



# **Business Groups, Governance, Institutional Frameworks and Cultures: Indian Mergers and Acquisitions**

A thesis submitted in fulfilment of the requirements  
for the degree of Doctor of Philosophy

**Vineet Tawani**  
M. Com, M. Finance  
(RMIT University, Melbourne)

School of Economics, Finance and Marketing

College of Business

RMIT University

April 2017

## *Declaration*

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; and, any editorial work, paid or unpaid, carried out by a third party is acknowledged; and, ethics procedures and guidelines have been followed.

I acknowledge the support I have received for my research through the provision of an Australian Government Research Training Program Scholarship.

Vineet Tawani

20<sup>th</sup> July 2017

# Acknowledgements

Every accomplishment in our lives is great. However, it is the contribution of the people involved in each accomplishment which is even greater. Here, I acknowledge the contributions of all those who have participated in this journey, playing varied but critical roles.

First and foremost, I would like to thank my supervisors, Prof. Sinclair Davidson and Dr Stuart Thomas whose role as guide throughout this journey is superior to all. Thinking of them, a distinguished couplet from one of the most revered 15<sup>th</sup> century Indian poets is quite apt:

*“Both are present but whom should I pay my respect first – my Guru or my Deity?”*

*It must be my Guru for having illuminated my intellects to realize the Almighty.”*

*Kabir (translated in English)*

Without Prof. Davidson’s unflinching faith, relentless positivity and constant motivation, I would not be writing my acknowledgement today. His astute inputs and cheerful demeanor made the journey seem comfortable. Words will never sufficiently express my deepest gratitude for his unconditional support. I thank Dr Thomas for his time and energy, and for his help and guidance in achieving major milestones throughout the journey. His prompt and insightful feedback was imperative in finalizing my thesis.

Next, I am very thankful to God for giving me the opportunity to undertake the prestigious and rewarding qualification of a PhD, and for blessing me with both the intellect and the spirit to overcome challenges and evolve throughout the process. I am certain that not everyone is lucky enough to have such an opportunity. I am also thankful to Him for sending so many well-wishers my way. I am truly blessed to have a very supportive group of people around me. And today, I wish to thank all of them.

The first person I wish to thank is my wife, Supriya. Her sacrifices are superior to all. My PhD entered its intensive mode during the first year of our marriage and Supriya had to sacrifice the joys of newly-wed bliss. Throughout this entire journey, she shouldered the family responsibilities and always stood strong and steadfast beside me. Her sacrifices, encouragement and patience are unquestionably the foundations upon which this thesis is built. I am in awe of your strength, Supriya. Thank you so much for being such a strong pillar

of support and a wonderful wife. I assure you that I shall now endeavour to make up for all our lost time together.

I would also like to thank my parents, my siblings and my extended family, including Supriya's parents and her siblings. I am blessed to have lovely families, in which everyone showers blessings, encouragement and is willing to endure all pains to see that everyone progresses. As the PhD journey is rarely smooth, their kind words and gestures uplifted my spirits and contributed significantly in their own way.

Further, I would like to thank my friends and colleagues Nirav, Guillermo, Vivek and Parul for their affection, support, guidance and help. They have always expressed an interest in my work, and ensuing discussions with them were fruitful in streamlining my ideas about my research.

Next, I would like to mention Kazuhiro and Jasper at Thomson Reuters for their help in organizing my data for the thesis. This thesis is based on Thomson Reuters' Databases, which are fairly sophisticated and can be overwhelming for beginners. Kazuhiro and Jasper were instrumental in explaining the functions and the critical aspects of these databases.

I would also like to extend my gratitude to Sally at <http://wordly.com.au/> for her promptness, meticulousness and professionalism while editing this thesis.

# Table of Contents

|                         |     |
|-------------------------|-----|
| Declaration .....       | ii  |
| Acknowledgements .....  | iii |
| Table of Contents ..... | v   |
| List of Figures .....   | ix  |
| List of Tables .....    | xi  |
| Abstract .....          | 1   |

## Chapter 1. Introduction

|   |      |
|---|------|
| 1.1 Motivation .....                    | 1-5  |
| 1.2 Research Contribution .....         | 1-8  |
| 1.2.1 Contextual Contribution .....     | 1-8  |
| 1.2.2 Methodological Contribution ..... | 1-14 |
| 1.3 Thesis Outline.....                 | 1-15 |

## Chapter 2. Literature and Hypotheses

|  |      |
|--|------|
| 2.1 Introduction.....  | 2-16 |
| 2.2 Origin, Motives and Incentives for M&As .....            | 2-16 |
| 2.3 Do M&As Have Synergies? .....                            | 2-21 |
| 2.3.1 Returns to Target or Selling Firms' Shareholders ..... | 2-21 |
| 2.3.2 Returns to Acquirer or Buying Firms Shareholders ..... | 2-22 |
| 2.4 Factors Affecting Takeover Premiums .....                | 2-23 |
| 2.4.1 Emerging Market Effects – Indian Business Houses ..... | 2-23 |
| 2.4.2 Information Asymmetry – Relatedness Effect .....       | 2-29 |
| 2.4.3 Cross-Border M&As – Multidimensional Effects .....     | 2-34 |
| 2.4.4 Methods of Payment – Consideration Effect .....        | 2-60 |
| 2.4.5 Industry – Diversification Effect .....                | 2-61 |
| 2.5 Overall Summary.....                                     | 2-61 |

## Chapter 3. Methodology

|  |      |
|--|------|
| 3.1 Introduction.....  | 3-63 |
| 3.2 Fundamentals .....   | 3-64 |
| 3.2.1 Event Study Assumptions .....                                    | 3-64 |
| 3.2.2 Event and Event Date .....                                       | 3-66 |
| 3.2.3 Estimation and Event Period Windows .....                        | 3-67 |
| 3.2.4 Choice of Models .....   | 3-68 |
| 3.2.5 Choice of Index .....  | 3-70 |
| 3.2.6 Data Frequency .....   | 3-70 |
| 3.2.7 Sample Size .....  | 3-71 |
| 3.2.8 Non-Synchronous Trading .....                                    | 3-71 |
| 3.2.9 Non-Normality of Daily Data .....                                | 3-71 |
| 3.2.10 Heteroskedasticity – Event Induced Variance .....               | 3-72 |
| 3.2.11 Event Clustering - Cross-Sectional Dependence .....             | 3-73 |
| 3.2.12 Cross-Sectional Correlation of Estimated Abnormal Returns ..... | 3-74 |
| 3.2.13 Autocorrelation .....   | 3-74 |
| 3.2.14 Impact of Outliers and Leveraged Data-Points .....              | 3-74 |

|   |             |
|---|-------------|
| 3.2.15 <i>Analysing and Testing Models</i>                      | 3-75        |
| <b>3.3 Implementation</b>                                       | <b>3-76</b> |
| 3.3.1 <i>Calculating Actual Returns</i>                         | 3-76        |
| 3.3.2 <i>Regression Techniques</i>                              | 3-77        |
| 3.3.3 <i>Calculating Expected (Normal) Returns</i>              | 3-77        |
| 3.3.4 <i>Calculating Abnormal Returns (AR)</i>                  | 3-79        |
| 3.3.5 <i>Aggregation of Abnormal Returns</i>                    | 3-80        |
| 3.3.6 <i>Variance of Abnormal Returns (AR) – Scaling Factor</i> | 3-81        |
| 3.3.7 <i>Standardised Abnormal Return (SAR)</i>                 | 3-82        |
| 3.3.8 <i>Cumulative Standardised Abnormal Returns (SCARs)</i>   | 3-82        |
| 3.3.9 <i>Statistical Tests for Significance of ARs</i>          | 3-82        |
| 3.3.10 <i>Statistical Tests for Significance of CAARs</i>       | 3-83        |
| 3.3.11 <i>Cross Sectional Regression Analysis</i>               | 3-83        |
| <b>3.4 Overall Summary</b>                                      | <b>3-86</b> |

## *Chapter 4. Sample Data*

|                                 |              |
|---------------------------------|--------------|
| <b>4.1 Introduction</b>         | <b>4-88</b>  |
| <b>4.2 Data Section</b>         | <b>4-88</b>  |
| 4.2.1 <i>Data Sources</i>       | 4-88         |
| 4.2.2 <i>Dataset Structures</i> | 4-90         |
| 4.2.3 <i>Data Screening</i>     | 4-91         |
| <b>4.3 Data Description</b>     | <b>4-97</b>  |
| 4.3.1 <i>Data Issues</i>        | 4-100        |
| <b>4.4 Overall Summary</b>      | <b>4-101</b> |

## *Chapter 5. Aggregate Deals*

|  |              |
|--|--------------|
| <b>5.1 Introduction</b>                              | <b>5-103</b> |
| <b>5.2 Market Model Analysis – Targets</b>           | <b>5-106</b> |
| 5.2.1 <i>OLS MM M Comparison</i>                     | 5-110        |
| <b>5.3 Fama-French (FF) Analysis – Targets</b>       | <b>5-111</b> |
| 5.3.1 <i>OLS MM M Comparison</i>                     | 5-114        |
| 5.3.2 <i>Fama-French (FF) vs. Market Model</i>       | 5-115        |
| <b>5.4 Scholes and Williams Analysis – Targets</b>   | <b>5-117</b> |
| <b>5.5 Equally Weighted Index - Targets</b>          | <b>5-118</b> |
| 5.5.1 <i>SW vs. Market Model</i>                     | 5-119        |
| <b>5.6 Summary - Targets</b>                         | <b>5-121</b> |
| <b>5.7 Market Model Analysis – Acquirers</b>         | <b>5-122</b> |
| 5.7.1 <i>OLS MM M Comparison</i>                     | 5-124        |
| <b>5.8 Fama-French Analysis - Acquirers</b>          | <b>5-125</b> |
| 5.8.1 <i>OLS MM M Comparison</i>                     | 5-128        |
| 5.8.2 <i>Fama-French (FF) vs. Market Model</i>       | 5-129        |
| <b>5.9 Scholes and Williams Analysis – Acquirers</b> | <b>5-130</b> |
| <b>5.10 Equally Weighted Index – Acquirers</b>       | <b>5-132</b> |
| 5.10.1 <i>SW vs. Market Model</i>                    | 5-133        |
| <b>5.11 Summary – Acquirers</b>                      | <b>5-135</b> |
| <b>5.12 Cross-Sectional Analysis</b>                 | <b>5-136</b> |
| 5.12.1 <i>Indian Target Firms</i>                    | 5-137        |
| 5.12.2 <i>Indian Acquirer Firms</i>                  | 5-141        |

|   |              |
|---|--------------|
| <b>5.13 Overall Summary.....</b>                      | <b>5-144</b> |
| 5.13.1 <i>Impact of Various Financial Models</i>      | 5-144        |
| 5.13.2 <i>Impact of Various Regression Techniques</i> | 5-145        |
| 5.13.3 <i>Impact of Indices</i>                       | 5-146        |
| 5.13.4 <i>Cross-Sectional Analysis</i>                | 5-147        |
| 5.13.5 <i>Snapshot – Hypothesis</i>                   | 5-147        |

## *Chapter 6. Domestic Deals*

|  |              |
|--|--------------|
| <b>6.1 Introduction.....</b>                                       | <b>6-148</b> |
| <b>6.2 Returns to Domestic Targets.....</b>                        | <b>6-151</b> |
| 6.2.1 <i>Market vs. Fama-French (FF) Model</i>                     | 6-152        |
| 6.2.2 <i>Market &amp; Scholes and Williams (SW) Adjusted Betas</i> | 6-156        |
| <b>6.3 Business Group Acquirers and Domestic Targets .....</b>     | <b>6-157</b> |
| 6.3.1 <i>MM Estimation Analysis</i>                                | 6-157        |
| 6.3.2 <i>OLS Estimation Analysis</i>                               | 6-158        |
| 6.3.3 <i>Market vs. Fama-French Returns</i>                        | 6-161        |
| <b>6.4 Related Firms and Domestic Targets .....</b>                | <b>6-162</b> |
| 6.4.1 <i>MM Estimation Analysis</i>                                | 6-162        |
| 6.4.2 <i>OLS Estimation Analysis</i>                               | 6-163        |
| 6.4.3 <i>Market vs. Fama-French Returns</i>                        | 6-165        |
| <b>6.5 Summary - Returns to Targets .....</b>                      | <b>6-167</b> |
| <b>6.6 Returns to Domestic Acquirers.....</b>                      | <b>6-168</b> |
| 6.6.1 <i>Market vs. Fama-French (FF) Model</i>                     | 6-169        |
| 6.6.2 <i>Market vs. Scholes and Williams</i>                       | 6-172        |
| <b>6.7 Business Group Acquirers .....</b>                          | <b>6-173</b> |
| 6.7.1 <i>MM Estimation Analysis</i>                                | 6-173        |
| 6.7.2 <i>OLS Estimation Analysis</i>                               | 6-174        |
| 6.7.3 <i>Market vs. Fama-French (FF) Returns</i>                   | 6-176        |
| <b>6.8 Relatedness and Domestic Acquirers .....</b>                | <b>6-177</b> |
| 6.8.1 <i>MM Estimation Analysis</i>                                | 6-177        |
| 6.8.2 <i>OLS Estimation Analysis</i>                               | 6-178        |
| 6.8.3 <i>Market vs. Fama-French Returns</i>                        | 6-180        |
| <b>6.9 Summary - Returns to Acquirers .....</b>                    | <b>6-181</b> |
| <b>6.10 Cross-Sectional Analysis .....</b>                         | <b>6-182</b> |
| 6.10.1 <i>Domestic Target Firms</i>                                | 6-183        |
| 6.10.2 <i>Domestic Acquirer Firms</i>                              | 6-188        |
| <b>6.11 Overall Summary.....</b>                                   | <b>6-192</b> |
| 6.11.1 <i>Abnormal Returns - Synergy</i>                           | 6-192        |
| 6.11.2 <i>IBG Effects</i>  | 6-192        |
| 6.11.3 <i>Relatedness Effects</i>                                  | 6-193        |
| 6.11.4 <i>Cross-Sectional Analysis</i>                             | 6-193        |
| 6.11.5 <i>Snapshot – Hypotheses</i>                                | 6-194        |

## *Chapter 7. Cross-Border Deals*

|   |              |
|---|--------------|
| <b>7.1 Introduction.....</b>                            | <b>7-195</b> |
| <b>7.2 Returns to Indian Targets .....</b>              | <b>7-197</b> |
| 7.2.1 <i>Market vs. Fama-French (FF) Model</i>          | 7-198        |
| 7.2.2 <i>Market vs. Scholes and Williams (SW) Betas</i> | 7-202        |
| <b>7.3 Corporate Governance Analysis.....</b>           | <b>7-203</b> |

|             |  |              |
|-------------|--|--------------|
| 7.3.1       | <i>MM Estimation Analysis</i>                              | 7–203        |
| 7.3.2       | <i>OLS Estimation Analysis</i>                             | 7–204        |
| 7.3.3       | <i>Corporate Governance Analysis Snapshot</i>              | 7–205        |
| 7.3.4       | <i>Market vs. Fama-French Returns</i>                      | 7–206        |
| 7.3.5       | <i>Corporate Governance Models and Political Framework</i> | 7–207        |
| <b>7.4</b>  | <b>Cultural Analysis</b>                                   | <b>7–211</b> |
| 7.4.1       | <i>MM Estimation Analysis</i>                              | 7–211        |
| 7.4.2       | <i>OLS Estimations Analysis</i>                            | 7–213        |
| 7.4.3       | <i>Cultural Analysis Snapshot</i>                          | 7–215        |
| 7.4.4       | <i>Market vs. Fama-French Returns</i>                      | 7–219        |
| <b>7.5</b>  | <b>Institutional Environment Analysis</b>                  | <b>7–220</b> |
| 7.5.1       | <i>MM Estimation Analysis</i>                              | 7–220        |
| 7.5.2       | <i>Market Model OLS Estimations</i>                        | 7–221        |
| 7.5.3       | <i>Institutional Framework Analysis Snapshot</i>           | 7–222        |
| 7.5.4       | <i>Market vs. Fama-French Returns</i>                      | 7–223        |
| <b>7.6</b>  | <b>Summary - Returns to Targets</b>                        | <b>7–224</b> |
| <b>7.7</b>  | <b>Returns to Indian Acquirers</b>                         | <b>7–225</b> |
| 7.7.1       | <i>Market vs. Fama-French (FF) Model</i>                   | 7–226        |
| 7.7.2       | <i>Market vs. Scholes and Williams (SW) Adjusted Betas</i> | 7–228        |
| <b>7.8</b>  | <b>Summary Returns to Acquirers</b>                        | <b>7–229</b> |
| <b>7.9</b>  | <b>Cross-Sectional Analysis</b>                            | <b>7–230</b> |
| 7.9.1       | <i>Indian Target Firms</i>                                 | 7–231        |
| 7.9.2       | <i>Indian Acquirer Firms</i>                               | 7–237        |
| 7.9.3       | <i>Summary</i>   | 7-244        |
| <b>7.10</b> | <b>Domestic vs. Cross-Border M&amp;As</b>                  | <b>7-245</b> |
| 7.10.1      | <i>Return to Target Firms</i>                              | 7-245        |
| 7.10.2      | <i>Returns to Acquirer Firms</i>                           | 7-247        |
| <b>7.11</b> | <b>Foreign Firms</b>                                       | <b>7-249</b> |
| <b>7.12</b> | <b>Overall Summary</b>                                     | <b>7-252</b> |
| 7.12.1      | <i>Abnormal Returns - Synergy</i>                          | 7-252        |
| 7.12.2      | <i>Corporate Governance Effect</i>                         | 7-252        |
| 7.12.3      | <i>Cultural Proximity Effect</i>                           | 7-253        |
| 7.12.4      | <i>Institutional Framework Effect</i>                      | 7-254        |
| 7.12.5      | <i>Snapshot - Hypotheses</i>                               | 7-255        |

## *Chapter 8. Conclusion*

|            |   |              |
|------------|---|--------------|
| <b>8.1</b> | <b>Introduction</b>                                 | <b>8-256</b> |
| <b>8.2</b> | <b>Recapitulation</b>                               | <b>8-256</b> |
| <b>8.3</b> | <b>Research Limitation and Proposed Future Work</b> | <b>8-264</b> |
| <b>8.4</b> | <b>Overall Summary</b>                              | <b>8-265</b> |

## *References*

## *Appendix*

|                           |              |
|---------------------------|--------------|
| <b>Appendix Chapter 5</b> | <b>5-1</b>   |
| <b>Appendix Chapter 6</b> | <b>6-55</b>  |
| <b>Appendix Chapter 7</b> | <b>7-138</b> |



## List of Figures

|   |       |
|---|-------|
| Figure 1.2.1 FDI – Inflows into India .....   | 1-11  |
| Figure 1.2.2 Multidimensional Characteristics of India .....                              | 1-12  |
| Figure 2.4.1 Pyramid Structure .....  | 2-24  |
| Figure 2.4.2 Role of Information Asymmetry in Takeover Premiums.....                      | 2-33  |
| Figure 2.4.3 Distance Factors in CBMAs.....   | 2-39  |
| Figure 2.4.4 Political View of CG Models.....   | 2-44  |
| Figure 2.4.5 Cultural Clusters Adopted from the GLOBE Study .....                         | 2-49  |
| Figure 2.4.6 Relationship between Various Distance Factors .....                          | 2-54  |
| Figure 2.4.7 The Multidimensional Aspects of India .....                                  | 2-59  |
| Figure 3.2.1 Graphical Representation of Event Study Time Frame .....                     | 3-67  |
| Figure 4.2.1 Fama-French Factor Annualized Daily Returns Over a 20 Year Period .....      | 4-90  |
| Figure 4.2.2 Data Structures .....  | 4-91  |
| Figure 4.2.3 Event Study Window Sizes .....   | 4-92  |
| Figure 4.2.4 Breakdown: Vanishing Companies and Insufficient Data .....                   | 4-96  |
| Figure 4.3.1 Breakdown of All the Targets for All the Deals .....                         | 4-101 |
| Figure 5.2.1 Market Model Returns; MM vs. OLS; All & Same-firms; VWI.....                 | 5-106 |
| Figure 5.2.2 Market Model Returns; M vs. Others (Same-firms); VWI.....                    | 5-110 |
| Figure 5.3.1 FF-Model Returns; MM vs. OLS; All & Same-Firms; VWI.....                     | 5-112 |
| Figure 5.3.2 Market vs. FF Returns; OLS vs. MM Regressions (Same-Firms).....              | 5-115 |
| Figure 5.4.1 Market vs. SW (1-3) Models Return; OLS (All-firms); VWI .....                | 5-117 |
| Figure 5.5.1 Returns to Targets; VWI vs. EWI; OLS vs. MM (Same-Firms) .....               | 5-118 |
| Figure 5.5.2 Market (VWI) vs. SW (1-3) (EWI) OLS (Same-Firms) .....                       | 5-120 |
| Figure 5.7.1 Market Model Returns; MM vs. OLS; All & Same-Firms; VWI .....                | 5-122 |
| Figure 5.7.2 Market Model Returns; M vs. Others (Same-Firms); VWI .....                   | 5-125 |
| Figure 5.8.1 Returns from FF Model; MM vs. OLS; All & Same-Firms; VWI.....                | 5-126 |
| Figure 5.8.2 FF vs. Market; OLS vs. MM Regressions (Same-Firms) .....                     | 5-129 |
| Figure 5.9.1 Returns from Market and SW (1-3) Models OLS (All-Firms) .....                | 5-131 |
| Figure 5.9.2 Market and SW model variants comparison (All-firms) .....                    | 5-131 |
| Figure 5.10.1 Returns to Acquirers; VWI vs. EWI; OLS vs. MM (Same-Firms) .....            | 5-132 |
| Figure 5.10.2 Market (VWI) vs. SW (1-3) (EWI); OLS (Same-Firms) .....                     | 5-134 |
| Figure 6.2.1 Market Returns; DMA - Targets – OLS vs. MM; (All & Same).....                | 6-151 |
| Figure 6.2.2 Returns to Domestic Target; Market vs. FF; OLS vs. MM (All & Same-Firms) ... | 6-152 |
| Figure 6.2.3 Returns from the Market and SW (1-3) Models; OLS (All & Same-Firms).....     | 6-156 |
| Figure 6.3.1 Domestic Targets and Business Group Analysis (MM).....                       | 6-157 |
| Figure 6.3.2 Domestic Targets and Business Group Analysis (OLS All-Firms).....            | 6-158 |
| Figure 6.4.1 Domestic Targets and Relatedness Analysis (MM All-Firms) .....               | 6-162 |
| Figure 6.4.2 Domestic Targets and Relatedness Analysis (OLS All-Firms) .....              | 6-163 |
| Figure 6.6.1 Market Returns to Domestic Targets – OLS vs. MM.....                         | 6-168 |
| Figure 6.6.2 Returns to Domestic Acquirers; Market vs. FF; OLS vs MM (All & Same-Firms)6- | 6-169 |
| Figure 6.6.3 Returns from the Market and SW (1-3) Models; OLS (All & Same-Firms) .....    | 6-172 |
| Figure 6.7.1 Domestic Acquirers and Business Group Analysis (MM).....                     | 6-173 |
| Figure 6.7.2 Domestic Acquirers and Business Group Analysis (OLS All-Firms).....          | 6-174 |
| Figure 6.8.1 Domestic Acquirers and Relatedness Analysis (MM – All-Firms) .....           | 6-177 |
| Figure 6.8.2 Domestic Acquirers and Relatedness Analysis (OLS – All-Firms).....           | 6-178 |
| Figure 7.1.1 The Multidimensional Aspects of India .....                                  | 7-196 |
| Figure 7.2.1 Market Returns to CBMA Targets - OLS vs. MM.....                             | 7-198 |
| Figure 7.2.2 Returns to CB Targets; Market vs. FF; OLS vs. MM (All & Same-Firms).....     | 7-199 |
| Figure 7.2.3 Returns from the Market and SW (1-3) Models; OLS (All & Same-Firms).....     | 7-202 |
| Figure 7.3.1 Indian Targets and Corporate Governance Analysis (MM).....                   | 7-203 |
| Figure 7.3.2 Indian Targets and Corporate Governance Analysis (OLS) .....                 | 7-204 |
| Figure 7.3.3 Country Specific Returns to Indian Targets (MM) .....                        | 7-208 |
| Figure 7.3.4 Blockholding vs. Diffused Ownership (MM).....                                | 7-210 |
| Figure 7.4.1 Country Clusters According to the GLOBE Study .....                          | 7-211 |
| Figure 7.4.2 Market Returns; Indian Targets; Multiple Clusters - I; (MM).....             | 7-212 |
| Figure 7.4.3 Market Returns; Indian Targets; Multiple Clusters - II; (MM) .....           | 7-213 |
| Figure 7.4.4 Market Returns; Indian Targets; Multiple Clusters - I; (OLS) .....           | 7-214 |
| Figure 7.4.5 Market Returns; Indian Targets; Multiple Clusters - II; (OLS).....           | 7-215 |

|  |              |
|--|--------------|
| <b>Figure 7.4.6 Cultural Analysis Snapshot .....</b>   | <b>7-217</b> |
| <b>Figure 7.5.1 Indian Targets; Institutional Analysis; All-Firms (MM) .....</b>                   | <b>7-220</b> |
| <b>Figure 7.5.2 Indian Targets; Institutional Analysis; All-Firms (OLS).....</b>                   | <b>7-221</b> |
| <b>Figure 7.7.1 Returns to CB Acquirers - OLS vs. MM .....</b>                                     | <b>7-225</b> |
| <b>Figure 7.7.2 Returns to CB Acquirers; Market vs. FF; OLS vs MM (All &amp; Same-Firms) .....</b> | <b>7-226</b> |
| <b>Figure 7.7.3 Returns from the Market and SW (1-3) Models; OLS (All &amp; Same-Firms) .....</b>  | <b>7-228</b> |
| <b>Figure 7.10.1 DMA vs. CBMA Indian Target Firms (MM) .....</b>                                   | <b>7-245</b> |
| <b>Figure 7.10.2 DMA vs. CBMA Indian Target Firms (OLS) .....</b>                                  | <b>7-245</b> |
| <b>Figure 7.10.3 DMA vs. CBMA Indian Acquirer Firms (MM) .....</b>                                 | <b>7-247</b> |
| <b>Figure 7.10.4 DMA vs. CBMA Indian Acquirer Firms (OLS).....</b>                                 | <b>7-248</b> |
| <b>Figure 7.11.1 Return to Foreign Targets; MM vs. OLS .....</b>                                   | <b>7-249</b> |
| <b>Figure 7.11.2 Return to Foreign Acquirers; MM vs. OLS .....</b>                                 | <b>7-250</b> |
| <b>Figure 7.11.3 CG-Analysis Foreign Acquirers; MM .....</b>                                       | <b>7-251</b> |
| <b>Figure 7.11.4 CG-Analysis Foreign Acquirers; OLS .....</b>                                      | <b>7-251</b> |

## List of Tables

|  |       |
|--|-------|
| Table 2.2.1 Patterns of Gains Related to Takeover Theories .....                           | 2-21  |
| Table 2.4.1 Adopted from Aguilera & Jackson (2010 p. 515) .....                            | 2-45  |
| Table 3.2.1 Summary of Issues and Resolutions in Event Study Methodology .....             | 3-76  |
| Table 4.2.1 Detail of Indices Used for Each Country .....                                  | 4-89  |
| Table 4.2.2 Correlation Matrix of Fama-French Factors.....                                 | 4-90  |
| Table 4.2.3 Deals Count Breakdown .....  | 4-95  |
| Table 4.2.4 Breakdown of Targets and Acquirers Firms .....                                 | 4-97  |
| Table 4.3.1 Yearly Distribution of Indian M&A Deals.....                                   | 4-98  |
| Table 4.3.2 Breakdown of CBMAs by Country and Culture of the Foreign Acquirers .....       | 4-99  |
| Table 5.1.1 Patterns of Gains Related to Takeover Theories .....                           | 5-103 |
| Table 5.1.2 Event Study Models and its Variants .....                                      | 5-104 |
| Table 5.2.1 Market Returns to Targets; All & Same Firms; OLS vs MM; VWI.....               | 5-107 |
| Table 5.2.2 Run-up vs. Mark-up; Target Shareholders; Market Model .....                    | 5-108 |
| Table 5.2.3 Market Returns to Targets; All & Same-Firms; M, MM & OLS; VWI.....             | 5-110 |
| Table 5.3.1 Fama-French Returns to Targets (All-firms) .....                               | 5-112 |
| Table 5.3.2 Run-Up vs. Mark-Up; Target Shareholders; FF Model .....                        | 5-113 |
| Table 5.3.3 Fama-French Returns to Targets (Same-Firms) .....                              | 5-114 |
| Table 5.3.4 Market vs. FF Model; OLS vs. MM Comparison .....                               | 5-116 |
| Table 5.4.1 Market and SW Variants Comparison (All-Firms) .....                            | 5-117 |
| Table 5.5.1 OLS vs. MM and VWI vs. EWI Comparison (Same-Firms).....                        | 5-119 |
| Table 5.5.2 Market vs. SW Variants; VWI vs. EWI Comparison Targets .....                   | 5-120 |
| Table 5.6.1 Summary Results; Indian Targets; All-Firms - VWI .....                         | 5-121 |
| Table 5.7.1 Market Returns to Acquirers -VWI - All-Firms .....                             | 5-123 |
| Table 5.7.2 Market Returns to Acquirers (Same-Firms); All Regressions .....                | 5-125 |
| Table 5.8.1 FF Returns to Acquirers; All & Same-Firms; MM vs. OLS; VWI .....               | 5-127 |
| Table 5.8.2 Fama-French Returns to Acquirers; (Same-Firms); All-Regressions .....          | 5-128 |
| Table 5.8.3 Market vs. FF Model; OLS vs. MM Comparison .....                               | 5-130 |
| Table 5.10.1 Market Models; OLS vs. MM and VWI vs. EWI (Same-Firms) .....                  | 5-133 |
| Table 5.10.2 Market vs. SW Variants; VWI vs. EWI Comparison - Acquirers.....               | 5-134 |
| Table 5.11.1 Summary Results; Indian Acquirers; All-Firms - VWI .....                      | 5-135 |
| Table 5.12.1 Correlation Coefficient Matrix; Independent Variables-Targets .....           | 5-137 |
| Table 5.12.2 Regression Analysis OLS CAARs – Indian Target Firms .....                     | 5-138 |
| Table 5.12.3 Regression Analysis MM CAARs - Indian Target Firms .....                      | 5-140 |
| Table 5.12.4 Correlation Coefficient Matrix; Independent Variables - Acquirers .....       | 5-141 |
| Table 5.12.5 Regression Analysis OLS CAARs – Indian Acquirer Firms .....                   | 5-142 |
| Table 5.12.6 Regression Analysis MM CAARs – Indian Acquirer Firms .....                    | 5-143 |
| Table 5.13.1 Summary of Methodological Impact on the Analysis .....                        | 5-146 |
| Table 5.13.2 Hypothesis Testing Outcome – Aggregate Dataset.....                           | 5-147 |
| Table 6.2.1 Market Returns to Targets; All & Same-Firms (OLS vs. MM).....                  | 6-153 |
| Table 6.2.2 Run-Up vs. Mark-Up Returns to Domestic Targets.....                            | 6-154 |
| Table 6.2.3 Market and SW Variants Comparison; OLS (All & Same-Firms).....                 | 6-156 |
| Table 6.3.1 Summary of Business Group Analysis; Market Model; OLS & MM .....               | 6-159 |
| Table 6.3.2 Comparison BGrp –Non-BGrp Targets.....   | 6-159 |
| Table 6.3.3 Summary of Business Group Analysis; Market vs. FF Model; OLS vs. MM. ....      | 6-161 |
| Table 6.4.1 Summary of Market Returns to Targets; All-Firms (OLS & MM).....                | 6-164 |
| Table 6.4.2 Comparison Unrelated – Related Targets.....                                    | 6-164 |
| Table 6.4.3 Summary of Market vs. FF Model; OLS vs. MM - Relatedness Analysis.....         | 6-166 |
| Table 6.5.1 Summary Results; Domestic Indian Targets; All-Firms - VWI.....                 | 6-167 |
| Table 6.6.1 Market Returns to Acquirers; All & Same-Firms (OLS vs. MM).....                | 6-170 |
| Table 6.6.2 Market and SW Variants Comparison; OLS (All & Same-Firms).....                 | 6-172 |
| Table 6.7.1 Summary of Market Returns to Acquirers; OLS & MM; Business Group Analysis      | 6-175 |
| Table 6.7.2 Comparison BGrp –Non-BGrp Acquirer .....                                       | 6-175 |
| Table 6.7.3 Summary of Market vs. FF Model; OLS vs. MM; Business Group Analysis .....      | 6-176 |
| Table 6.8.1 Summary of Market Returns to Acquirers; OLS vs. MM; Relatedness Analysis ..... | 6-178 |
| Table 6.8.2 Comparison Related – Unrelated Acquirers.....                                  | 6-179 |
| Table 6.8.3 Summary of Market vs. FF Model; OLS vs. MM - Relatedness Analysis.....         | 6-180 |
| Table 6.9.1 Summary Results; Domestic Indian Acquirers; All-Firms - VWI.....               | 6-181 |

|  |       |
|--|-------|
| Table 6.10.1 Correlation Coefficient Matrix; Independent Variables - Targets .....       | 6-183 |
| Table 6.10.2 Regression Analysis of the OLS CAARs – Domestic Target Firms .....          | 6-184 |
| Table 6.10.3 Regression of CAARs based on MM Estimations - Domestic Target Firms.....    | 6-185 |
| Table 6.10.4 Correlation Coefficient Matrix; Independent Variables - Acquirers .....     | 6-188 |
| Table 6.10.5 Regression Analysis of the OLS CAARs – Domestic Acquirer Firms .....        | 6-189 |
| Table 6.10.6 Regression Analysis of the MM CAARs – Domestic Acquirer Firms .....         | 6-190 |
| Table 7.2.1 Market vs. FF Model; OLS vs. MM Comparison .....                             | 7–200 |
| Table 7.2.2 Run-Up vs. Mark-Up Returns to CBMA Indian Targets .....                      | 7–200 |
| Table 7.2.3 Market and SW Models Comparison (All & Same-Firms) .....                     | 7–202 |
| Table 7.3.1 Summary of CG Analysis; Market Model; OLS & MM .....                         | 7–205 |
| Table 7.3.2 Comparison GJ –AS for Indian Targets .....                                   | 7–206 |
| Table 7.3.3 Summary of CG Analysis; Market vs. FF Model; OLS & MM. ....                  | 7–207 |
| Table 7.3.4 Adopted from Aguilera & Jackson (2010 p. 515) .....                          | 7–208 |
| Table 7.3.5 Summary - Indian Targets and Country Analysis (MM) .....                     | 7–209 |
| Table 7.4.1 Summary - Returns to Indian Targets from Various Cultures of Acquirers ..... | 7–216 |
| Table 7.4.2 Cultural Comparison - Indian Targets .....                                   | 7–218 |
| Table 7.4.3 Summary of Cultural Analysis; Market vs. FF Model; OLS & MM. ....            | 7–219 |
| Table 7.5.1 Summary of Institutional Analysis; Market Model; OLS & MM .....              | 7–222 |
| Table 7.5.2 Comparison NCW – CW for Indian Targets.....                                  | 7–222 |
| Table 7.5.3 Summary of Commonwealth Analysis; Market vs. FF Model; OLS & MM .....        | 7–223 |
| Table 7.6.1 Summary Results; Indian Targets; All-Firms - VWI .....                       | 7–224 |
| Table 7.7.1 Market vs. FF Model; OLS vs. MM Comparison .....                             | 7–227 |
| Table 7.7.2 Market and SW Betas Comparison (All & Same-Firms) .....                      | 7–228 |
| Table 7.8.1 Summary Results; Indian Acquirers; All-firms-VWI .....                       | 7–229 |
| Table 7.9.1 Correlation Coefficient Matrix; Independent Variables - Targets.....         | 7–232 |
| Table 7.9.2 Regression Analysis of the OLS CAARs – CBMA Indian Target Firms .....        | 7–233 |
| Table 7.9.3 Regression of the MM CAARs – CBMA India Target Firms - GJ.....               | 7–234 |
| Table 7.9.4 Regression of the OLS CAARs – CBMA India Target Firms - Blockhold .....      | 7–235 |
| Table 7.9.5 Regression of the MM CAARs – CBMA India Target Firms - Blockhold.....        | 7–235 |
| Table 7.9.6 Correlation Coefficient Matrix; Independent Variables - Acquirers .....      | 7–238 |
| Table 7.9.7 Regression Analysis of the OLS CAARs – CBMA Indian Acquirer Firms .....      | 7-240 |
| Table 7.9.8 Regression Analysis of the MM CAARs – CBMA Indian Acquirer Firms.....        | 7-241 |
| Table 7.9.9 Regression of the OLS CAARs – CBMA India Acquirer Firms - Diffused .....     | 7-242 |
| Table 7.9.10 Regression of the OLS CAARs – CBMA India Acquirer Firms - Diffused .....    | 7-243 |
| Table 7.10.1 Summary Returns DMA vs. CBMA; Indian Targets .....                          | 7-246 |
| Table 7.10.2 Run-up vs Mark-Up Comparison; DMA vs. CBMA; Indian Targets .....            | 7-246 |
| Table 7.10.3 Summary Returns DMA vs. CBMA; Indian Acquirers .....                        | 7-248 |
| Table 7.11.1 Summary of Foreign Firms; Market Model; OLS & MM .....                      | 7-250 |

# Abstract

The global business environment is defined by its compete-or-perish nature. To survive, businesses must continually undertake both organic and inorganic corporate restructuring activities. Amongst the inorganic options, Mergers and Acquisitions (M&As) are a very attractive strategy for managers. When implemented successfully, M&As may enable rapid forays into new territories, the benefits of diversification, economies of scale, operating and financial synergies, better efficiencies, industrial supremacy, tax advantages and several more rewards. However, when they fail, M&As destroy the value of the participating firms. This failure can be caused by diseconomies of scale, lack of synergy, cultural conflicts, negotiation disputes, integration issues, agency issues, the hubris effect, and so on. Given the numerous advantages of M&As, it is not surprising that managers show an urge to merge. However, a wrong venture can wipe out millions of dollars of shareholders wealth. Nonetheless, global business history is replete with M&As debacles. Thus, the implementation of M&As is a debatable strategy that needs careful evaluation.

The finance literature about M&As in the developed world is abundant. However, the emerging markets are not so well understood. While the emerging markets are relatively newer players, they are continuously gaining prominence on the global business landscape. The finance literature argues that Emerging Market Multinational Enterprises (EMNEs) are *fundamentally* different, in terms of their characteristics, from their counterparts in developed countries. In terms of globalization, as late comers, EMNEs have lagged behind, making their inspirations, intentions and implementation techniques quite unique. Further, emerging markets are typically characterized by weaker legal systems, with the legal firms controlled and managed by large business groups that own majority stakes in the firms. As a consequence, outside shareholders are minority shareholders, and in the context of classical agency theory, the principal and the agents are same identities. This implies a convergence of ownership and control. Thus, minority shareholders face the risk of expropriation of wealth at the hands of majority shareholders (horizontal agency issue), and the weaker legal systems constrain them in controlling the errant managers. Conceivably, announcing M&As in such a setting is poised to yield unique share market responses. Thus, our current understanding of M&As in the developed world has limited relevance to emerging markets.

India is one of the fastest growing economies in the world, and a member of the BRICS (Brazil, Russia, India, China and South Africa) countries, which are projected to be

the most dominant economies by 2050. In the last 25 years, India has undergone a series of economic reforms which has catapulted its status from a dormant state to one of the key players shaping up the new globalized economy. The current Indian Prime Minister, Mr Narendra Modi, is one of the most influential statesmen worldwide and is known for carrying out bold policies in a democracy that accounts for a sixth of the world's population. In fact, the press is already debating about the long-term potential that India has to become a new economic superpower.

This thesis highlights several conflicting and intriguingly perplexing attributes about India that make it a unique country amongst other emerging markets, thus necessitating research focussed on India. This thesis develops a comprehensive framework which projects India as a *common-law country* with business structures and corporate governance models resembling *civil-law countries*, yet is distant from either of the two with respect to its *socio-cultural anthropological attributes*. By defying existing principle theories in finance literature on various dimensions characteristically, India thus portrays a contradictory and captivatingly puzzling image. Therefore, to gain deeper insights, this thesis tests a set of hypotheses focusing on the impact of the factors like ownership stake, cultural proximity, related institutional frameworks, comparable corporate governance models, and economic distances on the returns obtained by the Indian shareholders.

In essence, this thesis mainly focuses on the following set of questions:

- (i) How do the Indian target and acquirer shareholders fare on the announcement of M&As, both domestic and cross-border?
- (ii) Is there a difference in return from domestic and cross-border M&As for the shareholders?
- (iii) Is there any *ownership effect* on the returns to the shareholders in domestic M&As?
- (iv) Is there any *cultural effect* on the returns to the shareholders in cross-border M&As?
- (v) Is there any *institutional effect* on the returns to the shareholders in cross-border M&As?
- (vi) Is there any *corporate governance effect* on the returns to the shareholders in cross-border M&As?

- (vii) Is there any *economic distance effect* on the returns to the shareholders in cross-border M&As?

The methodology employed is a two-stage analysis. The first stage includes an event study, which aims to determine abnormal returns associated with announcements of M&As to the Indian shareholders affected by the deal.

The second stage is a cross-sectional analysis, which aims to identify the factors that may explain the sources of abnormal returns obtained by these shareholders. The two financial models—Market and three factor Fama-French—are used to calculate the abnormal returns for the event study. These abnormal returns are determined by using the Ordinary Least Squares (OLS) and robust regression techniques. The robust regression method in the event study is the methodological contribution of this thesis to the literature. The contemporary discussions about event study methodology in statistical papers suggest that the robust regression method is more reliable in capturing announcement effects. For the cross-sectional analysis, the key factors identified in the literature are regressed with the cumulative average abnormal returns to identify those that determine the source of the returns.

The data for the analysis covers the M&A deals from 1989 to 2013. In total, 407 deals are shortlisted, with the analysis based on 308 target firms and 355 acquirer firms. The emerging market literature often sights data limitations, and thus the analysis is confined to the scope of the data. The methodologically induced filtering process of excluding deals with the confounding effects and insufficient trading data, along with the missing firms, narrowed the sample size for some sub-sets. For example, of the original 50 cross-border deals by Indian acquirers, there are 38 left in the clean sample. The phenomenon of missing firms is a known issue in the Indian markets and is well documented. Likewise, even the relevant accounting data to perform a pair-wise relative analysis of the target and acquiring firms is missing for a significant proportion of the dataset. Finally, this thesis focuses on the successful deals between the listed firms. The unsuccessful, pending, rumoured, withdrawn deals along with the deals involving private firms on either side are not incorporated.

The results indicate that:

- (i) Both the target and acquiring shareholders make positive abnormal returns on the announcement of M&As.
- (ii) Domestic deals produce higher returns for the shareholders than cross-border deals.

- (iii) The deals in which acquirers take a significant stake (>50%) are favoured more by the sharemarket. There is also an indication that the large business groups do not indulge in tunnelling of wealth, and intra-group M&As yield higher returns to the acquirers and lower to the targets.
- (iv) Cultural proximity has no effect in determining the returns to the shareholders. Instead, distant cultures produce economically larger returns.
- (v) Similarity in institutions does not dictate the outcomes of M&As.
- (vi) The corporate governance model seems to be the most important source of returns to the shareholders in cross-border deals. It appears there is a preference for a corporate governance model that encourages the owners to take a majority stake in the firm. Given the weaker legal environment, the minority shareholders perceive majority stake as a commitment from the management to perform well and thus align managers with their interest.
- (vii) The economic distance is an important factor when selecting the target firm in the cross-border deals. The higher the economic distance, more advance is the target nation, and thus the higher returns to the Indian acquirers.

Overall, as both the target and acquiring shareholders yield positive announcement returns, M&As appear to be a wealth enhancement strategy in the Indian markets. Also, there is a distinct preference for corporate practices that encourage concentrated ownership by the acquirers, as this enhances investor protection in a weaker legal environment by reducing horizontal agency issues between minority and majority shareholders.



# Chapter 1. Introduction

---

## 1.1 Motivation

The global business environment is defined by its compete-or-perish nature. The ongoing dynamism of this environment engenders continual reshaping of the businesses within to counter the ever-evolving competitive environment. As a response, corporations often seek *organic* growth internally by enhancing their core competencies. They undertake extensive Research and Development (R&D) which allows early access to productive technology or innovative new products. Or, they might devise a better marketing strategy for their products, implement competitive pricing or effective advertising policies, or even restructure their operations to attain cost efficiencies. Alternatively, corporations can restructure *inorganically* through external methods (various corporate strategies that chiefly deal with the overall scope of the business) which may alter their organizational structure and entire management. Here, decisions focus on the type and the form of the business, as well as its contraction or expansion. Firms may expand through joint ventures or mergers and acquisitions (takeovers), or may contract through divestitures, equity carve-outs or spin-offs. The ultimate objective for the managers of these firms is to create value for the firm.

Mergers and Acquisitions (M&As hereafter) are widely used to restructure corporate activities. A *merger* is a fusion of two entities into one new legal entity. An *acquisition* (or takeover) is where one firm takes a stake in another firm, either in part or in full. The modern corporations and capital markets made M&As attractive around the turn of the 20th century (Stigler, 1950), and since then they have occurred periodically in waves with rising numbers. Jensen (1987) favours such inorganic corporate restructuring by asserting that, on average, takeovers increase the total market value of the participating firms by nearly 50%.

In M&As, acquiring companies expand their business horizons by tapping into a new set of resources—the capabilities and competencies of the merging or target firms<sup>1</sup>. They can enter new markets without investing in the necessary infrastructure and swiftly expand their market share locally and internationally. Alternatively, they can take advantage of the benefits of diversification, economies of scale, operating and financial synergies, tax advantages, a

---

<sup>1</sup> M&As are traditionally classified as: (i) *Horizontal* M&As between competitors in the same industry, (ii) *Vertical* M&As occur between the firms in client – supplier relationships or value chain linkages and (iii) *Conglomerate* M&As occur between the firms from different industries.

superior position within the industry, or they may extract a comparative advantage from different economies or better efficiencies. The enormous list of the advantages makes M&As one of the favourite strategies for managers seeking inorganic corporate growth.

However, the harsh reality is that the M&A landscape is plagued with deals that have destroyed colossal amounts of shareholders wealth, most famously AOL Time Warner and Daimler Chrysler (Bartlett, 2007). In fact, there is an equally extensive list of factors that may destroy the value of firms involved in M&As. For example, diseconomies of scale, lack of synergies, cultural conflicts, negotiation disputes, integration issues, agency issues, the hubris effect, and so on. As a result, there is a potential to lose a huge amount of shareholders' wealth in the transaction. Corporate restructuring also entails dramatic changes in the working environment and the roles and responsibilities of related people and communities, thus creating controversies. The parties that are negatively impacted due to restructuring activities protest vehemently and claim that such actions destroy efficiencies, diverting energy from productive endeavours. They contend that gains if any are actually from renegotiated contracts, capital market inefficiencies in valuing assets, or lower tax payments, rather than from real synergies, as always argued. Since the gains are illusory and the costs are real, they opine that takeovers should be restricted (Jensen, 1987). Indeed, the evidence of positive returns to the acquiring firms is mixed, at least as a result of M&As in the developed world. In fact, MergerStat Review (2002) suggests that the mergers between 1995 and 2001 were five times greater than any other merger wave ever, and that 25% to 35% of the total mergers later resulted in divestitures. Corporate restructuring through divestitures implies disposing of some of business units by a firm. Alternatively put, divestitures may be understood as *the reverse of M&As*. Interestingly, M&As are quite often followed by divestitures as divesting can enhance firm value<sup>2</sup>.

---

<sup>2</sup> Kaiser and Stouraitis (2001) cite a case study of Thorn EMI which transformed itself from a stressed conglomerate merger to a very successful focused music company through divestitures in 1990s. Brealey *et al.* (2001) observe the number of divestitures has been about half of the number of mergers. Grimm's Merger Review for 1987 report 35% of the M&A transactions involved divestitures. Prior to this in 1980s, M&A activities represented 35% to 45% of the total mergers as divestitures from other firms (Copeland *et al.*, 2005). Kaplan and Weisbach (1992) find 44% of the target companies were divested within 7 years of their acquisitions in the period from 1971 to 1982. In mergers of 1960 to 1970, Ravenscraft and Scherer (1987) find that 33% of the acquisitions later divested. They also find that the divestitures are almost four times likely when targets are not in businesses highly related to those of the acquirers. Porter (1987) studies a sample of 33 large conglomerate mergers in the period from 1950 to 1986 and finds 60% of the acquisitions in 'new' fields, and 74% in unrelated industries, later divested.

Empirically, the finance literature converges upon the positive gains made by target firms (Asquith *et al.*, 1983), and the zero (Eckbo, 1983) or negative (Dodd, 1980) gains made by the acquiring firms as a result of takeover announcements. This initiates a debate about the efficacy of M&As overall. Though, Jensen and Ruback (1983) suggest that the varied evidence about acquiring firms is due to the difficulty in measuring returns to them.

Amidst the mixed arguments and evidence of value creation from M&As and the positive impact of divestitures, Porter (1987) takes a different standpoint, arguing that in both the process of merging and divesting, the majority of companies have dissipated, instead of creating shareholders value. To further confuse our understanding of M&As, there is overwhelming evidence suggesting that they may follow (or lead to) each other (Porter, 1987; Ravenscraft and Scherer, 1987; Kaplan and Weisbach, 1992) Thus, Porter's (1987) view of the negative impact of corporate restructuring contrasts with Jensen's (1987) view of the positive impact.

Further, while M&A literature is abundant, the bulk of this literature is based on findings from the developed world, particularly in the United States, United Kingdom, Australia, and other westernized countries (Franks and Harris, 1989; Erickson, 1998; Fuller *et al.*, 2002; Faccio and Masulis, 2005; Moeller *et al.*, 2005; Otchere and Ip, 2006). However, the understanding of emerging markets characterized by high levels of business activity is relatively shallow - this in itself presents an opportunity for research that enhances the existing knowledgebase of the nature of M&As worldwide.

The emerging markets are important because they have grown exponentially and are now a favourite destination of international capital inflows through hedge funds, index funds, indexes, Exchange Traded Funds, M&As and others. They have higher growth when compared to the rest of the world, encouraging corporations worldwide to enter into these markets. However, Fan *et al.* (2011) caution that in emerging markets, business organizations and managerial behaviours are fundamentally different to those in the developed world. Further, in the context of the prevailing corporate governance systems in the developing world, Sarkar and Sarkar (2000) argue that due to their institutional specifics, mechanically extrapolating the experiences of corporate governance from the developed world may not yield necessary explanations. Hence, it is conceivable that in M&As, these markets present a different set of challenges all together, thus demanding specific attention by researchers.

Jensen (1984) asserts that the shareholders are the most important constituents of the modern corporations as they bear the residual risk of every corporate transaction. Thus, this

research focuses on the impact on shareholders' wealth of the target and the acquirer company in the external restructuring method – M&As involving India.

## **1.2 Research Contribution**

This thesis contributes contextually and methodologically. Not only does it develop a unique framework describing India and test it empirically, it also implements the analysis differently.

### **1.2.1 Contextual Contribution**

The landscape of M&As literature is vast and well explored but is dominated by findings from mature and developed economies such as the United States, the United Kingdom, Australia, and other westernized countries. By comparison, the literature from emerging markets is relatively sparse, partly because of the limitations posed by data availability from these countries. Despite these limitations, researching emerging markets is equally important, particularly given their growing importance to the global economy. In addition, emerging markets differ extensively from the developed world on various dimensions, making existing wisdom about M&As much less applicable.

Drawn from prominent literature, the following discussion presents a snapshot of the major diversions of emerging markets, and thus, India in the context of M&As. These markets are typically characterized by (a) weaker legal systems and institutional voids, (b) pyramidal business structures, (c) agency issues, and (d) different motives. The arguments presented here are discussed at length in the literature review chapter.

#### *(a) Weaker Legal Systems and Institutional Void*

The shareholders bear the residual risk of every corporate transaction, making shareholders the most important constituency of the modern corporate world (Jensen, 1984). In that context, the emerging markets are characterized by weaker legal systems, which directly affect the level of *investor protection*. Their capital, labour and product markets suffer a variety of market failures. The financial markets are characterized by inadequate disclosures, and weak corporate governance and control. Further, securities regulations are generally weak, and their enforcement is erratic (Khanna and Palepu, 2000). Given the institutional void, the threat of takeover markets - a potent tool in developed markets in terms of disciplining errant managers and protecting shareholders, does not exist in emerging markets. As a result, investors' in emerging markets prefer concentrated ownership; it is

perceived as a means by which to align managerial interests and thus serves as a natural hedge against expropriation. That leads to the convergence of ownership and control which makes emerging markets behave significantly differently from developed markets. Firstly, the M&As tend to be mostly negotiated and friendly; they're seldom hostile. Secondly, as proposed by the Transaction Cost Economies (TCE) (Coase, 1937; Williamson, 1979), that firms are structured in accord with the institutional context, large business groups with concentrated ownerships are typical.

(b) *Pyramidal Business Structures*

La Porta *et al.* (1999) suggest that in economies with poor shareholder protection, firms are typically controlled by families or States. In emerging markets, business is generally structured as a *pyramid* wherein, through an intricate network of cross-holdings, owners can control a large number of diversified independent firms called *affiliates* without committing commensurate cashflow investment.

For example, the Tata Group, one of the largest business groups in India with interests in everything from salt to software, manages a complex network of hundreds of public and private subsidiaries through its holding company, Tata Sons Limited.

On the brighter side, these groups create their own internal factor markets and thus substitute the institutional void prevalent in the emerging markets. The affiliates then are not affected by the external market failures. However, at the same time, such complicated structures render external market discipline mechanisms ineffective and errant managers are able to ply their trade with impunity, often at the cost of minority shareholders<sup>3</sup>.

It is conceivable that the participation of such large groups in M&As can change the dynamics significantly when compared with other stand-alone firms.

Further, quite frequently, M&As occur within the affiliate firms of these groups. That could be the part of the restructuring within the group itself. However, such M&A

---

<sup>3</sup> Currently, Tata Sons is embroiled in a bitter dispute between ousted Chairman, Mr. Cyrus Mistry and his predecessor, Mr. Ratan Tata. Amongst several allegations, there is one which suggests that the former chairman pursued a loss making project as it provided critical inventory for another firm in which Mr. Tata is a stakeholder. If true, this is a clear example of the adverse effect of cross-holdings. The Tata listed companies have already lost \$13 billion in combined market capitalization thus far, and the controversy continues: <https://www.ft.com/content/4e6cfa64-bdef-11e6-8b45-b8b81dd5d080> accessed on 09/02/2017.

transactions alter the subtleties completely as the risk and uncertainty of the event reduce significantly for the acquiring affiliate.

(c) *Agency Issues*

As there is a convergence of ownership and control, the higher levels of insider control and ownership, and relatively weaker external disciplining mechanisms, perfectly set a scene for expropriation by insiders (as alluded to above). The classic principal - agent vertical agency conflict due to the separation of ownership and control in the developed world between the owners and executives, is non-existent. Instead, horizontal agency conflict arises between the majority insider shareholders and minority outsider shareholders. The majority shareholders, by virtue of their control, can divert valuable resources away from other shareholders. However, at the same time, from the TCE (Coase, 1937; Williamson, 1979) view point, the concentrated insider ownership can generate significant benefits where implicit trust-based contracting is widespread (Sarkar and Sarkar, 2000).

(d) *Motives*

The well-established theoretical frameworks explaining the motives for the cross-border forays by developed nations such as TCE and OLI (Ownership, Location and Internalization - the eclectic paradigm from Dunning (1980)), do not adequately explain the motives of M&As in the emerging markets. Neither do they seek cheap resources (they already have them), nor do they lead in technology or brand to capitalize. In fact, these nations seek better quality management, technology, resources and skills and hence are buying corporations in developed, more expensive nations.

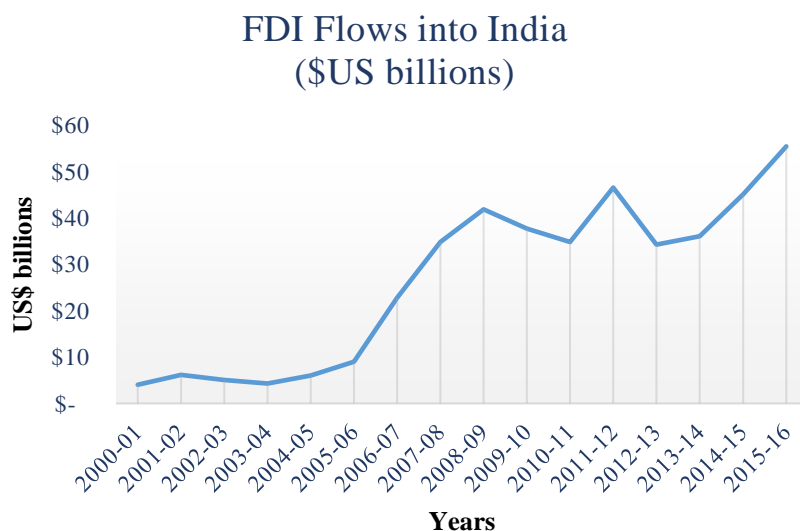
Thus, the overall environment and the sentiments for M&As in emerging markets are significantly different to those of the developed world. A notion that the well-established verdicts from the rest of the world about M&As can explain the phenomenon in the emerging markets adequately would be grossly misleading. Further, the literature from emerging markets is continuously evolving, with this thesis contributing directly to that body of research.

### **Why India?**

Apart from being an emerging market nation, India is an important country in the current global scenario. India belongs to a group of the fastest growing economies in the world commonly acronymed as the BRICS (Brazil, Russia, India, China and South Africa) countries. Since 1991, India has undergone a series of economic reforms that has catapulted

its status from a relatively dormant nation to one of the key players shaping up the new globalized economy. There is a steep rise in investment activities both inwards and outwards.

The following chart depicts the flow of Foreign Direct Investments (FDI) in India in last sixteen years, and reflects the growing attractiveness of the Indian market for the rest of the world.



**Figure 1.2.1 FDI – Inflows into India**

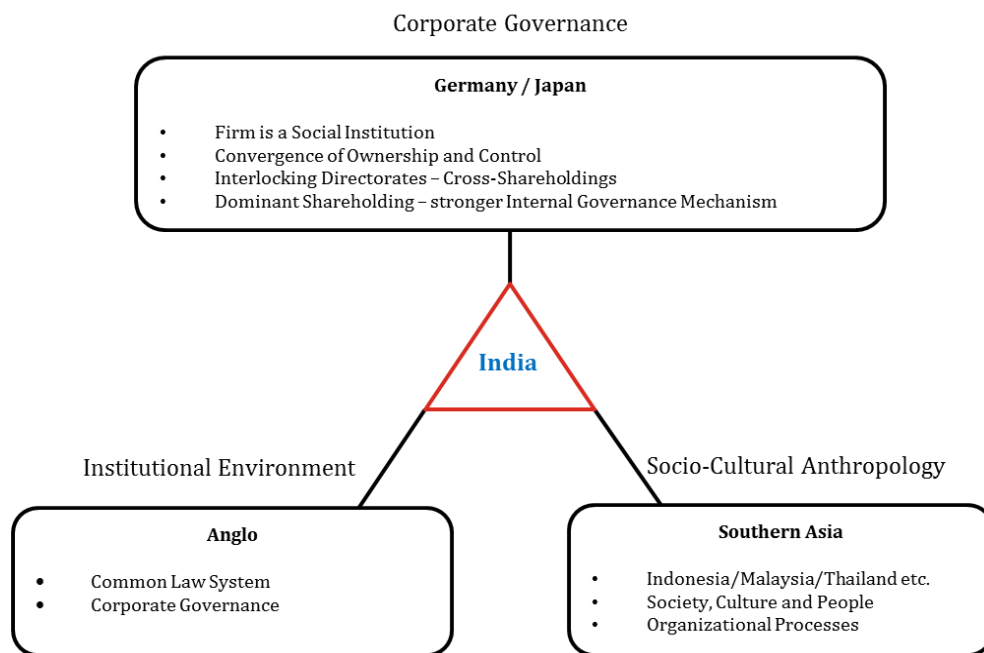
Data from Department of Industrial Policy & Promotion, Government of India Ministry of Commerce and Industry

---

Likewise, Indian business houses are leaving their footprints on the global landscape, holding ambitions of becoming global leaders. For example, the Tata Group is the manufacturer of the world's cheapest car, *Nano*, in the domestic Indian market. Yet, Tata Group acquired some of the most expensive international luxury cars brands - *Jaguar and Land Rover* - in a remarkable deal in 2008. Similarly, the Vedanta Group took over Asarco in 2008, transforming itself into one of the world's largest copper miners, and the Aditya Birla Group acquired Novelis in 2007 to become the world's largest rolled-aluminium producer.

The M&A market in India has grown enormously in recent times. In the trend analysis of M&As in India in the post-liberalisation period, Kar and Soni (2008) recognize 1996 to 2001 as the period of a first merger wave in India, with the focus of Indian M&As during this period purely strategic in nature and defined by a major emphasis on horizontal and vertical mergers. Further, Saboo and Gopi (2009) report a rise in the value of M&As in India from \$2.2 billion in 1998 to \$62 billion in 2007.

Clearly, this thesis highlights a number of contradictory and intriguingly puzzling attributes about India which make it a unique country amongst other emerging markets, thus necessitating research purely focussed on India. Drawing from the literature from various disciplines, India is uniquely placed. While India shares distinct tenets with some countries, holistically it has no exact match. India is truly multifaceted. *Figure 1.2.2* highlights the inherent contradictions that India possess.



**Figure 1.2.2 Multidimensional Characteristics of India**

---

This thesis identifies India as a common law country with the business structures resembling civil law countries and with unique socio-cultural anthropological attributes.

The common law system in India is a direct inheritance of British colonialism, and thus India’s institutional framework is fundamentally Anglo in nature. Even new reforms in business regulations, such as corporate governance, are evolving more towards the Anglo-American system. In line with these Anglo-American systems, corporate governance institutions in India are well defined, with respect to the range and depth of existing statutes and legal frameworks. However, like other emerging economies, India suffers from a weak enforcement regime (Sarkar and Sarkar, 2000), domestic institutional investors are passive, and external market monitoring mechanisms are ineffective. Sarkar *et al.* (2013) argue that good quality enforcement is as important as good quality laws to reduce agency costs. Consequently, in implementation and practices, the Indian corporate governance model, with respect to market mechanisms and ownership characteristics, more closely resembles that of



the German-Japanese model (Machold and Vasudevan, 2004). Finally, with respect to its culture and its impact on organizational processes, India is clustered with South Asian countries like Indonesia, Malaysia, Thailand, and so on (House *et al.*, 2004).

In the words of Nisha Kohli, *“Indian society is diverse and multifaceted. Its social structure is quite complex because of ethnic, linguistic, religious and economic differences. Access to wealth and power also varies considerably”* (Zattoni and Judge, 2012, p. 167). In fact, Chhokar (2002) in a GLOBE study, espouses that the best way to deal with India is “...to *expect* differences, to *accept* differences and also to *respect* differences”.

This unique mix of institutional, corporate and social systems merits studies specific to the Indian market. The country context is critical in management issues. As Hofstede (1980) argues, all the popular American managerial theories (Anglo) may not be applicable universally - what works in America may not work in other countries. Clearly, while the findings from the Anglo world are inadequate in terms of explaining Indian M&As, even the understanding gained from other emerging countries cannot be mechanically extrapolated to explain M&As in India, given its unique features. A comprehensive study of M&As in the Indian market is thus warranted.

Apart from testing the overall outcomes of M&As, this thesis also analyzes the specific impact of deals made by firms that pursue different corporate governance models, originate from other institutional environments, and with dissimilar cultures. This approach gives a unique element to this work.

In perspective, this thesis attempts to systematically explore the answers to the following questions:

- How do the Indian shareholders fare in M&As overall, and particularly in relation to domestic and cross-border deals? Are there any differences in returns between the two types of the shareholders?
- How do the Indian Business Group acquirers affect the M&As outcomes? Do the returns vary in intra-group deals?
- Does the variation in the corporate governance structures of the participating firms matter at all?
- Is cultural proximity an important factor in cross-border M&As?
- Do the returns vary with the countries?

- Is there any impact of similarities in the Institutional environment on returns for cross-border M&As?

### **1.2.2 Methodological Contribution**

Apart from testing the hypotheses surrounding M&As in the Indian context discussed above, this thesis also examines the implication of using (i) various financial models and their variants and (ii) robust regressions techniques in estimating the abnormal returns associated with Indian M&As.

The primary analytical tool used in this thesis is the event study methodology, which is based on daily stock price returns by Brown and Warner (1985). The event study methodology is commonly implemented using OLS estimations of abnormal returns. Brown and Warner (1985) argue that non-normality is prominent issue in the daily stock price data and if so, Huber (1973) and Yohai (1987) claim that the OLS estimates are sensitive to the presence of outliers and high leverage points. As a solution, Sorokina *et al.* (2013) suggest that using robust regressions (M and MM methods) captures event effects more accurately in the event studies. Thus, this thesis incorporates robust regression methods and compares and contrasts the returns from the OLS estimations, and finds significant differences between the two methods.

Further, in the Indian context, Bahl (2006), Tripathi (2008) and Taneja (2010) test variants of asset pricing models and propose that the three-factor model as a better estimator of stock returns. Thus, apart from using well established Market model, this thesis also employs the three factor Fama-French model and compares the results.

Further, Brown and Warner (1980) suggest that the use of Equally Weighted Index in asset pricing models is more likely to capture ARs. Thus, this thesis also compares the impact of Equally Weighted Index alongside the Value Weighted Index in the analysis.

Finally, as Rao *et al.* (1999) and Agarwalla *et al.* (2013) allude towards a problem of *thin trading* in Indian markets, this thesis employs Scholes and Williams (1977) adjusted beta and its variants (Fowler and Rorke, 1983; Davidson and Josev, 2005) to estimate the abnormal returns in the analysis.

Thus, this thesis employs different regression techniques, financial models, indices and their variants which, to the best of the author's knowledge, have never been previously used in estimating M&A returns in Indian markets.

## 1.3 Thesis Outline

The organization of this thesis is as follows:

- **Chapter 1** is an introduction about the need for this research, given the specifics unique to Indian corporate environment.
- **Chapter 2** summarizes the M&A theories and develops various hypotheses in the context of Indian market, which are later tested in the analysis.
- **Chapter 3** details the methodology adopted for empirical analysis of the hypotheses.
- **Chapter 4** discusses the dataset properties and limitations used in the analysis.
- **Chapter 5** presents the results for the aggregate dataset which provides the overall reflection of the Indian M&As.
- **Chapter 6** focuses on the domestic M&As specifically, and tests the role of various attributes unique to the domestic Indian markets.
- **Chapter 7** focuses on cross-border M&As in India and examines several attributes that may have bearings on the outcomes of cross-border M&As.
- **Chapter 8** summarizes the results, discusses various limitations in the research and suggests possible extensions.

# *Chapter 2. Literature and Hypotheses*

---

## **2.1 Introduction**

Corporate restructuring is one of the most prevalent strategies that firms employ to attain a competitive advantage and survive in the dynamic business world.

Amongst the various restructuring schemes, Mergers and Acquisitions (M&As) have been very attractive for strategic development, mainly because M&As afford more rapid expansion than in-house organic growth. This research focuses on the worth of M&As as an effective corporate restructuring strategy for firms in India.

Most of the primary literature on M&As emanates from the developed world, such as the United States, the United Kingdom, Australia, and other developed European countries. However, for the emerging markets, the literature is still in its nascent stage. These markets have a significant presence in the global business landscape and, as the firms in emerging markets are known to be fundamentally different from those in developed nations, the existing wisdom from the developed world may provide only a limited understanding. Thus, it is imperative to study emerging markets specifically. This chapter takes the lead from the key existing findings, and reviews these key findings from the perspective of emerging markets.

Jensen (1984) argues that, as the shareholders bear the residual risk, they are the most important constituency of modern corporations. Following that notion, the primary focus of this thesis is on wealth effects to the target and acquiring companies' shareholders in such restructuring strategies. This chapter summarizes the prominent findings of M&As from both the domestic and the cross-border perspective. It starts with a general background about M&As, including their origin and motivation. It then delves into studying the specific determinants governing these outcomes.

## **2.2 Origin, Motives and Incentives for M&As**

Since the evolution of the industrial economy in the latter part of the 19th century, mergers have typically occurred in cyclical patterns. There have been periods of intense merger movements followed by intervening periods of fewer mergers. This wave-like pattern in the density of merger activities gave rise to the term 'merger waves'. We have experienced six major waves thus far (Chang and Moore, 2011).

A brief discussion about these merger waves is warranted as they provide an evolutionary understanding and subsequent developments in M&As. The most intriguing part is that each merger wave had its own set of unique characteristics and outcomes. In the wake of continuously evolving business regulations, financial innovations, technological developments and other dynamics, the corporate strategies, motives and responses differed with time.

The first merger wave appeared around the conclusion of 19<sup>th</sup> century and the onset of the 20<sup>th</sup> century. Mergers, before 1904, were characterized by horizontal mergers. 'Monopolization' or market power was the dominant business motive then (Heflebower, 1963; Stigler, 1964). Another compelling argument put forth was that companies were seeking *scale-efficiencies*, achieved by lowering their per-unit costs (Jensen, 1986; Dutz, 1989). Further, Capron *et al.* (1998) propose *resource deployment* between target and acquirer firms as another possible explanation for horizontal mergers.

Approximately two thirds of all merger activities during the first merger wave were concentrated in a handful of industries: petroleum products, mining, metals, food products, and transportation, transforming the firms involved into industry giants. For example, the merger of Carnegie Steel and Federal Steel to form U.S. Steel which controlled 50% of the U.S. steel industry. The development of the modern corporations and the modern capital markets contributed immensely towards the rise of M&A activities. The aggregate market values of the securities of the new consolidation substantially exceeded the sum of the values of the securities just before the merger (Lintner, 1971). Hence, the mergers in this period were generally profitable for the shareholders of both firms involved. However, the stock market crash of 1904, the closure of many banks (Gaughan, 2010, p. 35), the enactment of the *Sherman Antitrust Act (1890)* in the US against horizontal mergers in 1904, and then the first world war, are regarded as the causes of the end of this wave (Lipton, 2006).

The merger wave in the 1920s was characterized by vertical mergers and also occasionally by conglomerate mergers (M&As within firms from the same industry but not with the same product). The *Clayton Act (1914)* deterred monopolies, and instead led to what Stigler (1950) describes as "*the mergers for Oligopoly*". The post World War I market boom provided the necessary impetus. Major automobile manufacturers emerged in this period. The expected gain from oligopoly was probably somewhat smaller than it was at the turn of the century (Lintner, 1971). Another prominent factor prompting M&As then was *cost synergies* (Chang and Moore, 2011), such as economies of scale in procurement, manufacturing,

marketing and distribution, and administration. Vertical mergers also provided *better control* of input resources, production process and distribution. The 1929 crash and the Great Depression ended this wave.

Mergers exploded within the booming market of 1966 to 1968. In the third merger wave, strict enforcement of antitrust laws made vertical and horizontal mergers impossible. Yet, M&As continued to occur. Gorton *et al.* (2005) suggest that expanding empire through mergers served as a *defensive mechanism* for the managers who preferred to stay independent rather than being acquired. Hence, the companies seeking expansion were left with no alternative other than to move into other industries. When companies merged with firms outside their core capacities, in ‘*pure conglomerate mergers*’, M&As within firms from different industries emerged. And soon they gained prominence. These mergers were the most distinctive outcomes in this era. *Product extension, market extension and diversification* were the primary goals for the companies. Another stark difference in mergers from earlier waves was that smaller firms were targeting larger firms (Gaughan, 2010, p. 40). The mergers were motivated by the fact that many companies were selling *below their break-up value<sup>4</sup> or book value*. The fact that the targets were selling, even below their reproduction costs, made such deals more attractive. It was therefore *cheaper and quicker to acquire the entire infrastructure*. They were seeking *revenue synergies* from cross-selling of products, increased market share and reduced competition. Purchasing a running business provided a *competitive advantage* as the merged companies had a *direct entry in the market* (Lintner, 1971). Further, the upsurge in the market in the 1960s provided another rationale for rampant M&As. Investors preferred shares with a high P/E ratio and bidding firms realised stock financing could lead to a rise in P/E ratio<sup>5</sup> without attracting tax liabilities, which would otherwise occur in the case of cash compensation. The bidding firms exploited this strategy and participated in several M&As (Gaughan, 2010, p. 40). Further, *gaining leverage capacity* by acquiring less leveraged firms and *tax advantage by merging* with companies with

---

<sup>4</sup> Break-up value is a sum total of price obtained by selling each asset of a company separately.

<sup>5</sup> Example (adopted from (Gaughan, 2010, p. 43): Let us assume the bidding firm’s share price is \$25 with \$1 million earnings and 1 million shares outstanding. That implies the firm has a P/E ratio of 25:1. Let us also assume that the target firm’s earnings are \$100,000 and has 100,000 shares outstanding and the current price is \$10. That implies target’s P/E is 10:1. Further, let us assume that in stock-to-stock transaction, bidding firm offers 50,000 shares of \$25 each for every 2 shares worth \$20 in Target firm and cancels all of their shares. That implies bidding firm now has total earnings of \$1,100,000 and total shares 1,050,000. The new EPS for the bidding firm is \$1.05. If we assume that the P/E ratio of the new firm will stay the same, then the new price would be \$26.25. So, even after providing premiums to Target firms, bidding firms could increase their own Price and EPS.

substantial losses, or just *an investment to divest* in future were other possible motives for mergers and acquisitions. The wave concluded in 1969 to 1970 (Lipton, 2006).

The fourth wave spanned 1981 to 1989 and the typical feature was the spate of hostile takeovers. The fourth wave was also the wave of megamergers - dollar amounts in these mergers were significantly higher than in earlier mergers. Further, though not as overwhelming as in fifth merger wave, the fourth merger wave had a significant percentage of international activity in the United States. Various foreign corporates seeking more stable markets started moving towards the US and a *dropping dollar value* drove the process further (Gaughan, 2010, p. 59). The *deregulation of the industries* was another major contributor towards M&As. The *development of the capital and money markets* further fuelled M&A activities. The rising stock prices and falling interest rates, resulting in an upsurge in high-yield bond markets, led to the higher usage of leverage. Leveraged Buyouts (LBO) were standard in this phase. Easy *access to finance* also resulted in rising in *corporate raiding*<sup>6</sup> (Chang and Moore, 2011), which was perceived as a highly profitable speculative activity in a very short time (Gaughan, 2010, p. 57). The overall sluggishness of the economy in general and the collapse of the junk bond market in 1989 which predominantly financed LBOs, led to the end of this wave.

With an advent of the 1990s, globalization created *international opportunities*, as well as *competition and pressure* on corporates to compete and survive. Consequently, regulatory bodies stopped frowning at mergers and were friendlier towards horizontal and vertical mergers than ever before. Corporate raiding tactics or short-term profit strategies were shunned, and strategic alliances were pursued. Also, leverage buyouts had lost their charm. Instead, stock-swap mergers<sup>7</sup> gained predominance due to high equity valuations as a result of the long sustained bull market. The most significant outcome of globalization was a tremendous increase in *cross-border M&A* activities. Even the corporates from emerging markets started participating in M&As worldwide (Gaughan, 2010, p. 66). Apparently, M&As were not restricted to the US or other developed nations. The *deregulation of various economies, access to new resources and markets, and technological advancement* further

---

<sup>6</sup> A corporate raider is an entity seeking profit by acquiring and reselling companies. They frequently engage in takeover of undervalued firms. Post-acquisition, they typically strip off target companies of their assets, carry the proceeds and leave target shareholders poorer.

<sup>7</sup> An arrangement where the target shareholders relinquish their shares in exchange of the acquiring company's shares in a predefined ratio.

stimulated such activities (Chang and Moore, 2011). This wave concluded with the market crash in the late 1990s and the ensuing recession.

Finally, in the early 2000s, lower interest rates, as a response to the 9/11 crisis, stimulated the sixth wave. Prolonged lower interest rates helped the real estate industry to thrive. Also, it gave a significant boost to the private equity business. While leveraged acquisitions were already cheaper, the growing economy helped to raise equity finance. Consequently, numerous IPOs appeared on the landscape. Corporates used the combination of cheap debt and equity financing to acquire assets and simply waited for the rising market to push up the prices of their acquisitions before selling them off. As the cost of funds was cheap, demand for M&A targets was high. With the subprime market crash, access to keen equity investors and cheap debt became limited and the wave culminated (Chang and Moore, 2011).

The extant literature cites abundant justifications and various outcomes for M&As. However, to summarize, these motives can be clustered into three broad categories: *the synergy, the agency, and the hubris hypotheses*.

The *synergy motive* aims to achieve value enhancement by integrating the resources of the firms. The hypothesis suggests that through various mechanisms, companies seek M&As to acquire specific competencies, resources, intellectual properties or unique talents which otherwise may not be viable to develop in-house. As such, mergers should result in an increase of overall combined value for the two firms.

On the contrary, the *agency hypothesis* implies that managers need to maximize their own utility at the cost of shareholders. Here, M&A decisions may emanate purely from issues wherein status, power and compensation of the managers are proportionate to the size of the empire they control (Murphy, 1985), and also there are psychic rewards associated with running large firms. Thus, they have incentives to keep building empires at the cost of shareholders. Bhaumik and Selarka (2012) argue that agency conflict is a well-known dominant explanation for the inability of the average M&A to add to the performance of the acquiring firm.

Finally, the *hubris hypothesis* from Roll (1986) suggests that the positive returns to the target shareholders are merely because of the transfer of wealth from acquiring firm's shareholders. This implies that managers err in estimating potential gains from targets and yet engage in M&As (Berkovitch and Narayanan, 1993).



The literature distinguishes the three motives by studying the total effects on the shareholders' wealth from both the sides, as outlined in *Table 2.2.1* (below).

**Table 2.2.1 Patterns of Gains Related to Takeover Theories**

| Effect                                    | Total Gains | Target Gains | Acquirer Gains |
|---|-------------|--------------|----------------|
| Synergy /Efficiency                       | +           | +            | +              |
| Hubris<br>(Winner's Curse /Overvaluation) | 0           | +            | -              |
| Agency issues or errors                   | -           | +/-          | -              |

If synergies exist, markets react favourably to such announcements. However, as the M&As may also be driven by hubris or agency motives, the main hypothesis discussed here collectively tests for all the three possible motives.

***H1: There are no abnormal returns associated with the announcements of M&As to the shareholders of the participating Indian firms.***

In the analysis presented in subsequent chapters, this hypothesis is tested for the targets, as well as the acquiring Indian firms.

## **2.3 Do M&As Have Synergies?**

As discussed above, corporates have myriad justifications for seeking M&As and 'synergistic gains' is the dominant of all justifications. Any such activity entails an immense amount of both tangible and intangible resource expenditure, and the entire process may take months, or even years, to conclude. The entire exercise is worthwhile only when M&As deliver the envisioned outcomes. As huge amount of shareholders' wealth is involved and they are the parties burdened with the residual risk, it is imperative to understand the financial and operational consequences on investors' wealth. That is, if M&As really contribute to enhancing a firm's value. The market perception about the scope of the possible synergistic gains can be observed by analysing the returns generated to the targets and the acquirers during M&As.

### **2.3.1 Returns to Target or Selling Firms' Shareholders**

The literature consistently reports gains for the target shareholders (Bradley *et al.*, 1988; Lang *et al.*, 1989; Berkovitch and Narayanan, 1993; Mulherin and Boone, 2000). These gains are significantly and materially positive (Bruner, 2002).

One of the commonly cited arguments about why target shareholders may gain is due to premiums. A *premium* can be defined as the difference between the price offered for each share and the price of the share in the recent past, to say, a month before the offer. Jarrell *et al.* (1988) report that premiums for target firms in the 1960s to the 1980s averaged around 30%, and were around 50% in the mid-1980s. Depending on the M&A characteristics, premiums may vary. To illustrate, a premium will be higher when the consideration paid is in cash (Wansley *et al.*, 1987), it is a tender offer (Jensen, 1984), or there is a competition within bidding firms (Jensen, 1987; Bradley *et al.*, 1988).

Interestingly, even when the deal fails, target shareholders may still enjoy higher valuation in the market. This is because, on the failure, target share prices do not immediately lose the entire price surge that they gained at the time of the announcement. This could also be because of the expectation of future bids. Jensen (1984) reports a 20% gain for the firms which receive bids in at least two years' time and a complete fall in initial rise for those firms that did not. Bradley *et al.* (1983) explain the same phenomenon through an information hypothesis which suggests that one of the rationales behind tender offers is the discovery of undervalued or underutilised assets owned by the target firms. This new information then becomes public and target share prices adjust accordingly, remaining the same for at least two years. However, for permanency, the target firm should be subsequently acquired.

At the other end of the scale, Roll (1986), through the hubris hypothesis, argues that gains to target shareholders may not necessarily be due to the synergies, but simply because of the wealth transfer from acquiring shareholders.

In sum, for numerous reasons, with respect to short-term price reactions around the announcements of M&As, the evidence of positive returns is well-established for the targets.

### **2.3.2 Returns to Acquirer or Buying Firms Shareholders**

While vast literature supports positive returns for target shareholders, there is a lack of consensus about the returns for bidder shareholders. Evidence includes positive, nil and even negative returns. If there is support for synergistic gains, loss from the hubris hypothesis seems to exist as well. Evidence in favour of synergistic gains is found in several studies. Jensen (1987) estimates \$50 billion in gains for the buying-firms' shareholders. While, Bradley *et al.* (1988) report 50% of the acquiring firms in their sample set had negative returns, yet overall combined results were positive after M&As. Francis *et al.* (2008) find that both cross-border and domestic acquisitions enhance wealth for US acquirers. However,

Mulherin and Boone (2000) observe no gains for domestic acquirers and Moeller and Schlingemann (2005) find lower returns for Cross-Border Mergers and Acquisitions (CBMAs).

For Indian M&As, Saboo and Gopi (2009) found positive returns for the companies acquiring domestic firms and negative impacts on those involved in CBMAs whereas, Gubbi *et al.* (2010) and Rani *et al.* (2014) suggest positive and higher gains in CBMAs respectively. However, Bhaumik and Selarka (2008) report that M&As led to deterioration in firm performance.

Clearly, the Indian evidence is mixed and further research is thus justified. And given the possible differences in returns in domestic and CBMAs, the first hypothesis (H1) is tested for the overall aggregate database and also for the sub-sets - domestic and cross-border deals.

## **2.4 Factors Affecting Takeover Premiums**

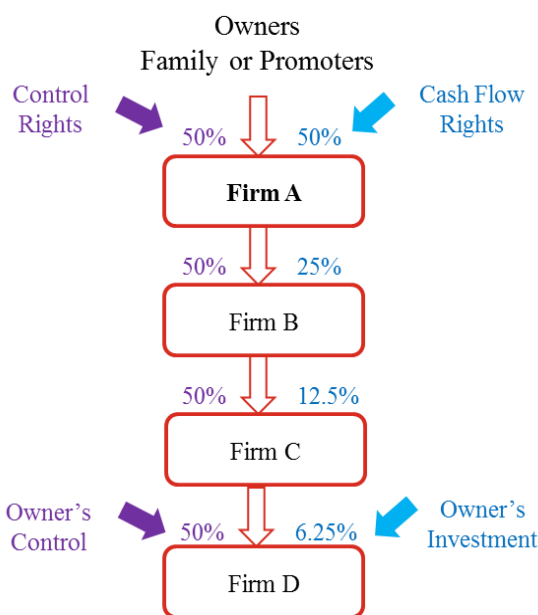
This section focuses on the factors that may have a bearing on the outcomes of Indian M&As. The M&A outcomes may differ because of the puzzling attributes of Indian corporates—they are known to operate in significantly different institutional contexts and thus have different organizational structures (Khanna and Palepu, 2000). It is largely because of the attributes (i) particular to the emerging markets, and (ii) peculiar to the Indian markets and firms. The discussion draws on the implications from the developed and emerging world, and analyzes these implications from an Indian perspective. Thus, it develops various hypotheses for the analysis of domestic and cross-border deals.

### **2.4.1 Emerging Market Effects – Indian Business Houses**

Emerging countries are characterized by numerous market failures due to information and agency problems. Weaker corporate governance, control and law enforcement (and thus the weaker property rights), flawed regulatory structures and inadequate disclosures are typical of emerging markets. The well-functioning institutional infrastructure of developed countries is absent and these institutional voids make it more onerous for individual firms to engage in product, labour and capital markets (Khanna and Palepu, 2000). Coase (1937) argues that the optimal structure of a firm is defined by the institutional framework in which it operates. Thus, given the institutional voids and market imperfections, the emerging markets' firms respond differently, and are typically structured as large conglomerate business groups with concentrated ownership and significant operational and financial linkages with their affiliates (Gopalan *et al.*, 2007). The large scale and scope of the groups

allow them to create *internal factor markets*. By efficiently allocating the critical resources internally, they replicate the functions of the institutions in advanced economies and mitigate the issues from the external market failures. Their affiliates derive significant benefits from relying on these internal sources. Besides that, concentrated ownership also provides internal monitoring mechanisms (Khanna and Palepu, 2000).

Right at the core of these large business groups is the principle that allows *corporates to own shares in other corporates*. This leads to the creation of *pyramidal organisational structures*, with a top-down chain of control, and successive layers of subsidiary or affiliate independent firms with the ultimate owners right at the apex. By virtue of its structure, a typical implementation entails that these owners take ultimate control of the resources of the entire group with just majority control at each level. Thus, they wield enormous control rights which are quite often disproportionate to their cashflow rights. *Figure 2.4.1* illustrates how a pyramid structure provides 50% control to owners in firm D, while investing only 6.25% of total capital in firm D.



**Figure 2.4.1 Pyramid Structure**

By owning 50% of Firm A, which in turn owns 50% of Firm B, a family can achieve control rights of Firm B with a cashflow stake of only 25%. Further, for every \$100 dividend in Firm D, owners are entitled to \$6.25.

Similarly, a typical Indian corporate structure is a ‘business house’. Indian business groups are the collection of publicly traded firms operating in several industries. The founding family members dominate shareholdings and control through direct and indirect participation via intra-family cross-ownership and passive support of domestic public financial institutions,

as they are perceived to be inactive in their governance roles in India (Sarkar and Sarkar, 2000; Machold and Vasudevan, 2004)

With respect to capital financing, one of the important functions of business groups is the formation of an ‘internal capital market’ wherein cashflows may be diverted from one affiliate to another for numerous motives such as (i) further investments in profitable projects - *investments*, (2) risk sharing by propping up ailing units - *support* and (3) tunneling profitable resources out from the firms with low insider ownership to higher ones – *tunneling*<sup>8</sup> (Gopalan *et al.*, 2007). Depending on the motive, such functions may be advantageous or destructive for the affiliates—the outcome varies according to the institutional context (Marisetty and Subrahmanyam, 2010). For example, the businesses affiliated with US conglomerates underperform (Berger and Ofek, 1995), but Japanese keiretsu are known to benefit from internal capital market activities (Hoshi *et al.*, 1991). However, the institutional context of India differs significantly from these advanced economies<sup>9</sup>. As the affiliates in Indian markets are independent public companies with distinct shareholders who, due to regulatory controls, are unable to own banks like in keiretsu in Japan, such opportunities are limited (Khanna and Palepu, 2000). Thus, the functions of the internal capital markets are more significant in the Indian context. Business group affiliation provides greater access to external funds in the countries with underdeveloped capital markets and low levels of investor protections (Ghatak and Kali, 2001). Typically, the funds are channeled through intra-group lending wherein the larger, more profitable firms borrow funds *externally* and then extend these funds to the other affiliates (Gopalan *et al.*, 2007). Khanna and Yafeh (2007) suggest that the groups thrive on their reputation, which is particularly beneficial in emerging economies where minority investors are more vulnerable to expropriation due to the weak regulatory and legal environment.

Thus, of the three motives outlined above, Gopalan *et al.* (2007) find *support* as the primary motive of capital transfers within Indian business groups, particularly as these loans are extended to *assist troubled affiliates* on heavily discounted or zero costs. They do so primarily to avoid negative spillovers within the rest of the group firms, particularly as business houses rely on their reputation as credible, high quality borrowers - the bankruptcy

---

<sup>8</sup> Discussed ahead in more detail.

<sup>9</sup> The United States is characterized by well-functioning factor markets, low corruption and strong contractual enforcement mechanisms. The Japanese groups have a main bank as their affiliate which provides capital and performs monitoring tasks. Thus, they have an efficient internal capital markets. Besides, these financial markets are comparatively more developed and the groups are not family controlled (Khanna and Palepu, 2000).

of their affiliates can hamper future capital flows for the rest of the group. Indian business groups see *propping up* as their primary motive.

Indian business groups enjoy a range of other advantages. Diversified business groups are able to generate large economic benefits because of their preferential access to bureaucrats in an economy where government regulation plays an important role, particularly in the event of a bail out when in distress. Further, group affiliates enjoy superior access to foreign capital and technology as the providers value their reputation and political connections and are concerned about information problems and weaker property rights of their investments (Khanna and Palepu, 2000). Siegel and Choudhury (2012) suggest that a group firm can control vast knowledge-creating resources with little capital and can ‘create complex recombination of inputs’ to generate added value in their products. They invest heavily in marketing and technology, and thrive on product differentiation strategies that thwart the competition. Thus, they respond better to market shocks.

Clearly, the functioning of internal capital markets benefits group affiliates in several ways.

However, when the performance effect of these business houses is considered, Khanna (2000) argues that while the positive effect of the group affiliation is generally large, this is partly due to the *value enhancing function* evident in their exceptional response to various market failures, and also partly because of the *welfare-reducing minority shareholder exploitation*. As the group owners command a much larger quantum of the equity of the companies than is directly owned by them, the diversion in the cashflow and control rights leaves ample scope for opportunistic earnings management by the controlling owners, at the cost of minority shareholders. La Porta *et al.* (2002) argues that cashflow ownership by an entrepreneur is seen as commitment against expropriation. In similar spirits, (Claessens *et al.*, 1999) find higher value for corporate assets with greater insider cashflow ownership.

With reference to the example in *Figure 2.4.1*, Firm A is entitled to receive only \$6.25 out of \$100 dividend paid out by Firm D. This obviously creates incentives for controlling shareholders (owners) to divert productive and profitable resources from low cashflow rights companies (Firm D) to those with higher cashflow rights (Firm A). The process is called *tunnelling*. It may be executed in several ways, including through the transfer of assets, the syphoning of profits, transfer pricing, diverting corporate opportunities, related transactions between firms at below or above market prices, and so on.

In reference to the classical agency theory, the *separation* of ownership and controls leads to incongruity in principal and agent interests (vertical agency problem). However, in the Indian context, *convergence* of ownership and control leads to conflicts between inside and outside shareholders (horizontal agency problem). Thus, the groups are often analysed for their benefits and costs under *alignment* and *entrenchment* hypotheses. Sarkar *et al.* (2013) argue, the entrenchment by the owners-managers trumps the positive effects of reduction in vertical agency problem. Claessens *et al.* (1999) suggest that East Asian pyramids reduce Tobin's  $q$ . Entrenchment is further facilitated by poor investor protection, which allows higher diversion of cashflows, rendering pyramidal structures more attractive as they generate higher private benefits of control (Heitor and Daniel, 2006).

There are several reasons for tunneling to persist in such markets. While the groups provide monitoring functions internally, the external monitoring and disciplining of the group's affiliates is a challenge for numerous reasons (i) domestic financial institutions are ineffective monitors, (ii) political affiliations insulate them from external interference and monitoring (Khanna and Palepu, 1999), (iii) inadequate disclosures and reporting and accounting practices are known to be influenced by ownership and control structures (Fan and Wong, 2002), and (iv) concentration in the hands of promoter families, along with the passive support of domestic public institutional investors reduce takeover risks (Morck *et al.*, 1988). Instead, they argue that insider-dominated systems takeovers are generally negotiated, rather than contested. Likewise, even (Long and Walkling, 1984) find that insider ownership implies less resistance (hostility) to takeover bids. Consequently, takeover threat market mechanism<sup>10</sup> is ineffective in disciplining errant management.

Further, the internal monitoring itself may be ineffective as insiders serve on boards. The extent is apparent via board-interlocks. Balasubramanian *et al.* (2011) report that 6% of the total directors on the boards of National Stock Exchange (NSE) listed companies controlled 66% of the total NSE market capitalization in 2010. Most of the directors were from the concentrated ownership structures.

Thus, the pyramidal structure makes it harder for the external market mechanism to discipline errant managers, and as internal monitoring may not be an adequate deterrent, the

---

<sup>10</sup> The developed world is market oriented where in external markets perform monitoring and controlling role. In such an environment, a takeover threat by other companies acts as a disciplining mechanism for poorly performing corporates and incumbent management.

groups can continue to ply their trades with impunity.

On another and significantly important cultural dimension, Sharma and Rao (2000) argue that the group firms value blood and family ties more than entrepreneurial and managerial skills. Hence, management and strategic decision-making at these firms may not be of the highest quality. Further, Chacar and Vissa (2005) argue that in emerging economies, groups show higher persistence in the face of poor performance.

Clearly, while groups are beneficial, they can also be detrimental. The evidence of tunnelling in Indian Business groups is mixed. Sarkar and Sarkar (2000) do not find empirical evidence of expropriation by insiders. Likewise, Gopalan *et al.* (2007) argue that the primary motive of intra-group transfers is to support, and not to tunnel. Siegel and Choudhury (2012) find no evidence of tunneling. However, Bertrand *et al.* (2002) argue that Indian group affiliated firms engage in higher earnings management relative to non-affiliated firms. With respect to M&As, Bhaumik and Selarka (2012) report that concentrated ownership may precipitate horizontal agency problems, and may not necessarily improve post M&A performance.

The pervasiveness of pyramidal structure, ownership concentration, nepotism in the domestic setting creates a unique atmosphere for domestic M&As. The following hypothesis is thus developed to understand the announcement effect of domestic M&As and is tested on domestic deals.

***H2: There are no abnormal returns associated with the announcements of M&As to the shareholders of the participating Indian firms in domestic M&As.***

The hypothesis is tested for both targets and acquirers in domestic deals and also allows the testing of synergy, hubris and agency motives.

Further, given the ambiguity around the effects of group affiliation, this thesis splits the domestic deals according to group orientation and tests the group impact on M&As using the following hypothesis:

***H3: There is no difference in abnormal returns at the announcement of takeovers when acquirers belong to Indian Business Groups (IBG).***

The negative abnormal returns support entrenchment hypothesis, and allude towards the detrimental effects of being a group affiliate.



## 2.4.2 Information Asymmetry – Relatedness Effect

While the ‘normal’ degree of information asymmetry between informed and uninformed traders is pervasive, it may be larger before the release of significant firm specific events such as M&As (Venkatesh and Chiang, 1986). One way finance literature studies the role of information asymmetry and its impact on the distribution of total premium around M&A announcements is by splitting the premium into pre-bid run-up and post-bid mark-up. The cumulative abnormal returns to the targets prior to announcement day are called *pre-bid run-up*, and those after the announcement are called *post-bid mark-up*. Interestingly, it is well documented that takeover bids are typically preceded by substantial target share price run-ups (Bris, 2002). Schwert (1996), in a well-regarded study based on 1,814 exchange-listed target takeovers, reports that this run-up starts 42 days before the announcement of M&As, with the largest pre-bid increments occurring during days [-21, -1]. Schwert estimates an average run-up of 13%, and a mark-up of 10.5% in the main sample. The chief finding being that these run-ups and mark-ups are generally *uncorrelated*, which implies that the run-up is an *additional cost* to the acquirers. Schwert labels the phenomenon as *mark-up pricing hypothesis*. Every \$1 in the last week of run-up increases the mark-up by \$0.80 on the announcement day (initial offer). Recently, Betton *et al.* (2008) performed a more exhaustive study, with 7,522 takeover bids of exchange-listed targets to arrive at similar conclusions. Thus, the larger the run-up, the larger the takeover premium. Even the most conservative estimate in Schwert’s analysis suggests that at least two-thirds of the run-up is added to the total premium paid in successful deals.

For acquirers, Schwert did not find statistically reliable positive impact of acquirers’ run-up on the takeover premium (except when there is competition for targets). When compared with the target run-ups, acquirer run-ups are small, and their mark-ups are generally negative.

Discussing its sources, pre-bid run-ups reflect takeover rumours emerging from the regulatory filings<sup>11</sup>, media speculations, street talks (Betton *et al.*, 2008), informed trading by insiders and arbitrageurs or block trading by toehold<sup>12</sup> investors (Choi, 1991).

---

<sup>11</sup> For example, toehold acquisitions are generally required to be reported to the regulatory authorities if they exceed certain threshold. For India, the first 5% stake and then every 2% stake acquired thereafter in the target firm needs to be reported.

<sup>12</sup> Toehold is an ownership stake already held in the target firm at the announcement of M&As. Its impact on M&As are discussed in detail in the next section.

#### 2.4.2.1 Insider Trading

Widely cited, Meulbroek (1992) explains pre-bid run-up by recognizing *insider trading*<sup>13</sup> as an important contributor. Meulbroek estimates that nearly half of the run-up is accounted for on the insider trading days. The average abnormal return is around 3% with a mean CAAR of 7% for insider trading days. Interestingly, insider trading occurs only on a small sub-set of days in the run-up period, yet insider-induced price movement is statistically larger relative to the announcement effect of the same information. Though the entire price movement on insider trading days may not happen just due to insider trading, pre-bid run-ups reflect widespread insider trading and that it is rewarding. When it comes to information leakage, Keown and Pinkerton (1981) claim that imminent merger announcement is inefficiently managed secret and trading on this non-public information abounds. They estimate that nearly half of the target firms' takeover gains occur *before* the actual public announcements. Several other researchers report similar estimates of pre-bid run-ups (Bris, 2002). Klein (1978) describes the process of information leakage during M&As as, "*You start with a handful of people, but when you get close to doing something the circle expands pretty quickly. You have to bring in directors, two or three firms of lawyers, investment bankers, public relations people, and financial printers, and everybody's got a secretary. If the deal is a big one, you might need a syndicate of banks to finance it. Every time you let in another person, the chance of a leak increases geometrically*"<sup>14</sup>.

Unusual trading patterns in the market about a security often attract attention from security traders. The efficient stock market may deduce informed trading through various legitimate sources, such as trade-specific characteristics (volume, size, frequency, direction, and so on) and incorporate a significant proportion of that information in the stock price instantaneously, and much before the formal announcements (Meulbroek, 1992). In similar spirits, Morellec and Zhdanov (2005) argue that outside investors can update their beliefs about participating firms by observing them. They may also anticipate timing and terms of the takeover to some extent. This leads to the incorporation of takeover surplus in the stock prices of the participating firms, and more of it in rising probabilities of takeover, thus inducing pre-bid run-ups.

---

<sup>13</sup> The definition of insiders varies according to jurisdictions but fundamentally it implies whoever is in possession of material non-public information that leads to significant abnormal price reactions on release. Apart from more obvious corporate insiders such as executives or staff members, brokers, dealers, arbitragers, investment bankers, and so on are just few other categories of insider traders.

<sup>14</sup> Quoted by Keown and Pinkerton (1981, p. 857)

Hence, the leakage of insider information and informed trading is quite prevalent and thus the pre-bid run-up.

#### 2.4.2.2 *Toehold Theories*

Another explanation of run-ups comes from the *toehold theories*. A toehold is an ownership stake already held in the target at the time of the announcement. It is well documented that acquirers benefit from purchasing initial stakes (Bris, 2002). Intuitively, while a toehold reduces the number of shares that must be purchased at a higher premium if the deal is successful, it also creates capital gain if the toehold had to be sold to a rival bidder. Toehold interest bestows *more* bargaining power on the acquirers. Firstly, if a toehold exists, acquirers require less shares to buyout minority shareholders and gain control. They can even exert more influence on the target's management. Secondly, if facing competition for targets, a toehold increases the probability of winning for the initial acquirer, lowers the offer premiums, and greater toeholds even deter competition or provide competitive advantage. Thirdly, a toehold effectively manages target free-rider problems<sup>15</sup>. Fourthly, if a toehold exceeds 9%, it reduces target management resistance to takeover attempts (Betton *et al.*, 2008, 2009). Finally, toeholds afford acquirers a partial insurance in case of overpayments, as the consideration paid is shared between the two sides. Depending on the extent of the toeholding, it can mitigate the issue of Winner's curse (Strickland *et al.*, 2010). Thus, the acquirers have an absolute advantage over both the target firm, as well as any rival acquirers. Strategically, acquirers may bid aggressively in either of the situations and gain nonetheless. Overall, a toehold gives acquirers an advantage and is generally considered to be a profitable approach.

However, toehold acquisitions prior to the announcement<sup>16</sup> while beneficial, may also be detrimental for the acquirers. While being a profitable strategy (acquirers can buy a stake beforehand the announcement, avoiding expensive premiums and deriving benefits associated with higher negotiating powers), toeholds also carry a certain amount of risk—they reveal valuable private information to the market before the announcement is made, particularly as toehold purchases can signal initiation of the acquisition process (Mikkelsen

---

<sup>15</sup> Minority shareholders may not tender their shares and hold out for a higher premium. Consequently, acquirers are forced to provide substantial premium and surrender their takeover gains.

<sup>16</sup> There is a debate about the timing of these acquisitions. Long-term toeholds refer to acquisition made long before the announcement, whereas short-term toeholds acquisitions occur during the run-up period. While short-term toeholds are known to have more impact, the overall total toeholds have a significantly negative impact on mark-ups (Betton *et al.*, 2008).

and Ruback, 1985). Unfortunately, acquirers can hide their trades only partially, even when the target stock is liquid. A part of the value gained at toehold acquisition announcements is in anticipation of value-enhancing control transfers either through takeovers or internal mechanisms, and the subsequent premiums to be earned (Choi, 1991). With such announcements, market participants infer imminent takeover probability and potential takeover synergistic gains thereupon, and revise stock prices upwards. Therefore, toeholds may initiate price movements *before* the M&A announcements in run-up period and affect the overall cost of acquisitions.

Despite the several positive effects of toeholds for acquirers, interestingly there is little empirical evidence of significantly positive direct takeover gains for acquirers due to toeholds (Betton and Eckbo, 2000). Betton *et al.* (2009) find toehold size to be statistically insignificant in explaining abnormal returns to the acquirers. Choi (1991) explains that acquirers receive only partial benefits from their toehold investments. However, they are still beneficial indirectly as they reduce the offer premium and acquirers' returns are less negative with positive toehold (Betton *et al.*, 2008).

For target firms, toeholds may directly reduce private benefits of control (Betton *et al.*, 2009). They have lesser negotiating power and thus toeholds imply lower bid premiums. Toehold purchase is positively related to price run-ups when detected by the market and there is a negative correlation between toehold size and offer premiums (Betton and Eckbo, 2000; Bris, 2002), which is well recognized in finance literature.

#### 2.4.2.3 Firm Level Asymmetry

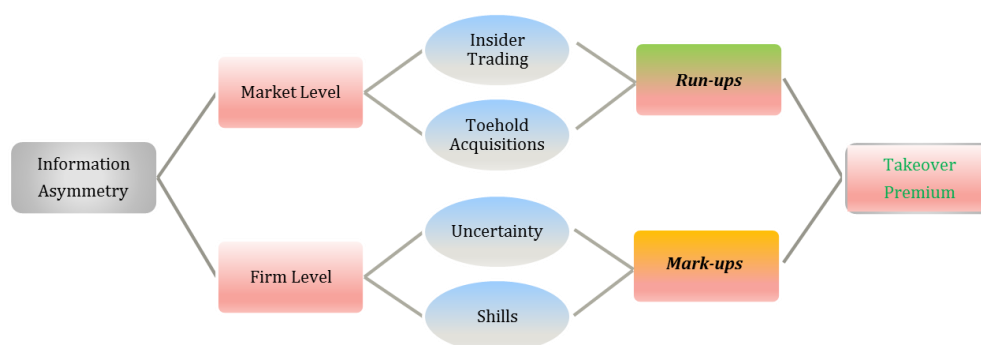
Information asymmetry may exist between the participating firms in the deal, which can have a bearing on takeover premiums. Firstly, it may be difficult for the firms to value the growth opportunities beyond the assets in place. Imperfect information about the possible synergistic gains leads to negative takeover returns for acquirers (Morellec and Zhdanov, 2005).

Secondly, if the run-up reflects the information already held by the participating firms, the takeover premium remains unaffected and both the parties may choose to ignore the run-up. However, in the case where either of the participating firms is *uncertain* about the sources of the run-ups, then they are likely to revise their valuations of the target's stock. For instance, if there is any suspicion about the presence of a rival bidder gradually acquiring target shares in the open market, then both the parties will revise their valuations upwards

leading to a *higher mark-up price* (Schwert, 1996). Such competition decays the acquirers' bargaining powers and gives targets an advantage, which increases the takeover premium. Target shareholders receive higher returns when the acquirers have to compete (Servaes, 1991). Bradley *et al.* (1988) found acquirer firms' returns to be significantly positive when single and almost zero in multiple-acquirer contest. Morellec and Zhdanov (2005) concluded that competition produces probabilities of negative returns for acquiring firms.

The presence of competition may also be falsely alluded to by *shills*. Shills are the third party insider traders in possession of proprietary information about the target and bidder, who act on that information without the knowledge of the negotiating parties. Their trades generate unusual price movements in the market and may falsely lead participating firms to conclude the presence of some legitimate competing acquirer, thus instigating an upward revision of the takeover premium. They have incentives in upward price revisions and thus prefer to remain disguised (Schwert, 1996).

Figure 2.4.2 demonstrates the sources of information asymmetry and how they affect the takeover premium. In essence, the insider trading and toehold acquisitions may signal imminent takeover activities to market participants, and thus their actions create run-ups. Whereas, uncertainty about synergistic gains and the presence of rival bidders and shills may lead to upward price revisions by the participating firms, thus increasing the mark-up. Together, they both affect the total takeover premiums.



**Figure 2.4.2 Role of Information Asymmetry in Takeover Premiums**

However, these run-ups may not necessarily always be costly to the acquirers. Betton *et al.* (2008, 2009) found that run-ups are significantly positively related to acquirer returns and explained that the takeovers with greater run-ups are indeed associated with larger total synergies (target plus acquirer). Hence, they increase the acquirers takeover gains. Instead, it is the mark-up which reduces the acquirers' gains. Further, run-up and mark-up may not

always be exogenous. Instead run-ups may partially substitute mark-ups in the presence of a toehold (Betton *et al.*, 2008) and insider trading (Schwert, 1996). This phenomenon is known as *substitution hypothesis*. In such scenarios, as the mark-up is low, informed investors get the larger share of the premium in the pre-bid run-up period.

Apart from the aspects of information asymmetry in M&A outcomes discussed above, in emerging markets such as India there is another dimension to this theory – *related acquisitions*. Related acquisitions refer to intra-group acquisitions. As discussed earlier, businesses are typically structured as a network of independent yet affiliated firms – *pyramid structures*. Interestingly, a plethora of M&As occur between the firms within the same business group with *common* parent company. One way to explain such M&As is corporate restructuring. However, M&As with or between affiliates changes the dynamics of M&As dramatically. As acquirers takeover an affiliate within the same group, the risk of valuation and uncertainty about the outcomes are reduced significantly. Even the level of information asymmetry about the target firm may be non-existent for the acquirers. There may not be any threat of competitive bidding. Given these possibilities, it is conceivable that acquiring firms enjoy the upper-hand in the deal right from the beginning, particularly given that they have even more bargaining power. The advantage enjoyed by the acquiring firm may dampen the positive announcement effect and larger takeover premiums generally argued in favour of the target firms. Even in this thesis, one third of the domestic acquisitions are intra-group in nature. Given their frequency and atypical characteristics, the following hypothesis is tested to evaluate if related M&As are different to unrelated M&As.

***H4: There is no difference in abnormal returns at the announcement of takeovers when the targets and the acquirers are already affiliated.***

### **2.4.3 Cross-Border M&As – Multidimensional Effects**

One of the most significant outcomes of globalization in the late 20<sup>th</sup> century is the tremendous increase in Cross-Border M&A (CBMA) activities. The shift in the political and economic systems prompted liberalisation of economies. In turn, increased economic opportunities, technological advancements (such as reduced transaction costs which enhanced international participation and facilitated exchange of information, knowledge and skills), the convergence of accounting standards, and the reduction in cumbersome industry regulations and bureaucracy provided the requisite stimulus (Dunning, 2006b; Chang and Moore, 2011). Edith (1959) defines firms as a collection of productive resources (physical and human) in constant quest of rewarding opportunities (new products and markets) to

ensure their long-term profitability - all this is the source of synergies in CBMAs (Seth *et al.*, 2000, 2002). In spirit, Jensen (1987) justifies CBMAs by reasoning that the most publicly traded companies cannot meet their targets without foreign acquisitions. Under the purview of these explanations, globalization has heightened the opportunities, as well as the pressure of engaging in CBMAs. Firms now have to work together to be either more inventive or more expansive. Just some of the opportunities that globalization provides are: (i) cost and revenue synergies by exploiting market imperfections wherein the same resource (factor or product) is priced differently in other countries, (ii) companies may seek acquisitions to transfer their technology to other nations and increase market share, (iii) acquisition of new knowledge and superior technology and capabilities which bolsters business both abroad and domestically. Many times, companies undertake CBMAs simply to follow or support existing clientele internationally, thereby avoiding the possibility of competition from potential suppliers abroad (Chang and Moore, 2011). Hofstede (1984) expects culturally different firms to grow with the exchange of a new set of strengths, capabilities, resources, and knowledge.

Given the range of plausible explanations, it appears that CBMAs may improve the overall efficiency of firms and increase shareholders' value. Indeed, that is the case in many studies. For Indian acquirers, Gubbi *et al.* (2010) report positive returns and Rani *et al.* (2014) indicate higher returns in CBMAs than in domestic acquisitions. Yet there is ample evidence of negative returns (Barkema *et al.*, 1996). Aybar and Ficici (2009) report that acquirers from emerging markets lose in CBMAs. In fact, 50% of the deals lost value in their sample. Holl and Kyriaziz (1996) report that 25% of CBMAs deals were abandoned after the announcement. Seth *et al.* (2000, 2002) find neutral, as well negative, returns for the acquiring firms in different sub-sets in their analysis and rationalize that these returns have occurred due to hubris and managerialism hypothesis respectively.

The path of CBMAs is far from being frictionless. Though the dynamics of CBMAs are similar to those of domestic ones, they also face several other unique hurdles due to their international characteristics. When compared with domestic M&As, Seth *et al.* (2000, 2002) argue that the CBMAs present different sources of costs and benefits, and may therefore lead to different magnitudes of synergies overall. In particular, the CBMAs face serious challenges at the post-acquisition stage. The impact of various country, industry, and firm-level variables is vital and poses a serious threat to successful post M&A integration. The country-level factors refer to cultural, institutional, economic, and political differences. The industry and firm-level attributes include factors such as technology, sales potential, brands, complimentary or strategic assets, multinational and local experience, product differentiation,

size, and age. The impact of the country and industry-level factors on cross-border ventures is clear and robust, but the impact of firm-level factors is ambiguous (Shimizu *et al.*, 2004).

There are numerous theoretical frameworks that can be used to explicate the role of these variables in cross-border ventures. Arguably, the most dominant frameworks, based on economic perspective, in the finance literature are TCE (Transaction Cost Economies) (Coase, 1937; Williamson, 1979) and the OLI framework (Eclectic paradigm (Dunning, 1980, 1985). The fundamental tenet of TCE is establishing governance structures that minimize transaction costs (searching, negotiating, monitoring and enforcing) and inefficiencies (coordination and cooperation) while enforcing implicit and explicit contracts associated with the foreign markets operations. Likewise, the OLI framework refers to exploiting Ownership (proprietary assets), Locational (factor costs) and Internationalization (scale and scope) advantages as a source of minimizing the transaction and coordination costs. Another relatively recent model, RBV (Resource Based View) (Barney, 1991), advocates investing in resources to create sustained competitive advantages that are valuable, rare and inimitable barriers to diffusion (exclusivity or non-transferability).

While each of these accounts is primarily focussed on exploring the appropriate channels to penetrate foreign markets (and since CBMA is one of the ways to foray into foreign markets), they provide a rich background of the challenges encountered by the firms engaged in cross-border alliances. As such, these accounts are a good starting point to discuss risks and rewards associated with any CBMA transactions.

One important limiting aspect of each of these theoretical frameworks is that they are based on the analysis of developed markets. However, in present times, CBMAs are not confined to developed nations - Emerging Market Multinational Enterprises (EMNEs) are increasingly participating in M&As worldwide. EMNEs are corporates headquartered in an emerging market, which engage in outward FDIs. In 2011, they accounted for 29% of global cross-border acquisition by value, according to the *World Investment Report (2011)* UNCTAD. And for these firms, Fan *et al.* (2011) argue that their business organizations and managerial behaviours are fundamentally different. That prompts Hennart (2012) to question the validity of Dunning's OLI framework in this context. In fact, even Dunning himself (Dunning, 2006b) suggests that the country and firm-specific competitive advantages might be different for EMNEs. And instead of exploiting their ownership advantages (O), they might be seeking ways to access or augment their existing capabilities. Likewise, in sharp contrast to the existing frameworks explicating internationalization, Mathews (2006) argues



that the well-established TCE, OLI or RBV views are inadequate for EMNEs. In fact, these markets expose the limitations and weaknesses of these existing accounts. They do not seek cheap resources (TCE) as they already have them, nor do they own any proprietary asset to exploit in foreign markets (OLI). Also, unlike RBV, which argues for non-duplicity and non-transferability, they assess resources for imitability and transferability. These firms usually start small. They lack critical resources, proprietary technology, brands, skills, experience, and knowledge, and they are distant from major markets. In reality, these firms are either newcomers or latecomers in the global scenario, and to make up for the lost time, they seek inorganic growth by directly acquiring corporations with better technology, resources, and managerial skills in developed and more wealthy nations. They grow through organizational innovations, rather than through product or technological inventions. In fact, Mathews argues that these firms have lessons to teach about the strategies they have adopted and proposes a new framework, Linkage-Leverage-Learning (LLL), which governs firms' behaviour in these markets. They establish *links* through joint ventures and partnerships overseas, and *leverage* their existing cost advantage. Repeated application of this strategy gives them valuable *learnings* about new sources of competitive advantage. Their view of the world as a set of available resources, and the modus operandi of M&A, is truly unique. In a similar vein, Kumar (2009) argues that emerging markets have different motivations. They already have a cost advantage, so what they seek is complementary competencies, as well as new business models, distribution networks, innovations, and talent. They aim to acquire and augment their existing strategic assets. Nicholson and Salaber (2013) take the argument even further, suggesting that motives for EMNEs are even country specific.

To further discuss their limitations, in their native form, these traditional theories fail to acknowledge the impact of institutional and cultural disparities which have emerged as prominent challenges within CBMAs. Olie (1994) explains that this is because the wealth of research has focussed primarily on M&As derived from the same national background. Today, these factors are vital in foreign forays, particularly in terms of their potential to impede the success of post-merger integration (Kogut and Singh, 1988; Brouthers and Brouthers, 2000) and hinder the realization of strategic objectives by foreign ventures. Consequently, these theories had to be revamped. Brouthers and Brouthers (2000) and Brouthers (2002) extend the TCE model to incorporate the institutional and cultural context. Dunning (2006b) also incorporated the institutional context into the OLI framework. He acknowledged that the respect for culture and tradition is of particular importance for the success of these strategic alliances. For the LLL framework, Dunning (2006a) credits it as a complement that adds to the richness of OLI framework, but disagrees about it being a

replacement and instead recommends that institutional context should be integrated into the LLL framework. Another argument incongruent with the LLL comes from Narula (2006) who asserts that EMNEs are not different from any traditional MNEs as they both exploit firm specific advantages and seek resources that they lack. Further research on Indian markets' EMNEs (Buckley *et al.*, 2015) finds support for both the asset exploitation (OLI) and augmentation (LLL) by Indian firms.

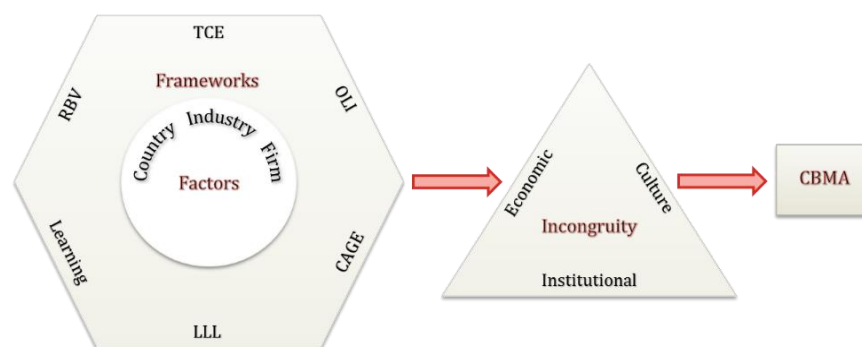
An alternate, but relatively expansive, model explaining CBMAs is proposed by Ghemawat (2001). He argues that managers are myopic in selecting cross-border associates, basing their decisions on the sales potential in a new territory and relying on tools such as country portfolio analysis (CPA) centred on national wealth and people's propensity to consume. In doing so, these managers grossly underestimate the costs and risks of doing business internationally. These costs and risks are from the impact of distance. The author proposes the unique CAGE (Cultural, Administrative, Geographical, and Economic) Distance Framework, which proposes that cultural, administrative, geographical, and economic distances between the participating firms are factors that affect CBMA outcomes. The higher the variance of these paradigms, the riskier the target market will be, the higher the degree of convergence, and the greater the potential will be. Of the four, cultural and administrative (institutional) distances have a larger impact. Ghemawat argues that these distances can make the foreign market considerably more or less attractive, citing some literature findings for substantiation. For instance, the chances of trade between firms from countries with past colonial relationships are ten times more likely, than between firms with no such historical connection. Likewise, trade between the countries with a common business language is three times greater than it would be otherwise. Common memberships of the countries can raise the trade possibilities by 330% and so on. What this implies is that socio-political linkages, charter memberships, and historical relationships are vital for foreign ventures. The idea that these business relationships must emerge from some cultural or institutional commonalities, and not just out of pure coincidence, is deep seated.

However, these distances are not always strenuous. Other theories such as RBV and Organizational Learning Theory suggest that the cultural and institutional differences present opportunities to acquire unique skill sets. The greater the divergence, the higher the possibilities of new learning (Barkema *et al.*, 1996; Vermeulen and Barkema, 2001). These dissimilarities provide new knowledge, talent and experience which adds to managerial proficiency. Towards wealth creation, CBMAs generate synergies through asset sharing and

risk diversification and hence positive returns to both target and acquiring shareholders (Seth *et al.*, 2002).

Further, a common business language, geographical proximity, religion, membership of various international organizations and many more factors are touted as other possible determinants. Identifying real factors from ephemeral factors is particularly difficult under the circumstances where underlying notions are shifting radically. While carefully sifting through these frameworks (along with their stated limitations and suggested reforms), a common theme emanates. This theme is that the dominant source of risks in CBMAs is the exposure to incongruent economic, regulatory and cultural structures (Hofstede, 1980; House *et al.*, 2002). In the same vein, Brouthers (2002) states that foreign market ventures are dictated by transaction costs (economic risks), as well as institutional (legal and regulatory environment risks) and cultural variables (investment risks). Technology may indeed be making the world a smaller place, but it is not eliminating the very real and often very high costs of distance (Ghemawat, 2001).

*Figure 2.4.3* summarizes the extract of the discussion in a simple layout. In essence, the various frameworks explaining the cross-border activities argue that the economic, cultural and institutional incongruities matter. However, while RBV and Organizational Learning Theory frameworks see them as mutual learning opportunities, other frameworks like TCE, OLI, CAGE and LLL perceive them as challenges.



**Figure 2.4.3 Distance Factors in CBMAs**

Incongruities (distance) in Economic, Institutional and Cultural structures of the participating firms are the sources of inefficiency in CBMAs. While the TCE, OLI, CAGE, and LLL frameworks see them as challenges, RBV and Organizational Learning Theory dub them 'learning opportunities'.

The fragmented literature on M&As in emerging markets is already pointing towards some unprecedented outcomes. Chari *et al.* (2009) distinguish between returns to the acquirers in deals between developed-country acquirers and emerging or developed country targets, and suggests that the results are economically large and statistically significant in former deals, as long as the majority control is acquired. Likewise, deals between emerging markets acquirers and targets also yield positive returns to the acquirers. Bhagat *et al.* (2011) show positive returns to the EMNEs acquirers. This positive gain to the acquirers is one unique finding in emerging markets M&As thus far. But not always. Aybar and Ficici (2009) report no value addition for EMNEs. Instead, 50% of the firms destroyed value in their sample set. When it comes to Indian markets, studies find positive returns to the acquirers (Gubbi *et al.*, 2010; Nicholson and Salaber, 2013) and (Chhibber and Majumdar (1999, 2005)) determine that foreign association has a positive impact on Indian targets for higher levels of ownership.

The evidence is mixed, and clearly, there is a pressing need to understand further the effects of CBMAs in general, and in emerging markets in particular.

In summary, while CBMAs have immense potential, this potential is coupled with greater obstacles to realizing opportunities. Depending on the theoretical framework, CBMAs may be seen as a challenge or an opportunity. They can be a source of positive synergies and can also act as value destroyers. While the return for target firms is clearly positive, the evidence in relation to CBMAs for EMNEs acquirers is mixed. To test the impact of the announcement of CBMAs on Indian firms, the following hypothesis is developed and tested on cross-border deals:

***H5: There are no abnormal returns associated with the announcements of CBMAs to the participating Indian firms.***

The hypothesis is tested for both targets and acquirers in cross-border deals and also allows the testing of synergy, hubris and agency motives.

*Figure 2.4.3* above summarizes the prominent frameworks explaining foreign forays into three main sources of incongruities, which are vital for the success of CBMAs leaving a scope for better understanding of these factors.

#### *2.4.3.1 Economic Costs - Corporate Governance*

Pivotal to understanding the costs summated in the TCE framework is the fact that the underlying arguments are identical to the issues pertaining to the agency costs theories in

finance. They both refer to the costs incurred by tolerating or restricting the commitment problem or opportunist behaviour on the part of one party to the contract. Jones (1995) argues that the macro-level impact of opportunism can be pervasive and that attempts to restrain it can be expensive. As a way to address these issues, Williamson (1996, p. 5) emphasizes the role of governance. The study of governance is concerned with the identification, explication, and mitigation of all forms of contractual hazards, and an essential function of governance is the harmonisation of interests that would otherwise spawn the pursuance of antagonistic sub-goals (Williamson, 1979). Likewise, in reference to CBMAs, Canabal and White (2008) propose that there is a need to establish governance structures that minimize costs and inefficiencies that are likely to incur while enforcing implicit and explicit contracts associated with the operations of foreign markets. As measuring transaction costs is a formidable task, focusing on comparative governance structures can alleviate the issues significantly.

In summary, the underlying argument for economic costs is that the divergence in corporate governance (CG) systems across nations can be detrimental to CBMAs.

Why is the corporate governance structure of a country such an important factor? Corporate governance is core to any economic system. It outlines authority and accountability. It establishes the claims on cashflows and answerability for strategic disasters. It prescribes market structures, resource allocation, wealth creation and dividend distribution. For employees, it determines the opportunities and job security; for suppliers, it dictates contractual continuity; for investors, it assures growth, return, and security; and for society at large, corporate governance is closely intertwined with general prosperity. It determines the response of firms to economic shocks, takeover threats, disputes and trade unions. Thus, both the affluent and the deprived are equally concerned, and every entity holds a stake in the prevailing corporate governance system and cares for its structure (Gourevitch and Shinn, 2005, p. 3). As a result, every nation has its own corporate governance system - one that is best suited to its own local economic environment.

Anything that determines the division of wealth and power is bound to create conflicts. The impact of such conflicts is often more pronounced in the case of CBMAs because the target firms import the corporate governance systems of the acquiring companies (Rossi and Volpin, 2004). This has the potential to alter the target firm's investor protection (Bris and Cabolis, 2002). To add to these complexities, Aguilera and Jackson (2010) argue that there is no definitive theoretical explanation that enables the comparison of corporate

governance models across countries - scholars must rely on legal origins, political systems or others to unravel the mysteries.

The two main economic models of corporate governance that dominate the traditional finance literature are based on Shareholder and Stakeholder perspective.

The Shareholder view finds its origin in classical Agency theory, first propounded by Berle and Means (1932) and popularised by Jensen (1986). It posits that there is a separation of ownership and control that leads to the divergence of agents' and shareholders' interests. Investors rely on market-based penalty and reward systems to control errant managers and recognize good performance; the monitoring system is external. Such economies are characterized by active markets for capital control, equity financing, diffused ownership and high investor protection right.

Stakeholder theory (Coase, 1937; Freeman and Reed, 1983; Jones, 1995) recognizes owners, managers and employees as the primary stakeholders, with the performance of a company dependent on the relationships of these stakeholders. As there is generally no separation of ownership and control, the monitoring system is *internal*. These economies are characterized by dormant markets for capital control, debt-financing, concentrated ownership and lower investor protection rights.

One of the ways to operationalize these theories in research is by employing 'a legal approach', as proposed by the iconic (La Porta *et al.*, 1997; La Porta *et al.*, 1998, 2002) (LLSV from now) (García-Castro *et al.*, 2008). LLSV literature divides the world into four legal regimes: English, French, German and Scandinavian. It is suggested that the legal context is the best way to understand corporate governance and its reforms. They particularly focus on the laws for investor protection and their effective enforcements. When these laws are weak, block ownership shows a commitment against expropriation, and is a way to persuade investor confidence.

In LLSV literature, *English origin countries* possess conditions that are propitious for Shareholder view based corporate governance models. The model thus developed is commonly referred to as the *Anglo-Saxon model* (García-Castro *et al.*, 2008). Likewise, *Civil law regimes* reflect attributes conducive to a Stakeholder view based corporate governance model, and the resultant corporate governance model is thus referred to as the *German/Japanese model*.

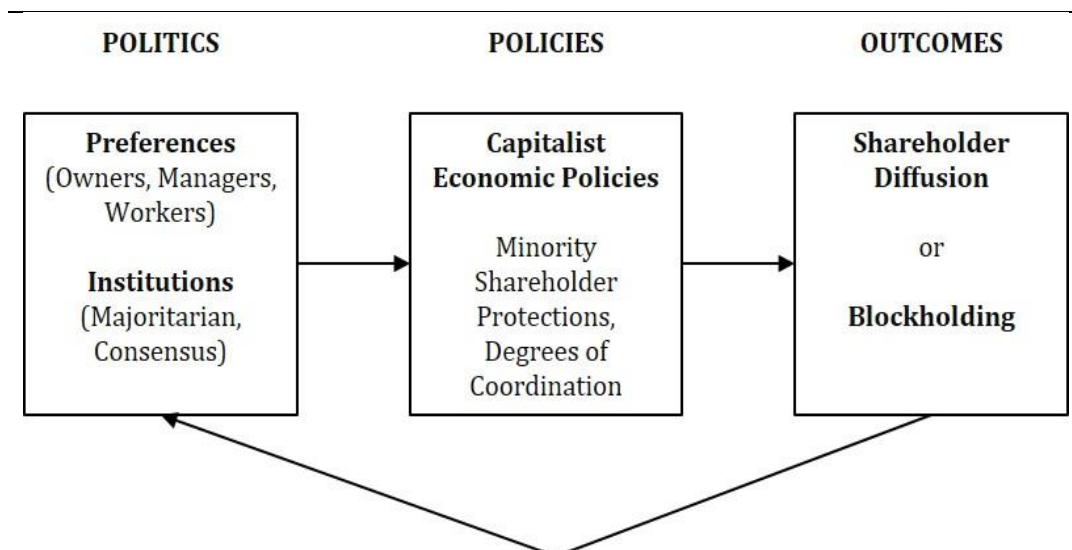
In the wake of the recent findings, Armour *et al.* (2009) question the validity of the legal origin hypothesis and find the dichotomy of the world in Common and Civil law regimes vague, particularly in trying to understand investor protection and ownership patterns. Their belief is that Civil law regimes are increasingly converging with Common law systems with regards to shareholder protection. However, Licht *et al.* (2005) argue that regardless of its limitations, the LLSV dataset provides a unique snapshot of certain legal rules in the context of corporate governance.

Another dimension to understanding corporate governance is proposed by Roe (1996) who brings in political paradigm for cross-national comparisons of corporate governance. The perspective has been further extended by Gourevitch and Shinn (2005) in recent times. In contrast to the theory propounded by LLSV, they opine that countries have various corporate governance systems and that they *change over time*. This notion opposes the LLSV argument that the corporate governance practices are *hard-wired* into country-specific legal families. Instead, they propose ‘Domestic Politics’ as a critical factor responsible for the adoption of various corporate governance models. The corporate governance systems reflect public policy choices based on laws and regulations. However, eventually, the extent of enactment and the degree of enforcement of these rules, laws and regulations are the functions of the prevailing political systems. In particular, it is the interaction of the economic preferences of the interests groups and the institutional framework that matters. This means that the relations between the principal actors within the firms (specifically managers, owners, and workers) have to be considered just as much as their relationships with actors outside the firm, particularly the state as key actors can form coalitions and influence the character of the corporate governance system. Consequently, multiple corporate governance models may exist, but they all eventually translate into *Diffused* or *Blockholding* ownership that can be abusive or protective for the investors.

In their seminal work, Gourevitch and Shinn (2005) detail *Shareholder* and *Blockholder* models. The Blockholder model tightly links ownership and control, and monitoring is performed by an influential ‘insider’ with concentrated blockholding of shares. These blockholders could be individuals, family, financial institutions and banks, other corporates or even the state itself. With such a range of possible blockholders, this model exists in several variants.

In this model, Owners (O), Managers (M) and Workers (W) are the interest groups (Stakeholders). Corporate governance confers benefits and each entity works through politics

to achieve the corporate governance policies which suit that entity the most. Depending on the varying corporate governance preferences they have, these stakeholders combine in different coalitions. The outcomes depend not only on what coalitions emerge, but also on who wins. There is an element of a power struggle here. The power comes from the institutional framework characterized by the extent of *minority shareholder protection* and the *degree of coordination*. The degree of coordination implies various laws and regulations governing several economic elements relevant to corporate governance, such as labour, anti-trust, price determinants and more. However, these economic policies are a function of the prevailing political system. Political systems can be Majoritarian or Consensual. Majoritarian systems have the potential for large policy swings which affect long-term investments and impair committed ownership. Consequently, Majoritarian systems are most likely to produce *Diffused* ownership. Whereas, Consensual systems generate concentrated *Blockholding*. *Figure 2.4.4* summarizes their proposition.



**Figure 2.4.4 Political View of CG Models**

Adopted from Gourevitch & Shinn (2005, pp.16)

To summarize, corporate governance is a function of the interplay of various coalitions of stakeholders and political institutions. The winning coalition forms the corporate governance system that they prefer. With three stakeholders and two political systems, there are six corporate governance models which might result in either Blockholding or Diffused ownership. Based on this theory, in their comprehensive study on comparative international corporate governance systems, Aguilera and Jackson (2010) produced the following table.



**Table 2.4.1 Adopted from Aguilera & Jackson (2010 p. 515)**

| Cleavage               | Model                  | Coalition   | Outcome for share ownership | Examples                              |
|------------------------|------------------------|-------------|-----------------------------|---------------------------------------|
| Class Conflict         | Investor Model         | $O + M > W$ | Diffusion                   | South Korea                           |
|                        | Labor Model            | $O + M < W$ | Blockholding                | Sweden                                |
| Cross-Class coalitions | Corporatist            | $O < M + W$ | Blockholding                | Germany, Japan                        |
|                        | Oligarchy              | $O > M + W$ | Blockholding                | China, Russia                         |
|                        | Managerialism          | $O + W < M$ | Diffusion                   | United States, United Kingdom, France |
|                        | Transparency coalition | $O + W > M$ | Diffusion                   | Chile, Malaysia                       |

*\*  $X > Y$ : X's preferences prevail in the political struggle over CG issues. O=Owners, M=Managers, W = Workers.*

In this political perspective, Germany, Japan and Sweden are identified as having Blockholding ownership just like LLSV or Stakeholder theory suggests. France is particularly interesting as Aguilera & Jackson categorize it alongside countries with Diffused ownership; this is in contrast to previous classifications where France was identified as having concentrated ownership.

Interestingly, regardless of the differences in their origin, all the theories - the classical view of Shareholder/Stakeholder dichotomy, the legal view from LLSV, and the political framework of corporate governance systems, converge eventually, with 'ownership patterns' the ultimate outcome. Concentrated ownership emerges as a natural hedge against the risk of expropriation of minority shareholders in the countries with weaker legal systems, such as India. Thus, they are all concerned with *investor protection* eventually.

Following the literature discussion presented above, corporate governance systems are eventually concerned with investor protection and property rights. Further, target firms are known to import corporate governance systems of the acquiring companies (Rossi and Volpin, 2004), which has the potential to alter its investor protection (Bris and Cabolis, 2002). Aybar and Ficici (2009) however, find no evidence of this transfer from emerging market economies. Further, there is a lack of any definitive theoretical explanation to match corporate governance systems across countries (Aguilera and Jackson, 2010). Collectively, all these findings inspire the testing of the impact of corporate governance systems on CBMAs in this thesis. The Indian corporate governance system is *Anglo-Saxon or Shareholder* formally, and it will be interesting to evaluate how they measure up against alternative corporate governance models. Statistically, the hypothesis constructed is as follows:

***H6: There is no difference in abnormal returns from the announcement of CBMAs in deals where the firms have identical corporate governance models.***

The hypothesis is tested for both Legal Origin of corporate governance systems from LLSV and political origin (Roe, 1996; Gourevitch and Shinn, 2005).

#### 2.4.3.2 Cultural Distance – National Administrative Heritage

*“Culture is the glue that holds an organization together. It helps guide all the decisions, how you behave and act. You can pick whatever strategy you want but how you go about doing it is the difference between, oftentimes, success and failure.”*

- **Lori Fouché, CEO, Fireman’s Fund**

Cultural disparity is generally blamed for ruining CBMAs (Chakrabarti *et al.*, 2009). Smith (2015) explains cultural distance as the measure of similarity or difference between two cultural groups or nations. Kogut and Singh (1988) measure cultural distance by using different scores on various cultural dimensions developed by Hofstede (1980). To fully comprehend why cultural distance matters, it is imperative to distinguish between *national* and *organizational* cultural disparities. Organisational cultural differences refer to the dissimilarities between the two firms such as different organizational routines and repertoires, or managerial practices and styles. They manifest *formal control mechanism* of an organization. National cultural disparities relate to the differences between the two countries in which the firms operate, and include attributes such as communication, coordination, socialization, individuals’ values and risk propensities, the degree of uncertainty avoidance. They are the *informal control systems* of an organization, which emanate from the respective national culture (Shimizu *et al.*, 2004). Hofstede (1994) provides a formative study that distinguishes between the two cultures. Literature suggests that of the several elements in the relationship between acquirer and target firms, the prevailing formal and informal control mechanisms are critical. Bartlett and Ghoshal (1999) refer to these formal control mechanisms as the ‘anatomy’ of an organization and the informal mechanisms as its ‘physiology’ and ‘psychology’. Put together, they represent national administrative heritage. Administrative heritage is a tangible representation of an organizational culture—its practices, beliefs and control structures. Over time, these routines and shared logic become institutionalized or ‘hard-wired’ for the members of the firm (Lubatkin *et al.*, 1998). In fact, Edith (1959) believes that firms are ‘administrative organizations’. Olie (1994) argues that the appropriate organizational structure and leadership are important. However, prevalent managerial practices and values vary between nations. Hofstede (1980) explains that worldwide dissimilarities in management styles, organizational structures, and employee motivations emerge from the differences in the collective mental programming of people embedded in different national cultures. *Common culture produces common beliefs, and they*

*shape common practices*. Hence, in the international arena, firms have diverse administrative heritages that are culturally influenced and nationally bound. Thus, the national administrative heritage partially reflects the national culture and the institutional routines in which it develops (Lubatkin *et al.*, 1998).

With respect to CBMAs, the acquirers are known to transfer their home practices and values to their subsidiaries or targets across nations (Bris and Cabolis, 2002; Rossi and Volpin, 2004). They tend to do so either because of ethnocentricity or due to comfort in their own national administrative heritage itself. However, in doing so, the divergence in the national administrative heritages of the participating firms can create conflicts and frustrate the successful integration of the merger. A poor administrative fit lowers the commitment and cooperation of the target members and enhances transaction and administrative costs (Lubatkin *et al.*, 1998). In the case studies from Olie (1994), the subject managers identify cultural conflicts as a potent source that prevented their firms from forging into cohesive entities. Likewise, Dikova *et al.* (2010) argue that national cultural differences may lead to standstills in acquisition deals, and its impact should not be underestimated. Furthermore, Calori *et al.* (1994) report national biases in the ways that buyers exert formal and informal controls over foreign targets. Their study found that informal systems are positively linked with the attitudinal and economic performance of target firms, and opposite with the levels of operational controls. So, the rigidity of the administrative heritage also matters.

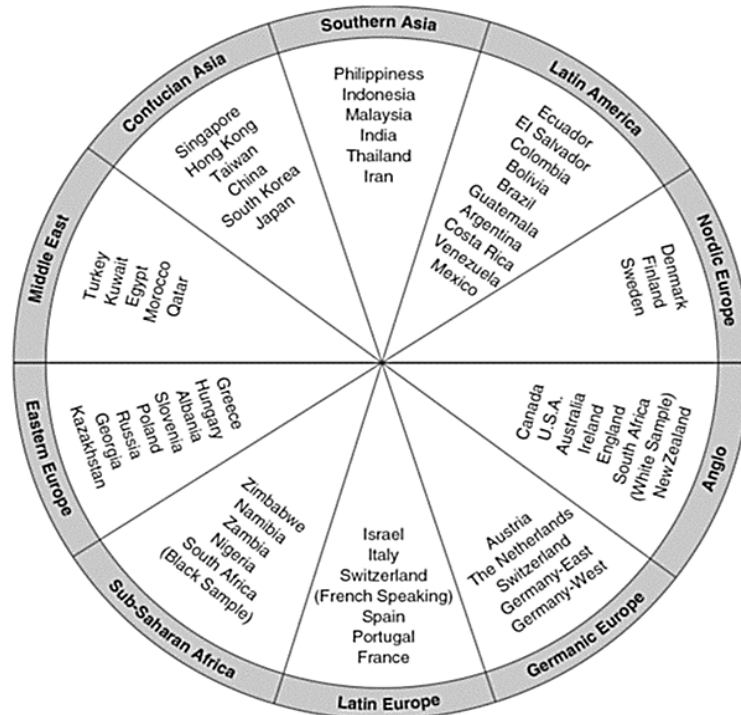
Researchers such as Calori *et al.* (1994) and Hofstede (1993) argue that the cultural contingencies must be considered in management theories. Hofstede (1994) suggests that managing international businesses implies accommodating both national and organizational cultures simultaneously. Barkema *et al.* (1996) claim that the integration process is more complex now as it requires double-layered acculturation (organizational and national). While differentiating the impact of the two, Weber *et al.* (1996) suggest that the incongruity in the corporate cultures engenders non-cooperation and negativity between the two sets of managers. However, the stress is not as high as in the case of national cultural disparity. Hofstede (1994) rationalizes that by arguing that organizational cultures are derived from (superficial) practices, they are somewhat manageable. However, national cultures are based on values and are hardwired. Relating the two, (Schneider, 1988; Calori *et al.*, 1994) argue that organizational cultures are, in fact, heavily influenced by their national culture. And these national characteristics are difficult to adjust as, over time, they are crystallized through institutions such as family and educational structures; religious and work organizations; government and law; literature and others. Thus, leadership style should emanate from the

cultural conditioning of a leader's subordinates (Hofstede, 1980). Mahatma Gandhi says, "*A nation's culture resides in the hearts and in the soul of its people.*" In fact, Lubatkin *et al.* (1998) suggest that the distance in the administrative heritage of the two firms is commensurate to the variations in the respective national cultures. Thus, the culture of a nation is a puzzling and unyielding factor in CBMAs.

Not only do investors need to consider the strategic and financial fit of firms, but they must also evaluate the impact of organizational and human resources in estimating future consolidation costs and the economic repercussions. The stock market announcement returns reflect the expectations of investors about the future performance of a firm involved in culturally different transactions (Stahl and Voigt, 2008). Datta and Puia (1995) report the detrimental effect that acquirer-target cultural distance has on acquiring shareholders in their short run analysis on the 'announcement effect'. But Chakrabarti *et al.* (2009) find significantly positive returns for the cross-border acquirers, and fail to see integration as an issue in the long term—CBMAs can equip acquirers with higher synergies and organizational strengths, making them successful global players. Likewise, Goulet and Schweiger in Stahl *et al.* (2012, p. 410) comment that congruity of national cultures is not necessarily a harbinger of successful integration as participating firms are already predisposed to manage these differences. There could be a possibility of attraction, rather than resistance, depending on the entities involved (Very *et al.*, 1996). Another popular argument emphasizes the required extent of integration, which can range from total autonomy to complete absorption of the target firm. If the degree of required integration is low, then there is no issue (Stahl and Voigt, 2008). However, Aybar and Ficici (2009) report that half of the transactions in their sample of CBMAs from EMNEs destroyed value, and the acquirers earned negative returns overall. Interestingly, cultural proximity, rather than distance, was an issue in their findings. On the contrary, Nicholson and Salaber (2013) argue that the Indian acquirers earn higher returns from culturally close countries and that cultural distance for Chinese acquirers does not matter at all. To summarize, the impact of national cultural distance in CBMAs from EMNEs is still murky.

Hofstede (1980) pioneered monumental studies of cultural variations and management theories on motivation, leadership styles, and organization across countries. His work was based on forty countries and four basic cultural dimensions. He suggested that these theories reflect the cultural environment in which they were written and hence they are not universally pervasive. Further, Schwartz (1994) proposed three alternative dimensions to study culture. These studies inspired House *et al.* (2004) to conduct a comprehensive analysis

of 62 societies on nine cultural dimensions and their impact on six types of leadership styles. On the basis of their analysis, they divide these 62 societies into ten cultural clusters as outlined in *Figure 2.4.5*.



**Figure 2.4.5 Cultural Clusters Adopted from the GLOBE Study**

Adopted from House *et al.*, (2004, p 190)

According to the findings of the previous literature, including the GLOBE study, people from same cultures develop shared schemas – common patterns of perceptions and reactions. That implies that organizations emerge with structures and cultures that mirror those schemas. They further find support for the cultural congruence proposition for leadership which implies that the style that is consistent with the shared values is acceptable and effective otherwise it engenders resistance, conflicts and dissatisfaction. Weiss and Bloom (1990) find that a clash of collective norms and foreign values are related to lower productivity and discontentment.

To summarize, the structure and conduct of an organization (organizational culture) are reflected in the national administrative heritage of a firm, which is derived from its national culture and institutional routines. Any divergence in these heritages ultimately leads to conflict and inefficiencies in the system. Hofstede (1994) argues that both the cultures need to be managed concurrently when conducting international businesses. And in fact, original policies should be adapted to fit local cultures and lead to the desired effect. Comparing the

impact of the two, Stahl and Voigt (2008) argue that the national cultural differences create relatively greater barriers to integration than the organizational cultural differences.

The finance literature is rich with evidence for both sides of the cultural context argument in relation to CBMAs and consequently, amongst all these explanations and evidence, the impact of cultural distance is ambiguous. As cited earlier, results from (Aybar and Ficici, 2009; Chakrabarti *et al.*, 2009; Nicholson and Salaber, 2013) provide contradictory conclusions. Past research has relied upon Hofstede's dimensions, religion and legal origin, (Chakrabarti *et al.*, 2009), as well as language and geographical proximity (Rossi and Volpin, 2004) as measures to capture cultural distances. Dikova *et al.* (2010) argue that the constructs and scales in the GLOBE study are developed cross-culturally and are more comprehensive, theoretically sound and empirically verified. Accordingly, this thesis uses the cultural clusters created by the GLOBE study to test whether there are any variations in the returns of the participating firms in CBMAs, based on the cultural distances of these firms.

Intuitively, cultural proximity should produce higher returns, but the literature is divided. Thus, statistically, the hypothesis created is as follows:

***H7: There is no difference in the abnormal returns obtained from the announcement of CBMAs when the counterparty to the deal originates from other cultures.***

#### *2.4.3.3 Institutional Distance –Legitimacy and Isomorphism*

Institutional context is important. It can undermine property rights and escalate risks in exchange in CBMAs (Brouthers, 2002). Institutions provide the structure in which transactions occur. They set out the 'rules of the game in a society' and construct the constraints that shape human interactions (North, 1990, pp. 3-4). For semantics, *formal constraints* refer to constitutions, rules, laws and regulations and are collectively referred to as institutions. In comparison, *informal constraints* such as values and beliefs; customs, conventions, and traditions; and codes of conduct are manifestations of the national culture of a country. Scott (1995) classifies these constraints in three domains: regulatory, cognitive and normative. *Institutional distance* is defined as the differences in these institutions between the host and the home country. It affects the interpretation of local institutional requirements, as well as the extent of adjustments required. In practice, it may create barriers, such as quotas and tariffs, incentives for entry-exit and performance conditions, ownership restrictions, and many more. It implies dissimilarities in accounting standards, legal systems, political setups and others. Of the three domains, the regulatory domain is relatively easier to comprehend and adapt, as its constituents are formalized and well codified. However,

complexities increase in the other domains as they are more tacit, and embedded deep into the structures of a country (Kostova and Zaheer, 1999). The latter two are captured more in administrative heritage, which was discussed earlier.

The institutional environment exerts forces on organizations ‘to legitimize’ and hence institutional theory can best be explained as a theory of ‘legitimacy-seeking’ (House *et al.*, 2004, p. 81). Organizational legitimacy refers to the acceptance of the organization by its environment and the adoption of legitimate elements, which increases the probability of the organization’s survival and success (Zucker, 1987; Kostova and Zaheer, 1999). Kostova and Zaheer (1999) cite a case study of the uprooting of Cargill Inc from India. This was met with vociferous resistance from local competitors, politicians, intellectuals and environmentalists. Despite several moderating measures, Cargill Inc failed to obtain local legitimacy. Thus, by incorporating the institutionalized elements in its formal structure, functionalities, and procedures, an organization insulates itself against public outcry against its conduct. It is then referred to as ‘legitimized’, which ensures external support, less turbulence and more stability (Meyer and Rowan, 1977). Thus, the prevailing institutional environment dictates the shape of firms’ structures and behaviours (DiMaggio and Powell, 1983; Scott, 1995). Suchman (1995) adds that institutionalization and legitimacy empower organizations by making them seem natural and meaningful.

Firms can legitimize themselves through *isomorphism*, which is the process of adopting the structures and practices that are already institutionalized in the given environment and are successful. The implementation of institutional isomorphism by an organization maximizes its legitimacy and ensures its support, success and survival (Meyer and Rowan, 1977). In terms of CBMAs, institutional distance has been linked with two aspects: firstly, the transfer of strategic orientations and organizational practices from the parent firm to the acquiring foreign subsidiary (Kostova, 1999), and secondly, the establishment of legitimacy in the host country (Kostova and Zaheer, 1999). Davis *et al.* (2000) refer to them as *internal and external institutional environment* respectively. They explain that the acquiring subsidiaries face twofold isomorphic pressures: being isomorphic to the internal institutional environment requires the need for conformity with the parent firm’s structure, policies, and practices. It is critical to share resources internally. Whereas, adapting to local markets (target) and their unique characteristics implies isomorphism with respect to the *external institutional environment*. This is important for outside support and survival in the host country. While discussing the relative importance of the two forms of isomorphisms, Davis *et al.* (2000) conclude that the internal isomorphism exerts more

pressure. This implies that the institutional features of the acquiring parent company are critical to the success of CBMAs. The firms are exposed to all the three domains to varying degrees as their structures and legitimacy requirements vary across national environments. Hence, the more identical the institutional profiles of the countries are, the easier it is to comply with legitimacy requirements (Kostova and Zaheer, 1999).

For businesses operating in emerging markets, the legal framework and institutions are of prime importance, particularly when they are unacquainted with the local environment (Meyer and Nguyen, 2005). The purpose of the formal constraints is to facilitate the process of decrypting the environmental complexities and to promote value enhancing transactions. However, these elements are country-specific and more importantly, they differ between countries even for the same transactions (North, 1990, pp. 3-4). Hence, the home grown wisdom about legal institutions has limited validity in international transactions. Given the fact that the acquirers acclimatize more easily to identical legal environments (Kostova and Zaheer, 1999), divergence in the regulatory environment of the target and acquirer countries increases the environmental complexities. In fact, in a unique study about deals abandoned after announcements, Dikova *et al.* (2010) found that differences in the *formal institutional environments* of the home and host countries play havoc.

Given the possible range of impact of institutional differences, the success of CBMAs depends on the choice of the integration process and control systems, which are contingent on the acquirers' nationality (Brouthers, 2002). Hitt *et al.* (1997) argue that the cultural and institutional environment construct the strategic orientation of the managers. Thus, the divergence in institutional frameworks can lead to distinct managerial practices and thus severe conflicts (Shimizu *et al.*, 2004) during the process of isomorphism within the local institutional environment of the host country.

Thus, an identical institutional environment is a key to reducing this friction. Referring to the classic distinction between common and civil law systems, Dikova *et al.* (2010) argue that the fundamental legal institutional differences can heighten the environmental complexities of CBMAs. The laws of most nations were transplanted through either voluntary adoption, or conquests or colonization by one of the European powers, and then tailored to suit local needs. Legal rules reflect legal family concisely (Licht *et al.*, 2005). Thus, contract laws and commercial laws in India find their origin in the common law adopted during British imperialism, with Indian formal institutions reflecting this legacy. However, 'legal family classification' is just one dimension of identifying near-identical legal



institutional environment. The administrative distance in the CAGE framework (Ghemawat, 2001) also refers to home-host country linkages and suggests that other socio-political and economic ties between countries can also help bridge institutional distances. For instance, bilateral treaties and membership of international organizations can moderate distance problem. Indian membership of international groups such as G15 (developing countries), G20 (developed and emerging countries) and the Commonwealth (former British colonies) is relevant in this context. Coordinated macro-economic policies implemented by member countries to achieve common economic goals promote networking and linkages between the member countries, engendering institutional uniformity for the firms intending cross-border transactions (Buckley *et al.*, 2012). In their analysis, they find membership of the G20 and Commonwealth nations to have a significantly positive impact on CBMAs.

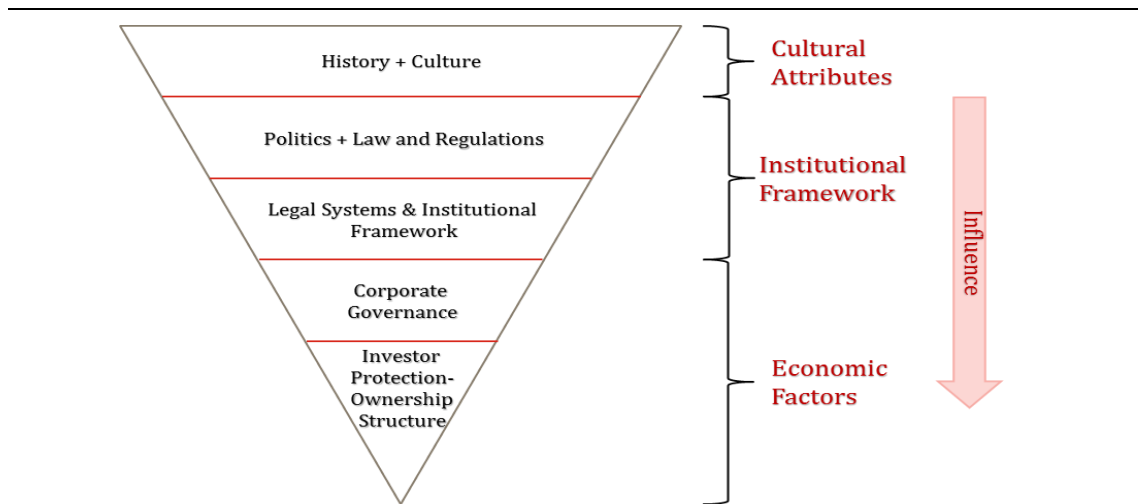
Following CAGE theory and in the spirit of Buckley *et al.* (2012) who found that membership of the Commonwealth was a significant variable in Indian CBMAs, this thesis uses Commonwealth membership as a measure of institutional distance to evaluate whether there are any differences in abnormal returns for participating Indian firms in a deal. India is a Commonwealth nation, so for statistical analysis the following hypothesis is constructed:

***H8: There is no difference in abnormal returns generated in the deals with the firms with the identical Institutional framework.***

#### *2.4.3.4 Distance Factors Relationship*

The finance literature suggests that cultural, institutional and economic incongruities are not always truly exogenous, but instead have an implicit hierarchy of influence. It explains how cultures affect institutions (Licht *et al.*, 2005; Alesina and Giuliano, 2013) and, in turn, how institutions determine the economic cost of exchange (North, 1990, p. 34).

Drawn from the various arguments presented in the finance literature, *Figure 2.4.6* is constructed to demonstrate the purported flow of influence in this hierarchy. Right at the top sits the culture. And that is the reason, Brouthers (2002) suggests, that the cultural context disparity, in its larger connotation, summates ‘investments risks’ generated from the difference in the target country’s economic, legal, political, and cultural systems, along with its market attractiveness.



**Figure 2.4.6 Relationship between Various Distance Factors**

The cultural values may motivate and constrain law-makers' preferences for certain legal arrangements (Licht *et al.*, 2005). Thus, countries differ in institutional contexts, and that directs their corporate governance relationships (Inkpen *et al.*, 2000).

However, this direction of relationship may not always be that clear or unidirectional. Culture and institutions are not always exogenous—they interact and co-evolve in a complementary way with mutual feedback effects. As a result, culture may evolve differently, depending on the type of institutions. And, institutions may function differently depending on the culture (Alesina and Giuliano, 2013). Even, Lubatkin *et al.* (1998) suggest that national culture can shape, and be shaped by, social and political institutions.

Nonetheless, what is evident is that these elements strongly relate, both to each other and to national culture (Licht *et al.*, 2005), and institutional setup can help determine and predict the governance structure, and thus the extent of challenge in any CBMA deal.

#### 2.4.3.5 *The Indian Conundrum*

If culture and statutory laws are related with respect to corporate governance rules (Licht *et al.*, 2005), then this should generate a stable equilibria with certain specific sets of attributes for each country in line with the existing literature. However, when India as a country, is evaluated on all the three relevant dimensions of incongruities simultaneously, it defies all existing tenets of finance theories. It presents a unique confluence of these variables, which is only partly chartered in the literature, making it difficult to predict the directions of the outcomes in Indian CBMAs. In fact, Licht *et al.* (2005) treated Asian countries with a common law heritage (including India) as an outlier, concluding that formal laws play only a minor role in protecting shareholders in these countries.

*a) Appropriateness of Indian Corporate Governance Model*

As discussed earlier, the two classic corporate governance models are the Anglo-Saxon (outsider dominated) and German/Japanese (insider dominated) models. Owing to its British heritage, the Indian legal system finds its origin in the common law system. And consequently, the corporate governance model adopted by India is formally Anglo-Saxon. Not only that, it even continues to evolve on the similar lines. But the debate is about the fitness of such a model in the Indian context—in practice is the Indian corporate governance model Anglo-Saxon?

Machold and Vasudevan (2004) suggest that corporate governance models can be evaluated on three primary continuums: (a) ownership and control distance, (b) role of external or internal control mechanism, and (c) the social versus the economic view of the firm. They argue that with respect to these dimensions, the Indian corporate governance model is more German/Japanese (than Anglo-Saxon) in practice.

With regards to ownership in India, some strategic sectors are dominated by the state, while others are dominated by various business groups or promoters. These business groups or promoters (through direct ownership, family ownership or People Acting in Concerts (PAC)) exercise direct control in firms. Through crossholdings and pyramidal structures, they gain more influence. Further, like in Germany and Japan, domestic financial and institutional investors hold both equity and debt with significant voting rights, and can potentially influence corporate decisions. However, as in many similar countries, in India, these investors are perceived to be inactive in their governance roles (Sarkar and Sarkar, 2000). In reality though, they are even known to block hostile takeovers. So, the effective powers of the owners' increase further due to the inertness of the investors. This 'business house culture', where significant control of a firm is in hands of a promoter or family due to the confluence of various sources and significant funding from institutional investors resembles the German/Japanese model of dominant shareholders (Machold and Vasudevan, 2004).

Literature acknowledges the stock markets' role in corporate control through mergers and takeovers mechanisms. Takeover threats acts as a disciplining mechanism for poorly performing corporates and management. Anglo-Saxon models are market-oriented wherein external markets perform a monitoring and controlling role. However, such takeover threats rarely exist in insider-dominated systems. Instead, they are generally negotiated and not contested (Davis and Stout, 1992). The lack of hostile takeovers in India reflects the characteristics of the German/Japanese model.

Finally, the active participation of Indian corporate houses in local community development highlights the social orientations of Indian firms, rather than the narrow economic or financial orientation in the Anglo-Saxon model. In the German/Japanese model, corporations are social institutions, with a distinct public role and responsibility (Machold and Vasudevan, 2004).

Thus, the Indian corporate governance model is intricate. Sarkar and Sarkar (2000) suggest that the Indian corporate governance system shares attributes of both the systems and thus they call it 'hybrid system' whereas (Machold and Vasudevan, 2004) suggest that despite adopting Anglo-American model, in India the 'business house model' persists.

*b) Formal Institutional Environment*

The iconic LLSV literature provides an excellent discussion of laws and finance theories. The literature argues that investor *protection rights* are essential for investors to extract a return on their investments from managers. However, these rights derive value only from the legal system of the jurisdiction in which these securities were issued. Outside investors' rights can be protected only through the enforcement of regulations and laws. Some of the crucial regulations are disclosure and accounting rules, which provide investors with the information they need to exercise other rights. However, legal systems (laws and enforcement) differ markedly around the globe due to the different legal families from which they originate: common and civil. The common law tradition tends to protect investors, including both shareholders and creditors, considerably better than the civil law tradition. Legal families also determine the quality of accounting standards and, here again, common law countries are ranked higher than German and French civil law countries. To counterbalance, countries with poor legal systems and accounting standards adopt remedial laws (referred to as 'bright line' rules), which provide some mandatory controls against managerial expropriation. Further, in countries with higher anti-director rights, a better rule of law and better accounting standards, ownership tends to be dispersed. The legal systems also affect the size and the extent of a country's capital markets.

Alternatively stated, weak legal systems engender ineffective corporate governance, which implies poor investor protection and consequently inferior opportunities of external financing, as well as smaller financial markets. Shleifer and Vishny (1997) argue that poor investor protection engenders economic inefficiencies as financial markets can no longer allocate resources efficiently (La Porta *et al.*, 2002). Poor investors' protection also necessitates heavily concentrated ownership as a way to monitor and control errant managers.

Indian commercial law originated from the common law family as a legacy of British imperialism. Thus, ideally, Indian laws should be similar to the laws of other common law countries. However, a careful analysis of the data from LLSV literature specifically about India, suggests that it rarely complies with the aggregate findings of common law countries. Even, Licht *et al.* (2005) report that Asian countries with a common law heritage are an outlier sub-group with respect to investor rights.

Firstly, for investor protection, the aggregate common law index for anti-director rights stood at 3.39 on scale of 5. In that same group, India scored 2. This score is not only the minimum for all the countries in the group, but it is also closer to the aggregate of various other civil law families, such as French (1.76), German (2), and Scandinavian (2.5).

Secondly, for accounting standards, India scored 57. This was far away from the average score of 70 recorded by common law countries. In fact, it was closer to French (51.17) and German (62.67) civil law countries.

In the law enforcement category, out of five variables, India was in the lowest quartile with respect to 'Rule of Law' and 'Corruption', and was below the median for 'Efficiency of Judicial System', 'Risk of Expropriation' and 'Contract Repudiation'. It has been argued that richer countries enforce laws more effectively than poorer countries.

Further, despite the weaker legal system and poor accounting standards, India did not have any remedial (or bright line rules) to protect investors, as LLSV literature suggested of most civil law countries.

Inefficient corporate governance leads to under-developed financial markets and limited external financing resources. However in the seven-pillar analysis of Financial Development Report of 2012 from WEF<sup>17</sup>, Indian financial markets were relatively well placed, at 28<sup>th</sup> out of 62 countries analysed.

Finally, in terms of concentration of ownership, as per the rationales presented in the literature, Indian firms should have had higher outsider shareholdings so as to enable them to monitor and control management and thus save their interests from expropriation. However, the Indian corporate landscape, like many other emerging nations, is dominated by large business groups wherein the owners are also the managers, which gives them significant control over company affairs, with investors relegated to the status of minority shareholders.

---

<sup>17</sup> [http://www3.weforum.org/docs/WEF\\_FinancialDevelopmentReport\\_2012.pdf](http://www3.weforum.org/docs/WEF_FinancialDevelopmentReport_2012.pdf) accessed on 7/12/2014

Selarka (2005) finds no support for the monitoring hypothesis (in which there are minority block holders) in Indian firms.

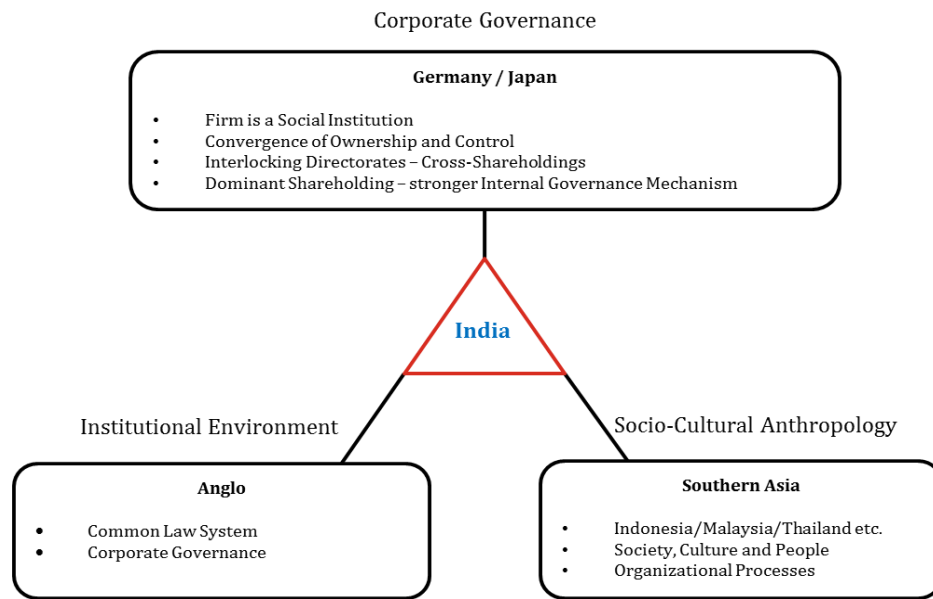
To conclude, despite being classified as a member of the common law family, India rarely exhibits the attributes argued for such countries. In several dimensions, it is more aligned with civil law countries but not always. Thus, legal systems in India do not project picture consistent with the finance literature. This challenges the fundamental tenet of the institutional theory that institutional proximities can reduce risks and facilitate isomorphism.

#### *c) Socio-Cultural Anthropological Attributes*

India's corporate governance model reflects the properties of the German/Japanese model more so than those of the Anglo-Saxon model. Furthermore, the relevant laws of economics and finance in India deviate from the established wisdom about other common law regimes. Finally, what adds more to the puzzle is the findings of GLOBE study about India, in which India is clustered with countries like the Philippines, Malaysia, Thailand and Iran, rather than grouped with nations such as the United States, the United Kingdom, Germany or Japan from where it's institutional and corporate governance features are derived. In fact, the social values and practices of Germanic, Nordic, Latin European and Anglo-Saxon cultures are noticeably different to the South Asian cluster. Hofstede (1980) argues that *Power Distance* and *Uncertainty Avoidance* dimensions of culture are more important for structuring organizations operating in different countries. However, he had difficulties in identifying an 'implicit model' for India on those grounds. Mainly because Indian organizations are formalized as far as relationships between people are concerned (Power Distance), but not as far as the workflow is concerned (Uncertainty Avoidance). Likewise, other mutually exclusive cultural attributes such as *Collectivism* and *Individualism* coexist in Indian systems. Thus, India presents ambiguity in its cultural orientation. In the GLOBE study, Chhokar (2002) explains that the diversity and complexity of society and culture in India results in a lack of one common nation-wide theme that could be termed as 'Indian Culture'. Simultaneously, it also lacks any unique country-specific cultural model that is different to others countries. He states that the best way to deal with India is "...to *expect* differences, to *accept* differences and also to *respect* differences".

#### *2.4.3.6 Multidimensional India*

Thus, when India is analysed from the frame of incongruities relevant in CBMAs, a multifaceted picture of India emerges as follows:



**Figure 2.4.7 The Multidimensional Aspects of India**

The findings within India make it a unique territory for CBMAs—one that necessitates more research, particularly as India contradicts existing beliefs about how these three associate with each other and shape the structures and procedures of firms in any country.

Further, undoubtedly, there is a wealth of literature that explains the motives, tools and risks for outward orientation in CBMAs. However, the literature that describes determinants of returns to target firms is equally scarce. Though, unambiguously, literature documents extraordinary positive returns for target firms but rarely are there any studies which explore the factors that may be driving those returns. This is imperative to explore especially in the environment where the deals are mostly negotiated and even targets have bargaining powers. Occasionally, there are some explanations, such as that of Chhibber and Majumdar (2005) who argue that for Indian target firms, CBMAs can provide them with global orientation with reduced transaction costs as foreign firms generally have superior international marketing capabilities or knowledge of other institutional, legal and cultural domains. Likewise, acquirers can become global suppliers at the behest of their low cost subsidiary in India. Indeed, in their sample set, the authors find superior exporting performance for Indian target firms which have major ownership in hands of foreign associates. In another finding, Rossi and Volpin (2004) argue that in CBMAs, targets are generally based in poor investor protection countries, and they subsequently adopt the enhanced corporate governance of the acquiring firms. However, Aybar and Ficici (2009) find no evidence for this in emerging market economies.

With an exception of a handful of publications, the territory is largely uncharted and needs further research. As a starting point, this thesis takes a different approach, evaluating whether the factors that are so profound for CBMA acquirers, hold any importance for targets. Do the returns to target firms vary depending on the cultural, institutional and economic distance from the acquiring firm? And if the answer is yes, of all the factors, which one affects the returns the most?

## **Other Factors**

### **2.4.4 Methods of Payment – Consideration Effect**

In terms of acquisition currency, bidder firms may opt for cash, stocks or a combination of both, in order to pay the consideration in M&A deals. Martin (1996) classifies the possibilities in three categories: *cash financing* (including cash, debt or assumption of liabilities), *common stock* (with or without differing voting rights), and *the combination of cash, stock or other convertible security*. The choice of payment method is crucial as there is always a trade-off for acquiring firms: cash impacts liquidity and stocks provide tax benefits.

Acquirers with higher cash balances or free cashflows<sup>18</sup> prefer cash financing (Jensen, 1986). Berkovitch and Narayanan (1990) argue that large cash offers increase the possibility of initial bid acceptance, and can avoid both delays and the possibility of another competing bid. In a similar vein, if the bidder firm places a higher value on the target firm, perhaps due to perceived synergistic gains or other favourable private information, then they may also opt for cash in order to deter competing bids (Fishman, 1989) Under the ‘control hypothesis’ managers prefer to retain control and are reluctant to use shares (Stulz, 1988). In the case of information asymmetry, where the valuation of the firm is questionable, stock financing is often the preferred option as it contains ‘contingency pricing effect’, which makes target firm shareholders bear the burden in post-acquisition revaluations effect if any (Hansen, 1987). Further, if the acquirer perceives growth opportunities from acquisitions, the chances of raising stock for financing increases, as it gives management (Myers and Majluf, 1984) greater discretion over funds.

The enormous amount of literature documents negative price reactions to the acquiring firms in stock/equity swap/financed deals. Servaes (1991) reports that cash takeovers increase bidder’s abnormal returns by 11%. Travlos (1987) documents significant

---

<sup>18</sup> Jensen (1988, p.28) defines Free Cashflow as “cashflow in excess of that required to fund all of a firm’s projects that have positive net present values when discounted at the relevant cost of capital”.



losses in stock deals, but normal reaction for cash offers. Wansley *et al.* (1987) report significantly higher returns on the cash offers than that of security offers. Agrawal *et al.* (1992) also find lower post-acquisition returns in stock-financed acquisitions. Linn and Switzer (2001) substantiate the same findings and propose that post-acquisition stock return performance of merged firms is significantly larger for cash offers as compared to stock offers. The important outcome of their research is that the share of synergistic gains captured by the acquiring firm seems to increase with the proportion of cash in the offer. Thus, bidders with very favourable private information about future excess operating returns tend to use larger amounts of cash in their offers, both to deter competition and to ensure that they capture a large share of the synergistic gains. Similarly, Eckbo *et al.* (1990) also support a higher proportion of cash in mixed financing for higher valued acquirers.

#### **2.4.5 Industry – Diversification Effect**

Berger and Ofek (1996) find that diversified firms destroyed an average of 15% of their possible value, had they not diversified. Morck *et al.* (1990) record statistically significant declines in the returns of unrelated acquisitions. Bruner (2002) concludes that there is a positive association in the returns and the degree of relatedness between merging firms and that conglomerate deals lead to poor returns. Literature suggests that shareholders lose wealth as managers lack necessary skills to manage diversified portfolios. Almost 60% of the mergers in the third merger wave, which was dominated by conglomerate mergers, were later divested (Gaughan, 2010, p. 46).

However, in the context of emerging markets and particularly in India, Khanna and Palepu (2000) find that the affiliates of the *most diversified groups* have higher Tobin's *q*. As such, diversification across industries is key for large business houses when it comes to minimizing risks and creating internal factor markets.

## **2.5 Overall Summary**

This chapter reviews the M&A literature from both emerging markets and the Indian perspective. It highlights the main findings, and develops the following set of hypotheses that are tested in the subsequent chapters.

| Aggregate Analysis                                    |  |
|---|--|
| Effect  | Hypothesis   |
| Motive  | <b>H1:</b> <i>There are no abnormal returns associated with the announcements of M&amp;As.</i>   |
|   | H1a: Synergy<br>H1b: Hubris<br>H1c: Agency   |
| Domestic Analysis (DMA)                               |  |
| Effect  | Hypotheses   |
| Motive  | <b>H2:</b> <i>There are no abnormal returns associated with the announcements of domestic M&amp;As.</i>  |
|   | H2a: Synergy<br>H2b: Hubris<br>H2c: Agency   |
| Indian Business Group                                 | <b>H3:</b> <i>There is no difference in abnormal returns generated in the takeovers by the large Indian Business Groups.</i>                         |
| Relatedness   | <b>H4:</b> <i>There is no difference in abnormal returns generated in the takeovers when the participating firms are already affiliated.</i>         |
| Cross Border Mergers and Acquisitions (CBMA) Analysis |  |
| Effect  | Hypotheses   |
| Motive  | <b>H5:</b> <i>There are no abnormal returns associated with the announcements of Cross-Border M&amp;As (CBMA).</i>                                   |
|   | H5a: Synergy<br>H5b: Hubris<br>H5c: Agency   |
| Corporate Governance                                  | <b>H6:</b> <i>There is no difference in abnormal returns generated in the takeovers of the firms with the identical corporate governance models.</i> |
| Cultural Proximity                                    | <b>H7:</b> <i>There is no difference in abnormal returns generated in the takeovers of the firms with the cultural proximity.</i>                    |
| Institutional Framework                               | <b>H8:</b> <i>There is no difference in abnormal returns generated in the takeovers of the firms with the identical institutional framework.</i>     |

# Chapter 3. Methodology

---

## 3.1 Introduction

The impact of M&As on the value of a firm is determined by measuring its accounting or share price performance. However, McWilliams and Siegel (1997) argue that accounting variables are susceptible to manipulation due to managerial choices of accounting processes. Stock prices, on the contrary, are relatively exogenous in nature, reflecting the true value of firms as they incorporate all relevant current and future information. In the same vein, even Bromiley *et al.* (1988) propose that share price based studies can measure economic performance of any corporate event more efficiently than any study of accounting returns.

*Event study methodology* is one such model that relies on security price behaviour and focuses on measuring the impact of any ‘*new or unexpected information*’, termed as an ‘*event*’, on a firm’s value. A plethora of extant corporate finance literature focussing on effects of M&As is indeed based on this technique (Loughran and Vijh, 1997; Moeller *et al.*, 2004; Chari *et al.*, 2009).

The origins of the event study method can be traced back to the early 1930s (Dolley, 1933) and was popularized by Fama *et al.* (1969). Since then, it has become one of the prominent techniques in corporate finance. Interestingly, the primary structure and the focus of the method has not changed over time. Hence, the formative literature about the methodology is still relevant, which is why it is discussed here. Brown and Warner (1980, 1985), while advocating that the methodology is a powerful tool, also argue that the usefulness of this methodology largely relies on the set of strong assumptions (like market efficiency, unexpected events, and so on) associated with it, and the fact that any violation renders empirical results biased and imprecise (McWilliams and Siegel, 1997). Further, researchers have also highlighted other critical issues and suggested various measures to ensure compliance with these assumptions Brown and Warner (1980, 1985) and Binder (1998). Consequently, over the last few decades, any statistical imperfections have been identified, critiqued and reformed, making the methodology even more sophisticated (Kothari and Warner, 2006, p. 8).

The first half of this chapter discusses the fundamentals of an event study. The second half describes the steps for implementing an event study. The discussion summarizes the

seminal work, highlights various concerns and explains available measures. The state-of-the-art event study adopted in this thesis incorporates the latest developments in the literature.

Finally, the chapter discusses the cross-sectional analysis used as an extension to event study analysis in this thesis.

## 3.2 Fundamentals

Central to any event study is the measurement of ‘Abnormal Returns’ (AR) or ‘excess returns’ around the event date. Abnormal returns are the difference between *expected returns* and *actual (realized) returns* during the event period. The expected returns are the ‘normal returns’ of a given security in the absence of any event. Any deviation of realized returns from the expected returns during the event period is attributed to the event and defined as an AR. ARs are further analysed statistically for their significance.

$$AR_{it} = R_{it \text{ Actual}} - R_{it \text{ Expected}}$$

However, as with any analytical tool, this methodology has some key aspects that determine the efficacy of the model and reliability of the results. This section outlines all the relevant issues that have a bearing on the methodology.

### 3.2.1 Event Study Assumptions

McWilliams and Siegel (1997) provide the following partial, yet nonetheless critical, list of assumptions present in event study methodology:

#### *a. Existence of Market Efficiency*

This assumption is inarguably a founding pillar of the methodology. Market efficiency suggests that stock prices incorporate all relevant information. The underlying notion behind event study is that when the markets are efficient, future expected earnings are reflected in the current market price of securities. This implies that the advent of any news that may have a potential impact on future payoffs should lead to an *instantaneous* repricing of securities. Thus, by observing *price disturbances* around event dates, the impact of the event can be accurately measured.

The bonding of the two is highlighted in the fact that the tests for Efficiency Market Hypothesis (EMH) and event study methodology are interrelated. In fact, they tend to presume each other to an extent. To study information content, the event study assumes *quick*

*absorption* of new information in share prices (EMH) wherein the tests for EMH assume the *existence of information* in the event (Bowman, 1983).

However, as a matter of fact, there exists sufficient evidence that the random walk model—the test for EMH—does not sufficiently describe stock behaviours in Indian markets (Poshakwale, 1996; Pandey, 2003; Ahmad *et al.*, 2006). This violation of the efficiency hypothesis implies imperfect price reaction around the event time, and the spill over effect in the surrounding days. Therefore, as a remedy, the share price of a firm should be observed for few days surrounding the event date, in a period that is known as an *event window*<sup>19</sup>. However, the size of an event window is a subjective matter as the researchers lack consensus about the optimum size (Seiler, 2004, pp. 218-9).

*b. Events are Unexpected*

This methodology presupposes that markets strictly do not have any *a priori information* about the event and that the market participants obtain information through formal announcements. Brown *et al.* (1988) argue that any dramatic financial event increases both the risk and the expected return of the securities systematically. Thus, in conjunction with market efficiency assumption, the advent of any news should naturally produce disturbances or ARs in the event window. Nonetheless, Brown *et al.* (1988) argue that while market reaction to uncertain information may not be instantaneous, it is still efficient.

However, in practice, there is the strong possibility that the market has either anticipated the formal announcement, or that information has been leaked prior to the formal announcement. Dodd (1980) reports evidence of such *leakage*. Consequently, the exact event time becomes elusive, and the published date might not capture the impact of an event adequately and efficiently. For this, Brown *et al.* (1988) suggest accumulating residuals over a period to capture event effect adequately. Hence, the event study invariably always tests Cumulative Average Abnormal Returns (CAARs) in order to understand the full impact of any given event. CAARs refer to the accumulation of average abnormal returns over various days in the event window.

*c. Absence of Confounding Effects*

The ultimate aim of the method is to attribute ARs to the given event. However, the presence of confounding effects reduces the efficacy of the model. Confounding effects occur

---

<sup>19</sup> The concept of event window is discussed in detail further in the chapter.

when a firm experiences multiple corporate events in quick successions. Since each event has some bearing on stock returns, it becomes impossible to isolate the impact of each of these events distinctly on share prices. Hence, an event study cannot be performed on either of these events. As a prerequisite, it is imperative that the defined event window is clear of every other major event<sup>20</sup>.

This assumption once again brings forth the discussion about the event-period windows. The companies in M&As tend to be large, well-diversified and multinational, which means they regularly engage in major corporate activities. The longer the period of event window in the analysis, the higher the chances of confounding effects in the sample (McWilliams and Siegel, 1997), and the higher the chances of inconsequential results. Thus, it is critical that the sample firms and windows are selected cautiously, and that they are free of any confounding effects.

### 3.2.2 Event and Event Date

Any corporate decision that has financial and economic implications for a given firm can be defined as an ‘event’. The share price performance is evaluated in the days surrounding the event date. It is referred to as *Day-0* in the event study methodology.

There is a dichotomy surrounding the event date in the finance literature. On one side, Dodd (1980); Asquith *et al.* (1983) and numerous others, have used the ‘Announcement date’ as Day-0. The announcement date is the date when the target company is first publicly disclosed as a possible takeover candidate. On the other side, Mandelker (1974); Ellert (1976); Langetieg (1978) frequently refer to findings that used the ‘Effective date’ as Day-0. This is the date when the entire transaction is completed and is effective, and when final approval for the merger is received from the shareholders. They report systematic ARs to the firms in the estimation period<sup>21</sup> but nothing significant around the event period. Dodd (1980) probes these results and purports that pre-event gains could be the result of information

---

<sup>20</sup> *Confounding Effect Example*: In a completed deal wherein Company A acquired Company B, if the same deal was withdrawn two months ago and has been renegotiated, it is said to have confounding effect. As the share prices must have fluctuated then, the deal does not have a clean event or estimation period windows. Likewise, the deals where Company A was also involved in multiple acquisitions in recent past or Company B had also received bids from other vendors recently are also regarded as confounded deals. Similarly, there could be various scenarios which can lead to confounding effects and such deals are excluded from the sample. It is to be noted that literature refers to Confounding effects and ‘Contagion effects’ interchangeably. The treatment of confounding effects is discussed in detail in Chapter 4.

<sup>21</sup> *Estimation-period* is a pre-event period used to determine the normal returns of any security. It is explained in the next section in detail.

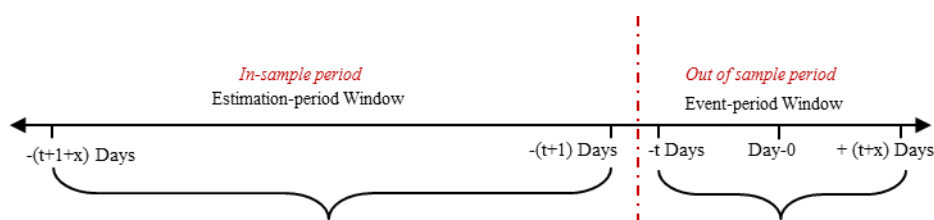
released on the announcement date, as this date precedes the effective date. Alternatively, a new hypothesis could be that the firms actually perform well during the transition. This ambiguity suggests that the use of an effective date leads to inconclusive results.

Brown and Warner (1980) emphasize that the uncertainty of specific timing of ARs leads to a significant fall in the power of tests. Henderson (1990) elaborates that it is not the exact event date which is critical. Instead, it is the timing of when the interested and informed segment of the market could have reasonably foreseen and acted upon the news. For M&As, the timing issue may be even more profound given that they take longer to be fully reflected (McWilliams and Siegel, 1997).

To conclude, the *announcement date* should be considered as the starting point. However, in reality, the impact may be observed for a number of days either side of the announcement date and, as such, the returns should be observed for a longer period, rather than just not on the event day itself.

### 3.2.3 Estimation and Event Period Windows

The process of event study entails recognizing an ‘*estimation period*’ and an ‘*event period*’ around the advent of the news. The two windows are designed specifically to ensure that there is no overlapping, which can contaminate the analysis. *Figure 3.2.1* is a graphical representation of the two event period windows:



**Figure 3.2.1 Graphical Representation of Event Study Time Frame**

An *estimation period* is the period during which *no other significant event* must occur. The estimation period is used to establish how the returns of given stock behave *ordinarily*. The statistics thus obtained are used to estimate *expected* returns in the event period. The *event period* surrounds the event date and captures the *actual* returns of the firm. The difference between the actual and expected returns in the event period is termed as *Abnormal Returns* (AR). ARs are interpreted as an impact of the event and are the focus of event study.

The size of these estimation windows is another critical aspect as inappropriate sizes can violate the assumptions and make analysis redundant. Seiler (2004, pp. 218-9) suggests that there is generally a lack of consensus in scholars' fraternity about an optimal number of days to include in these event windows. Ball and Brown (1968) and Fama *et al.* (1969) select window size arbitrarily. Dodd (1980) reports results for a 250 day estimation window analysis, and also used 100 and 300 days estimation windows, and found no difference in the results for the sample. Binder (1998) argues that studies based on daily data tend to take 250 trading days (1-Year). For merger studies, McWilliams and Siegel (1997) suggest using longer windows as M&As may take relatively longer to reflect information as this information is released slowly. Brown and Warner (1980, 1985) suggest longer windows to ensure more stable estimates of model parameters.

In Indian studies of cross border analysis, Gubbi *et al.* (2010) use an 11 day event window and a 240 day estimation window. In comparison, for similar studies, Mann and Kohli (2011) use a 101 day event window and a 150 day estimation period.

In theory, an event window should be large enough to capture any significant impact, yet small enough that it does not violate any other assumptions.

### **3.2.4 Choice of Models**

Prime issues in event study arise as result of the type of event, the statistical properties of the data, and the estimation model. As these issues were recognized and resolved, few variants of the methodology evolved. All the prominent offshoots of event study are categorized broadly into three categories: (a) Mean Adjusted model, (b) Market Adjusted Returns, and (c) Market and Risk Adjusted Returns (Brown and Warner, 1980). On the grounds of technical complexities, misspecifications possibilities, implementation cost and efficiency and performance of the tests, *Market and Risk Adjusted Returns* models have gained popularity. This category refers to various Asset Pricing models, which are used to calculate returns based on market and other factors, and use a regression model to generate estimates.

#### *a. Market Model*

While literature proposes various models to calculate expected returns (Masulis, 1978; Latane and Jones, 1979; MacKinlay, 1997), the model that has gained prominence is the Market model. Its strength lies in its simplicity and efficacy (Brown and Warner, 1985).



In this one-factor linear model, the expected return of a given security is determined by its covariance with the return on the market portfolio.

*b. Fama-French Three Factor Model*

After the use of the one factor model, researchers soon found numerous patterns in understanding average stock returns and, as such, a list of other possible fundamental factors was devised. To cite few, (Stattman, 1980; Rosenberg *et al.*, 1985) propose *book to market value* as a key element, while (Banz, 1981) finds that *size-effect* is vital and the relationship is not linear. Basu (1983) suggests an *earnings to price ratio*, and Bhandari (1988) finds *leverage* critical. They are termed as anomalies as they are aberrations from the market portfolio theory and are generally categorized as Size, Value, Leverage and Price earnings effect. Fama and French (1992, 1993, 1996) conclude that just general market conditions alone cannot explain returns, and instead derive a more comprehensive three factor model. They suggest that most of the anomalies disappear when *size and value factors* are included, along with the *market factor* in the original asset pricing model. However, for the event studies, MacKinlay (1997) argues that gains from multifactor models are limited.

In the Indian context, Bahl (2006), Tripathi (2008) and Taneja (2010) test variants of asset pricing models and conclude the three factor model is a better estimator of stock returns. Interestingly, Taneja (2010) in the analysis of 187 companies, reports a high correlation between size and value factors and instead proposes a two factor model with Market and Size or Value as the only factors. However, Tripathi (2008), in the analysis of 455 companies, finds low and insignificant correlation between the size and value factors, and finds both of them significant in explaining stock returns. Jain (2013) analyses stock returns on an industry basis and argues that there must be other factors apart from the three factor model to account for variation in performance sector-wise.

Amidst the debate about the Market model's sufficiency in explaining stock price returns, this thesis also employs the Fama-French Three Factor model to gain a better understanding of stock price returns<sup>22</sup>.

---

<sup>22</sup> Agarwalla *et al.* (2013) provide a data library for the period 1993 to 2012 to implement Three Factor model. The relevant daily data for Rm, SMB and HML variables with Survivorship-Bias Adjusted is downloaded from the following link: <http://www.iimahd.ernet.in/~iffm/Indian-Fama-French-Momentum/archive/archive-2013-06-30.html> accessed on 15th April 2014. This data is being updated continually.

### 3.2.5 Choice of Index

As a proxy for market portfolio, asset pricing models specify the use of a Value Weighted Index because it is able to adequately reflect overall market performance. However, Brown and Warner (1980) suggest that use of an Equally Weighted Index in asset pricing models is more likely to capture ARs. They argue that there exists a higher degree of correlation between the latter index and the security returns, which gives more accurate parameter estimators of a model and thus more easily detectable abnormal returns. However, in most of the issues related to indices that they highlight, they exonerate the Market model and conclude that while other models suffer significantly, the Market model tends to perform reasonably well.

Unfortunately, all the prominent indices in India are value weighted. Though some recently developed indices are equally weighted, they do not cover the sample period sufficiently to derive any meaningful analysis. However, the MSCI India Equally Weighted Index was launched in 2013 and is back-tested up until July 1999. As such, this thesis uses it for the deals that occurred in the study period.

### 3.2.6 Data Frequency

Share price performance is studied typically on an intraday, daily or monthly basis. However, in event studies, studying intraday fluctuations is highly dependent on accurate knowledge of the timing of the event. Such precision is rarely available. On the other hand, monthly values are quite distant from each other, making precise attribution of the impact of the event difficult. However, share price performance is still used to measure long-term post-event performances of firms.

This thesis is about measuring *short-term* share price reactions within few days (event window) around the event date. For such study, extended periods can violate basic assumptions, dilute statistical tests and change stock's risk exposure, thus contaminating the results. Further in favour of daily data, Fama *et al.* (1969) find a full reflection of the information in the share price on monthly data. They also alluded that some adjustment lags for daily data provides an opportunity to study delay in absorption of information. Kothari and Warner (2006, p. 8) suggest that daily returns allow a more accurate measurement of abnormal returns and more informative studies of announcement effects. Even Campbell *et al.* (1997, p. 174) find a substantial increase in the power of testing daily intervals when compared to monthly testing. In case of any violations of assumptions by the data, Henderson

(1990) argues that the event study design is still robust as techniques have developed to address such concerns.

### **3.2.7 Sample Size**

MacKinlay (1997) suggests that the power of the tests is directly proportional to the sample size, and a larger sample size is particularly critical when ARs are minuscule. Brown and Warner (1980) also support the same argument. Further, in Brown and Warner (1985), they suggest that the degree of misspecifications in the method is sensitive to sample sizes.

### **3.2.8 Non-Synchronous Trading**

Non-synchronous trading is another prominent time series property of daily data, which leads to serial dependence in daily excess returns, even when the underlying return series are independent and the serial is uncorrelated (Lo and MacKinlay, 1990). Brown and Warner (1985) explain that the presence of non-synchronicity makes OLS estimates of Market model  $\beta$  biased and inconsistent. Infrequently, traded shares have downward biased  $\beta$  estimates. The problem is more pronounced with target firms as they are relatively smaller when compared with acquiring firms. Consequently, regression estimates may be biased and inconsistent with higher variance.

For non-synchronous or thinly traded shares, (Scholes and Williams, 1977; Dimson, 1979; Fowler and Rorke, 1983) have proposed the aggregation of lead, current and lagged estimators in models to estimate  $\hat{\alpha}_i$  and  $\hat{\beta}_i$  through regression models.

However, Dyckman *et al.* (1984) found no significant improvement in the specification or power of the tests using either of these modified betas. Though they argue their conclusion is based heavily on the sample firms they used. Brown and Warner (1985), Jain (1986) and Davidson and Josev (2005) share a similar conclusion.

### **3.2.9 Non-Normality of Daily Data**

Daily returns data has known issues of non-normality. Brown and Warner (1985) find the same for *distribution of excess returns* too. Dyckman *et al.* (1984) report leptokurtic residuals with a negative median in their analysis. Fama *et al.* (1969) report right skewness in Market model residuals.

As a solution, Patell (1976) suggests using Scaled (standardized) Abnormal Returns (SAR) for statistical tests. In the process, the abnormal returns are divided by the standard

deviation of the residuals from estimation period, adjusted for forecasting errors. The advantages are two folds: (i) adjustment for *out of sample* forecast has a statistically higher variance, (ii) controlling hetroskedasticity lessens the impact of high volatility firms in the tests when averaging. Consequently, the resulting returns (SARs) are approximately unit normal (Boehmer *et al.*, 1991). Similarly, Dyckman *et al.* (1984) use standardised residuals and conclude that non-normality of abnormal returns has little impact on the inferences and t-tests are valid.

### **3.2.10 Hetroskedasticity – Event Induced Variance**

Stationarity of daily variances is also questionable in event study. Given that the market reacts to uncertain events, there is evidence that event period variance of returns increases significantly (Patell and Wolfson, 1984; Kalay and Loewenstein, 1985). To illustrate, the event period variance was more than 3.5 times the estimation period variance (Dann, 1981). This increase in variability is economically intuitive. Brown *et al.* (1988) argue that it is due to a temporary shift in firm's systematic risk. Alternatively, either the event was triggered by the factors aggrandizing uncertainty, or the event itself prompts uncertainty in the economic circumstances of the firm (Kothari and Warner, 2006, p. 12). From a methodological perspective, this increased variance affects cross-sectional dispersion and reduces the power of tests. Boehmer *et al.* (1991) in their simulation study, demonstrate that even the slightest increase in variance increases the probability of Type I error in the analysis of zero mean returns.

As a solution, researchers suggest ignoring estimation period variance, and instead employing contemporaneous *cross-sectional variance* of abnormal returns of the firms in the sample to generate test statistics (Charest, 1978; Penman, 1982). The underlying assumption is that these returns are independent and identically distributed. However, in the case of the violation of assumptions, the cross-sectional procedures may be misspecified. Also, ignoring estimation period variance can lower the power of the test if there was no induced variance (Brown and Warner, 1985). Boehmer *et al.* (1991) (referred to as BMP-91 hereafter) eliminate these concerns by introducing standardizing theory from Patell (1976) to ordinary cross-sectional technique. The resulting methodology is a *standardized cross-sectional* procedure that accounts for non-normality and hetroskedasticity issues. It also incorporates estimation period standard deviation that increases its efficiency and the power of the tests. However, it is still based on the assumption that the abnormal returns are cross-sectionally uncorrelated, or that the returns are independent.

### 3.2.11 Event Clustering - Cross-Sectional Dependence

There can be two main types of clustering effects in the analysis. First, *Calendar time Clustering*, which is a possibility when firms simultaneously experience an event at or near the same calendar time. This can be further divided into two main types: (i) *Event date clustering*, which may happen if firms experience multiple events on the same date. Changes in accounting procedures, tax laws, regulations, government, or the legal framework may engender such a situation. (ii) *Event-period clustering* (partial clustering) may occur due to events such as mergers and share repurchases that exhibit waves (Kothari and Warner, 2006, p. 28). Second, *Industrial clustering* (risk clustering) refers to increased concentration of similar beta firms (industries) in the sample set. Calendar time clustering is known to weaken the power of the tests, while industrial clustering does weaken the power of the tests in the case of high beta firms (industries) as they increase the variance and make detection of abnormal returns complicated (Brown and Warner, 1980). There is also a possibility of these clusters reinforcing each other and further reducing the power of tests (Dyckman *et al.*, 1984).

Statistically, the issue that follows is that the firms in the sample set are no longer independent. Consequently, estimated ARs are correlated across securities, and that increases the variance and hence lowers the power of tests. It is termed as *cross sectional dependence*, and it leads to two issues: (i) *Cross-sectional correlation* and (ii) *Cross-sectional heteroskedasticity*.

One popular technique to address cross-sectional correlation is the portfolio approach (Jaffe, 1974; Mandelker, 1974). However, Salinger (1992) is sceptical of the approach and rationalizes that one portfolio for each period will only address contemporaneous correlation and, as such, intertemporal correlation (between portfolios) will still remain.

Another alternative is to analyze abnormal returns without aggregation by running a multivariate regression with a dummy variable for event date security-by-security. However, the model has its own drawbacks and lacks power compared to other alternatives (Campbell *et al.*, 1997, p. 167).

The Market model, which explicitly accounts for market wide risks and systematic risks has no significant impact of clustering. However, that conclusion comes with a rider that the Equally Weighted Index is used (Brown and Warner, 1980). The *standardized cross-sectional* approach from BMP-91 accommodates cross-sectional heteroskedasticity and is even found to be immune to event date clustering. However, it still needs cross-sectional

correlation of the ARs be zero. So, there exists a need to address the issue of clustering in the analysis explicitly.

### **3.2.12 Cross-Sectional Correlation of Estimated Abnormal Returns**

Clustering may lead to cross-sectional correlation. Salinger (1992) stresses that even if true abnormal returns were uncorrelated, estimated abnormal returns are not, and failing to account for correlation results in significant underestimations of standard errors. In the same vein, Jaffe (1974) argues that test statistics should not assume independence of residuals. While Brown and Warner (1980) and Dyckman *et al.* (1984) suggest positive correlation leads to higher rejection rates of the null hypothesis, Kothari and Warner (2006, p. 28) argue that even the negligible size of cross-sectional correlation in the data will certainly lead to serious misspecifications of the models. Hence, the impact of clustering should not be overlooked in abnormal returns, particularly for longer duration studies (a year or more).

As a solution, Kolari and Pynnönen (2010) in their model, ADJ-BMP, adjust the standardised cross-sectional variance procedures proposed by BMP-91 to accommodate cross-correlation within securities. In the case of zero correlation, their adjustment factor is 1 and the t-statistics is same as that of BMP-91.

### **3.2.13 Autocorrelation**

Brown and Warner (1985) find significant autocorrelation in the residuals from Market model estimations, and when coupled with non-synchronous trading the issues could be more pronounced (Henderson, 1990). Due to nonsynchronous trading, security returns are not perfectly matched with market returns, which renders the OLS estimates biased and inconsistent.

However, Kolari and Pynnönen (2010) argue that in the single day analysis, the biasing effect is negligible and in cumulative returns analysis, ADJ-BMP handles this issue indirectly in the process. Firstly, SARs are calculated on a time series variance and are accumulated. Then, they are again *rescaled* with cross-sectional variance. Effectively, same-order autocorrelation in numerator becomes the part of the denominator and cancels out the effect of autocorrelation.

### **3.2.14 Impact of Outliers and Leveraged Data-Points**

The issue of non-normality in daily stock returns is indicative of the existence of outliers and leverage data points. OLS estimations and the inferences thereupon are reported

to be quite sensitive to such issues (Huber, 1973; Yohai, 1987). The literature suggests a few measures such as ignoring, trimming through some arbitrary cut-off threshold point or winsorizing them. None of the methods is foolproof as true outliers are from the size of the residuals from the model, and just not from the observations. Moreover, even if such measures improve accuracy, they come at the cost of vital information. Alternatively, if such observations are not treated properly, they immensely influence the benchmark statistics used to identify events (AR) (Sorokina *et al.*, 2013).

Cook's distance (Cook, 1977) can be used to identify outliers and high leverage points. In case they are present, the robust regressions should be employed instead of the OLS. The robust regressions work with less restrictive assumptions than OLS. In the OLS estimations, outliers may exert more influence in the estimations and thus distort the coefficients and residuals to be smaller. However, the robust regressions down-weight the influence of outliers and make their residuals larger and visible. The process minimizes the impact of outliers on the coefficient estimates. The robust regressions like the M estimator (Huber, 1973) and the MM estimator (Yohai, 1987) significantly improve the recognition of event effects. While the M estimator is used to deal with outliers and is therefore useful in detecting changes in systematic risks, the MM estimator is used to simultaneously deal with outliers and leveraged data points both and is found to be better in identifying ARs in event studies (Sorokina *et al.*, 2013).

### **3.2.15 Analysing and Testing Models**

As a violation of assumptions needed for parametric tests is frequent in event study, other non-parametric tests have evolved over time. Brown and Warner (1980) argue that while non-parametric tests are employed to correct misspecifications of parametric tests such as t-statistics, they are misspecified themselves. Instead, they report that after transforming the data to approximate theoretical distributions, t-test based parametric tests perform better than any non-parametric tests. Even, Kolari and Pynnönen (2010) argue that the ADJ-BMP parametric test was the most robust and dominates non-parametric tests in certain situations in event study.

*Table 3.2.1* summarizes the prominent issues in event study methodology, along with the proposed solutions discussed in the literature. This thesis takes these measures as guidelines and implements them in the analysis.

**Table 3.2.1 Summary of Issues and Resolutions in Event Study Methodology**

| Specifications          | Issue                               | Resolution                         |
|-------------------------|-------------------------------------|------------------------------------|
| EMH Assumption          | Violation                           | Large Windows                      |
| Unexpected News         | Spill Over Effect                   | Cumulative Studies                 |
| Confounding Effects     | Inconsequential Analysis            | Weed them out of the sample set    |
| Event Date              | Inconclusive Analysis               | Announcement and surrounding dates |
| Frequency of the Data   | Detection of ARs                    | Use Daily Data                     |
| Non-synchronous trading | Biased Estimates                    | Scholes and Williams Beta          |
| Non-Normality of Data   | Violation of Regression Assumptions | Standardisation of Residuals       |
| Event Induced Variance  | Incorrect Hypothesis Testing        | Cross-Sectional Procedures         |
| Clustering              | Cross-Sectional Correlation         | ADJ-BMP method accounts for that   |
| Autocorrelation         | Biased and Inconsistent Estimates   | ADJ-BMP method accounts for that   |
| Outliers and Leverage   | Incorrect estimates                 | Robust Regressions                 |
| Statistical Tests       | Misspecifications                   | Parametric Tests are better        |

### 3.3 Implementation

Having discussed the model specifications, this section explains the process of event study adopted for this research, and how the required variables are determined.

In this thesis, the announcement of M&As is the *event*. Following the argument proposed by Dodd (1980) and others cited earlier, the event date used for this research is the ‘*Announcement Date*’ and the words ‘*event day*’, ‘*announcement day*’ and ‘*Day-0*’ are used synonymously to indicate the event date.

Using Day-0 as a reference point, this study uses a window of *51 trading days* (-20 to +30 days from Day-0) for the *event period* and a window of a year or *250 trading days* (-270 to -21 days from Day-0) for the *estimation period*. Clearly, there is no overlapping of the two windows that can otherwise contaminate the analysis. While there is a lack of consensus for window sizes (Seiler, 2004, pp. 218-9), some pointers do exist. The selection of days for the two windows and also the idea of an asymmetric event period are collectively inspired by the arguments presented by Ball and Brown (1968), Dodd and Ruback (1977), Dodd (1980), Asquith *et al.* (1983) and Binder (1998). Instead of just focusing on the specific date of an event, the event window is defined to fully capture any pre-event expectations or information leakages, as well as post-event slow reactions if applicable.

#### 3.3.1 Calculating Actual Returns

Once the windows are determined, actual returns for any security *i* are calculated on a continuous compounding basis in the *estimation period*. Stock returns are assumed to be lognormal. Hence, stock return on day-t  $R_{it}$  is calculated by taking the natural log (Ln) of the share price on day t divided by share price on day t-1 for a given security *i*.



$$R_{it} = \text{Ln} \left[ \frac{P_t}{P_{t-1}} \right] \quad (3-1)$$

Similarly, continuous returns on the market index value ( $R_{mt}$ ) are also calculated for each day. It is worth noting that the Datastream database (used in this study for share price data) excludes weekends and holidays. Also, adjusted closing prices are used to control for capitalization changes and dividends.

### 3.3.2 Regression Techniques

Expected returns in the event window are generated by extrapolating the parameter estimators calculated in the estimation period window through regression analysis. However, the estimators themselves are calculated using the OLS and the robust regressions are calculated using the M and MM estimators for the market, and the Fama-French three factor model.

### 3.3.3 Calculating Expected (Normal) Returns

#### a. Market Model

The model determines a linear *ex-ante* relationship between the return of a firm  $i$  and the return of the market portfolio. It assumes that asset returns are jointly multivariate normal and independently and identically distributed through time. Following is the mathematical representation of Market model:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \quad (3-2)$$

where:

$R_{it}$  = the actual daily return of Target or Acquirer security  $i$  for day  $t$

$R_{mt}$  = the daily return on market index for day  $t$

$\varepsilon_{it}$  = error term

$\alpha_i$  = intercept of the model

$\beta_i$  = slope of the model

$\alpha_i$  and  $\beta_i$  are the parameters of the model which are estimated through parameter estimators  $\hat{\alpha}_i$  and  $\hat{\beta}_i$  generated by the *OLS, M and MM methods*. The model assumes *stationarity of the return values* and that  $\varepsilon_{it} \sim NID(0, \sigma_i^2)$ .

The unbiased estimate of the variance of the residuals during estimation-period is given by:

$$se_i^2 = \frac{1}{n-2} \sum_{i=1}^N \hat{\epsilon}_i^2 \quad (3-3)$$

(e) *Fama and French Three Factor Model*

Fama *et al.* (1969) argue that the Market model is oversimplified, and general market conditions alone do not determine the returns on an individual security. Consequently, the actual and expected returns are also calculated using Fama-French three factor model:

$$R_{it} = \alpha_i + \beta_i R_{mt} + s_i SMB_t + h_i HML_t + \epsilon_{it} \quad (3-4)$$

where:

$R_{it}$  = the actual daily return of Target or Bidder security i for day t

$R_{mt}$  = the daily return on market index for day t

$SMB_t$  = small market capitalization minus Big

$HML_t$  = high book to market ratio minus Low

$\alpha_i$  = intercept of the model

$\beta_i$  = slope of the model with respect to market Index

$s_i$  = slope of the model with respect to SMB

$h_i$  = slope of the model with respect to HML

$\epsilon_{it}$  = prediction error for security i for day t

$\alpha_i$ ,  $\beta_i$ ,  $s_i$  and  $h_i$  are the parameters of the model which are estimated through the *OLS*, *M* and *MM Methods* of regression. Similar assumptions to those of the Market model apply here as well. The unbiased estimate of the variance of the residuals during estimation period is given by:

$$se_i^2 = \frac{1}{n-4} \sum_{i=1}^N \hat{\epsilon}_i^2 \quad (3-5)$$

(f) *Scholes and Williams - Non-Synchronous Trading*

This research uses daily data which is known for non-synchronous trading. Scholes and Williams (1977) technique is used to estimate the Market model parameters. As there is no existing precedent about the levels of leads and lags that shall fit the Indian market adequately, this thesis extends the basic SW-betas using the generalization provided by

Fowler and Rorke (1983) for two and three leads and lags in the market returns<sup>23</sup>. Davidson and Josev (2005) also test the two period lead / lag model. The revised Market model equation is as follows:

$$R_{it} = \alpha_i^{sw} + b_i^{sw}R_{mt} + \varepsilon_{it} \quad (3-6)$$

where:

$$b_i^{sw} = \frac{b_i^{-1} + b_i^0 + b_i^{+1}}{1 + 2\rho_1}$$

$$\alpha_i^{sw} = \frac{1}{T} \left[ \sum_{t=0}^T R_{it} - b_i^{sw} \sum_{t=0}^T R_{mt} \right]$$

$$b_i^{-1} : R_{it} = \alpha_i + b_i^{-1}R_{mt-1} + e_{it}$$

$$b_i^0 : R_{it} = \alpha_i + b_i^0R_{mt} + e_{it}$$

$$b_i^{+1} : R_{it} = \alpha_i + b_i^{+1}R_{mt+1} + e_{it}$$

T = number of days employed to estimate the adjusted betas

$R_{it}$  = actual daily return of Target or Bidder security i for day t

$R_{mt}$  = daily return on market index for day t

$\rho_1$  = first order Serial correlation co-efficient for the market return.

The unbiased estimate of the variance of the residuals during estimation-period is given by the equation (3-3).

### 3.3.4 Calculating Abnormal Returns (AR)

Stationarity assumption allows extrapolation of the model in and out of the sample period. By using the estimated coefficients for both the models and all regressions, expected or theoretical returns for a security  $i$  over the event period are calculated. After this, prediction errors  $e_{it}$  are calculated as a difference between actual returns and theoretical returns from

---

<sup>23</sup> When two - leads and lags model is used, first model is extended to obtain new  $b_i^{sw}$  as:

$$b_i^{sw} = \frac{b_i^{-2} + b_i^{-1} + b_i^0 + b_i^{+1} + b_i^{+2}}{1 + 2\rho_1 + 2\rho_2}$$

where:

$$b_i^{-2} : R_{it} = \alpha_i + b_i^{-2}R_{mt-2} + e_{it} ;$$

$$b_i^{+2} : R_{it} = \alpha_i + b_i^{+2}R_{mt+2} + e_{it} ;$$

$\rho_1$  and  $\rho_2$  are first and second order serial correlation coefficient for the market return respectively.

Likewise, it was further extended to obtain three – leads and lags model.

the models - ( $e_{it} = R_{it \text{ Actual}} - R_{it \text{ Expected}}$ ). The error term  $e_{it}$  is referred to as Abnormal Returns (AR) or excess return in event study. For each model, they are calculated as follows:

$$\text{Market Model} \quad AR_{it} = e_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{mt}) \quad (3-7)$$

$$\text{Fama-French Model} \quad AR_{it} = e_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i R_{mt} + \hat{\delta}_i \text{SMB}_t + \hat{\eta}_i \text{HML}_t) \quad (3-8)$$

$$\text{SW-adjusted Betas} \quad AR_{it} = e_{it} = R_{it} - (\hat{\alpha}_i^{\text{SW}} + \hat{\beta}_i^{\text{SW}} R_{mt}) \quad (3-9)$$

The prediction error term  $e_{it}$  is termed as an abnormal return because it captures the deviation from what would have been a normal return with respect to the various factors in case the event had not taken place.

### 3.3.5 Aggregation of Abnormal Returns

For meaningful inferences in the case of event date uncertainty, these AR values must be aggregated. This is done in two ways:

- Aggregation across firms (Average AR)
- Aggregation across time (Cumulative Average AR)

After calculating the abnormal returns for all the firms in the sample for day  $t$  in the event window, a *cross-sectional average* of abnormal returns for the same day is then computed for the entire sample. These values are called as Average Abnormal Returns ( $\overline{AR}$ ).

$$\overline{AR}_{nt} = \frac{1}{n} \sum_{i=1}^n AR_{it} \quad (3-10)$$

where,  $n$  is the total number of firms in the sample on day  $t$ .

Following that, *AARs* are summed across all the days in the event window to arrive at what is called as Cumulative Average Abnormal Returns (CAAR).

$$\text{CAAR}_{i,T1,T2} = \sum_{t=T1}^{T2} \overline{AR}_{it} \quad (3-11)$$

where,

$T_1$  is the first day in event-period before Day 0.

$T_2$  is the last day over which cumulative  $\overline{AR}_t$  are being calculated in the event-period.

Alternatively,

$$CAAR_t = CAAR_{t-1} + \overline{AR}_t \quad (3-12)$$

In case of no abnormal price fluctuations around the event date,  $\overline{AR}$  and CAAR values should randomly fluctuate around zero. Any evidence of CAARs being systematically different from zero indicates the presence of information.

The CAAR analysis is meaningful only when there is no clustering. The CAARs are also understood to be serially dependent. So, Kolari and Pynnönen (2010) argue that raw returns should only be used to interpret economic information when any signals are detected. However, for statistical testing, they purpose use of scaled returns as signal detecting devices.

### 3.3.6 Variance of Abnormal Returns (AR) – Scaling Factor

Variance for the ARs is a *two step* process: First, it requires calculation of an unbiased estimate of variance from regression models explained in equation (3-3) and (3-5). Second, when estimated period coefficients are extrapolated to predict returns in the *event period*, which is essentially *out of sample* period, the variance of ARs must be adjusted to reflect the predictive nature of the excess returns (Patell, 1976; Peterson, 1989). The generic formula for adjustment factor<sup>24</sup> (*Af*) is as follows:

$$Af = 1 + \frac{1}{n} + \frac{\sum_{j=1}^k (x_{j,t} - \overline{x}_j)^2}{\sum_i^n \sum_{j=1}^k (x_{j,i} - \overline{x}_j)^2}$$

So, the variance of the abnormal returns from each of the models, for each day in the event-period is calculated as:

$$s_{AR_{it}}^2 = se_{it}^2 * Af \quad (3-13)$$

As  $n$  increases,  $S_{AR_{it}}^2 \approx \sigma_i^2$

---

<sup>24</sup> For the market model it can be simplified as follows:

$$Af = 1 + \frac{1}{n} + \frac{[R_{mt}(\text{event window}) - \overline{R}_{mt}(\text{est.period})]^2}{\sum_{t=1}^n [R_{mt}(\text{est.period}) - \overline{R}_{mt}(\text{est.period})]^2}$$

### 3.3.7 Standardised Abnormal Return (SAR)

The effects of an event are determined by testing the statistical significance of ARs. Following the argument proposed by Patell (1976), these ARs are standardized by their respective variance to arrive at SARs. The standardization process normalizes each AR value to generate  $SAR_{it} \sim NID$ . The distribution of SAR values comply with the assumptions of Normal Distribution and thus can be readily employed in various parametric tests.

$$SAR_{it} = \frac{AR_{it}}{\sqrt{s_{AR_{it}}^2}} \quad (3-14)$$

where,  $s_{AR_{it}}^2$  is the variance of ARs from equation (3-13) and  $SAR \sim NID$

### 3.3.8 Cumulative Standardised Abnormal Returns (SCARs)

These SAR values are aggregated across event time to generate SCARs as follows:

$$SCAR_{i,T1,T2} = \frac{1}{\sqrt{T_2 - T_1 + 1}} \sum_{t=T_1}^{T_2} SAR_{it} \quad (3-15)$$

where, T1 and T2 represent the length of the period over which SAR values are accumulated.

### 3.3.9 Statistical Tests for Significance of ARs

This thesis uses the ADJ-BMP method by Kolari and Pynnönen (2010) to generate test statistics to confirm the significance of the results. For *individual day analysis (AR)*, test statistics for SARs is developed using cross-sectional procedures and then it is adjusted for cross-correlation.

Steps:

Average SARs: 
$$\overline{SAR}_{nt} = \frac{1}{n} \sum_{i=1}^n SAR_{it} \quad (3-16)$$

Cross-sectional Standard Deviation of SARs: 
$$s_c^2 = \frac{1}{n-1} \sum_{i=1}^n (SAR_t - \overline{SAR}_{nt})^2 \quad (3-17)$$

$$\text{BMP-91 test statistics} \quad t_{\text{BMP}} = \frac{\overline{\text{SAR}}_{nt} \sqrt{n}}{\sqrt{s_c^2}} \quad (3-18)$$

$$\text{ADJ-BMP test statistics} \quad t_{\text{Adj-BMP}} = t_{\text{BMP}} \sqrt{\frac{1 - \bar{r}}{1 + (n - 1)\bar{r}}} \quad (3-19)$$

where,

$\bar{r}$  is calculated by averaging the sample correlations of the estimation-period residuals and  $n$  represents number of firms in the sample set.

### 3.3.10 Statistical Tests for Significance of CAARs

The same steps are followed for *multiple day analysis (CAAR)* by replacing SAR in the above set of equations by SCARs.

This thesis also needs to compare the differences between CAARs for various sub-sets of the firms. It is done by using a t-test proposed by Sichernan and Pettway (1987).

$$t = \frac{[ \text{CAAR}_{T_{i,1}}/T_{i,1} ] - [ \text{CAAR}_{T_{i,2}}/T_{i,2} ]}{S_p \sqrt{1/T_{i,1} + 1/T_{i,2}}} \quad (3-20)$$

where,

$\text{CAAR}_{T_i}$  is cumulative average abnormal return over interval  $i$  for each sub-set

$T_i$  is the specific number of days in interval  $i$

$s_p$  is the pooled estimate of each group's standard deviation<sup>25</sup>

The differences in overall CAARs from the robust and OLS regressions are tested using paired t-test for two sample means.

### 3.3.11 Cross Sectional Regression Analysis

Typically, an event study is performed in conjunction with cross-sectional regression analysis. This allows the evaluation of the impact of various firm and deal specific factors on abnormal returns even if the ARs are zero (Kothari and Warner, 2006, p. 19). It can help in

---

<sup>25</sup>  $S_p = \frac{\sqrt{[T_{\text{BASE}(i,1)} - 1]s_1^2 - [T_{\text{BASE}(i,2)} - 1]s_2^2}}{[T_{\text{BASE}(i,1)} + T_{\text{BASE}(i,2)} - 2]}$

detecting multiple sources of ARs, if any. As each firm is studied individually, it can also be construed as an alternative to dealing with the issue of clustering and several other issues that are cited above.

Given the possibilities of leakages, spill over effects, imperfect event dates, and so on, the cross-sectional analysis is performed on the CAARs at varying intervals. The univariate and multivariate OLS regressions analyses are conducted to analyse the cross-sectional variation in these CAARs on selected explanatory variables classified under six categories. The general form of the equation is as follows:

$$\begin{aligned}
 CAAR_{i,T1,T2} = & \alpha + \sum_{k=1}^{k=4} \gamma_{k,i} \text{ Deal attributes} + \beta_i \text{ Ownership stake} \\
 & + \beta_i \text{ Information asymmetry} + \beta_i \text{ Institutional distance} \\
 & + \sum_{j=1}^{j=6} \theta_{j,i} \text{ Cultural distance} + \beta_i \text{ Economic distance} \\
 & + \beta_i \text{ Corporate Governance distance} + \epsilon_i
 \end{aligned} \tag{3-21}$$

where,

$CAAR_{i,T1,T2}$  is a cumulative average abnormal return of firm  $i$  over period T1 to T2.

$\gamma_k, \beta_i, \theta_j$  are regression coefficients from OLS regression for each independent variable.

$\epsilon_i$  is an error term assumed to be normally distributed with zero mean and constant variance.

### ***Independent Variables Description***

There is a range of variables under each category analysed in this thesis. The independent variables under each category are:

#### ***a. Deal Attributes***

In the method of payment variable, *Cash* is given a value of one if it is a cash offer and zero for shares or any combinations. The cross-border variable *CB* is given a value of one if the acquirer is a foreigner and zero otherwise. The *Conglomerate* variable captures the industry effect and is assigned a value of one when the deal happens within firms not identical on SIC two digit codes basis. The *BGroup* variable is assigned a value of one if the acquirer in the deal is affiliated with some large Indian Business Group.



*b. Ownership Stakes*

The variable *Pct50* is assigned a value of one when the final ownership stake of the acquirer exceeds 50%. Such stakes grant majority control over target firms to the acquirer and are considered a turning point in M&As.

*c. Information Asymmetry*

The variable *PctToe* is a continuous variable that measures the size of pre-event ownership (Toehold), if any. The variable *Related* also captures the relationship between the target and the acquiring firm and is assigned a value of one if the two are connected either through parent-subsidiary relationship or if they both are sister firms within the same corporate group or have a common parent company.

*d. Corporate Governance Models*

The variable *GJ* is assigned a value of one when the acquirer company is believed to follow the German/Japanese corporate governance model and is used to test CBMA targets. Likewise, the variable *AS* is assigned one if the target country is pursuing Anglo-Saxon corporate governance model. It is used to test returns to the Indian acquirers in CBMAs. The variable *Blockhold* is another way to test the effect of the corporate governance model. Here, one is assigned when the acquirer is pursuing a model that promotes Blockholding of shares in the system, and zero describes *Diffused* ownership pattern.

*e. Institutional Distances*

*CWA* and *CWT* variables capture the institutional framework of the participating firms. *CWA* is assigned a value of one when the acquirer is one of the Commonwealth nation. Likewise, *CWT* is assigned one when the target is from one of the Commonwealth nations.

*f. Cultural Distances*

There is a range of cultures involved in the sample deals in this thesis. Following the GLOBE study, these foreign firms are classified into several cultures and are assigned one for belonging to their respective cultural category and zero otherwise. The variables *Anglo*, *Germanic*, *Nordic*, *Confucian*, *SE*, *LE* and *Others* are assigned a value of one when the acquirer or target belongs to that culture.

g. *Economic Distances*

The role of economic distance between the Indian acquirer and the participating target firms is analysed. A variable  $Ed$  is constructed as a ratio of  $\left(\frac{Per\ Capita\ RGDP\ India}{Per\ Capita\ RGDP\ Foreign}\right)$ . The lower the ratio, the larger the economic distance between the two countries. Alternatively put, this variable captures the role of targets from the developed nations to the Indian acquirers in the Indian CBMAs.

Finally, this thesis studies the impact of M&A announcements on Indian firms over three scopes: Aggregate, Domestic and Cross-Border Deals. It is to be noted that *not* all the variables under each category are relevant for every scope analysed. While some are tested for each scope, others are selected on the basis of literature findings for each scope. Even after that, in multivariate analysis, the variables have to be paired cautiously to achieve statistical robustness and stability. The cross-sectional results presented in the main body are those which are optimized according to the model and/or variable(s) significance. Others are reported in the appendix to that chapter.

### 3.4 Overall Summary

This chapter highlights the key aspects of the event study methodology. It discusses the framework of the methodology, possible concerns cited in the literature and the ways to resolve them. Based on the findings, this thesis implements the Adjusted BMP framework (ADJ-BMP) which attempts to address all the main concerns surrounding event study and makes it a state-of-the-art methodology.

Further, the Market model has always been the most popular model for its simplicity and efficacy. Yet, there are some limitations cited in the literature about it. Consequently, this thesis also uses the Fama-French three factor model to capture the share price returns around the event. For thin trading, the Market model coefficients are estimated using Scholes and Williams adjusted beta with its variants up to three lead and lag periods.

The analysis uses a long event window of 250 days [-270, -21] for the estimation period and 51 days [-20, +30] in the event period. The tests of significance are applied to ensure the robustness of the results.

Apart from the OLS methodology, this thesis also uses robust regressions (M and MM) to generate the abnormal returns around the event. These robust regressions are deemed better in terms of handling the presence of outliers and influential leverage points, which are

known to occur around the event. The robust regressions down-weight the influence of outliers and make their residuals larger and more visible, while minimizing their impact on the regressions coefficients.

The univariate and multivariate regression is performed to analyse the cross-sectional variation in cumulative average abnormal returns over several intervals on selected independent variables categorized under six categories: deal attributes, ownership stakes, corporate governance models, institutional distances, cultural distances, and economical distances.

# Chapter 4. Sample Data

---

## 4.1 Introduction

While the methodology adopted in this thesis is quite intuitive, it has its own implementation challenges. Chapter three highlights the range of possible issues that event study may encounter. It also details how the methodology adopted in this thesis addresses those issues. A substantial part of this methodology relates to the type and treatment of the data. This chapter aims to describe the attributes of the data, and outlines the treatment adopted to make the data suitable for analysis.

This chapter also provides a description of the databases and the variables used, along with the descriptive analysis of the sample data.

## 4.2 Data Section

The sample for this research is comprised of domestic and cross-border merger and acquisition deals involving Indian companies. In the sample set, either the target or the acquirer nation was India. The sample covers deals from 1988 to 2013.

### 4.2.1 Data Sources

#### *a. Deals and Stock Exchange Data*

Information about various M&A deals is gathered from Thomson Reuters' *Thomson ONE (T1) Database*. T1 provides extensive coverage of around 25 years of Indian M&A markets, though the data for the initial years is understandably sparse.

The relevant Share – Price and Indices Values needed for the study also come from another Thomson Reuters product named *Datastream*.

#### *b. Indices*

*BSE Sensex*, which is a yardstick index, is used as a proxy for market returns for firms listed in India. Also, the Fama-French variables used in this analysis are based on companies listed on the Bombay Stock Exchange (BSE).

BSE-Sensex is a Value Weighted Index. However, as literature argues for Equally Weighted Index to detect abnormal returns, the *MSCI India Equally Weighted Index* is also used for the analysis. The MSCI Index was launched in 2013 and is back-tested up until July

1999. As it does not cover the entire sample period, it is used for a sub-set of the dataset to draw inferences, if any.

While the prime focus of this thesis is to evaluate returns to Indian shareholders, a brief analysis of participating foreign firms is also conducted. For the foreign firms, the leading indices in the respective countries are used based on their primary stock exchanges as follows:

**Table 4.2.1 Detail of Indices Used for Each Country**

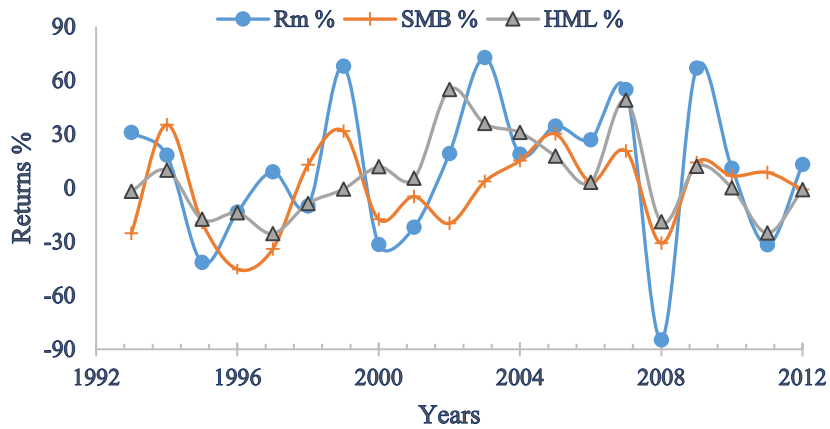
| Country                  | Market Index                   |
|--------------------------|--------------------------------|
| Australia                | All Ordinaries Australia       |
| Austria                  | Austrian Traded Index          |
| Bahrain                  | Bahrain Bourse All Share Index |
| Belgium                  | BEL20                          |
| Canada                   | S&P/TSX Composite Index        |
| China                    | SSE Composite                  |
| Finland                  | OMX Helsinki 25                |
| France                   | CAC 40                         |
| Germany                  | DAX                            |
| Hong Kong                | Hang Seng Index                |
| Indonesia                | Jakarta Composite              |
| Italy                    | FTSE MIB                       |
| Japan                    | Nikkei 225                     |
| Malaysia                 | FTSE Bursa Malaysia KLCI       |
| Netherlands              | AEX-INDEX                      |
| Oman                     | MSM 30                         |
| Singapore                | STI                            |
| South Africa             | FTSE/JSE All Share Index       |
| South Korea              | KOSPI                          |
| Sri Lanka                | ASPI                           |
| Sweden                   | OMX Stockholm 30               |
| Switzerland              | Swiss Market Index             |
| Taiwan                   | Taiwan Stock Exchange          |
| Thailand                 | SET Index                      |
| United Kingdom           | FTSE 100                       |
| United States of America | S&P 500                        |

*c. Fama-French Model Data*

Agarwalla *et al.* (2013)<sup>26</sup> provide the necessary data for the period January 1993 to June 2012. To gain an understanding of the return behaviour, *Figure 4.2.1* graphs the three

<sup>26</sup> Agarwalla *et al.* (2013) provide data library for the period 1993-2012 to implement Three-Factor Model. The relevant daily data for Rm, SMB and HML variables with Survivorship-Bias Adjusted is downloaded from the following link: <http://www.iimahd.ernet.in/~iffm/Indian-Fama-French-Momentum/archive/archive-2013-06-30.html> accessed on 15th April 2014. This data is being updated continually.

factors. The returns graphed are annualized by compounding daily returns and are readily available from the same source.



**Figure 4.2.1 Fama-French Factor Annualized Daily Returns Over a 20 Year Period**

While there is certainly a difference in scales in the three factors, they seem to follow a similar trend overall, with a few exceptions. The correlation matrix of the factors is as follows:

**Table 4.2.2 Correlation Matrix of Fama-French Factors**

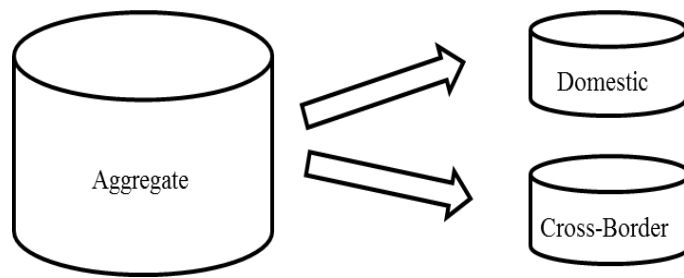
|       | Rm %        | SMB %      |
|-------|-------------|------------|
| SMB % | -0.4051 *** |            |
| HML % | 0.0106      | 0.0802 *** |

*p-values: \*\*\* p <.01*

Though the variable SMB is significantly negatively (positively) correlated with Rm (HML) variable, it is not in high enough order to affect the analysis.

#### 4.2.2 Dataset Structures

For the purpose of the analysis, data is grouped into three sets as outlined in *Figure 4.4.2*. On the top of the hierarchy is the aggregate sample, which comprises of all the deals shortlisted after data screening. The aggregate sample is then split into two more sub-sets: domestic and cross-border. The domestic sub-set focuses on the deals wherein both the participating firms (target and acquirer) originate in India as per their primary listing. In the cross-border sub-set, only one of the participating firms originates in India. The nationality of a firm is based on the primary exchange listing, and the location of the primary business or division at the time of the transaction.



**Figure 4.2.2 Data Structures**

Further, data from the MSCI Equally Weighted Index and the Fama-French model does not cover the entire sample period. They are implemented on sub-sets based on their availability.

### **4.2.3 Data Screening**

#### *i. Public Companies*

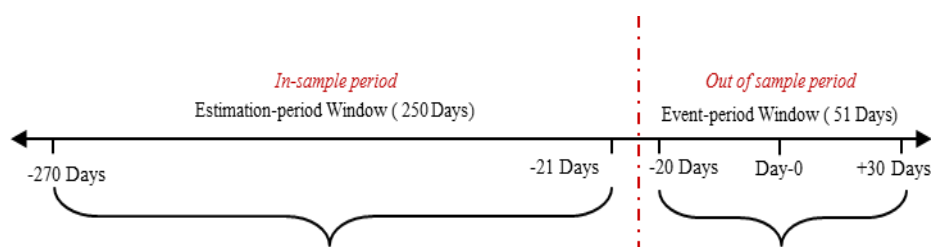
This thesis focuses on the deals between listed companies and the immediate share price reaction around the announcement. Hence, the primary filter applied to the database is for the 'Public' status of the target and acquiring companies at the time of the deal. This results in a total of 932 deals.

#### *ii. Confounding Effects*

Bowman (1983) suggests that the success of any event study heavily relies on the treatment of confounding effects. The confounding effect is said to appear when any firm experiences multiple events either during the estimation or event period window. As a result, it becomes difficult to measure the magnitude of the effects and attribute them to each of the events distinctly. Consequently, such observations have to be excluded from the sample set.

One of the variables of the T1 database is *Deal Status*, which describes deals as completed, withdrawn, rumoured, pending, related, intended or unknown. While the focus is on the successfully *completed* deals, information of other deals is also vital to identify contagion effects in completed deals, if any. Dodd and Ruback (1977) and Bradley (1980) argue that even on cancellation of tender offers, the share price for target firms does not return to pre-offer level. Thus, the impact of any event engenders some price reaction, and it stays, at least in the short-term. Hence, all types of deals were downloaded and are part of the sample above of 932 observations.

There are numerous scenarios which trigger the contagion effect and result in removal of the deal(s) from the sample. As the contagion effect is based directly on the event study design, a brief note about it is warranted beforehand. As demonstrated in *Figure 4.2.3*, this study uses the *estimation window* of 250 days, and the *event window* covers 51 days. This event study goes up to 30 days after the event. Thus, it covers 301 trading days for a given firm overall.



**Figure 4.2.3 Event Study Window Sizes**

The comprehensive list of all the scenarios prompting confounding effects found in this dataset is as follows:

- *Multiple bids<sup>27</sup> from the same bidder within 30 days*: This refers to the situation where in the target firm receives multiple bids from the same bidder within 30 days of the original bid. These bids have dual contagion effect - they influence event period of the original bid, and the original bid influences the estimation period of the latter bid. Hence both the deals, former and latter, disqualify from the sample.
- *Multiple bids from the same bidder within 270 days but not in 30 days*: This refers to the situation where the bidder firm makes another bid for the same target firm within 270 days<sup>28</sup> but after 30 days of the original bid. The target and the bidder companies are same. Such a deal does not affect the original bid as it is out of the event period of the former deal. Hence, the original bid is included in the dataset. However, this deal itself has contagion effect due to the existence of former bid effect in its estimation period and thus is removed from the dataset.

<sup>27</sup> Multiple bids are said to occur when any target firm receives more than one bid within 270 day period from either the same bidder or from different bidder(s). They also describe a situation wherein bidders make multiple bids either for the same target or different targets within 270 days. It is observed that targets did receive subsequent bids either on the same day, or within few months of the initial bids quite frequently. Likewise, it also happens regularly that even bidders bid for same or different target(s) in short span of time. However, any bid that occurs after 270 days of the last deal of the target or the bidder is treated separately and not considered as a multiple-bid.

<sup>28</sup> The calculation of 270 days comes from 20 days of event period window and 250 days of estimation period.



- *Multiple bids from new bidder(s) within 30 days:* This refers to the situation where the target firm receives multiple bids from one or more different bidders within 30 days of the original bid. These bids have a dual contagion effect. While they influence event period of the original bid, even the original bid influences their estimation period. Hence, all deals, former and latter, disqualify from the sample.
- *Multiple bids from new bidder(s) within 270 days but not in 30 days:* This refers to the situation where the target firm receives another bid from one or more different bidders within 270 days, but after 30 days of the original bid. Such deals do not affect the original bid as they are out of event period of the former deal. Hence, the original bid is included in the dataset. However, these deals themselves have contagion effect due to the existence of former bid effect in their estimation period and thus are removed from the dataset.
- *Multiple bids from parents and its subsidiary companies:* This scenario describes situations in which target firm receives multiple bids from a parent company and its subsidiary company simultaneously. Herein, a parent company tries to raise its stake directly and also indirectly through its subsidiary. However, since all the companies are listed companies and are independent in the Indian context, it is difficult to isolate the impact of each bid on respective share prices and hence is removed from the dataset. Though, such occasions are very rare.
- *Multiple acquisitions by the bidder on the same date:* This refers to the situation where the bidding firm acquires multiple targets on the same day. This phenomenon occurred quite frequently, and these deals were removed from the sample set.
- *Multiple acquisitions by the bidder within 30 days:* This describes a scenario in which any bidder engages in multiple acquisitions within 30 days of the first bid. Consequently, the event window of each bid has a contagion effect and is subsequently removed from the dataset.
- *Multiple bids from multiple bidders on the same date:* Occasionally, some target firms receive bids from multiple bidders on the same date. Such cases can be classified as competing bids. Clearly, such bids affect estimation and event period windows of the companies involved and thus are taken out of sample.
- *Withdrawal of the same bid in the recent past:* This occurs when an acquirer withdraws the same deal and bids again within 270 days. This typically happens in cases of renegotiations. However, such deals are taken out of dataset as their

estimation period has contagion effects. Also, the original deal is taken out as it was withdrawn.

- *Withdrawal of a bid by another bidder in the recent past:* This refers to the situation when a target firm is subjected to a new bid from a different bidder within 270 days of the last bid from another bidder, which was subsequently withdrawn. Such deals are taken out of dataset as their estimation period has contagion effects.
- *Withdrawal of a bid by the bidder for another deal in recent past:* This accounts for a situation wherein the bidder of the current deal has recently withdrawn from other deal(s) for another target firm(s) within 270 days. The last withdrawal(s) renders the estimation period of the current deal contagious and thus disqualifies it from the sample dataset.
- *Discontinued rumours:* The T1 database also captures the dates when bidder firms officially put down rumours about potential bids. While these rumoured bids do not qualify for selection in the dataset, they create a confounding effect for other deals involving the target or the bidder if they happen within 270 days.
- *Spinoff and bidding simultaneously:* In one of the occasions, the target firm spun off one of its units just to acquire another target somewhere else. This generated ambiguity about the status of the firm as target or acquirer and, as such, is left out of sample dataset.
- *'Related deals'*<sup>29</sup> is another variable that captures any other transaction related to the companies in the original bid. It is also used to detect confounding effects. Out of 176 completed related transactions, 111 were contaminated transactions due to the reasons outlined above. In 27 instances, the *same bidder and the target* had two or more deals on the *same date*. It happened when the merger and the tender offers occur simultaneously. For the purpose of share price reaction, the two deals were treated as one deal and for variables such as toehold size, shares acquired, and so on, the values were added carefully while ensuring no double counting happens. This led to the further rejection of 27 more deals (double counting). Finally, 38 pure deals are identified from this category and are included in the analysis.

---

<sup>29</sup> Related deals: When two or more deals exist which cause or effect each other including, but not limited to, competing bids, divestitures or seeking buyers connected with a merger, defensive transactions, stakes before acquisitions and two or more deals having a combined total value.

To summarize, every deal is carefully evaluated for a clear window of  $250 + 51 = 301$  days. All the deals with overlapping windows are removed from the dataset. And deals between the same targets and acquirers on the same date are treated as one.

In all, the instances of competing bids are scarce, but those of multiple bids by the acquirers in rapid succession are quite numerous. Given that the mergers occur in waves, using large estimation and event windows presents the challenge of qualifying them for the analysis. McWilliams and Siegel (1997) suggest that longer event windows result in a higher number of confounding effects in the sample, which leads to more rejections.

Also, quite frequently, these deals are affected by *multiple contagion effects* and classifying each deal under exactly one contagion category is grossly misleading. However, *Table 4.2.3* below provides a detailed breakdown of all the types of deals accepted and rejected for the analysis. In total, 283 completed deals ( $172 + 111$ ) are contaminated and are excluded from the sample.

**Table 4.2.3 Deals Count Breakdown**

| Deal Status    | Downloaded | Rejected   | Accepted    |
|----------------|------------|------------|-------------|
| Completed      | 623        | 172        | 451         |
| Related Deals  | 149        | 111        | 38          |
| Combined Deals | 27         | 0          | 0           |
| Rumours        | 48         | 48         | 0           |
| Intended       | 6          | 6          | 0           |
| Pending        | 19         | 19         | 0           |
| Unknown        | 1          | 1          | 0           |
| Withdrawn      | 59         | 59         | 0           |
| <b>Total</b>   | <b>932</b> | <b>416</b> | <b>489*</b> |

\*489 includes 27 related firms

In the first round of screening, 489 deals were shortlisted for the event study analysis. In *Table 4.2.2*, 176 Related Deals are divided into two headings: Related Deals (149) and Combined Deals (27). These 27 valid deals are included in 489 accepted deals.

### iii. *Missing companies*

The phenomenon of ‘vanishing public companies’ in the Indian market is well documented in the literature (Rao *et al.*, 1999). Agarwalla *et al.* (2013) report that 3,184 companies stopped trading in their sample period from 1993 to 2012, and out of these companies, 439 ceased operations purely due to ‘merger activities’. They also indicate that the Datastream database may not have sufficient coverage of medium to small firms in the Indian market. Given that their sample period heavily overlaps the period covered in this study, and also that the data is extracted from Datastream, missing companies is a major issue

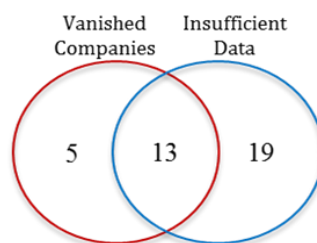
in the sample set. While some of these companies are traced as *dead* and *delisted*, others did not exist even on stock exchange websites.

iv. *Insufficient data – Illiquidity, Unavailable or Missing data*

The Indian stock market is characterized by concentrated trading. Rao *et al.* (1999) report that only 1.2% (Top 50) of all companies accounted for 91% of all turnover in 1998, and that almost 50% of the companies transacted less than 100 times in that year. Similarly, Agarwalla *et al.* (2013) removed more than 50% of the firms with 50 trading days' filter from 1998 to 2001. They report it is only after 2004 that the liquidity improved significantly in the Indian markets.

Consequently, *thin trading* is another significant issue in the sample set. This thesis deals with the issue in two ways. Firstly, it excludes firms which do not have sufficient trading days for reliable estimation of parameters or ARs. Some studies suggest using a minimum of 30 days trading data as a filter for estimation period data. This choice still results in a fairly large dataset and yet removes truly illiquid firms. For the event period window, Marisetty *et al.* (2008) suggest that a firm should have traded at least once in the days [0, +2] relative to the announcement day *or* at least for 50% of the days (26 days in this analysis) in the event window to qualify for a sample. They use the same market and comparable event period (61 days) in their analysis. This thesis uses Day -1 to Day +2 or the 50% criteria.

Secondly, Scholes and Williams betas along with its variants are also employed to estimate the Market model parameters. However, Brown and Warner (1985) find even failing to account for non-synchronicity in Market model OLS estimates does not lead to misspecification of event study methodology.



**Figure 4.2.4 Breakdown: Vanishing Companies and Insufficient Data**

Out of 489 deals shortlisted so far, acquirers and targets of five deals vanished, and nineteen deals had insufficient data. Another thirteen deals suffered both the issues

simultaneously for either side. Subsequently, all these deals had to be excluded, resulting in the further loss of 37 deals<sup>30</sup>.

Further, of the remaining 452 (489-37) deals, 48 deals are share repurchase or buybacks, which do not fit strictly into the definition of M&As. So, the final count for shortlisted deals is 404. After applying all the filters, out of 404 deals, 234 are domestic, and remaining 170 are cross-border deals. Of these 404 deals, 25 acquirers and 52 targets were missing, and another 34 acquirers and 44 targets lacked sufficient data. Since their counterparts in the deals were valid, only these companies in the analysis are dropped but not the entire deal. *Table 4.2.4* provides a final breakdown of Indian acquirers and targets for each sample sub-set.

**Table 4.2.4 Breakdown of Targets and Acquirers Firms**

| Sample               | Aggregate  |            | Domestic   |            | Cross-Border |            |
|----------------------|------------|------------|------------|------------|--------------|------------|
|                      | Acquirers  | Targets    | Acquirers  | Targets    | Acquirers    | Targets    |
| Shortlisted          | 404        | 404        | 234        | 234        | 170          | 170        |
| Vanished             | -25        | -52        | -16        | -38        | -9           | -14        |
| Insufficient Data    | -34        | -44        | -23        | -26        | -11          | -18        |
| <b>Total Sample</b>  | <b>345</b> | <b>308</b> | <b>195</b> | <b>170</b> | <b>150</b>   | <b>138</b> |
| <i>Foreign firms</i> | -112       | -34        | -          | -          | -112         | -34        |
| <i>Indian firms</i>  | 233        | 274        | 195        | 170        | 38           | 104        |

### 4.3 Data Description

#### *i. Yearly Distribution of All the Deals for All the Samples*

*Table 4.3.1* provides a summary of the distribution of domestic, cross-border (CB) and aggregate M&A deals by year. The deals in the initial years are quite sparse, particularly the cross-border acquisitions by Indian firms. Each side in the table is split by a median number of deals, suggesting 50% of the deals occur after 2004-2005, implying that half of the deals occurred in one third of the sample period, which suggests the possibility of calendar time clustering.

---

<sup>30</sup> In these 13 deals, seven acquirers and six targets vanished while their counterparts in the deals - seven targets and six acquirers are excluded because of insufficient data.

**Table 4.3.1 Yearly Distribution of Indian M&A Deals**

| Year         | Acquirers |    |           | Targets  |     |           |
|--------------|-----------|----|-----------|----------|-----|-----------|
|              | Domestic  | CB | Aggregate | Domestic | CB  | Aggregate |
| 1990         |           | 1  | 1         |          | 1   | 1         |
| 1991         | 1         |    | 1         |          | 1   | 1         |
| 1992         | 1         |    | 1         | 1        | 1   | 2         |
| 1993         | 2         |    | 2         | 1        | 3   | 4         |
| 1994         | 1         |    | 1         | 1        | 3   | 4         |
| 1995         | 5         |    | 5         | 3        | 2   | 5         |
| 1996         | 2         |    | 2         | 2        | 4   | 6         |
| 1997         | 8         |    | 8         | 5        | 6   | 11        |
| 1998         | 6         |    | 6         | 3        | 7   | 10        |
| 1999         | 9         |    | 9         | 5        | 4   | 9         |
| 2000         | 13        | 4  | 17        | 13       | 4   | 17        |
| 2001         | 5         |    | 5         | 6        | 7   | 13        |
| 2002         | 6         |    | 6         | 7        | 2   | 9         |
| 2003         | 7         |    | 7         | 13       | 3   | 16        |
| 2004         | 12        | 2  | 14        | 7        | 6   | 13        |
| 2005         | 14        | 3  | 17        | 16       | 4   | 20        |
| 2006         | 20        | 4  | 24        | 15       | 10  | 25        |
| 2007         | 20        | 4  | 24        | 15       | 8   | 23        |
| 2008         | 12        | 8  | 20        | 10       | 10  | 20        |
| 2009         | 14        | 3  | 17        | 13       | 2   | 15        |
| 2010         | 15        | 2  | 17        | 15       | 2   | 17        |
| 2011         | 9         | 3  | 12        | 6        | 8   | 14        |
| 2012         | 11        | 2  | 13        | 11       | 1   | 12        |
| 2013         | 2         | 2  | 4         | 2        | 5   | 7         |
| <b>Total</b> | 195       | 38 | 233       | 170      | 104 | 274       |

Further, while both domestic and cross-border mergers show a relative drop in the period around Global Financial Crisis (GFC) in 2008, cross-border mergers seem to have taken the major brunt here. Given the fact that nearly 40% of the cross-border mergers are from Anglo countries (refer Table 4.3.2), which suffered heavily during GFC, such a drop is understandable.

*ii. Breakdown as per the Country and Culture of the Acquiring Countries*

Using the GLOBE Study (House *et al.*, 2004), the cross-border deals are clustered according to the acquirers' ultimate parent's culture. Table 4.3.2 (below) provides a breakdown of deals by acquiring cultures and their countries. Clearly, the landscape of Indian CBMAs is dominated by the United Kingdom and United States, which collectively account for nearly 40% of the deals. Culturally, Anglo countries dominate the M&As landscape in Indian markets. Since these countries suffered heavily in GFC, there is a noticeable drop in cross-border mergers in Table 4.3.1 in the years after GFC.

**Table 4.3.2 Breakdown of CBMAs by Country and Culture of the Foreign Acquirers**

| Culture/Country     | Count      | % of Deals  |
|---------------------|------------|-------------|
| <b>Anglo</b>        | <b>39</b>  | <b>38%</b>  |
| Australia           | 1          | 1%          |
| United Kingdom      | 12         | 12%         |
| United States       | 26         | 25%         |
| <b>Confucian</b>    | <b>24</b>  | <b>23%</b>  |
| China               | 1          | 1%          |
| Hong Kong           | 2          | 2%          |
| Japan               | 18         | 17%         |
| Singapore           | 2          | 2%          |
| Taiwan              | 1          | 1%          |
| <b>Germanic</b>     | <b>15</b>  | <b>14%</b>  |
| Austria             | 1          | 1%          |
| Germany             | 7          | 7%          |
| Switzerland         | 7          | 7%          |
| <b>Latin Europe</b> | <b>9</b>   | <b>9%</b>   |
| France              | 6          | 6%          |
| Italy               | 2          | 2%          |
| Switzerland         | 1          | 1%          |
| <b>Nordic</b>       | <b>11</b>  | <b>11%</b>  |
| Finland             | 1          | 1%          |
| Sweden              | 10         | 10%         |
| <b>Others</b>       | <b>3</b>   | <b>3%</b>   |
| Bahrain             | 1          | 1%          |
| Oman                | 2          | 2%          |
| <b>SA</b>           | <b>3</b>   | <b>3%</b>   |
| Malaysia            | 1          | 1%          |
| Thailand            | 2          | 2%          |
| <b>Total</b>        | <b>104</b> | <b>100%</b> |

*iii. Conglomerate Mergers*

Conglomerate mergers are identified by matching all the product lines of the target company with that of the acquiring company or that of the ultimate parent company of the acquirer. The product lines are matched with two digit SIC code. In total, 132 deals are conglomerate.

*iv. Absence of Hostile Takeovers in the Data*

Emerging economies are typically characterized by higher insider control and ownership and relatively weaker external disciplining mechanisms (La Porta *et al.*, 1999). There is a convergence of ownership and control in Indian firms. The concentration stays in the hands of promoter families and institutional investors, both of which reduce takeover risks. Morck *et al.* (1988) argue that in insider-dominated systems, the takeover is generally *negotiated*, rather than contested. In similar spirits, even Long and Walkling (1984) suggest that insider ownership implies less resistance (hostility) to takeover bids. Consequently, the *takeover threat* market mechanism is ineffective in disciplining errant management. Instead, Sarkar and Sarkar (2000) find a positive correlation between concentrated ownership and firm value. This supports ‘convergence of interests’, and discards the classical agency theory of

‘conflict of interests’. Consequently, one of the most effective agency conflict resolutions—the ‘hostile takeover’—is practically non-existent in the Indian market.

#### 4.3.1 Data Issues

##### *i. Non-Normalcy - Outliers and Leverage Observations*

As discussed earlier, daily returns data is characterized by non-normalcy. Hence, the returns are thoroughly inspected for the presence of outliers. Firstly, a more stringent four standard deviation filter is applied to the return data in the estimation period, and still there are occasions where extreme values exist. Following that, Q-Q Plots are drawn for each firm to inspect these outliers visually. There are instances of deviation from the normal distribution. Further, Cook’s Distance is used with  $4/(n-k-1)$  as the cut off mark to verify if these outliers have any impact on the analysis, where  $n$  is the number of observations and  $k$  is the number of independent variables. As accounted by Sorokina *et al.* (2013), the data of the sample firms has outliers with high leverage points. Consequently, robust regression techniques, including the M and MM methods, are applied in addition to the OLS method to estimate the returns in this analysis.

##### *ii. Missing Values and Regressions*

The data for the Equally Weighted Index and the Fama-French model used in the analysis does not cover the sample period entirely. As the information is merged from different sources into the main dataset, for some firms it was not a perfect match, and they had missing values for the control variable. For such cases, the 50 day trading rule is applied and, if qualified, missing values for control variables were ignored pairwise in calculating regression estimators.

Ideally, this thesis would control for accounting attributes. However, as discussed earlier, vanishing companies (Rao *et al.*, 1999), and missing data (Agarwalla *et al.*, 2013) are known issues with Indian firms, particularly in the Datastream database. The sparse coverage of accounting data makes evaluating attributes like relative size, profitability, leverage and other such factors of the participating firms difficult. This would have led to a substantial loss of sample observations and limited the analysis.

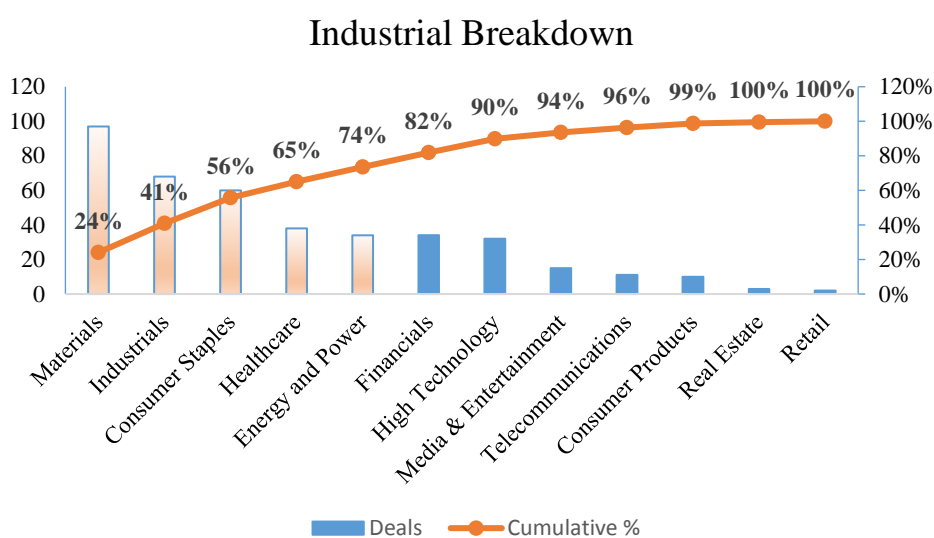
Further, the robust regressions have an inbuilt threshold for the level of data contamination, and in a few specific cases robust regressions do not generate coefficients. This happens with the firms with insufficient values to run the algorithm of the models. All the robust regressions are first estimated in Eviews-8 and then again verified by SAS 9.3.



However, the issue persists. Consequently, while the OLS regressions generate estimations for the entire dataset, robust regressions exclude some firms.

### iii. Clustering

As discussed in *Methodology* in chapter three, clustering can be of two types: calendar time and industry. *Table 4.3.1* shows that 50% of the deals happened in the last eight years of the sample data, and 25% of the deals occurred in just three years from 2006 to 2008. As such, there is a strong indication of the presence of calendar time clustering. Further, the industry analysis for the targets in *Figure 4.3.1* reveals that just five industries account for nearly three-quarters of the deals.



**Figure 4.3.1 Breakdown of All the Targets for All the Deals**

It appears that the sample may have clustering issues and that cross-sectional procedures with adjustment for cross-sectional correlation must be adopted and the Adjusted BMP-91 methodology accounts for that.

## 4.4 Overall Summary

This thesis investigates M&As in India for the period 1989 to 2013. The M&A and Stock Exchange data is collected from Thomson Reuters' T1 and Datastream Databases.

After filtering for confounding effects, missing firms and insufficient data issues, the clean sample is comprised of 404 deals. These 404 acquirers and targets are further filtered for missing firms, insufficient data and foreign participants, to arrive at a clean sample of 234 acquirers and 274 targets. They are analysed through three sample sets: aggregate, domestic and cross-border deals.

It appears that the data suffers from some statistical issues like non-normalcy due to outliers and high leverage observations, clustering, missing values, and thin trading.

As a recourse, for high leverage values, robust regressions are used to generate estimates. For clustering, cross-sectional procedures are adopted, and for thin trading, Scholes and Williams's adjusted betas and its variants are calculated.

# Chapter 5. Aggregate Deals

## 5.1 Introduction

The primary objective of this chapter is to evaluate the overall returns to the shareholders of Indian target and acquiring firms in the aggregate dataset. The synergy motive views M&As as a value enhancing scheme by integrating strategic resources of the participating firms. If synergies exist, markets react favourably to such announcements. However, M&As may also be driven by hubris or agency motives. Thus, the main hypothesis discussed here collectively tests for all the three possible motives. It states that: *There are no abnormal returns associated with the announcements of M&As to the shareholders of the participating Indian firms.* The literature distinguishes the three motives by studying the total effects on the shareholders' wealth from both the sides as outlined in *Table 5.1.1*.

**Table 5.1.1 Patterns of Gains Related to Takeover Theories**

| Effect                                    | Total Gains | Target Gains | Acquirer Gains |
|---|-------------|--------------|----------------|
| Synergy /Efficiency                       | +           | +            | +              |
| Hubris<br>(Winner's Curse /Overvaluation) | 0           | +            | -              |
| Agency issues or errors                   | -           | +/-          | -              |

The second objective of the chapter is to critically analyse the impact of various financial models, regression techniques and types of indices in evaluating the announcement effects. The focus here is to understand whether the outcomes vary with changes in analytical tools.

This study uses two types of financial models to calculate the abnormal returns associated with the announcement of M&As. The *Market model* is based on 'market risk' as the sole source of security risk and has a well-established precedent in such research. Its strength lies in its simplicity and its efficacy Brown and Warner (1985). The second model, the *Fama-French three factor model (FF)*, incorporates additional sources of risks such as 'size and value effect', as well as market risk. Bahl (2006), Tripathi (2008) and Taneja (2010) argue that three factor model is more comprehensive in capturing security returns in India. Further, as it is typical of emerging economies that share price data is non-synchronous, the variants of the Market model based on the *Scholes and Williams (SW)* adjusted betas are also

employed here. The SW betas are calculated by leading and lagging returns by two and three periods.

The market indices used here as benchmarks are both Value Weighted (VWI) and Equally Weighted Index (EWI).

Finally, the analysis is based on two regression techniques: Ordinary Least-Square (OLS) and robust regressions. Of the available robust regressions, the M and the MM regression estimates are applied here.

Table 5.1.2 summarizes the variants of event study analysis used.

**Table 5.1.2 Event Study Models and its Variants**

| Regression Techniques |    | Financial Models |                              |                  |
|-----------------------|----|------------------|------------------------------|------------------|
|                       |    | Market Model     |                              | Fama-French (FF) |
|                       |    | Unadjusted Beta  | Scholes –Williams (SW) Betas |                  |
| OLS                   |    | VWI / EWI        | VWI / EWI                    | VWI              |
| Robust Regressions    | M  | VWI / EWI        | -                            | VWI              |
|                       | MM | VWI / EWI        | -                            | VWI              |

\* VWI refers to a Value Weighted Index and EWI refers to Equally Weighted Index

One particular challenge here is that all the likely combinations of the two financial models, regression techniques and indices mentioned above, are neither relevant nor possible. To elaborate, the EWI data does not extend earlier than the year 2000 and, for the FF model, it is not available at all. Hence, the analysis of the Market model based on EWI is not *all-inclusive*, and the analysis of the FF models is based only on VWI returns. Further, even the FF data does not cover the entire sample period. Hence, the FF model analysis is also not *all-inclusive*. Finally, while the returns from the native Market model are calculated using all the regression techniques, the SW variants of the Market model are based on the OLS method.

Another challenge that arises is the various regression techniques. As discussed in chapter three, the M and the MM estimators are sensitive to influential outliers, and when executed on their default parameters, they have their own inbuilt threshold for the level of contamination (influence) due to the outliers in the dataset. Consequently, even after using both - SAS and Eviews software, they both eliminated some sample firms from the estimations. On an average, both the M and the MM estimations excluded 10% and 5% of the sample firms from the analysis respectively. That is advantageous in the sense that they

make analysis more accurate and more robust by deliberately excluding potentially problematic firms. However, this also implies that the results may not be comparable with other regressions directly due to the possibility of sample variation bias. Consequently, parallel to the analysis of *'all firms'* for each regression method, another analysis is also run for the common set of firms – *'same firms'* in the MM and the M sample sets, in order to compare and ensure that the results are actually regression driven and not sample driven. These sub-sets are referred to as: *M firms and MM firms*. Further, various graphs are merged here to facilitate meaningful comparisons. The MM and the OLS combination (*All & Same firms*) are presented in one graph, and the MM, the M and the OLS (*All & Same firms*) combination in another for each phenomenon when appropriate.

Further, even the data for both the Fama-French variables and the Equally Weighted Index cover the sample period partially. Hence, to compare these returns with those from the Market model and VWI outcomes respectively, the *'same firm'* analysis is also carried out and the sub-sets are referred to as *FF firms and EWI firms*.

The final and equally important objective of this chapter is to identify the decisive factors that govern these outcomes. The univariate and multivariate OLS regressions analyses are conducted to evaluate the cross-sectional variation in these CAARs for the selected explanatory variables.

The chapter begins with a discussion about Indian target firms, which leads to the analysis of Indian acquirer firms. In the process, the impact of various financial models, regression techniques, and indices on abnormal returns around the announcement day are discussed. Finally, the cross-sectional results for the two sides are reported.

For brevity and relevance, only the primary outcomes are graphed, compared, contrasted and summarized in the main body of the chapter. Other subsidiary outcomes are provided in Appendix Chapter 5<sup>31</sup>.

---

<sup>31</sup> All the statistical results of the analysis are tabulated in the appendix for Chapter 5. These tables are labelled to provide the name of the financial model; the type of sample firms; the type of sample set; the regression technique and the number of observations (in parenthesis) and the index used. For each day in the entire event window - Days [-20, +30], these tables provide average abnormal returns - AAR, median AARs, cumulative average abnormal returns - CAARs, averaged Standardized Abnormal Returns (SARa) along with their standard deviations and t-statistics, and averaged Standardized CAARs (SCARa) along with the respective standard deviations and the t-statistics. Finally, the tables also earmark the t-statistics significant at the 5% and 10% level for SARa and SCARa. While, the t-statistics, significant at the 10% level, is provided in bold and italic numbers, that at 5% is further highlighted. Also, 3 day analysis for the

## 5.2 Market Model Analysis – Targets

In the aggregate dataset, subsequent to the filtering process discussed in chapter four, of the 308 target firms, 274 firms are identified as Indian targets. While the regression estimates based on the OLS method are available for the entire dataset, those from the M and the MM regressions are available only for 241 and 264 firms respectively.

Figure 5.2.1 compares the cumulative average abnormal returns (CAARs) obtained from the MM and the OLS regressions for *all the available firms* over the 51 day event window [-20, +30] relative to the announcement day for the target firms in India.

Also, as the MM estimator includes slightly fewer firms, the solid blue line labelled as ‘OLS-Same’ represents the CAARs from the OLS estimations for *the same set of firms* (MM firms – 264 firms). It facilitates the comparison of the returns from the two regressions by controlling the sample selection bias.

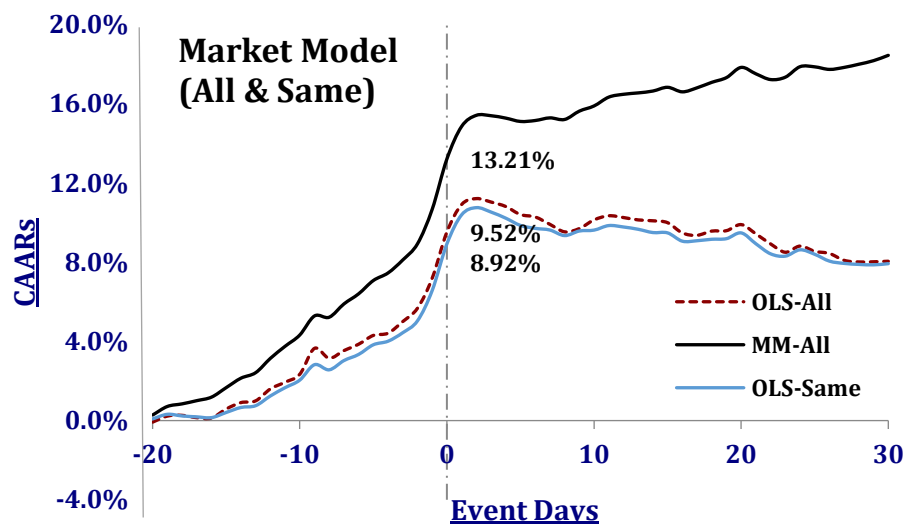


Figure 5.2.1 Market Model Returns; MM vs. OLS; All & Same-firms; VWI

The CAARs derived from the MM estimator are represented by the solid black line and are reported in Table-A 5.1. With some intermittent days as an exception, the AARs are mostly significantly positive even in the pre-event period and around the event day for the days [-3, +1]. The CAARs are also significantly greater than zero throughout the event window, with an exception of Day -20. Also, with the t-statistics of 7.95, even the 3 day

days [-1, +1] is provided at the bottom of these tables.

CAAR [-1, +1] of 5.93% is significantly positive. Finally, the CAARs tend to drift upwards in later weeks.

The OLS results are tabulated in *Table-A 5.2*. The CAARs are statistically significantly greater than zero from Day -12 onwards. The AAR and CAAR on Day-0 and the three day CAAR [-1, +1] of 5.24% are all significantly positive at the 5% level. Though there is evidence of a slight decline in daily returns in the days after the event (hence the negative slope for the CAARs in later weeks), overall there is a positive impact not just on the announcement day itself, but also on the surrounding days [-3, +1].

The blue line, OLS-Same, based on the MM firms sub-set follows the same trajectory as of the OLS-All and confirms visually and statistically (tested below) that the sample variation does not change the overall properties of the results. The results are presented in the table *Table-A 5.3*.

*Table 5.2.1* provides a statistical snapshot of the three CAAR graphs discussed above.

**Table 5.2.1 Market Returns to Targets; All & Same Firms; OLS vs MM; VWI**

| Model  | Regression | AAR<br>Day-0 | 3-Days<br>CAAR | CAAR<br>Day-0 | 51-Days<br>CAAR | AARs<br>(**) around<br>Day-0 | CAARs<br>(**) around<br>Day-0 | n   |
|--------|------------|--------------|----------------|---------------|-----------------|------------------------------|-------------------------------|-----|
| Market | MM         | 2.54% ***    | 5.93% ***      | 13.21% ***    | 18.45% ***      | -3 to +1                     | -19 to +30                    | 264 |
|        | OLS-All    | 2.33% ***    | 5.24% ***      | 9.52% ***     | 8.05% ***       | -3 to +1                     | -12 to +30                    | 274 |
|        | OLS-Same   | 2.35% ***    | 5.36% ***      | 8.92% ***     | 7.93% ***       | -3 to +1                     | -12 to +30                    | 264 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The hypothesis tested here is that there are no abnormal returns associated with the announcements of M&As to the shareholders of the participating Indian firms and the evidence presented here rejects the null hypothesis. In conformity with the findings from other countries, there is sufficient evidence that the Indian target firms do gain positive abnormal returns at the announcements of M&As. These gains occur on the event day, as well as on the surrounding days.

Further, being consistent with the efficiency market hypothesis, there is no evidence of systematic average abnormal returns (AARs) to the new investors immediately *after* the public announcement of the event. However, the returns before the announcements are significantly positive and worthy of further discussion.

The significantly positive CAARs since Day -19 (MM) or Day -12 (OLS) before the event indicate pre-bid run-up. In Schwert (1996) analysis, the pre-bid CAARs start rising

from the Day -42 but the largest activities are recorded during days [-21, -1]. While the announcement effect returns hover around 2.5% (Day-0), the pre-bid run-up is already in excess of 10.5% (MM) and 7% (OLS). This suggests that the market participants can partially anticipate the takeover premiums and have already incorporated that information into the price of the target shares. For the lower announcement effect, Cai *et al.* (2011) suggest that the abnormal returns based on announcements are largest when the takeovers are largely unanticipated. This is not entirely true here. Further, as the Day-0 AARs dominate the other AARs in the run-up period, it suggests that the information leakage may not be a universal phenomenon for all the deals, but for just a few of them and that most of the new information is made available only on the event day. In similar spirits, Morellec and Zhdanov (2005) suggest that some level of uncertainty is resolved only at the announcement.

Though it is a crude measure, *Table 5.2.2* (below) provides some insight into the differences between run-up and mark-up CAARs.

**Table 5.2.2 Run-up vs. Mark-up; Target Shareholders; Market Model**

| Regression | Run-up<br>[-20, -1] | Mark-up<br>[0, +30] | Difference |
|------------|---------------------|---------------------|------------|
| MM         | 10.67%              | 7.78%               | 2.89% *    |
| OLS        | 7.19%               | 0.86%               | 6.34% **   |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01.*

The CAARs in the run-up period indicate anticipation of synergies by *some* market participants. The CAARs in the post-event days capture the general market expectations of the synergies once the news enters the market formally. Interestingly, more than half of the total price adjustments occur prior to the event day. The difference in run-up and mark-up CAARs is significantly greater than zero (it is nearly significant at 5% level from the MM estimates). Evidently, the higher proportion of the takeover premium is credited to the informed participants trading in the run-up period. This may be a market response to an increase in takeover probabilities inferred either through insider trading (Meulbroek, 1992) or through the toehold effect (Betton *et al.*, 2008).

The significantly positive AARs on a number of days prior to the announcement may be consistent with the notion of insider trading days proposed by Meulbroek (1992). Though, she also suggested that the entire price movement on those days should not be attributed purely to the insider trading. While she estimated half of the run-up is accounted for on insider trading days, in this analysis, nearly 80% of the total run-up occurs on select days when AARs are significantly positive. However, given the data limitation, unfortunately there is no way



to ascertain if insiders actually traded on those days. Thus, at best, it is purely a deduction. With respect to toehold theory arguments, the average toehold held by the acquirers in these targets at the announcement is around 17%, and toeholds are known to increase the run-ups and reduce the mark-ups (Betton *et al.*, 2008).

The analysis thus provides insights into the extent of trading in the pre-event period and its impact on the distribution of the takeover premium. It highlights that proportionately larger takeover returns are attributed to a select group of investors before the announcement. It is evident that apart from the synergistic gains, asymmetric information plays a dominant role in determining the outcomes of takeovers<sup>32</sup>.

Another important finding is the fact that there are striking differences in the results from the OLS and the MM regression. While both the regressions indicate significantly positive abnormal returns on both the announcement day and the surrounding days, the magnitudes differ—those from the OLS regressions are lower. Even the window of significantly positive CAARs [-19, +30] is larger for the MM estimates. Not only that, in the post-event days, while the CAARs from the MM regression continue to rise, and are significantly greater than zero, those from the OLS estimates declined, which is also statistically significantly positive.

Further, the t-statistics of the differences in the Day-0 AARs from the MM and the OLS regressions is not statistically significantly different from zero. This can be explained by the argument proposed by Cai *et al.* (2011) that the announcement effect is amplified only when it is largely unanticipated. Here, with large run-ups and mark-ups, the announcement effect (the tested variable) cascaded over several days in the event window and is actually diluted on that day.

On the contrary, the t-statistics of the differences in the CAARs from the MM and the OLS regressions for the 3 days [-1, +1] and the entire event window [-20, +30] is statistically significantly different from zero, even at the 1% level. This is true with both the OLS-All and the OLS-Same. *This confirms that the divergence in the outcomes is fundamental to the regression techniques and is not sample specific.*

---

<sup>32</sup> The findings here do not aim to validate or discard the theories of investor behaviour in markets with prevalent information asymmetry within market participants. Neither it attempts to determine the nature of information – public or private - used by them while trading in days prior to the announcement.

Clearly, the OLS and the MM returns differ, not only in their magnitudes, but also in the directions of the outcomes. This is because robust regressions down-weight the influence of outliers and make their residuals larger and more visible, and also minimize their impact on the regressions coefficients.

### 5.2.1 OLS MM M Comparison

Figure 5.2.2 presents the Market model results from the M estimator. Since the M regression excluded a lot more firms from estimation, its results are compared here separately with the MM and the OLS results for the *same set of firms* (equivalent to M-firms - 241).

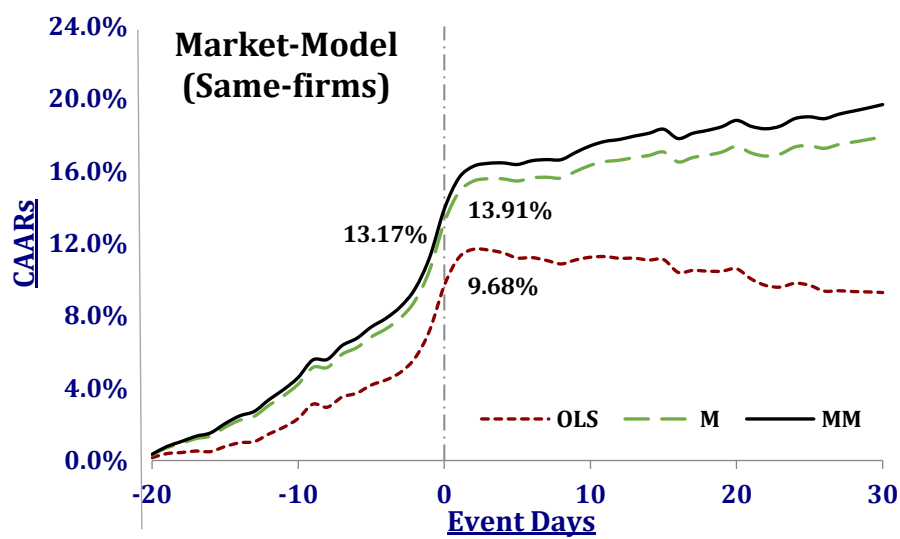


Figure 5.2.2 Market Model Returns; M vs. Others (Same-firms); VWI

These results are tabulated in Table-A 5.4, to 5.6 and the findings are summarized in Table 5.2.3 below.

Table 5.2.3 Market Returns to Targets; All & Same-Firms; M, MM & OLS; VWI

| Model  | Regression | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**) around Day-0 | CAARs (**) around Day-0 | n   |
|--------|------------|-----------|-------------|------------|--------------|------------------------|-------------------------|-----|
| Market | MM         | 2.67% *** | 6.12% ***   | 13.91% *** | 19.68% ***   | -3 to +1               | -19 to +30              | 241 |
|        | M          | 2.63% *** | 6.00% ***   | 13.17% *** | 17.90% ***   | -3 to +1               | -19 to +30              | 241 |
|        | OLS        | 2.48% *** | 5.55% ***   | 9.68% ***  | 9.29% ***    | -2 to +1               | -12 to +30              | 241 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The results are still qualitatively identical to that of the MM and the OLS regressions presented in Table 5.2.1 with the full sample set. There is no change in the status of the statistical significance of the Day-0 AARs and CAARs or even for 3 day CAARs. The magnitudes of these values are also comparable to their respective counterparts.

The announcement day differences in the AARs from the three regressions are not statistically different from zero. However, the difference in the 3 day and 51 day CAARs between the OLS and the other two robust regressions is significantly different from zero. The comparison of the two robust regression techniques suggests that the CAARs from the M method are slightly lower, but are similar with respect to the overall pattern and statistical significance of the results. This slight difference is not statistically different from zero.

Clearly, the divergence in the outcomes from the OLS and the robust regressions is *not sample specific but is fundamental* to the regression techniques instead. The relevant finding here, however, is the fact that there is *no unique value addition to the analysis from the M estimations*.

### 5.3 Fama-French (FF) Analysis – Targets

The Fama-French variables cover the period from January 1993 to June 2012 and hence could be used only for a part of the sample period. The clean sample set for Fama-French analysis has 256 Indian target firms. While the regression estimates based on the OLS regressions are available for the entire dataset, those from the M and the MM regressions are available only for 230 and 248 firms respectively.

*Figure 5.3.1* compares the CAARs obtained from the MM and the OLS regressions for *all the available firms* over the 51 day event window [-20, +30] relative to the announcement day for the target firms in India.

Also, as the MM estimator has slightly lesser firms, the solid blue line labelled as ‘OLS-Same’ represents the CAARs from the OLS estimations for *the same set of firms* (MM-firms – 248 firms). It facilitates the comparison of the returns from the two regressions by controlling the sample selection bias.

The solid black line presents the CAARs from the MM estimates and those from the OLS estimates are in red dotted line.

The CAARs obtained from the MM regression are reported in *Table-A 5.7*. The AARs and the CAARs remain positive throughout. With some intermittent days as an exception, the AARs are mostly significantly positive, even in the pre-event period and around the event day for the days [-3, +1]. The CAARs are also positive and statistically significantly different from zero for the entire event window. Also, with the t-statistics of 7.58, even the 3 day

CAAR [-1, +1] of 5.67% is significantly positive. Finally, the upward sloping CAAR curve is explained by the regular positive daily AARs in the days after the event.

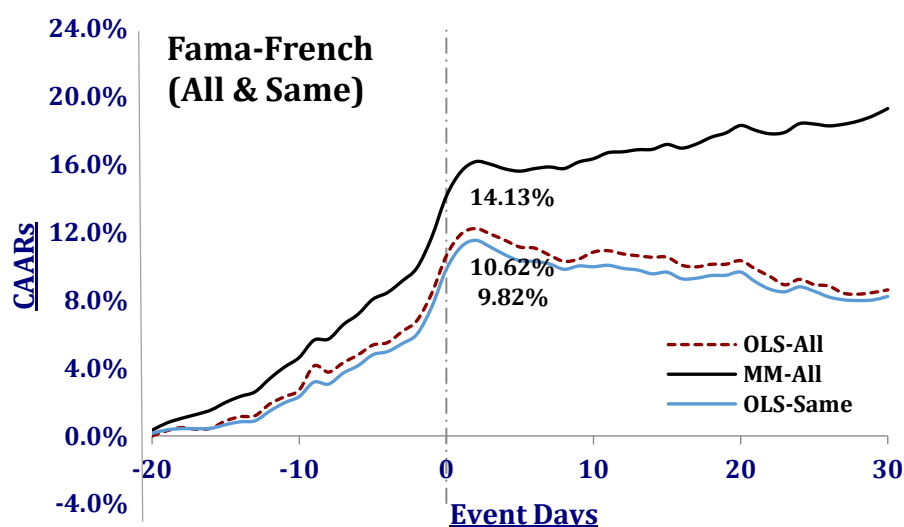


Figure 5.3.1 FF-Model Returns; MM vs. OLS; All & Same-Firms; VWI

The returns from the OLS regression for 256 firms are tabulated in *Table-A 5.8*. While the CAARs are positive throughout, they gain statistical significance from Day -15 and sustain it for the rest of the event window. The AAR and the CAAR on Day-0 and also the 3 day CAAR [-1, +1] of 5.10% are all significantly different from zero at 5% level. Though there is an evidence of a slight decline in daily returns in the days after the event (hence the negative slope for CAARs), overall there is a positive impact on the announcement day and the adjacent days [-3, +1].

The blue line, OLS-Same based on the MM firms sub-set, follows the same trajectory as the OLS-All, and confirms visually and statistically (tested below) that the sample variation does not change the overall properties of the results.

The results are presented in *Table-A 5.9* in the appendix and *Table 5.3.1* provides a statistical snapshot of the three CAAR graphs discussed above.

Table 5.3.1 Fama-French Returns to Targets (All-firms)

| Model       | Regression | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**) around Day-0 | CAARs (**) around Day-0 | n   |
|-------------|------------|-----------|-------------|------------|--------------|------------------------|-------------------------|-----|
| Fama-French | MM         | 2.43% *** | 5.67% ***   | 14.13% *** | 19.29% ***   | -3 to +1               | -20 to +30              | 248 |
|             | OLS-All    | 2.23% *** | 5.10% ***   | 10.62% *** | 8.16% ***    | -3 to +1               | -15 to +30              | 256 |
|             | OLS-Same   | 2.24% *** | 5.15% ***   | 9.82% ***  | 8.22% ***    | -3 to +1               | -14 to +30              | 248 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

Like Market model analysis, the evidence presented here also rejects the null hypothesis. In line with the findings from other countries, there is sufficient evidence that the Indian target firms gain positive abnormal returns at the announcements of M&As. These gains occur on the event day, as well as on the surrounding days.

Further, similar to the findings from the Market model analysis, the efficiency market hypothesis holds true as there is no evidence of systematic average abnormal returns (AARs) to new investors immediately *after* the public announcement of the event.

Table 5.3.2 provides the difference between the run-up and mark-up CAARs.

**Table 5.3.2 Run-Up vs. Mark-Up; Target Shareholders; FF Model**

| Regression | Run-up<br>[-20, -1] | Mark-up<br>[0, +30] | Difference |
|------------|---------------------|---------------------|------------|
| MM         | 11.70%              | 7.59%               | 4.11% **   |
| OLS        | 8.39%               | 0.22%               | 8.17% ***  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01.*

The difference in run-up and mark-up CAARs is significantly greater than zero. Evidently, the higher proportion of the takeover premium is attributed to the informed participants due to their trading activities in the run-up period. This may be a market response to an increase in takeover probabilities inferred either through insider trading (Meulbroek, 1992) or the toehold effect (Betton *et al.*, 2008). Clearly, apart from the synergistic gains, asymmetric information also plays a dominant role in determining the outcomes of takeovers.

Once again, the analysis exhibits striking differences in the returns from the OLS and the MM regressions. While both the methods produce significantly positive returns around the event for both the AARs and the CAARs, the returns based on the OLS are relatively lower, and the difference is particularly large for the CAARs. Even the window for significantly positive CAARs [-19/20, +30] is larger for the MM regressions. Not only that, in the post-event days, while the CAARs from the MM estimator continue to rise and are significantly positive, those from the OLS method—also statistically significantly different from zero—declined. This explains the divergence in the post-event slopes of the respective graphs.

Like the Market model analysis, the test of differences in the returns on announcement day based on the respective AARs is not statistically significantly different from zero. But, the t-statistics of differences in the CAARs from the MM and the OLS regressions for the 3 days and the entire event window of 51 days is significantly different

from zero, even at the 1% level. That is true for both the OLS-All and the OLS-Same. *That confirms that the divergence in the outcomes is fundamental to the regression techniques and is not sample specific.*

Clearly, the OLS and the MM returns differ, not only in magnitude, but also in the directions of the outcomes. This is because robust regressions down-weight the influence of outliers and make their residuals larger and more visible, and also minimize their impact on the regressions coefficients.

### 5.3.1 OLS MM M Comparison

Figure A 5.1 in the appendix presents the Fama-French model results from the M estimator and compares it with those from the OLS and the MM regressions for the same set of firms (M-firms - 230). The results are summarized in Table 5.3.3.

**Table 5.3.3 Fama-French Returns to Targets (Same-Firms)**

| Model       | Regression | AAR<br>Day-0 | 3-Days<br>CAAR | CAAR<br>Day-0 | 51-Days<br>CAAR | AARs<br>(**) around<br>Day-0 | CAARs<br>(**) around<br>Day-0 | n   |
|-------------|------------|--------------|----------------|---------------|-----------------|------------------------------|-------------------------------|-----|
| Fama-French | MM         | 2.51% ***    | 5.82% ***      | 14.32% ***    | 19.91% ***      | -3 to +1                     | -20 to +30                    | 230 |
|             | M          | 2.48% ***    | 5.70% ***      | 13.65% ***    | 18.20% ***      | -3 to +1                     | -19 to +30                    | 230 |
|             | OLS        | 2.32% ***    | 5.31% ***      | 10.04% ***    | 8.78% ***       | -3 to +1                     | -12 to +30                    | 230 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The results are still *qualitatively identical* to that of All-firm regressions presented in Table 5.3.1. There is no change in the statistical significance of Day-0 AARs, and CAARs or 3 day CAARs. Even the magnitudes of these values are comparable to their respective counterparts.

Once again, the announcement day differences in the AARs from the three regressions are not statistically different from zero. However, the difference in the 3 day and 51 day CAARs between the OLS and the other two robust regressions is significantly different from zero. The comparison of the two robust regression techniques suggests that the CAARs from the M method are slightly lower, but the difference is not statistically different.

Clearly, the divergence in the outcomes from the OLS and the robust regressions *is not sample specific* but is fundamental to the regression techniques. The relevant finding here, however, is the fact that there is *no unique value addition to the analysis from the M estimations* as such.

### 5.3.2 Fama-French (FF) vs. Market Model

Figure 5.3.2 compares the two financial models for the same set of firms and the two regression techniques. The OLS analysis is based on 256 common firms, and the MM CAARs are based on matching 248 firms. As the CAARs from the M regression are identical to those from the MM estimations, they are not included here.

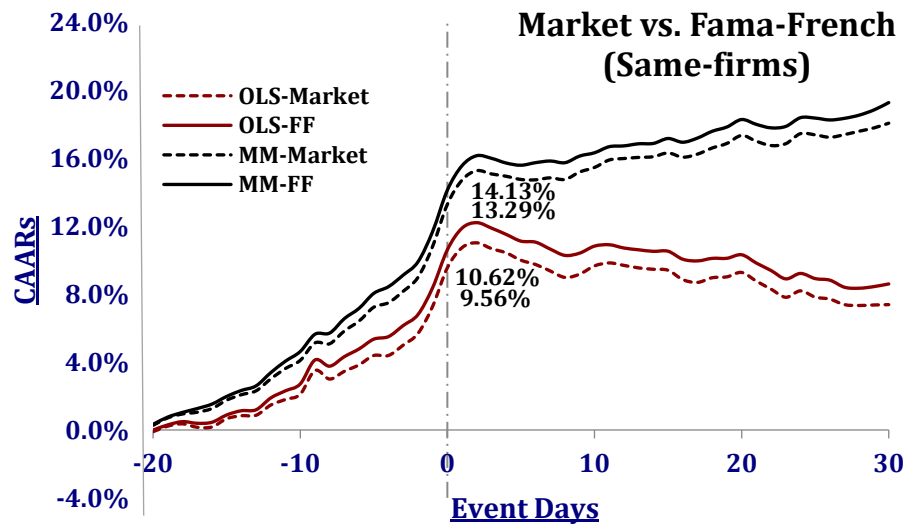


Figure 5.3.2 Market vs. FF Returns; OLS vs. MM Regressions (Same-Firms)

The graphs in red are for the CAARs from the OLS method and those in black are from the MM regression respectively. The dotted lines represent the CAARs from the Market model, and the solid lines denote those from the Fama-French model.

The divergence in the black and the red graphs reflects the differences in the regression techniques. Clearly, the MM estimator produces higher returns. Also, while the MM CAARs continue to rise in the later part, those from the OLS method decline.

Comparing any solid line with the dotted line in the same colour shows the differences in the Market and the FF models for the respective regression technique. The solid lines (FF model) in both the regressions lie above the dotted lines (Market model) and run parallel throughout. That indicates that the returns from the FF model are consistently marginally higher.

Table 5.3.4 (below) provides a statistical summary of the various CAARs graphed in Figure 5.3.2. The relevant tables are Table-A 5.7, 5.8, 5.10 and 5.11.

**Table 5.3.4 Market vs. FF Model; OLS vs. MM Comparison**

| Regression | Model  | AAR<br>Day-0 | 3-Days<br>CAAR | CAAR<br>Day-0 | 51-Days<br>CAAR | AARs (**)<br>around<br>Day-0 | CAARs<br>(**)<br>around<br>Day-0 | n   |
|------------|--------|--------------|----------------|---------------|-----------------|------------------------------|----------------------------------|-----|
| MM         | Market | 2.47% ***    | 5.74% ***      | 13.29% ***    | 18.08% ***      | -3 to +1                     | -19 to +30                       | 248 |
|            | FF     | 2.43% ***    | 5.67% ***      | 14.13% ***    | 19.29% ***      | -3 to +1                     | -20 to +30                       | 248 |
| OLS        | Market | 2.27% ***    | 5.06% ***      | 9.56% ***     | 7.39% ***       | -3 to +1                     | -12 to +30                       | 256 |
|            | FF     | 2.23% ***    | 5.10% ***      | 10.62% ***    | 8.61% ***       | -3 to +1                     | -15 to +30                       | 256 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

Overall, qualitatively, the Fama-French model analysis reproduces the findings of the Market model. The magnitudes of the Day-0 AARs, CAARs and 3 day CAARs are all comparable to the given regression technique. So is the window size of the significantly positive AARs and the CAARs around the event day. Even the test of differences in abnormal returns for Day-0 AARs and 3 day CAARs for each regression technique is not significantly different from zero. However, the overall CAARs generated within 51 days are significant different and the FF Model returns are higher by 1% (rounded) on an average.

Though in the Indian context, Bahl (2006), Tripathi (2008) and Taneja (2010) favour the three factor model as a better estimator of stock returns, this thesis reports no significant difference in the announcement returns from the two. The overall CAARs however, may be marginally higher, but there is no difference in the trend at all. This finding is in line with MacKinlay (1997) who argues that for event studies, gains from the multifactor models are limited.

Once again, the analysis exhibits prominent differences in the returns from the OLS and MM regressions. While both the methods produce significantly positive returns around the event for both AARs and CAARs, the returns based on the OLS are relatively lower, and the difference is particularly large for the CAARs. Even the window for significantly different from zero CAARs [-19/20, +30] is larger for the MM regressions. Not only that, in the post-event days, while the CAARs from the MM method continue to rise and are significantly positive, those from the OLS method, also statistically significant, declined. This explains the divergence in the post-event slopes of the red and the black graphs.

The main finding are: (i) the target shareholders gain significantly positive returns on the announcement day, and in the surrounding days, and (ii) both the financial models capture identical announcement effects. However, the overall CAARs are marginally higher from the Fama-French model—by approximately 1% on average. In addition, it is important to note that the Fama-French model has a limitation due to its unavailability for the entire sample



period. (iii) The MM regressions returns are lot higher and they differ significantly from the OLS estimates in magnitudes as well in the direction.

### 5.4 Scholes and Williams Analysis – Targets

The Market model is recalculated using Scholes and Williams’ adjusted betas by lagging the index variable for one to three time periods. That generates three new variants of the Market model. The set of common firms used is also the entire sample set.

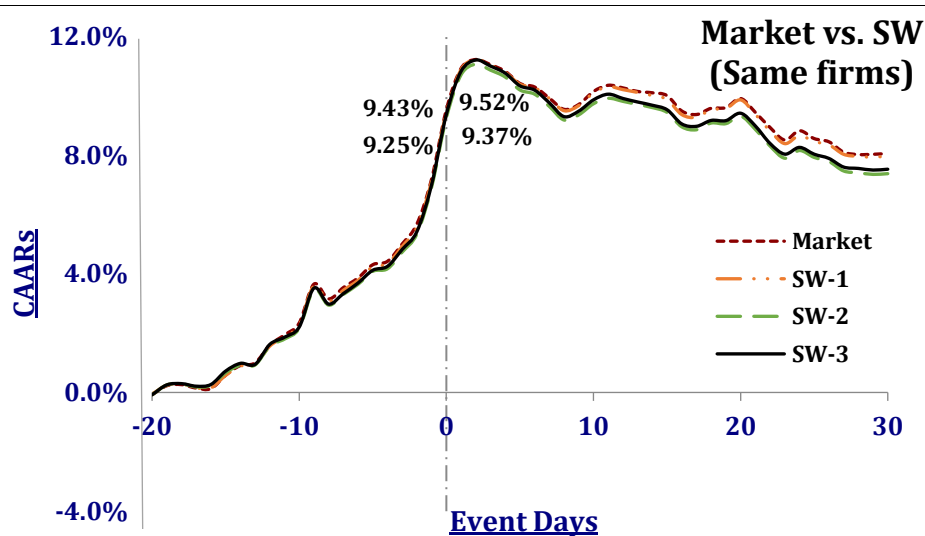


Figure 5.4.1 Market vs. SW (1-3) Models Return; OLS (All-firms); VWI

Figure 5.4.1 is based on Table – A 5.20, 5.12 to 5.14. It serves two purposes. Firstly, it shows the abnormal returns from all three of the SW adjusted beta variants. Secondly, it also compares them with the unadjusted Market model for the same set of firms. Table 5.4.1 (below) provides a statistical summary of all the CAARs graphed above.

Table 5.4.1 Market and SW Variants Comparison (All-Firms)

| Model  | Regression Beta | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**) around Day-0 | CAARs (**) around Day-0 | n   |
|--------|-----------------|-----------|-------------|------------|--------------|------------------------|-------------------------|-----|
| Market | Unadjusted      | 2.33% *** | 5.24% ***   | 9.52% ***  | 8.05% ***    | -3 to +1               | -12 to +30              | 274 |
|        | SW-1            | 2.31% *** | 5.31% ***   | 9.43% ***  | 7.96% ***    | -3 to +1               | -12 to +30              | 274 |
|        | SW-2            | 2.34% *** | 5.36% ***   | 9.25% ***  | 7.37% ***    | -3 to +1               | -12 to +30              | 274 |
|        | SW-3            | 2.37% *** | 5.40% ***   | 9.37% ***  | 7.52% ***    | -3 to +1               | -12 to +30              | 274 |

p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.

The SW adjusted betas also replicate the findings of the unadjusted Market model. Qualitatively, all the relevant aspects of the analysis are statistically identical. The findings are in line with Dyckman *et al.* (1984) and Davidson and Josev (2005), which advocate no

significant improvement in the model specifications or the power of tests using either of these modified betas. Thus, there is *no unique value addition to the analysis* over the Market model analysis from the SW adjusted beta Market models.

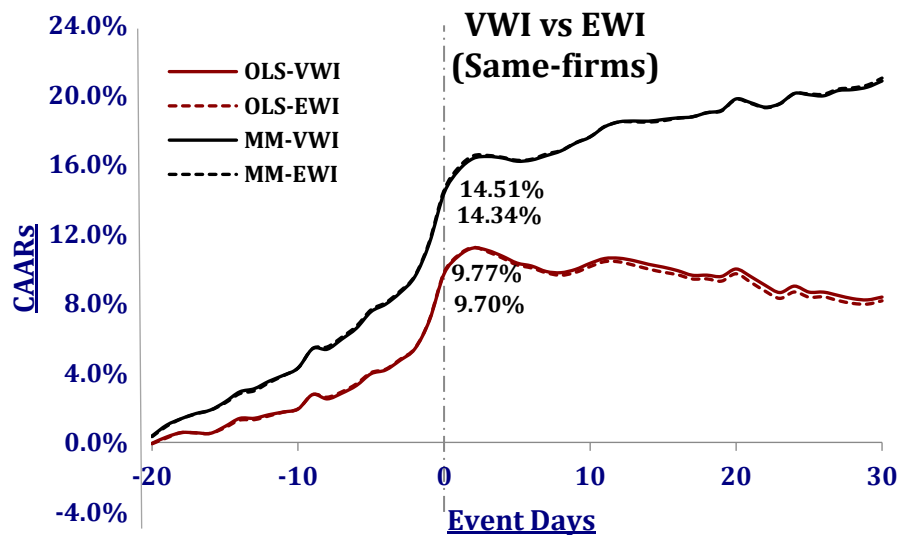
## 5.5 Equally Weighted Index - Targets

The Equally Weighted Index (EWI) data does not extend earlier than the year 2000 and, hence, is used only for a sub-set of the sample data. In total, 226 target firms from the clean sample have EWI values available.

*Figure 5.5.1* presents the comparison of Market model returns based on EWI and VWI indices, and also for both the OLS and the MM regressions. It is based on *Table-A 5.15 to 5.18*.

The OLS analysis is based on 226 common firms, and the MM estimations are based on 220 common firms. The CAARs from the M estimates are identical to those from the MM estimates, and have been left out in this comparison.

The graphs in red are for the CAARs from the OLS method, and those in black are from the MM technique. The dotted lines represent the CAARs from the EWI, and the solid lines denote those from the value weighted index.



**Figure 5.5.1 Returns to Targets; VWI vs. EWI; OLS vs. MM (Same-Firms)**

The divergence in the black and the red graphs reflects the differences in the regression techniques. As the robust regressions down-weight the influence of outliers and make their residuals larger and more visible, and minimize their impact on the regressions

coefficients, the MM estimations generate larger returns. Not only that, in the post-event days, while the CAARs from the MM estimates show significant systematic increment, those from the OLS estimates, also statistically significantly different from zero, declined.

Comparing any solid line (VWI) with the dotted line (EWI) in the same colour shows the impact of the index for that regression technique. There is hardly any discernible difference between any pair. The dotted lines (EWI) in both the regressions match the respective solid lines (VWI) precisely. As explained in the data chapter, EWI values have been developed retrospectively using BSE Sensex, which is the same market index used in the VWI models. The two datasets correlate highly (0.95), and that may explain this resemblance. The given set of CAARs is summarized in *Table 5.5.1*.

**Table 5.5.1 OLS vs. MM and VWI vs. EWI Comparison (Same-Firms)**

| Regression | Index | AAR<br>Day-0 | 3-Days<br>CAAR | CAAR<br>Day-0 | 51-Days<br>CAAR | AARs<br>(**) around<br>Day-0 | CAARs<br>(**) around<br>Day-0 | n   |
|------------|-------|--------------|----------------|---------------|-----------------|------------------------------|-------------------------------|-----|
| MM         | VWI   | 2.87% ***    | 6.12% ***      | 14.34% ***    | 20.80% ***      | -3 to +1                     | -19 to +30                    | 220 |
|            | EWI   | 2.94% ***    | 6.23% ***      | 14.51% ***    | 20.96% ***      | -3 to +1                     | -19 to +30                    | 220 |
| OLS        | VWI   | 2.67% ***    | 5.34% ***      | 9.70% ***     | 8.36% ***       | -2 to 0                      | -12 to +30                    | 226 |
|            | EWI   | 2.71% ***    | 5.38% ***      | 9.77% ***     | 8.15% ***       | -3 to 0                      | -11 to +30                    | 226 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

*Qualitatively, there is no key difference in the returns from VWI and EWI.* The only difference is due to the regression techniques where the robust regression returns are larger than that of the OLS, and they slope upwards in later weeks when OLS CAARs decline. Though EWI is argued to be better in asset pricing models to capture abnormal returns (AR), Brown and Warner (1980) argue that, of all the possible issues cited for not using EWI, the Market model particularly, tends to perform reasonably well regardless.

### 5.5.1 SW vs. Market Model

All the three versions of the Market model, based on Scholes and Williams adjusted betas from EWI, are compared with the VWI based Market model returns for the set of same firms. This serves two purposes. Firstly, it presents the abnormal returns from the SW adjusted beta Market models based on EWI and secondly, it compares them with a VWI based Market model for the same set of firms.

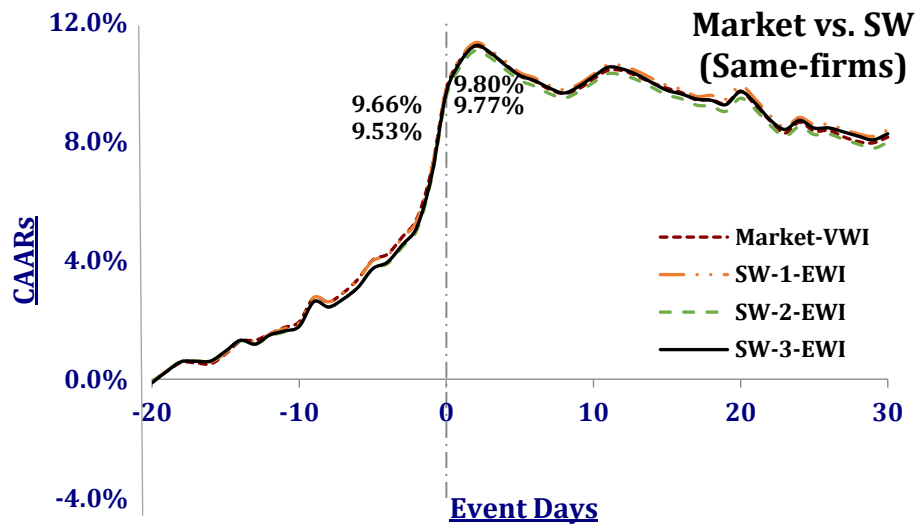


Figure 5.5.2 Market (VWI) vs. SW (1-3) (EWI) OLS (Same-Firms)

Figure 5.5.2 is based on Table-A 5.15, 5.19 to 5.21. Table 5.5.2 (below) provides a statistical summary of all the CAARs graphed above.

Table 5.5.2 Market vs. SW Variants; VWI vs. EWI Comparison Targets

| Beta       | Index | AAR Day-0 | CAAR Day-0 | 3-Days CAAR | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|------------|-------|-----------|------------|-------------|--------------|---------------------------|----------------------------|-----|
| Unadjusted | VWI   | 2.67% *** | 5.34% ***  | 9.70% ***   | 8.36% ***    | -2 to 0                   | -12 to +30                 | 226 |
| SW-1       | EWI   | 2.74% *** | 5.50% ***  | 9.80% ***   | 8.39% ***    | -3 to 0                   | -11 to +30                 | 226 |
| SW-2       |       | 2.76% *** | 5.53% ***  | 9.53% ***   | 7.97% ***    | -3 to 0                   | -11 to +30                 | 226 |
| SW-3       |       | 2.80% *** | 5.60% ***  | 9.66% ***   | 8.26% ***    | -3 to 0                   | -11 to +30                 | 226 |

*p-values: \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . n represents sample size.*

Interestingly, the SW adjusted beta Market models based on EWI replicate the VWI based Market model returns. The magnitudes of Day-0 AARs, CAARs and 3 day CAARs are all comparable. So is the window size of the AARs and CAARs significantly different from zero around the event day.

Qualitatively, there is no fundamental difference in the outcomes from the two indices and the model variants. Thus, *there is no unique value addition to the analysis from the SW adjusted betas or the EWI.*

## 5.6 Summary - Targets

Table 5.6.1 summarizes the findings of the entire analysis of the abnormal returns to the Indian target firms, based on the value weighted index.

**Table 5.6.1 Summary Results; Indian Targets; All-Firms - VWI**

| Model       | Regression Betas | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|-------------|------------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| Market      | MM               | 2.54% *** | 5.93% ***   | 13.21% *** | 18.45% ***   | -3 to +1                  | -19 to +30                 | 264 |
|             | OLS              | 2.33% *** | 5.24% ***   | 9.52% ***  | 8.05% ***    | -3 to +1                  | -12 to +30                 | 274 |
|             | M                | 2.63% *** | 6.00% ***   | 13.17% *** | 17.90% ***   | -3 to +1                  | -19 to +30                 | 241 |
|             | SW-1             | 2.31% *** | 5.31% ***   | 9.43% ***  | 7.96% ***    | -3 to +1                  | -12 to +30                 | 274 |
|             | SW-2             | 2.34% *** | 5.36% ***   | 9.25% ***  | 7.37% ***    | -3 to +1                  | -12 to +30                 | 274 |
|             | SW-3             | 2.37% *** | 5.40% ***   | 9.37% ***  | 7.52% ***    | -3 to +1                  | -12 to +30                 | 274 |
| Fama-French | MM               | 2.43% *** | 5.67% ***   | 14.13% *** | 19.29% ***   | -3 to +1                  | -20 to +30                 | 248 |
|             | OLS              | 2.23% *** | 5.10% ***   | 10.62% *** | 8.16% ***    | -3 to +1                  | -15 to +30                 | 256 |
|             | M                | 2.48% *** | 5.70% ***   | 13.65% *** | 18.20% ***   | -3 to +1                  | -19 to +30                 | 230 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The announcement day effect (AAR Day-0) and that in the surrounding days (CAARs) are statistically significantly positive. Depending on the financial model and the regression technique, the AAR on Day-0 can range from 2.23% to 2.63%, and the CAAR up until the announcement day can vary between 9.25% and 14.13%. Even the overall 51 day CAAR can be as high as 19.29%, which is also statistically significantly positive.

The positive abnormal returns to the target firms are a well-established phenomenon in the finance literature for both developed and emerging markets. Clearly, there is sufficient evidence that the Indian target shareholders make huge positive abnormal returns both at the announcement and in its surrounding days. The statistically significant post-event CAARs suggest small incremental continuous returns to the shareholders.

Further, the target run-up is lot higher than its mark-up, suggesting that a major share of the takeover premium is taken away by the informed traders. A role of information asymmetry within the market participants is a large determining factor for outcomes and allocations.

## 5.7 Market Model Analysis – Acquirers

In the aggregate dataset, subsequent to the filtering process discussed in chapter four, of the 345 acquirer firms, 233 firms are identified as Indian acquirers. While the regression estimates based on the OLS are available for the entire dataset, those from the M and the MM regressions are available only for 214 and 229 firms respectively.

Figure 5.7.1 compares the CAARs obtained from the MM and the OLS regressions for all the available firms over the 51 day event window. The solid black line presents the CAARs from the MM estimates, while those from the OLS estimates are in red dotted line.

Also, as the MM estimator includes slightly fewer firms, the solid blue line labelled as ‘OLS-Same’ represents the CAARs from the OLS estimations for the same set of firms (MM firms – 229 firms). It facilitates the comparison of the returns from the two regressions by controlling the sample selection bias.

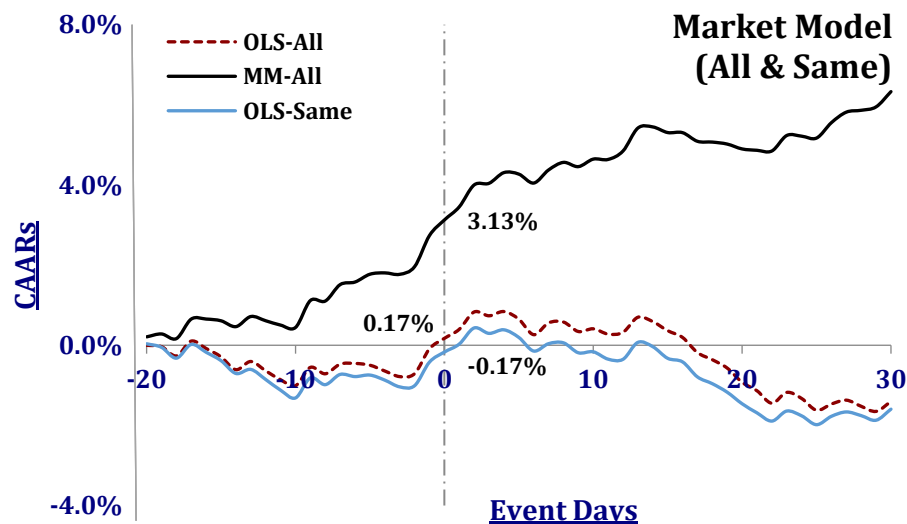


Figure 5.7.1 Market Model Returns; MM vs. OLS; All & Same-Firms; VWI

The CAARs from the MM regression are reported in Table-A 5.22. The AARs are mostly positive around Day-0 but are not statistically significantly different from zero except for Day -1. The CAARs are significantly positive from Day -7 onwards for the rest of the event window. Also, with the t-statistics of 3.23, even the 3 day CAAR of 1.49% is significantly greater than zero. The upward sloping CAAR curve suggests continuous positive share price reactions in several days after the event.

The returns from the OLS method are tabulated in Table-A 5.23. The CAARs are positive for a brief period of the days [0, +16] but are *not* statistically different from zero for

the entire event window. So is the AAR on Day-0. However, the 3 Day CAAR [-1, +1] of 1.11% is significantly positive, at the 5% level.

The blue line, *OLS-Same*, based on the MM firms sub-set follows the same trajectory as of the *OLS-All* and confirms visually and statistically (tested below) that the sample variation does not change the overall properties of the results. These returns are presented in *Table-A 5.24*.

*Table 5.7.1* provides a statistical summary of the three regressions discussed above.

**Table 5.7.1 Market Returns to Acquirers -VWI - All-Firms**

| Model  | Regression | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|--------|------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| Market | MM         | 0.39%     | 1.49% ***   | 3.13% ***  | 6.33% ***    | -1                        | -7 t0 +30                  | 229 |
|        | OLS-All    | 0.26%     | 1.11% **    | 0.17%      | -1.40%       | -1                        |                            | 233 |
|        | OLS-Same   | 0.25%     | 1.04% **    | -0.17%     | -1.60%       | -1                        |                            | 229 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

There are significantly positive abnormal returns to the Indian acquirers at the announcement of M&As. However, they occur cumulatively over the adjacent days [-1, +1] and not on the announcement day (AAR Day-0) itself. These CAARs are significantly positive to both the regression techniques. Thus, there is sufficient evidence to reject the null hypothesis and conclude that the Indian acquirers do observe positive gains at the announcement of M&A deals. This conforms with other findings from the emerging markets (Bhagat *et al.*, 2011).

Further, consistent with the efficiency market hypothesis, there is no evidence of systematic significant Average Abnormal Returns (AARs) for new investors *after* the public announcement of the event in the event window.

Discussions concerning bidders' run-ups and mark-ups are quite rare in the existing finance literature. Schwert (1996) finds that acquirer mark-ups are generally negative and acquirer run-ups are much smaller, particularly when compared with the target run-ups. Further, there is no significant impact on acquirers' run-up as a result of the takeover premium. It is possible that some investors may infer the probability of takeovers for the targets (hence the target run-up), but may still remain unaware of the identity of the acquirers. In this analysis, although MM regression shows some significantly positive CAARs in days just before the announcement in the pre-event period (implying the possibility of insider

trading), unlike target firms, there is no discernible pattern of significantly positive average abnormal daily returns to the acquirers before the announcement. One possibility is that the trades were proportionately so small that insider trading, if any, may have gone unnoticed.

Particularly of interest, is the fact that there are striking differences in the results from the OLS and the MM regressions. The CAARs are higher and are also statistically significantly different from zero from the MM method on Day-0, as well as in the pre and post-event days, which is not the case for the OLS CAARs. Not only that, in the post-event days, while the CAARs from the MM method continue to rise and are significantly positive, those from the OLS declined and lacked any statistical significance.

The test of differences in the returns on the announcement day based on the respective AARs is not statistically significantly different from zero, but the t-statistics of differences in the CAARs from the MM and the OLS regressions for the 3 day window and the entire event window of 51 days is statistically significantly different from zero, even at the 1% level. This is true with both - the OLS (All) and the OLS (Same-firms). *This confirms that the divergence in the outcomes is fundamental to the regression techniques and is not sample specific.*

Clearly, the OLS and the MM returns differ, not only in the magnitudes, but also in the directions of the outcomes. This occurs because robust regressions down-weight the influence of outliers and make their residuals larger and more visible, and minimize their impact on the regressions coefficients.

### **5.7.1 OLS MM M Comparison**

*Figure 5.7.2* presents the Market model results from the M estimator. Since the M regression left out many more firms in its estimation, its results are compared here separately with the MM and the OLS results for the *same set of firms* (equivalent to M-firms - 214).

When compared with the results presented in *Table 5.7.1* for All-firm regressions, *the MM outcomes have changed*. Even the announcement day abnormal return (AAR Day-0) is now statistically significantly different from zero.

Further, the announcement day differences in the AARs from the three regressions are not significantly different from zero. However, the difference in the 3 day and 51 day CAARs between the OLS and the other two robust regressions is significantly different. By comparison, the two robust regression techniques produce statistically identical returns.



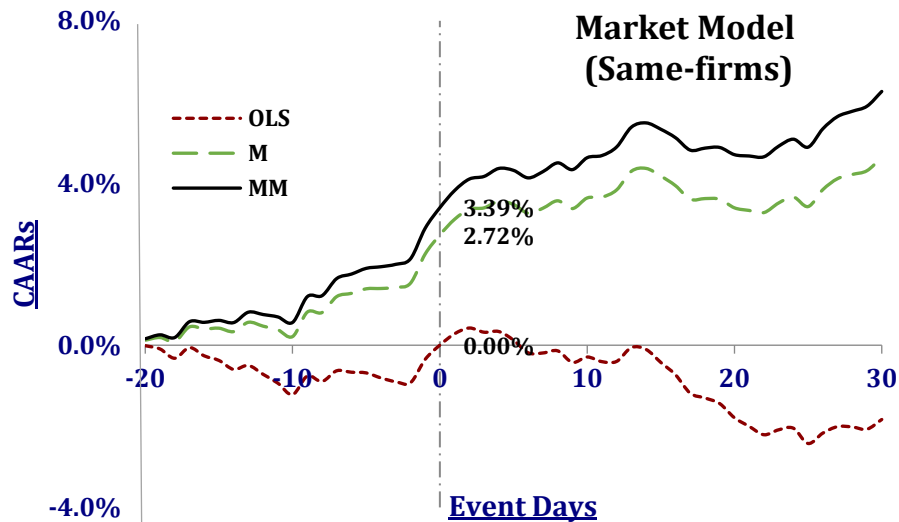


Figure 5.7.2 Market Model Returns; M vs. Others (Same-Firms); VWI

These results are tabulated in the *Table-A 5.25 to 5.27* and the findings are summarized in *Table 5.7.2* (below).

Table 5.7.2 Market Returns to Acquirers (Same-Firms); All Regressions

| Model  | Regression | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**) around Day-0 | CAARs (**) around Day-0 | n   |
|--------|------------|-----------|-------------|------------|--------------|------------------------|-------------------------|-----|
| Market | MM         | 0.51% **  | 1.69% ***   | 3.39% ***  | 6.26% ***    | -1 to 0                | -7 to +30               | 214 |
|        | M          | 0.47% *   | 1.58% ***   | 2.72% ***  | 4.64% ***    | -1                     | -1 to +30               | 214 |
|        | OLS        | 0.35%     | 1.21% **    | 0.00%      | -1.83%       | -1                     |                         | 214 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The Day-0 AARs are significantly positive from the MM and nearly significantly positive from the OLS regressions, which is not the case with the full sample. Apparently, dropping the sample to the M-firms sub-set can modify the results. Whereas, the analysis in *Table 5.7.1* confirms that modifying a sample set to the MM firms sub-set does not affect the outcomes qualitatively, and can be readily compared with OLS (All). So, there is no sample selection bias in the MM regression outcomes, but the M regression results may not be consistent as there is a potential for distortion in results obtained from the M-firms sub-set.

## 5.8 Fama-French Analysis - Acquirers

The Fama-French variables cover the period from 1993 to June 2012. As such, they can only be used for a sub-set of the sample period. The clean sample set for Fama-French analysis includes 209 Indian acquirer firms. All of these acquirer firms are used in the OLS, whereas the M and the MM regressions are available only for 191 and 205 firms respectively.

Figure 5.8.1 compares the CAARs obtained from the MM and the OLS regressions for all the available firms over the 51 day event window. The solid black line presents the CAARs from the MM estimates, while those from the OLS estimates are shown as a red dotted line.

Also, as the MM estimator has slightly lesser firms, the solid blue line labelled as ‘OLS-Same’ represents the CAARs from the OLS estimations for the same set of firms (MM firms - 205). This facilitates the comparison of the returns from the two regressions by controlling the sample selection bias.

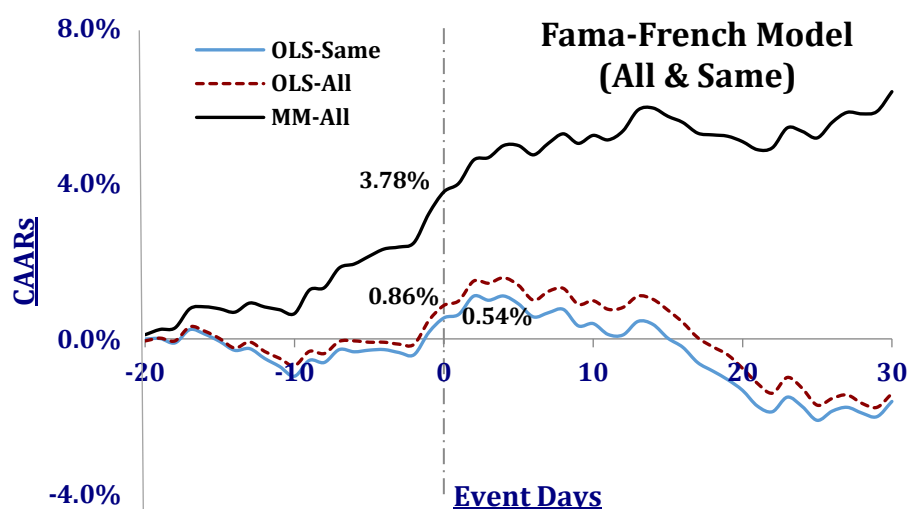


Figure 5.8.1 Returns from FF Model; MM vs. OLS; All & Same-Firms; VWI

The CAARs derived from the MM method are reported in the Table-A 5.28. They are positive throughout the event window and are also statistically significantly positive for the days [-7, +30]. Even, the 3 day CAAR of 1.53% is significantly positive. However, while the AARs are mostly positive around Day-0, they are not different from zero, except for just one day - Day -1. Finally, the upward sloping CAAR curve in the subsequent weeks suggests positive share price reactions in several days after the event. These CAAR values are also significantly positive.

The CAARs obtained from the OLS estimations of the 209 firms are tabulated in Table-A 5.29. The CAARs are positive for the days [-1, +17], and yet are never statistically different from zero for the entire event window. The same results are true of the AARs, except for Day -1. There is evidence of a decline in the AARs in subsequent weeks, which explains the downward drift of the post-event CAAR graph. Finally, the 3 day CAAR [-1,+1] of 1.12% is significantly positive at the 5% level.

The blue line, *OLS-Same* based on the MM firms sub-set, follows the same trajectory as the *OLS-All* and confirms visually and statistically (tested below) that the sample variation does not change the overall properties of the results. The results are presented in *Table-A 5.30. Table 5.8.1* provides a summary of the three regressions discussed above.

**Table 5.8.1 FF Returns to Acquirers; All & Same-Firms; MM vs. OLS; VWI**

| Model       | Regression | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|-------------|------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| Fama-French | MM         | 0.56%     | 1.53% ***   | 3.78% ***  | 6.37% ***    | -1                        | -7 to +30                  | 205 |
|             | OLS-All    | 0.39% **  | 1.12% **    | 0.86%      | -1.40%       | -1                        |                            | 209 |
|             | OLS-Same   | 0.37% *   | 1.04% **    | 0.54%      | -1.61%       | -1                        |                            | 205 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The evidence presented here rejects the null hypothesis. In line with the findings from the other emerging countries, Indian acquirer firms do observe positive abnormal returns with the announcement of M&A deals. However, these gains may not occur on the event day, as the evidence suggests that the AAR Day-0 is statistically weak. Instead, consistent statistically significantly positive 3 day CAARs imply positive abnormal returns to the acquirers in the cumulative form.

Similar to the findings from the Market model analysis, the efficiency market hypothesis holds true because there is no evidence of systematic average abnormal returns (AARs) for the investors *after* the public announcement of the event. Although, the returns are marginally higher. Also, while the MM regression shows some significant CAARs in the pre-event period, there are rarely any significant average abnormal daily returns to the acquirers before the announcement.

Once again, the results from the OLS and the MM regressions differ. The CAARs are higher and are also statistically significantly different from zero even in both the pre and the post-event periods from the MM estimations. This is not the case with the OLS CAARs. Not only that, in the post-event days, while the CAARs from the MM method are upward sloping and significantly positive, those from the OLS regression decline and are not different from zero statistically.

Like the Market model analysis, the test of differences in the returns on the announcement day based on the respective AARs is not statistically significantly different from zero. However, the t-statistics of differences in the CAARs from the MM and the OLS regressions for the 3 day and the entire event window of 51 days is statistically significantly

different from zero, even at the 1% level. *This confirms that the divergence in the outcomes is fundamental to the regression techniques and is not sample specific.*

Clearly, the OLS and the MM returns differ, not only in the magnitudes but also in the directions of the outcomes. This is so because robust regressions down-weight the influence of outliers and make their residuals larger and more visible, and also minimize their impact on the regressions coefficients.

### 5.8.1 OLS MM M Comparison

Figure A 5.2 presents the Fama-French Model results from the M estimator and compares it with those from the OLS and the MM regressions for *the same set of firms* (M-firms - 191). The results are summarized in Table 5.8.2 (below).

**Table 5.8.2 Fama-French Returns to Acquirers; (Same-Firms); All-Regressions**

| Model | Regression | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|-------|------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| FF    | MM         | 0.74% *** | 4.17% ***   | 1.85% ***  | 6.56% ***    | -1 to 0                   | -7 to +30                  | 191 |
|       | M          | 0.70% *** | 3.43% ***   | 1.75% ***  | 4.78% ***    | -1 to 0                   | -4 to +30                  | 191 |
|       | OLS        | 0.53% **  | 0.59%       | 1.33% **   | -2.01% *     | -1 to 0                   |                            | 191 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

When compared with the results presented in Table 5.8.1 for All-firm regressions, there is a noticeable disparity. Even the announcement day abnormal return (AAR Day-0) is now statistically significantly different from zero.

The announcement day differences in the AARs from the three regressions are statistically not different from zero. However, the difference in the 51 day CAARs between the OLS and the other two robust regressions is significant. The two robust regression techniques produce identical returns statistically.

Clearly, dropping the sample to the M-firms sub-set can alter the results. Whereas, the analysis in Table 5.8.1 confirms that modifying a sample to MM firms sub-set does not affect the outcomes qualitatively and can be readily compared to the OLS (All). So, there is no sample selection bias in the MM regression outcomes, but the M regression results may not be consistent as there is a potential for distortion in results obtained from the M-firms sub-set.

### 5.8.2 Fama-French (FF) vs. Market Model

Figure 5.8.2 compares the two financial models for the same set of firms and the two regression techniques. The OLS analysis is based on 209 common firms, and MM CAARs are based on same 205 firms. Following the results of the previous sub-section, the CAARs from the M estimates are left out of this comparison.

The graphs in red are the CAARs from the OLS method, while those in black are from the MM regression. The dotted lines represent the CAARs from the Market model, and the solid lines denote those from the Fama-French model.

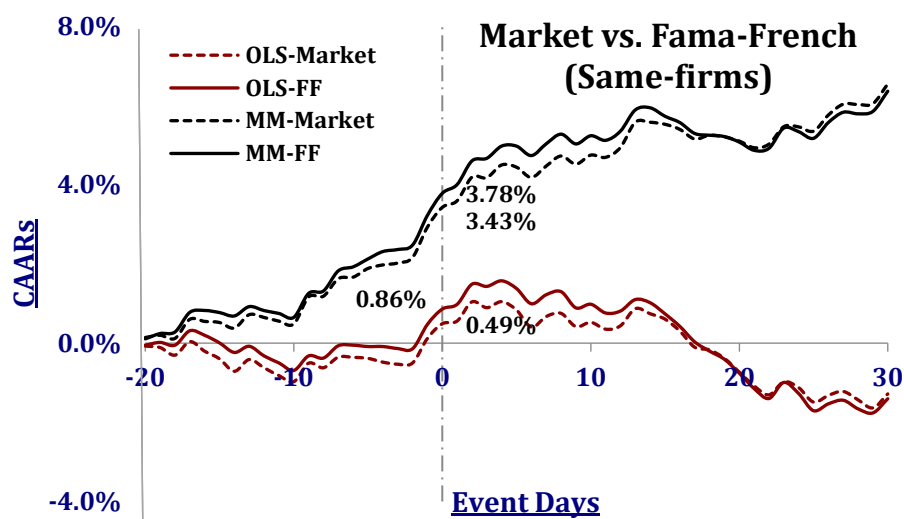


Figure 5.8.2 FF vs. Market; OLS vs. MM Regressions (Same-Firms)

The divergence in the black and the red graphs reflects the differences in regression techniques. Clearly, the MM estimator produces higher returns. Also, while the MM CAARs are statistically significantly positive in the later part, those from the OLS are negative.

Comparing any solid line with the dotted line in the same colour shows the differences in the Market and the FF models for that regression technique. The solid line (FF model) has the same trajectory as the dotted lines (Market model) but it mostly lies above the dotted line. This indicates that the returns from the FF model are consistently marginally higher.

Table 5.8.3 (below) provides a statistical summary of the various CAAR graphs presented in Figure 5.8.2. The relevant tables are Table-A 5.28, 5.29, 5.31 and 5.32.

**Table 5.8.3 Market vs. FF Model; OLS vs. MM Comparison**

| Regression | Model  | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|------------|--------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| MM         | Market | 0.50%     | 1.43% ***   | 3.43% ***  | 6.55% ***    | -1                        | -6 to +30                  | 205 |
|            | FF     | 0.56%     | 1.53% ***   | 3.78% ***  | 6.37% ***    | -1                        | -7 to +30                  | 205 |
| OLS        | Market | 0.37% *   | 1.06% **    | 0.49%      | -1.28%       | -1                        |                            | 209 |
|            | FF     | 0.39% **  | 1.12% **    | 0.86%      | -1.40%       | -1                        |                            | 209 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The magnitudes of Day-0 AAR, CAAR and 3 day CAAR are all comparable to the given regression technique. So is the window size of the significantly positive AARs and CAARs around the event day. Further, the test of differences in the Day-0 AARs, 3 day, and 51 day CAARs for each regression technique is not significantly different from zero. Thus, the results from the Fama-French and Market model are identical. This is consistent with MacKinlay (1997) who argues that for event studies, the gains from multifactor models are limited.

Once again, the OLS and the robust regressions differ. They both produce significantly positive returns for the AARs and CAARs. However, the OLS returns are relatively lower. The MM regression even has long windows for significantly positive CAARs. Not only that, in the post-event days, while the CAARs from the MM method continue to rise and are significantly positive, those from the OLS method declined. This explains the divergence in the slopes of the red versus the black graphs.

Overall, qualitatively, the *Fama-French model analysis reproduces the findings that of the Market model*. Thus, there is *no additional value to the analysis* over the Market model from the Fama-French model. In addition, it is important to note that the Fama-French model has a limitation due to its unavailability for the entire sample period.

## **5.9 Scholes and Williams Analysis – Acquirers**

The Market model is recalculated using Scholes and Williams adjusted betas by lagging the index variable for one to three time periods. Doing so generates three new variants of the Market model. All three of the new models, along with the original Market model, are compared in this section.

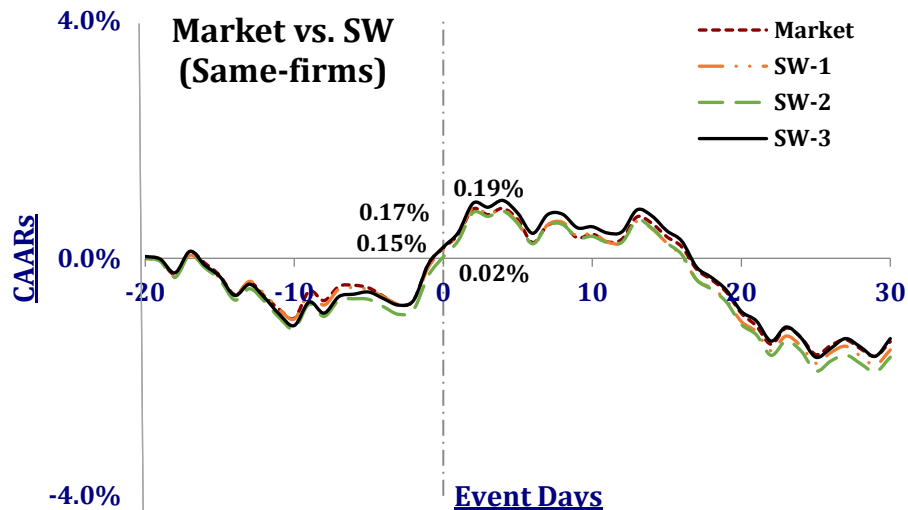


Figure 5.9.1 Returns from Market and SW (1-3) Models OLS (All-Firms)

Figure 5.9.1 is based on Table-A 5.23, 5.33 to 5.35. It serves two purposes. Firstly, it shows the abnormal returns from all of the three SW adjusted betas. Secondly, it compares SW models with the Market model for the same set of firms.

Table 5.9.2 provides a statistical summary of all the CAARs graphed above.

Figure 5.9.2 Market and SW model variants comparison (All-firms)

| Model  | Beta       | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**) around Day-0 | CAARs (**) around Day-0 | n   |
|--------|------------|-----------|-------------|------------|--------------|------------------------|-------------------------|-----|
| Market | Unadjusted | 0.26%     | 1.11% **    | 0.17%      | -1.40%       | -1                     |                         | 233 |
|        | SW-1       | 0.29%     | 1.14% **    | 0.15%      | -1.54%       | -1                     |                         | 233 |
|        | SW-2       | 0.32%     | 1.16% **    | 0.02%      | -1.66%       | -1                     |                         | 233 |
|        | SW-3       | 0.29%     | 1.14% **    | 0.19%      | -1.35%       | -1                     |                         | 233 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The SW adjusted betas also replicate the findings of the unadjusted Market model. Qualitatively, all the relevant aspects of the analysis are statistically identical. The findings are in line with (Dyckman *et al.* (1984) and Davidson and Josev (2005) which advocate no significant improvement in the model specifications or the power of tests using either of these modified betas. Thus, there is *no unique value addition to the analysis* over the unadjusted Market model analysis from the SW adjusted beta Market models.

## 5.10 Equally Weighted Index – Acquirers

The Equally Weighted Index (EWI) data does not extend earlier than the year 2000. As such, it is used only for a sub-set of the sample data. In total, 194 acquirer firms from the clean sample have EWI values available.

Figure 5.10.1 is based on Table-A 5.36 to 5.39. It presents the comparison of Market model returns constructed using the EWI and the value weighted index (VWI) indices, as well as for the OLS and MM regressions.

The OLS analysis is based on 194 common firms, and the MM estimations are based on the same 193 firms. The CAARs from the M estimates are excluded from this comparison.

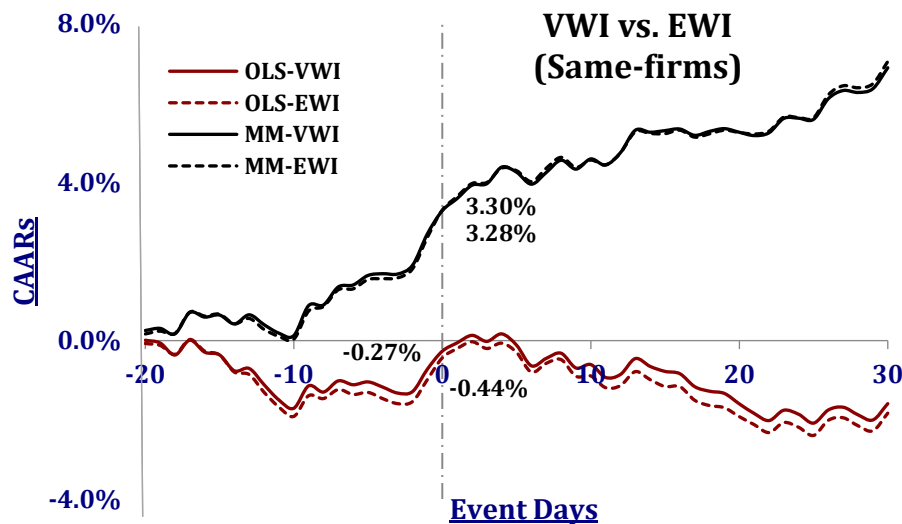


Figure 5.10.1 Returns to Acquirers; VWI vs. EWI; OLS vs. MM (Same-Firms)

The graphs in red are the CAARs from the OLS estimates, while those in black are from the MM estimates. The dotted lines represent the CAARs from the EWI, while the solid lines denote those from the VWI.

The divergence in the black and red graphs reflects the differences in regression techniques. Clearly, the MM estimations produce larger returns. Not only that, in the post-event days, while the CAARs from the MM method continue to rise and are significantly positive, those from the OLS method decline. That explains the divergence in the slopes of the red and the black graphs.

Comparing any solid line (VWI) with the dotted line (EWI) in the same colour shows the impact of the index for that regression technique. There is hardly any discernible difference between any pair. The dotted lines (EWI) in both the regressions follow the solid



lines (VWI). As discussed earlier, the high degree of correlation (0.95) between the two sets of indices may explain this resemblance.

The given set of CAARs is summarized in *Table 5.10.1* (below).

**Table 5.10.1 Market Models; OLS vs. MM and VWI vs. EWI (Same-Firms)**

| Regression | Index | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|------------|-------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| MM         | VWI   | 0.58%     | 1.68% ***   | 3.28% ***  | 6.89% ***    | -1                        | -1 to +30                  | 193 |
|            | EWI   | 0.69%     | 1.83% ***   | 3.30% ***  | 7.05% ***    | -1                        | -1 to +30                  | 193 |
| OLS        | VWI   | 0.45% **  | 1.23% **    | -0.27%     | -1.59%       | -1 to 0                   |                            | 194 |
|            | EWI   | 0.54% **  | 1.34% **    | -0.44%     | -1.83%       | -1 to 0                   |                            | 194 |

*p-values: \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . n represents sample size.*

*Qualitatively, there is no key difference in the returns from the VWI and the EWI. The only difference is due to the regression techniques where the robust regression returns are larger than the OLS, and they slope upwards in later weeks, whereas the OLS CAARs decline. Though EWI is argued to be better in capturing abnormal returns (ARs) in asset pricing models, Brown and Warner (1980) argue that the Market model tends to perform reasonably well, even when the EWI is not used.*

### **5.10.1 SW vs. Market Model**

All the three versions of the Market model (based on Scholes and Williams adjusted betas from EWI) are compared with the VWI based Market model returns for the set of same firms. This serves two purposes. Firstly, it presents the abnormal returns from the SW adjusted beta Market models based on EWI. Secondly, it compares them with a VWI based Market model for the same set of firms.

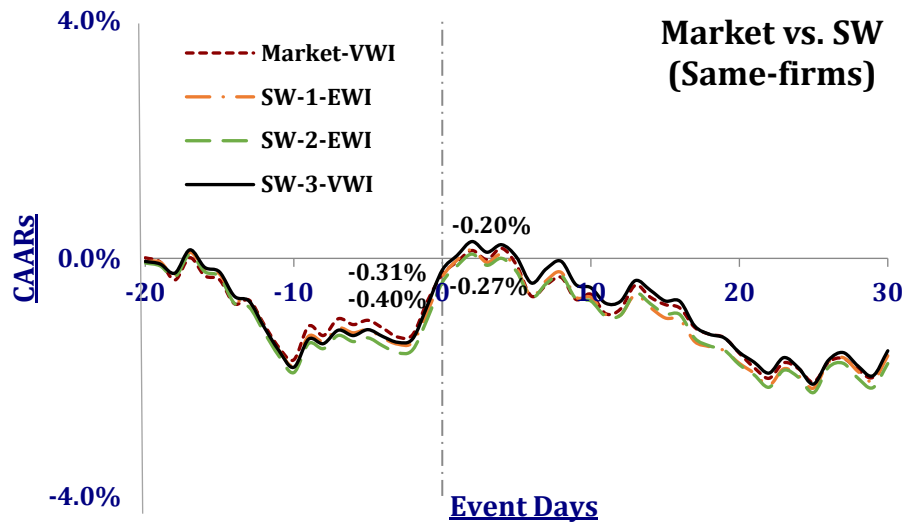


Figure 5.10.2 Market (VWI) vs. SW (1-3) (EWI); OLS (Same-Firms)

Figure 5.10.2 is based on Table-A 5.37, 5.40 to 5.42 and Table 5.10.2 provides a relevant statistical summary.

Table 5.10.2 Market vs. SW Variants; VWI vs. EWI Comparison - Acquirers

| Beta       | Index | AAR Day-0 | CAAR Day-0 | 3-Days CAAR | 51-Days CAAR | AARs (**) around Day-0 | CAARs (**) around Day-0 | n   |
|------------|-------|-----------|------------|-------------|--------------|------------------------|-------------------------|-----|
| Unadjusted | VWI   | 0.45% **  | 1.23% **   | -0.27%      | -1.59%       | -1 to 0                |                         | 194 |
| SW-1       | EWI   | 0.58% **  | 1.39% ***  | -0.31%      | -1.64%       | -1 to 0                |                         | 194 |
| SW-2       |       | 0.61% **  | 1.42% ***  | -0.40%      | -1.77%       | -1 to 0                |                         | 194 |
| SW-3       |       | 0.60% **  | 1.40% ***  | -0.20%      | -1.56%       | -1 to 0                |                         | 194 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

Interestingly, the SW adjusted betas Market models based on EWI match the VWI based Market model returns. The magnitudes of Day-0 AARs, CAARs and 3 day CAARs are all comparable, as is the window size of the significantly different from zero AARs and CAARs around the event day.

Thus, qualitatively, there is no fundamental difference in the outcomes from the two indices and the two financial models. Thus, *there is no unique value addition to the analysis from the SW adjusted betas or the EWI.*

## 5.11 Summary – Acquirers

Table 5.11.1 summarizes the findings of the entire analysis of abnormal returns to the Indian acquirer firms.

**Table 5.11.1 Summary Results; Indian Acquirers; All-Firms - VWI**

| Model       | Regression Betas | AAR Day-0        | 3-Days CAAR      | CAAR Day-0       | 51-Days CAAR     | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|-------------|------------------|------------------|------------------|------------------|------------------|---------------------------|----------------------------|-----|
| Market      | MM               | 0.39%            | <b>1.49%</b> *** | <b>3.13%</b> *** | <b>6.33%</b> *** | -1                        | -7 to +30                  | 229 |
|             | OLS              | 0.26%            | <b>1.11%</b> **  | 0.17%            | -1.40%           | -1                        |                            | 233 |
|             | M                | 0.47% *          | <b>1.58%</b> *** | <b>2.72%</b> *** | <b>4.64%</b> *** | -1                        | -1 to +30                  | 214 |
|             | SW-1             | 0.29%            | <b>1.14%</b> **  | 0.15%            | -1.54%           | -1                        |                            | 233 |
|             | SW-2             | 0.32%            | <b>1.16%</b> **  | 0.02%            | -1.66%           | -1                        |                            | 233 |
|             | SW-3             | 0.29%            | <b>1.14%</b> **  | 0.19%            | -1.35%           | -1                        |                            | 233 |
| Fama-French | MM               | 0.56%            | <b>1.53%</b> *** | <b>3.78%</b> *** | <b>6.37%</b> *** | -1                        | -7 to +30                  | 205 |
|             | OLS              | <b>0.39%</b> **  | <b>1.12%</b> **  | 0.86%            | -1.40%           | -1                        |                            | 209 |
|             | M                | <b>0.70%</b> *** | <b>3.43%</b> *** | <b>1.75%</b> *** | <b>4.78%</b> *** | -1 to 0                   | -4 to +30                  | 191 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

When compared with the target firms, the abnormal returns to the acquirers are not as high. In fact, they are very small. However, this could be because of the size effect—acquirers are generally larger companies, and the returns are calculated in terms of percentages (Jensen, 1984). Depending on the financial model and the regression technique, the AAR on Day-0 can range from 0.26% to 0.70%, and the CAAR up until the announcement day can vary from 1.12% to 1.75%. The 51 day CAAR can be as high as 6.37%, which is also statistically significantly different from zero.

While the positive returns to the acquiring firms are a rare phenomenon in the developed world, the findings are in line with the existing literature on the emerging markets (Bhagat *et al.*, 2011). However, instead of occurring on the event day itself, these abnormal returns accumulate over adjacent days and are captured in the significantly positive surrounding CAARs.

To summarize, there is sufficient evidence that the shareholders of Indian acquirer firms make positive abnormal returns. Further, there is no significant difference in abnormal returns from the two financial models and indices. However, the two regression methods produce significantly different estimates.

## 5.12 Cross-Sectional Analysis

This section takes the analysis further, investigating the cross-sectional determinants of the Cumulative Average Abnormal Returns (CAARs) obtained by the participating Indian firms in the aggregate dataset. As a dependent variable, this analysis uses several CAAR windows of various time lengths, ranging from the days [-1,+1] to [-20,+20] with respect to the announcement day. While the smaller event windows capture only the returns in the days adjacent to the event day, larger event windows ensure that pre and post-event market reactions are also fully captured. The larger windows are particularly important in this analysis. As evidenced by the event study analysis, the announcement effect is not concentrated solely around the event day, but is also present throughout the surrounding weeks.

Both the target and the acquirer firms' CAARs are regressed on a series of independent variables comprising Cash, Pct50, PctToe, CB and Conglomerate<sup>33</sup>. The equation takes the following form:

$$\text{CAAR}_{t_1,t_2} = \alpha_0 + \beta_1 \text{Cash} + \beta_2 \text{Pct50} + \beta_3 \text{PctToe} + \beta_4 \text{CB} + \beta_5 \text{Conglomerate} + \varepsilon_i \quad (5-1)$$

where Cash and CB variables are expected to be positive for both the sides; Pct50 should be positive for the targets and unclear for the acquirers; PctToe is expected to be negative for the targets and positive for the acquirers, and Conglomerate should be negative for both the sides.

Further, the Market model CAARs (based on both the OLS and MM estimation techniques from the event study analysis) are examined using the OLS regression with White-Heteroskedastic robust standard errors adjustments.

This thesis confines the cross-sectional analysis to the OLS technique. Maronna and Yohai (2000) argue that the presence of multiple independent explanatory dummy variables

---

<sup>33</sup> Recall from the methodology chapter, Cash is a dummy variable wherein the value of one is assigned for a cash offer and zero for shares or a combination of cash and share; Pct50 is a dummy variable that reflects acquisition of majority stake - one is assigned when either the acquired stake is 50% or more or when the existing stake is increased to 50% or more; PctToe is a continuous variable that represents the percentage shareholding already held by the acquirer prior to the announcement of the deal; CB variable is assigned one when the given deal is Cross-border and zero when it is Domestic; and Conglomerate is a dummy variable and is assigned one when the participating firms belong to a different industry on the basis of 2 digit SIC codes.

can easily yield to collinear sub-samples created while executing various algorithms inherent to robust regressions procedures.

### 5.12.1 Indian Target Firms

Table 5.12.1 provides a Pearson Correlation Coefficient Matrix of the independent variables used in the analysis of the target firms. While some of the variables are significantly correlated, none of them is of high enough order to make any impact on the analysis. Further, these variables have a mean Variance Inflation Factor (VIF) of 1.08, with none exceeding 1.12 individually. Collectively, they both rule out the possibility of the existence of any multicollinearity issues in the analysis.

**Table 5.12.1 Correlation Coefficient Matrix; Independent Variables-Targets**

| Variables           | Cash                         | Pct50                         | PctToe                        | CB                   |
|---------------------|------------------------------|-------------------------------|-------------------------------|----------------------|
| <b>Pct50</b>        | 0.0174<br>(0.7748)           |                               |                               |                      |
| <b>PctToe</b>       | <b>0.1689***</b><br>(0.0056) | -0.0024<br>(0.9686)           |                               |                      |
| <b>CB</b>           | <b>0.2659***</b><br>(0.0000) | 0.0900<br>(0.1372)            | 0.0818<br>(0.1821)            |                      |
| <b>Conglomerate</b> | <b>-0.1280**</b><br>(0.0341) | <b>-0.1780***</b><br>(0.0031) | <b>-0.1839***</b><br>(0.0025) | -0.1102*<br>(0.0686) |

*p*-values in parentheses; \**p* <.10, \*\* *p*<.05, \*\*\* *p*<.01

Table 5.12.2 presents the multivariate regression results for the various CAAR windows for the Indian target firms. The CAARs referred to here come from the OLS estimation of the abnormal returns in the event study analysis. The univariate results for each of these regressions are presented separately in Table-A 5.43 to 5.52. The discussion below refers to both the multivariate and the univariate results.

The equation (5) in Table 5.12.2 below for the days adjacent to the announcement day [-1,+1] has weak F-statistics with regressions coefficients not differing from zero statistically. As Cai *et al.* (2011) explain, the announcement based abnormal returns are largest when they are largely unanticipated. The large number of significant CAARs in the run-up and mark-up period in the event study analysis reveals that the returns are scattered around the announcement day.

The larger CAAR windows provide a more comprehensive picture of the analysis. The statistical significance for the model and the constituting variables fluctuate as the

window size grows. The variables which are significantly different from zero at least at the 5% level are indicated in bold in *Table 5.12.2*.

**Table 5.12.2 Regression Analysis OLS CAARs – Indian Target Firms**

| CAAR Windows:  | (1)<br>[-20, +20]           | (2)<br>[-15, +15]           | (3)<br>[-10, +10]            | (4)<br>[-5, +5]              | (5)<br>[-1, +1]       |
|----------------|-----------------------------|-----------------------------|------------------------------|------------------------------|-----------------------|
| Cash           | <b>0.1173**</b><br>(2.5686) | <b>0.0972**</b><br>(2.4890) | <b>0.0986***</b><br>(2.9638) | <b>0.0529**</b><br>(2.2559)  | 0.0066<br>(0.4261)    |
| Pct50          | <b>0.1067**</b><br>(2.4173) | <b>0.0997**</b><br>(2.3613) | 0.0597*<br>(1.8261)          | <b>0.0690***</b><br>(2.6660) | 0.0188<br>(1.1266)    |
| PctToe         | -0.1679*<br>(-1.9422)       | -0.1322*<br>(-1.7392)       | -0.0999<br>(-1.6208)         | 0.0382<br>(0.8276)           | 0.0310<br>(1.0397)    |
| CB             | -0.0681*<br>(-1.7269)       | -0.0432<br>(-1.2053)        | -0.0242<br>(-0.8131)         | 0.0127<br>(0.5692)           | 0.0228<br>(1.5065)    |
| Conglomerate   | -0.0813*<br>(-1.8867)       | -0.0513<br>(-1.3137)        | -0.0276<br>(-0.8732)         | -0.0146<br>(-0.6492)         | -0.0123<br>(-0.8398)  |
| Intercept      | 0.1263***<br>(3.0172)       | 0.1066***<br>(2.7923)       | 0.0750**<br>(2.1882)         | 0.0276<br>(1.3367)           | 0.0368***<br>(2.9283) |
| Observations   | 268                         | 268                         | 268                          | 268                          | 268                   |
| F-Statistics   | 3.8333                      | 3.2942                      | 2.8614                       | 3.3407                       | 1.7434                |
| p-value        | <b>0.0023***</b>            | <b>0.0067***</b>            | <b>0.0155**</b>              | <b>0.0061***</b>             | 0.1250                |
| Adj. R-Squared | 0.0547                      | 0.0406                      | 0.0335                       | 0.0462                       | 0.0153                |

*t* statistics in parentheses; \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Of all, *Cash* (the consideration paid in cash) and *Pct50* (the acquisition of majority stake) are the two most prominent variables to explain the CAARs. These findings are consistent with the existing literature. Even in the univariate analysis, these two variables are generally significantly positive for these CAAR windows. Cash and Pct50 both produce higher returns in the range of 5% to 12% and 7% to 11% (approximately) respectively when compared with their base dummy counterparts.

For targets, Cash compensation reflects managers confidence about the target valuation and also reduces the risk of the ‘contingency pricing effect’ in the post-acquisition revaluation effect (Hansen, 1987). Linn and Switzer (2001) find that cash offers produce significantly larger post-acquisition stock return performance for the merged firms. Under synergy hypothesis, cash offers reflect acquirers’ perception of synergistic gains and their need to capture them (Stulz, 1988; Fishman, 1989) particularly for acquirers who place a higher value on the target firms. Cash consideration then is a way to deter other competitors.

Taking the majority stake in an Indian company reflects managements’ confidence and their long-term commitment to the venture. Also, as explained by LLSV, majority stakes

are preferred by minority shareholders in countries with weaker legal systems to defend their own interests. Chari *et al.* (2009) observe significantly positive returns from the acquisition of majority control to the participating firms in the emerging markets.

The coefficients of PctToe (existing toeholds) are mostly negative and are occasionally significant but at 10% level in both the univariate and in the multivariate analyses. This negative relationship is in line with existing literature. Toeholds are known to be advantageous for acquirers on several dimensions, particularly with respect to asymmetric information about the targets and competition from rival acquirers. They increase the bargaining power of the acquirers significantly, while reducing the offer price for the target firms (Betton and Eckbo, 2000; Bris, 2002; Betton *et al.*, 2009).

In multivariate analysis, while the CB coefficients are insignificantly positive for smaller windows and significantly negative (at the 10% level) for larger windows [-20,+20], are actually significantly positive for smaller windows [-1,+1] and insignificantly negative for the larger ones in univariate analysis. This ambiguity between short-term and long-term CAAR windows implies that the immediate positive announcement effect is relatively higher in cross-border deals, but overall, it is the domestic deals that offer greater cumulative returns for the target firms' shareholders.

Finally, the Conglomerate variable is generally not different from zero in multivariate analysis. However, it is frequently significantly negative at the 10% level in univariate analysis. The significantly positive intercept terms in each of these univariate cases imply that conglomerate deals produce lower returns when compared with the congeneric deals. Bruner (2002) concludes that conglomerate deals lead to poor returns.

The next analysis (*Table 5.12.3*) also applies to target firms, but the CAARs here are based on the MM estimations of the Market model in the event study analysis.

Once again, depending on the window size, the model and the constituting variables alter their statistical significance. The results are still identical to the analysis of OLS based CAARs with slight variations. The two variables—*Cash* and *Pct50*—are still the most prominent independent variable to explain the CAARs. They are statistically significantly positive in both multivariate and univariate analysis for most of the CAAR windows. Even their coefficients are economically large enough to affect the size of returns obtained on the announcement of deals.

**Table 5.12.3 Regression Analysis MM CAARs - Indian Target Firms**

| CAAR Windows:  | (1)<br>[-20, +20]              | (2)<br>[-15, +15]            | (3)<br>[-10, +10]             | (4)<br>[-5, +5]              | (5)<br>[-1, +1]        |
|----------------|--------------------------------|------------------------------|-------------------------------|------------------------------|------------------------|
| Cash           | <b>0.0851 **</b><br>(2.0446)   | <b>0.0743 **</b><br>(2.0908) | <b>0.0783 ***</b><br>(2.6124) | <b>0.0507 **</b><br>(2.1514) | 0.0040<br>(0.2503)     |
| Pct50          | <b>0.0912 **</b><br>(2.0121)   | <b>0.0937 **</b><br>(2.2255) | 0.0574 *<br>(1.7810)          | <b>0.0543 **</b><br>(2.1346) | 0.0162<br>(0.9781)     |
| PctToe         | <b>-0.1662 **</b><br>(-2.0675) | -0.1292 *<br>(-1.8221)       | -0.0965 *<br>(-1.6791)        | 0.0305<br>(0.6728)           | 0.0228<br>(0.7500)     |
| CB             | -0.0423<br>(-1.1015)           | -0.0160<br>(-0.4645)         | -0.0060<br>(-0.2139)          | 0.0153<br>(0.6892)           | 0.0261 *<br>(1.6925)   |
| Conglomerate   | -0.0597<br>(-1.4102)           | -0.0289<br>(-0.7714)         | -0.0152<br>(-0.5160)          | -0.0119<br>(-0.5316)         | -0.0152<br>(-1.0575)   |
| Intercept      | 0.2011 ***<br>(5.1691)         | 0.1534 ***<br>(4.3439)       | 0.1087 ***<br>(3.5703)        | 0.0529 **<br>(2.5474)        | 0.0466 ***<br>(3.7258) |
| Observations   | 258                            | 258                          | 258                           | 258                          | 258                    |
| F-Statistics   | 2.6307                         | 2.4828                       | 2.4113                        | 2.5121                       | 1.7091                 |
| p-value        | <b>0.0244 **</b>               | <b>0.0323 **</b>             | <b>0.0370 **</b>              | <b>0.0305 **</b>             | 0.1329                 |
| Adj. R-Squared | 0.0325                         | 0.0281                       | 0.0251                        | 0.0327                       | 0.0155                 |

*t statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01*

The coefficients of PctToe become significantly negative for larger CAAR windows in the multivariate analysis, but they are not significantly different from zero in the univariate analysis for all the windows. PctToe in window [-20, +20] implies that the existing toehold interest of an acquirer can reduce the overall takeover returns to the targets by 17%. The CB variable is significantly positive for smaller windows in both univariate and multivariate analysis [-1, +1]. However, it is negative but not different from zero for the larger ones. This suggests that target shareholders may receive higher than domestic returns around the announcements from cross-border deals, but may not receive higher returns overall.

Overall, the consideration received in cash and the acquisitions of the majority stake emerge as the main driving forces for the returns to the Indian target firms. Cash payments mitigate several risks for the target shareholders. And a majority stake safeguards the interests of minority shareholders. Further, toehold interests impact returns negatively. Another interesting finding is the distinction between smaller and larger CAAR windows in the cross-border deals. Cross-border deals yield lesser returns to the targets when compared with those from the domestic returns in aggregate but not so at the time of the announcement.

Interestingly, despite big differences in the magnitudes of the CAARs obtained from the OLS and the MM methods, the regression results from both are essentially identical. They



both identify the same factors as critical, and produce similar inferences about the analyses. However, their magnitude of coefficients may differ slightly.

### 5.12.2 Indian Acquirer Firms

Table 5.12.4 provides a Pearson Correlation Coefficient Matrix of the independent variables used in this analysis for the acquirer firms. While some of the variables are significantly correlated, none of them is of a high enough order to make any impact on the analysis. Further, these variables have a mean Variance Inflation Factor (VIF) of 1.07, with none exceeding 1.12 individually. Collectively, they both rule out the possibility of the existence of any multicollinearity issues in the analysis.

**Table 5.12.4 Correlation Coefficient Matrix; Independent Variables - Acquirers**

| Variables           | Cash                          | Pct50                         | PctToe              | CB                             |
|---------------------|-------------------------------|-------------------------------|---------------------|--------------------------------|
| <b>Pct50</b>        | 0.0537<br>(0.4144)            |                               |                     |                                |
| <b>PctToe</b>       | -0.0231<br>(0.7288)           | 0.0068<br>(0.9192)            |                     |                                |
| <b>CB</b>           | <b>0.2392 ***</b><br>(0.0002) | -0.0166<br>(0.8007)           | -0.1063<br>(0.1102) |                                |
| <b>Conglomerate</b> | -0.1027<br>(0.1181)           | <b>-0.1331 **</b><br>(0.0424) | -0.1083<br>(0.1038) | <b>-0.1695 ***</b><br>(0.0095) |

*p-values in parentheses; \*\* p<.05, \*\*\* p<.01*

The multivariate regression results for the various CAAR windows for the Indian acquirer firms are presented in Table 5.12.5. The CAARs used here are from the OLS estimation of the abnormal returns in the event study analysis. The univariate results for each of these regressions are presented separately in the appendix in Table-A 6.53 to 6.57. The discussion below refers to both the multivariate and the univariate results.

With the changing CAAR windows, the model and the constituting variables alter their statistical significance. The most important variable that governs the returns obtained by the acquiring firms is *CB*. Unlike the ambiguity presented in the analysis of the target firms, this variable is unequivocally negative and mostly significant in both univariate and multivariate analyses. Further, the positive intercept coefficients in the univariate analyses suggest that the acquirers lose 2% to 8% (approximately) in cross-border takeovers relative to domestic deals. Another variable, *Pct50*, is generally not different from zero except for the CAAR window of [-15, +15], where it is significantly positive in both the analyses.

**Table 5.12.5 Regression Analysis OLS CAARs – Indian Acquirer Firms**

| CAAR Windows:  | (1)<br>[-20, +20]             | (2)<br>[-15, +15]             | (3)<br>[-10, +10]             | (4)<br>[-5, +5]      | (5)<br>[-1, +1]      |
|----------------|-------------------------------|-------------------------------|-------------------------------|----------------------|----------------------|
| Cash           | 0.0376<br>(1.0731)            | 0.0245<br>(0.7688)            | 0.0112<br>(0.4278)            | 0.0122<br>(0.5155)   | 0.0032<br>(0.2716)   |
| <b>Pct50</b>   | 0.0629<br>(1.5664)            | <b>0.0848**</b><br>(2.1855)   | 0.0417<br>(1.3933)            | 0.0073<br>(0.3872)   | 0.0038<br>(0.3274)   |
| PctToe         | 0.0812<br>(1.4289)            | 0.0631<br>(1.1990)            | -0.0009<br>(-0.0194)          | 0.0111<br>(0.2841)   | 0.0125<br>(0.6450)   |
| <b>CB</b>      | <b>-0.0804**</b><br>(-2.1990) | <b>-0.0672**</b><br>(-2.2117) | <b>-0.0521**</b><br>(-2.2799) | -0.0227<br>(-1.5299) | -0.0040<br>(-0.3944) |
| Conglomerate   | 0.0457<br>(1.1699)            | 0.0374<br>(1.0422)            | 0.0216<br>(0.7837)            | 0.0210<br>(1.2105)   | 0.0079<br>(0.7988)   |
| Intercept      | -0.0425<br>(-1.4942)          | -0.0299<br>(-1.1701)          | 0.0020<br>(0.0885)            | 0.0028<br>(0.2186)   | 0.0058<br>(0.7154)   |
| Observations   | 227                           | 227                           | 227                           | 227                  | 227                  |
| F-Statistics   | 2.5992                        | 2.8403                        | 1.9443                        | 1.1019               | 0.3047               |
| p-value        | <b>0.0262**</b>               | <b>0.0165**</b>               | 0.0881 *                      | 0.3603               | 0.9098               |
| Adj. R-Squared | 0.0214                        | 0.0307                        | 0.0038                        | -0.0077              | -0.0172              |

*t* statistics in parentheses; \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

In other variables, the variable PctToe for existing toeholds is steadily positive, as expected, but has weak t-statistics in both the analyses. This positive, yet insignificant impact, is consistent with Betton *et al.* (2009). Choi (1991) explains that the acquirers receive only partial benefits from the toehold investments. But, the toeholds are still indirectly beneficial as they reduce the offer premium and acquirers' returns are less negative when there is a positive toehold in place (Betton *et al.*, 2008). Likewise, as expected, even the Cash variable is positive but never significantly different from zero in both the analyses.

Interestingly, the Conglomerate coefficients, though not significantly different from zero throughout, show signs of positivity. This suggests that for acquirers, diversification is seen as a positive move, which is in complete contrast to the findings of the target firms. However, given the culture of large business houses in India, which are also large conglomerates, positive signs for the acquirers make sense.

Table 5.12.6 below is based on the CAARs from the MM estimations of the Market model in the event study analysis. The univariate results for each of these regressions are presented separately in the appendix in Table-A 5.58 to 5.62. The results obtained here are qualitatively identical to the regression analysis from OLS CAARs presented in Table 5.12.5. The difference is that the intercept coefficients are significantly positive in all the univariate

analysis. Also, there are some sign reversals in smaller and larger CAAR windows when compared with respective multivariate equations, but none of these coefficients is significantly different from zero to explain CAARs.

**Table 5.12.6 Regression Analysis MM CAARs – Indian Acquirer Firms**

| CAAR Windows:  | (1)<br>[-20, +20]             | (2)<br>[-15, +15]             | (3)<br>[-10, +10]             | (4)<br>[-5, +5]      | (5)<br>[-1, +1]      |
|----------------|-------------------------------|-------------------------------|-------------------------------|----------------------|----------------------|
| Cash           | 0.0252<br>(0.7365)            | 0.0160<br>(0.5072)            | 0.0056<br>(0.2053)            | 0.0078<br>(0.3257)   | 0.0032<br>(0.2612)   |
| <b>Pct50</b>   | 0.0493<br>(1.4704)            | <b>0.0685**</b><br>(2.2487)   | 0.0314<br>(1.1696)            | 0.0024<br>(0.1337)   | 0.0029<br>(0.2496)   |
| PctToe         | 0.0964*<br>(1.6654)           | 0.0809<br>(1.4968)            | 0.0131<br>(0.2639)            | 0.0144<br>(0.3614)   | 0.0158<br>(0.8043)   |
| <b>CB</b>      | <b>-0.0858**</b><br>(-2.2073) | <b>-0.0709**</b><br>(-2.2215) | <b>-0.0532**</b><br>(-2.2231) | -0.0261<br>(-1.6339) | -0.0042<br>(-0.4028) |
| Conglomerate   | 0.0382<br>(1.0506)            | 0.0280<br>(0.8914)            | 0.0171<br>(0.6436)            | 0.0184<br>(1.0848)   | 0.0076<br>(0.7450)   |
| Intercept      | 0.0235<br>(0.7583)            | 0.0196<br>(0.7197)            | 0.0347<br>(1.4510)            | 0.0219<br>(1.6365)   | 0.0098<br>(1.1483)   |
| Observations   | 223                           | 223                           | 223                           | 223                  | 223                  |
| F-Statistics   | 2.8006                        | 3.4050                        | 1.9713                        | 1.2336               | 0.3295               |
| p-value        | <b>0.0179**</b>               | <b>0.0055***</b>              | 0.0840*                       | 0.2944               | 0.8948               |
| Adj. R-Squared | 0.0198                        | 0.0273                        | -0.0011                       | -0.0081              | -0.0172              |

*t* statistics in parentheses; \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

An interesting finding is that the toehold variable has gained mild statistical significance for larger CAARs, which is not in line with existing finance literature.

Overall, the cross-border (CB) deals and the acquisition of the majority stake (Pct50) emerge as the main driving forces for the returns to Indian acquirer firms. The CB variable is mostly significantly negative. This implies that the cross-border deals yield lesser returns to the acquiring shareholders. Pct50 is consistently positive and significantly different from zero for CAAR window [-15, +15], thus acquiring a majority stake may yield positive results. Signs of Cash and PctToe are as expected, and a positive sign for Conglomerate suggests that for the acquirers, diversification strategies generate positive returns—just the opposite of target firm returns. However, the coefficients are never significantly different from zero at conventional levels.

Once again, despite a big difference in the magnitudes of the CAARs obtained from the OLS and the MM methods, the regression results from both are, in effect, identical. They

both point towards the same critical factors. However, their magnitude of coefficients may differ slightly.

### 5.13 Overall Summary

The chapter tests the first hypothesis (H1), which is focused on the possible motives of M&As: synergy, hubris or agency. The hypothesis tested is:

***H1: There are no abnormal returns associated with the announcements of M&As for the participating Indian firms.***

As both the target and the acquirer firms' shareholders make abnormal positive returns at the announcement of M&As, the null hypothesis is rejected. And the positive returns to both the sides indicate *synergy creation*. However, the returns to the target shareholders are considerably higher than those to the acquirers', at least in percentage form.

Further, the targets' takeover premium has a run-up that is significantly more than the post-bid mark-up. This implies that information asymmetry and informed trading play a substantial role in determining the distribution of the total takeover premium generated around announcements. It also implies that informed traders receive a larger proportion overall.

The second, but equally important, objective of this chapter is to analyse the impact of various financial models, regression techniques and types of indices in evaluating the announcement effects.

#### 5.13.1 Impact of Various Financial Models

The abnormal returns calculated using the SW adjusted beta Market models reproduce the returns obtained by the native Market model. There is hardly any discernible difference between the outcomes. This is true for both the targets and the acquirers, and also for the Value Weighted Index (VWI) and the Equally Weighted Index (EWI). Essentially, there is no unique contribution to the analysis from using SW adjusted betas.

Likewise, qualitatively, Fama-French returns are mostly identical to those of the Market model returns. While the Fama-French returns are marginally higher with respect to the announcement effect, they are statistically alike overall. However, with respect to the overall CAARs [-20, +30], FF based returns exceed Market model returns statistically by 1% on average but for only the target shareholders. Apart from this slight variation, the outcomes

are comparable. Besides, the Fama-French variables do not cover the entire sample period and hence, is not an *all-inclusive* model.

Thus, the Market model provides the most exhaustive and reasonably reliable and insightful analysis of this event study.

### **5.13.2 Impact of Various Regression Techniques**

As expected, there are striking differences between the abnormal returns from the OLS and the robust regressions. These differences are multidimensional, including magnitudes, direction and statistically significant values. What is also evident is that the M estimations generally replicate the outcomes of the MM estimations.

The abnormal returns based on the robust regressions are much larger in magnitude than those obtained from the OLS method. This is true for both the targets and the acquirers, for both the financial models, and for both types of indices.

Generally, in the post-event period, the CAARs obtained by robust regressions are upward sloping, while those from the OLS regression, decline. There are also sign reversals in the outcomes in both the Market model and the Fama-French model.

Finally, more of the CAARs and the AARs obtained by robust regressions are statistically significantly different from zero when compared with the ones from the OLS method. For the target firms, the CAARs based on robust regressions are statistically significantly positive generally for the entire event period. For the acquirer firms, they are significant for the entire post-event period. However, for OLS based estimations, the days with the returns that are statistically significantly different from zero are considerably less.

One criticism of this argument could be the fact that the robust regressions did not use the entire sample set, and that this difference in results could be due to sample selection. To counter this problem, all the models were re-estimated for the same set of firms (based on the availability of the M and the MM estimations) for both the target and the acquirer firms, and the Market model and the Fama-French model. When all the results were re-estimated for the OLS and the MM comparison only, they were identical to the ‘all firms’ analysis, which indicates that the results from the MM method can be directly compared to those from the OLS regression, without being concerned about sample selection bias. With the M estimation sub-set, for the target firms, the ‘same-firms’ results are qualitatively identical to

those with ‘all-firms’ analysis for all the three regressions. However, for the acquirers, the results change.

To conclude, while the M estimations replicate the MM estimations qualitatively, they can still potentially distort the results due to the smaller sample set. Further, given the influencing leverage points in the data (as explained in chapter four), the *MM estimations are the most reliable estimations in this analysis.*

### 5.13.3 Impact of Indices

Equally Weighted Index (EWI) data does not cover the entire sample period and thus is not an *all-inclusive* model. Still, for the firms where EWI data is available, the Market model and the SW adjusted betas are evaluated for both the indices. When compared, qualitatively, there is no difference in the results obtained by using the VWI or the EWI for any of these regressions. Clearly, the type of index has no bearing on the results of event study as derived in this thesis.

Table 5.13.1 (below) summarizes the methodological impact on the analysis.

**Table 5.13.1 Summary of Methodological Impact on the Analysis**

| Regression Techniques    |    | Financial Models   |  |  | Notes (Regression Techniques)   |
|--------------------------|----|--|--|--|---|
|                          |    | Market Model   |  | Fama-French  |   |
|                          |    | Unadjusted Beta  | Scholes – Williams   |  |   |
| OLS                      |    | VWI / EWI  | VWI / EWI  | VWI  | All-inclusive and insightful results  |
| Robust Regressions       | M  | VWI / EWI  | -  | VWI  | Potential to distort results  |
|                          | MM | VWI / EWI  | -  | VWI  | Most reliable estimations   |
| Notes (Financial Models) |    | All-inclusive (VWI).<br>Insightful results.<br>EWI is a sub-set. | Results replicate the Market model outcomes<br>EWI is a sub-set. | Results replicate the Market model outcomes with occasionally marginally higher returns. | <b>Most insightful results come from:</b><br><br><b>Market model, OLS, MM and VWI</b> |

The Market model based on the OLS and MM estimations using VWI provides the most insightful analysis. The two regression outcomes could be compared directly without any sample selection bias. Due to the contamination of the data, *MM estimations are the most reliable estimations in this analysis.* All the other financial models, their variants and M estimates are practically redundant for the purpose of this thesis.

### 5.13.4 Cross-Sectional Analysis

In the cross-sectional analysis, target returns are governed by cash compensation (Cash) and the acquisition of the majority stake (Pct50). Toehold (PctToe) yield lower returns. Cross-border deals yield higher returns around announcement day but not overall, and diversification is discouraged. On the other hand, for acquirers, cross-border deals yield lesser returns always and there is also some evidence that majority stake (Pct50) may generate positive returns. As opposed to the target firms, diversification can be positive.

Another important finding is that despite the differences in the magnitudes of the CAARs obtained from the OLS and the MM estimations, they yield coefficients that are qualitatively identical and comparable in a cross-sectional analysis.

### 5.13.5 Snapshot – Hypothesis

**Table 5.13.2 Hypothesis Testing Outcome – Aggregate Dataset**

| Effect      | Hypothesis   | Targets | Acquirers | Notes   |
|-------------|--|---------|-----------|---|
| Motive      | <i>There are no abnormal returns associated with the announcements of M&amp;As to the participating Indian firms.</i><br><b>H1 :</b> | ✗       | ✗         | <i>Significantly positive returns to both - the targets and acquiring shareholders at the announcement.</i>                           |
|             | <b>H1a: Synergy</b>  | ✓       | ✓         | <i>As both targets and acquirers gain positive abnormal returns on average, the total effect is positive for the combined wealth.</i> |
|             | H1b: Hubris  | ✗       | ✗         |   |
| H1c: Agency | ✗  | ✗       |           |   |

# Chapter 6. Domestic Deals

---

## 6.1 Introduction

The aggregate dataset of M&A deals is further divided into two broad sub-sets: the domestic dataset and the cross-border dataset. The domestic dataset is comprised of M&A deals where both the target and the acquirer firms are based in India, evidenced by their primary listing on the Indian Stock Exchanges. This chapter focuses on the returns obtained by these companies.

The primary objective of this chapter is to test the synergy hypothesis for domestic M&A (DMA) deals. If synergies exist, markets should react favourably to such announcements. Thus, the central hypothesis tested here is: *There are no abnormal returns associated with the announcements of domestic M&As to the shareholders of the participating Indian firms.*

However, there is a gamut of related factors that can play a significant role in determining the outcomes of M&As in national settings. This makes the testing of a variety of sub-hypotheses imperative in terms of gaining a comprehensive understanding of the announcement effects of DMA deals.

Large Indian Business Groups (IBGs) dominate the corporate Indian landscape. IBGs are family-based business groups which use both pyramidal structures and reciprocal cross-holdings amongst group member companies. IBGs are typically characterized by the influential insider control in the affiliate companies they own, achieved either through substantial shareholdings or controlling rights disproportionately higher than their cashflow rights. This significant and concentrated control provides absolute discretion over the assets of the company they manage, creating a conducive environment for expropriation, often at the cost of minority shareholders. Given these circumstances, being taken over by an IBG may not be looked upon favourably by outside shareholders, who are reduced to the status of minority company owners. On the other extreme, IBG acquirer can have positive impact on the target returns. In an environment of subpar capital, product and labour markets, IBGs create 'internal factor markets' for their affiliates. To achieve that, they thrive on their reputation and will support ailing affiliates (often by diverting resources towards them) to protect their reputation. In turn, that increases the value of a group overall.



The possible effects of pyramidal structures are commonly propositioned by the tunnelling and propping hypotheses. Delving deeper into the subject, the deals are analysed to determine that effect of IBG acquisition.

Nayar (2014, pp. 207, 10) compiles lists of the top Indian Business Groups (IBGs) in the 1950s and 1990s. Understandably, there is a significant overlap between the two lists. Based on Nayar's lists, a combined list of the top 60 IBGs was prepared. For the purposes of this thesis, the acquirer may be either the flagship company of an IBG, or one of its subsidiaries. Accordingly, all domestic M&A deals were reclassified as either Business Group or Non-Business Group deals. The hypothesis tested in this context is: *There is no difference in abnormal returns generated from the takeovers by the large Indian Business Groups.*

Another important dimension of organizing business in groups is *intra-group deals*. Businesses are structured as a group with a network of firms in the Indian corporate system. However, despite belonging to a common parent company, these affiliates are independent companies with their own board of directors and are accountable to their own shareholders. Being a member of a group enables access to the diverse resources of other sister companies. In fact, quite often, deals occur within the affiliates of the same business group. In the sample used, nearly a third of the deals are intra-group in nature. The existing relationship between the targets and acquirers may have substantial bearings on the takeover outcomes. In such takeovers, the information asymmetry about the target would be less, as will the probability of competing bids. As the attribute *relatedness* has different dynamics, such deals may produce different outcomes.

Related deals are those where the two participating companies are the part of the same corporate group. Either they already have an existing parent-subsidary relationship, or they are two distinct entities operating under the same parent company. Accordingly, all domestic deals were reclassified as either related or unrelated deals. The hypothesis tested in this context is: *There is no difference in abnormal returns generated in the takeovers when the participating firms are already affiliated.*

The final, and equally important, objective of this chapter is to evaluate the various deal and firm-specific characteristics to determine the main driving forces for these returns. A thorough cross-sectional analysis is conducted to isolate the decisive factors that govern the outcomes in domestic deals.

The chapter begins with a discussion about domestic target firms and leads to the analysis of domestic acquirer firms. In the process, the impact of various financial models, and regression techniques on abnormal returns is discussed. Finally, the cross-sectional results for each side are reported.

Chapter five provides a sound basis for all the relevant aspects of the methodology employed in this thesis. To restate, the announcement effect captured by the Fama-French model is identical to the Market model outcomes. However, the overall CAARs for the 51 day event window are 1% higher for targets, and no difference for acquirers. The Scholes and Williams adjusted betas replicate results from the unadjusted Market model. The EWI produces returns that are comparable to VWI returns for the same set of firms, and thus provides no additional insights. However, for the two regressions techniques, there are significant differences in the results from the MM and the OLS regressions. The MM returns can be directly compared with the OLS outcomes, despite the marginal difference in the sample size. In terms of the two robust regressions, the M estimator follows the general trend of the MM regressions for the same set of firms. However, due to the smaller sample size, it has the potential to alter the overall properties of the analysis. Finally, given the properties of the dataset, the MM estimator is better suited.

Following on from chapter five, this chapter focuses on the outcomes from the Market model based on the Value Weighted Index (VWI) and regressed with the OLS and the MM techniques. As discussed earlier, the MM regression does not estimate all the sample firms. The sub-set estimated by the MM regressions is referred to as '*MM firms*'. Further, the results from the Fama-French model and the SW variants are compared for the primary hypothesis. For the other attributes, the Fama-French results are provided in Appendix Chapter 6 . The Fama-French sub-set is referred to as '*FF firms*'.

For brevity and relevance, only the primary outcomes are compared, contrasted and reported in the main body of the chapter. Other subsidiary findings are provided in the appendix to this chapter.

## 6.2 Returns to Domestic Targets

The aggregate dataset has 274 firms identified as Indian Targets. Of these, 170 firms are domestic targets. While the regression estimates based on the OLS method are available for each of these firms, only 165 firms are estimated by the MM regression.

Figure 6.2.1 compares the cumulative average abnormal returns (CAARs) obtained from the MM and the OLS regressions using the Market model for *all the available firms* over the 51 day event window [-20, +30], relative to the announcement day for the target firms in India.

Also, as the MM estimator includes slightly fewer firms, the solid blue line labelled as ‘OLS (Same)’ represents the CAARs from the OLS estimations for *the same set of firms* (MM firms – 165 firms). It facilitates the comparison of the returns from the two regressions by controlling the sample selection bias.

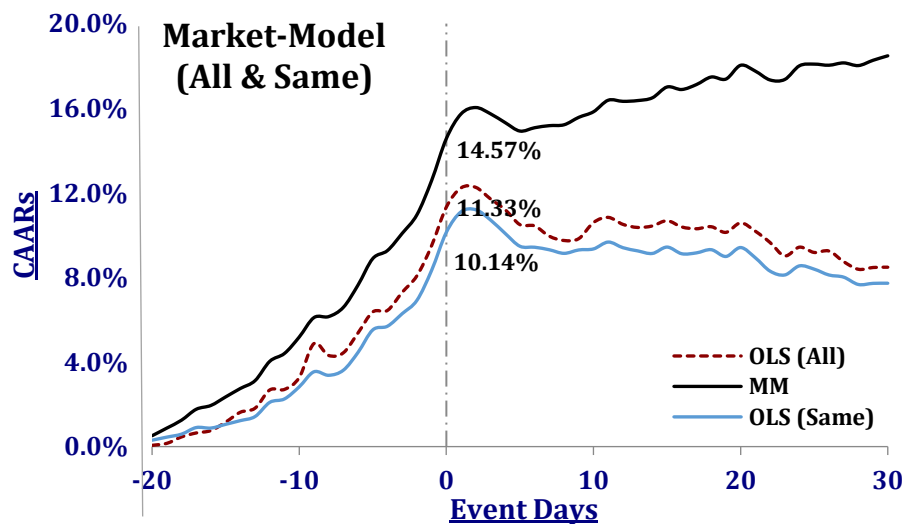


Figure 6.2.1 Market Returns; DMA - Targets – OLS vs. MM; (All & Same).

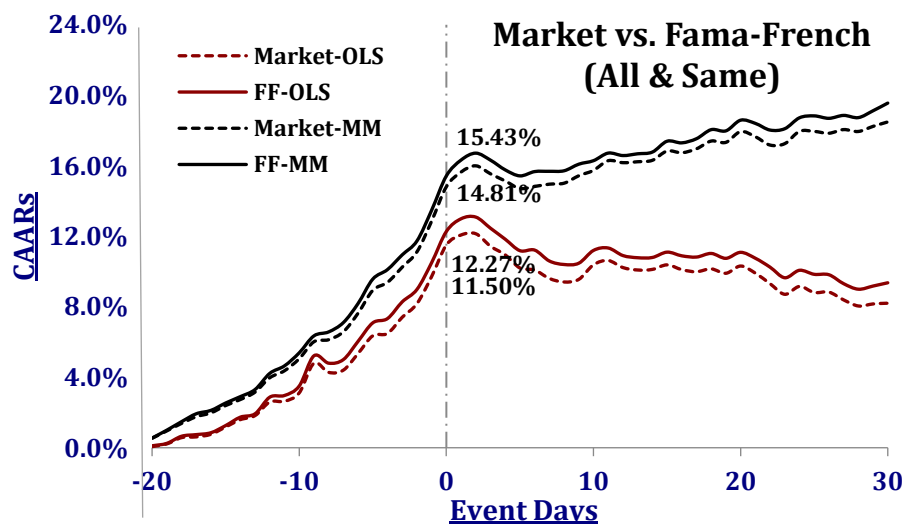
The CAARs derived from the MM estimator are represented by the solid black line and are reported in Table-A 6.1. With some intermittent days as exceptions, the AARs are mostly significantly positive, including in the pre-event period and around the event day for the days [-3, 0]. The CAARs are also significantly positive throughout the event window, except for Day -20. Also, with the t-statistics of 4.74, even the 3 day CAAR [-1, +1] of 4.77% is significantly different from zero. Finally, the CAARs in the later weeks can be seen drifting upwards.

The red dotted line charts the CAARs from the OLS regression based on 170 firms. The results are tabulated in *Table-A 6.2*. The CAARs are statistically significantly greater than zero from Day -12 onwards. The AAR and the CAAR on Day-0 and the 3 day CAAR [-1, +1] of 4.15% are all significantly positive at the 5% level. Though there is evidence of a slight decline in daily returns in the days after the event (hence the negative slope for the CAARs in later weeks), overall there is a positive impact on the announcement day itself, as well as on the surrounding days [-3, 0].

The blue line, *OLS (Same)*, based on the MM firms sub-set, follows the same trajectory as of the *OLS (All)* and confirms visually and statistically (tested below) that the sample variation captures similar effects and does not change the overall properties of the results. The results are presented in *Table-A 6.3*.

### 6.2.1 Market vs. Fama-French (FF) Model

*Figure 6.2.2* compares the two financial models and the two regression techniques for the same set of firms (FF firms). The OLS analysis is based on 163 common firms, and the MM CAARs are based on the same 158 firms. The results are documented in *Table-A 6.4 to 6.7* in the appendix.



**Figure 6.2.2 Returns to Domestic Target; Market vs. FF; OLS vs. MM (All & Same-Firms)**

The graphs in red are the CAARs from the OLS regression, while those in black are the MM estimator. The dotted lines represent the CAARs from the Market model, while the solid lines denote those from the Fama-French model.

The divergence in the black and the red graphs in the post-event period reflects the differences in the regression techniques. Clearly, the MM estimators produce higher returns. Also, while the MM CAARs drift upwards in the later part, those from the OLS estimator gradually decline. This is so because robust regressions down-weight the influence of outliers and make their residuals larger and more visible, while minimizing their impact on the regressions coefficients.

Comparing any solid line with the dotted line in the same colour shows the differences in the Market and the FF models for that regression technique. The solid line (FF model) has the same trajectory as the dotted lines (Market model), but it mostly lies above the dotted line. That indicates that the returns from the FF model are consistently marginally higher.

Table 6.2.1 provides a statistical summary of all the CAAR graphs discussed above. The comparative results for the same set of firms, based on the M estimator, are graphed in Figure A 6.1 and 6.2 in the appendix for the Market and FF model respectively.

**Table 6.2.1 Market Returns to Targets; All & Same-Firms (OLS vs. MM)**

| Model     | Regression | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|-----------|------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| Market    | MM         | 1.99% *** | 4.77% ***   | 14.57% *** | 18.48% ***   | -3 to 0                   | -19 to +30                 | 165 |
|           | OLS (All)  | 1.82% *** | 4.15% ***   | 11.33% *** | 8.48% ***    | -3 to 0                   | -12 to +30                 | 170 |
|           | OLS (Same) | 1.80% *** | 4.18% ***   | 10.14% *** | 7.72% ***    | -2 to 0                   | -12 to +30                 | 165 |
| FF Market | MM         | 1.95% *** | 4.59% ***   | 15.43% *** | 19.56% ***   | -6 to 0                   | -20 to +30                 | 158 |
|           |            | 1.95% *** | 4.53% ***   | 14.81% *** | 18.49% ***   | -6 to 0                   | -19 to +30                 | 158 |
| FF Market | OLS        | 1.77% *** | 4.01% ***   | 12.27% *** | 9.36% ***    | -3 to 0                   | -14 to +30                 | 163 |
|           |            | 1.79% *** | 3.90% ***   | 11.50% *** | 8.20% ***    | -3 to 0                   | -12 to +30                 | 163 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The hypothesis tested here is that there are no abnormal returns associated with the announcements of DMAs for Indian target shareholders. The evidence presented here rejects the null hypothesis. In line with findings from other countries, there is evidence that the Indian target firms do gain positive abnormal returns at the announcements of M&As. These gains occur on the event day, as well as on surrounding days.

Further, consistent with the efficiency market hypothesis, there is no evidence of systematic average abnormal returns (AARs) to the new investors immediately after the public announcement of the event. On the contrary, the period before the announcement is marked with significantly positive returns on numerous days and is worthy of closer inspection.

The significantly positive CAARs before the event day are part of pre-bid run-ups. While the announcement day returns are around 2% (Day-0), the pre-bid run-up is already in the range of 9% to 13 % (refer *Table 6.2.2*). This suggests that the market participants can somewhat anticipate the takeover premiums and incorporate that information into the price of the target shares before the event. Yet, since the AARs on Day-0 are the highest abnormal returns generated on a single day in the entire event window, it suggests that the significant information released only at the announcement resulting in positive returns for the shareholders.

Though a crude measure, *Table 6.2.2* highlights the distribution of the total premium generated between the run-ups and the mark-ups of DMAs.

**Table 6.2.2 Run-Up vs. Mark-Up Returns to Domestic Targets**

| Model  | Regression | Run-up<br>[-20, -1] | Mark-up<br>[0, +30] | Difference |
|--------|------------|---------------------|---------------------|------------|
| Market | MM         | 12.58%              | 5.90%               | 6.69% ***  |
|        | OLS        | 9.50%               | -1.02%              | 10.53% *** |
| FF     | MM         | 13.48%              | 6.08%               | 7.40% ***  |
|        | OLS        | 10.50%              | -1.14%              | 11.64% *** |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01.*

Both the models show a significant difference in the pre and post-event CAARs. While the CAARs in the run-up period indicate anticipation of synergies by *some* market participants, those in the post-event days capture the synergy realisation expectations of the traders in general when the news formally enters the market. However, the returns in the mark-up period after the announcement are much lower than the returns in the run-up period. In fact, they are negative when estimated from the OLS method. Notably, the higher proportion of the total takeover premium goes to the informed participants trading before the event. This may be a market response to an increase in takeover probabilities inferred through insider trading (Meulbroek, 1992) or the toehold effect (Betton *et al.*, 2008). Clearly, apart from the synergistic gains, asymmetric information also plays a dominant role in determining the outcomes of takeovers.

Further, there are striking differences in the results from the OLS and the MM regression for the Market and FF models. While both the regressions indicate significantly positive abnormal returns around the announcement and overall, their magnitudes differ. Those from the OLS regressions are lower. Even the window for significantly positive CAARs [-20/-19, +30] is larger from the MM regression. Not only that, in the post-event days, while the CAARs from the MM regression continue to rise and are significantly

positive, those from the OLS estimates, while also statistically significantly positive, decline. This explains the divergence in the post-event slopes of the respective graphs.

When the returns from both the models are compared for the two regression methods, the t-statistics of the differences in the Day-0 AARs are not statistically significantly different from zero. The large run-up suggests that the announcement effect (the tested variable) is not fully unanticipated and is therefore diluted on that day. On the contrary, the t-statistics of the differences in the CAARs from the MM and the OLS regressions for 3 day CAAR [-1, +1] and the entire event window [-20, +30] *is statistically different from zero* at the conventional level of significance. Also, there is no significant difference between the returns from the OLS (All) and OLS (Same). *That confirms that the divergence in the outcomes is fundamental to the regression techniques and is not just sample specific.*

Evidently, the OLS and the MM returns differ not only in the magnitudes but also in the directions of the outcomes.

Further, while comparing the FF model with the Market model returns, the differences in the magnitude of the Day-0 AARs, CAARs and 3 day CAARs are not different from zero. However, 51 day CAAR from the FF model exceed Market model returns by 1% (rounded) on average at the 5% level. Finally, the FF model is limited by its unavailability for the entire sample period.

## 6.2.2 Market & Scholes and Williams (SW) Adjusted Betas

All three SW adjusted beta variants, along with the unadjusted Market model, are compared in this section. There is no variation in the samples.

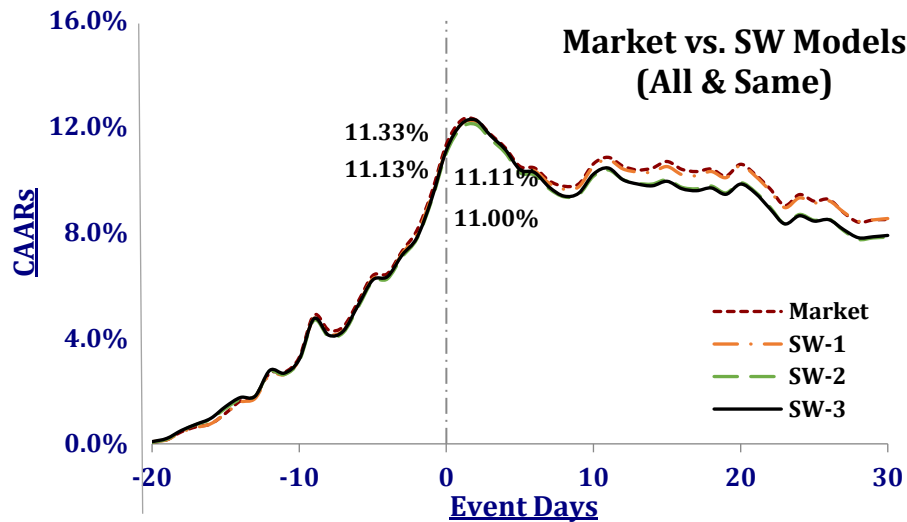


Figure 6.2.3 Returns from the Market and SW (1-3) Models; OLS (All & Same-Firms)

Figure 6.2.3 is based on Table-A 6.2, 6.8 to 6.10. It serves two purposes. Firstly, it shows the abnormal returns from all three SW adjusted beta variants. Secondly, it compares them with the unadjusted Market model for the same set of firms. Table 6.2.3 provides the statistical summary of all the CAARs graphed in Figure 6.2.3.

Table 6.2.3 Market and SW Variants Comparison; OLS (All & Same-Firms)

| Model  | Beta       | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**) around Day-0 | CAARs (**) around Day-0 | n   |
|--------|------------|-----------|-------------|------------|--------------|------------------------|-------------------------|-----|
| Market | Unadjusted | 1.82% *** | 4.15% ***   | 11.33% *** | 8.48% ***    | -3 to 0                | -12 to +30              | 170 |
|        | SW-1       | 1.77% *** | 4.15% ***   | 11.13% *** | 8.52% ***    | -3 to 0                | -12 to +30              | 170 |
|        | SW-2       | 1.80% *** | 4.19% ***   | 11.00% *** | 7.82% ***    | -3 to 0                | -12 to +30              | 170 |
|        | SW-3       | 1.85% *** | 4.28% ***   | 11.11% *** | 7.88% ***    | -3 to 0                | -12 to +30              | 170 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The SW adjusted betas also replicate the findings of the unadjusted Market model. Qualitatively, all relevant aspects of the analysis are statistically identical. The findings are in line with Dyckman *et al.* (1984) and Davidson and Josev (2005) which advocate no significant improvement in the model specifications or the power of tests using either of these modified betas. Thus, there is *no unique value addition to the analysis* as a result of implementing the SW adjusted beta variants of Market model.



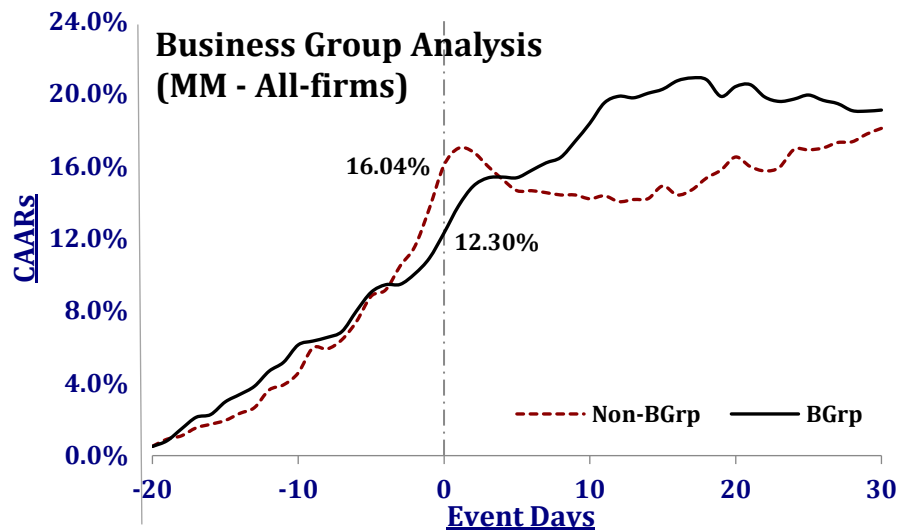
## 6.3 Business Group Acquirers and Domestic Targets

This section evaluates the abnormal returns obtained by the domestic targets when taken over by an acquirer affiliated with a large Indian Business Group (IBG).

For the convenience of comparing the outcomes, the CAAR graphs for the two subsets, Business Group and Non-Business Group, are presented alongside each type of regression technique.

### 6.3.1 MM Estimation Analysis

The MM regression based results are graphed here in *Figure 6.3.1* and tabulated in *Table-A 6.11* and *6.12* in appendix.



**Figure 6.3.1 Domestic Targets and Business Group Analysis (MM)**

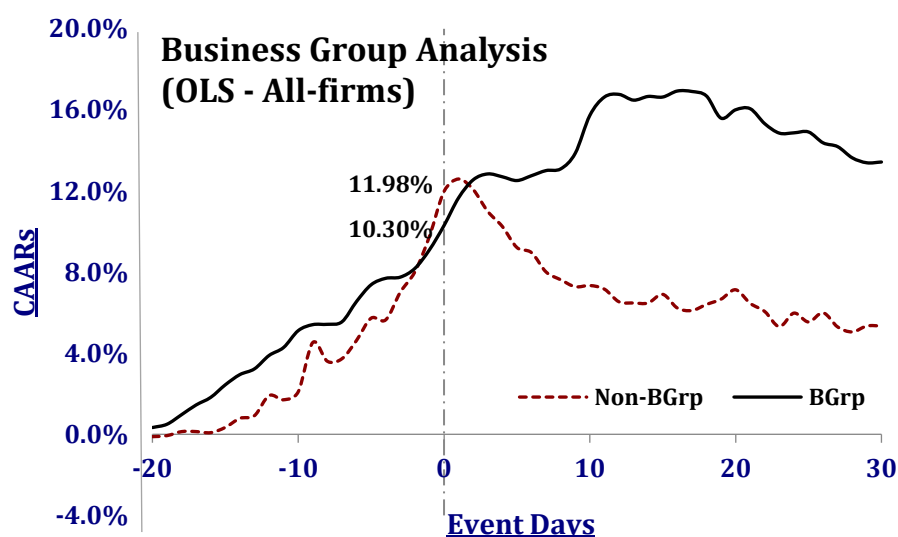
*\* BGrp implies acquirers belongs to large Indian Business Group*

For the non-business group, Day-0 AAR, the CAARs from Day -19 onwards and 3 day CAAR of 5.43% are all significantly positive. There is a positive reaction in the market on and around the announcement day. However, this is followed by an immediate negative reaction for a couple of weeks.

For the business group sub-set, the announcement day return AAR Day-0 is not significantly different from zero but the CAARs from Day -14 onwards along with the 3 day CAAR of 3.75% are all significantly positive. Unlike the non-business group, the CAARs here have a constant positive slope for the remainder of the post-event days. Thus, there is a clear evidence of positive returns to the shareholders around and after the announcement.

### 6.3.2 OLS Estimation Analysis

In the OLS analysis, of a total of 170 domestic targets, the acquirers of 66 deals are associated with a large business group; the remaining 104 acquirers are not. *Figure 6.3.2* presents the CAARs for the two sub-sets.



**Figure 6.3.2 Domestic Targets and Business Group Analysis (OLS All-Firms)**

\* BGrp implies these acquirers belong to a large Indian Business Group

The red dotted line represents the CAARs from the non-business group acquirers. The results are tabulated in *Table-A 6.13*. The AAR and the CAAR on Day-0 and the 3 day CAAR [-1, +1] of 4.58% are all significantly positive at the 5% level. For other days, CAARs are significantly positive for the days [-7, +21]. However, due to the decline in the post-event daily returns, some of which are significantly negative, the CAAR graph slopes downwards in the subsequent weeks. There is an adverse market reaction immediately after the announcement.

The CAARs derived from the Business Group acquirers are represented by the solid black line and are reported in *Table-A 6.14*. The Day-0 AAR is significantly positive at the 10% level. The 3 day CAAR [-1, +1] of 3.48% and the CAARs from Day -12 onwards are significantly greater than zero at the 5% level. The CAARs in post-event weeks are upwards sloping. *Table 6.3.1* (below) summarizes the statistical findings from the two regression methods discussed above<sup>34</sup>.

<sup>34</sup> The comparative results for the same set of firms for each category are graphed in *Figure A 6.3* and *Figure A 6.4* in the appendix and there is no statistical variation in the results. Hence, the sample reduction does not alter the properties of the results obtained from the OLS estimates.

**Table 6.3.1 Summary of Business Group Analysis; Market Model; OLS & MM**

| Market Model | Sub-Group         | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|--------------|-------------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| MM           | Non-BGrp          | 2.37% *** | 5.43% ***   | 16.04% *** | 18.08% ***   | -3 to 0                   | -19 to +30                 | 100 |
|              | BGrp <sup>†</sup> | 1.39%     | 3.75% **    | 12.30% **  | 19.09% ***   |                           | -14 to +20                 | 65  |
| OLS          | Non-BGrp          | 2.22% *** | 4.58% ***   | 11.98% *** | 5.34% *      | -3 to 0                   | -7 to +21                  | 104 |
|              | BGrp              | 1.20% *   | 3.48% ***   | 10.30% *** | 13.43% ***   |                           | -12 to +30                 | 66  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size. † BGrp - Indian Business Group*

Interestingly, both the sub-groups have significantly positive CAARs in the pre and post-event window with comparable magnitudes in the former period, but with growing divergence in the latter. The business group CAARs become larger and maintain positive slope in the weeks immediately after the event. Whereas those from the non-business group face a negative reaction. Such a pattern can be explained by numerous advantages of being affiliated with a business group, which are discussed ahead.

Following Sicherman and Pettway (1987), the differences in the two sub-groups are compared over a various stratum of the event period. The differences in stratum-specific CAARs (BGrp – Non-BGrp) over selected intervals are presented in *Table 6.3.2*.

**Table 6.3.2 Comparison BGrp –Non-BGrp Targets**

| CAAR Windows |           | MM        | OLS        |
|--------------|-----------|-----------|------------|
| Pre-event    | -20 to -1 | -2.76%    | -0.66%     |
|              | -15 to -1 | -3.29%    | -2.40%     |
|              | -10 to -1 | -4.00%    | -3.24%     |
| Post-event   | +1 to +10 | 7.75% *** | 10.07% *** |
|              | +1 to 15  | 9.09% *** | 11.42% *** |
|              | +1 to +20 | 7.63% **  | 10.56% *** |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01.*

While the differences between the two sub-groups during the pre-bid run-up is not significantly different, business groups yield significantly higher returns post-event. Schwert (1996) explains that the variation in average run-ups across various deal types is much less. Instead, the reliable variation of takeover premiums is determined in the variation of mark-ups as the deal specifics are learned by the market. It is plausible that some investors may deduce information about a target's potential takeover, without actually learning about the acquirers. As such, some of this uncertainty is resolved only at the announcement (Morellec and Zhdanov, 2005). Thus, the post-event share price behaviour reflects the market reaction to those unknown deal specifics. According to this analysis, when the news of an IBG acquirer formally enters the market on the event day, and it drives the market sentiments bullish.

The higher returns from IBG acquisitions are consistent with the findings of (Siegel and Choudhury, 2012). They compare and contrast the IBGs with the standalone (others) firms and also comment on the ownership effect thereupon. They suggest that the affiliated group firms differ systematically in their business strategies. A group firm can control vast knowledge-creating resources with little capital and can 'create complex recombinations of inputs' to generate added value in their products. As the institutional environment develops, they become larger, more diversified and invest more in their marketing and technology. They might have relatively lesser profitability, but they thrive on product differentiation strategies that thwart the competition. Thus, they respond better to market shocks. In general, IBGs are able to create more value than standalone firms. Further, when it comes to ownership, control and their impact on minority shareholders within the affiliated group firms, their restrictive yet robust analysis finds no evidence for tunnelling possibilities.

In an alternative explanation, of the 66 business group deals, 50 deals (76%) were settled through shares. While the compensation in the form of shares generally generates negative signals in the market, for the business groups, the phenomenon is the reverse. In finance literature, asymmetric information hypothesis explains negative share price reactions for stock offers for two reasons. Firstly, the preference for stock payment signals the management's incompetence in assessing the true value of the target assets (Hansen, 1987). Secondly, it may also suggest acquiring managements' belief about the possible overvaluation of their own shares, implying bleak long-term prospects (Myers and Majluf, 1984). However, in the case of IBGs, cash offers could also be seen as a defence mechanism against ownership dilution in a potentially valuable asset. Shares offer the opportunity to partake in long-term synergies as a result of the takeover, and to be associated with an IBG that has a long-standing reputation for creating value over time. This is particularly true of the higher levels of ownerships, which are typical of IBGs. Thus, share offers may engender positive returns for the target firms when the acquirer is affiliated with an IBG.

The t-statistics of the differences in the Day-0 AARs is not statistically significantly different from zero for both the types of regressions. The differences in CAARs for the entire 51 day event window are nearly statistically significantly different from zero at 10% from the OLS and not at all from the MM regression.

However, the post-event returns are higher in the deals involving large IBG acquirers. From the shareholders' perspective, these significantly positive returns from the

business group sub-set defy the tunnelling hypothesis, which proposes the possibility of expropriation from the minority shareholder.

### 6.3.3 Market vs. Fama-French Returns

Here, the Fama-French results for *all the available firms* are presented and compared with those from the Market model for *the same set of firms* under the two regression techniques. The comparative graphs are provided in the *Figure A 6.5 and 6.6* and the findings are summarized in *Table 6.3.3* below.

**Table 6.3.3 Summary of Business Group Analysis; Market vs. FF Model; OLS vs. MM.**

| Regression                 | Model  | AAR<br>Day-0 | 3-Days<br>CAAR | CAAR<br>Day-0 | 51-Days<br>CAAR | AARs<br>(**) around<br>Day-0 | CAARs<br>(**) around<br>Day-0 | n   |
|----------------------------|--------|--------------|----------------|---------------|-----------------|------------------------------|-------------------------------|-----|
| <b>Non-Business Groups</b> |        |              |                |               |                 |                              |                               |     |
| MM                         | Market | 2.22% ***    | 5.25% ***      | 16.22% ***    | 18.26% ***      | -3 to 0                      | -19 to +30                    | 99  |
|                            | FF     | 2.18% ***    | 5.18% ***      | 16.95% ***    | 19.87% ***      | -6 to 0                      | -19 to +30                    | 99  |
| OLS                        | Market | 2.05% ***    | 4.38% ***      | 12.05% ***    | 5.30% *         | -3 to 0                      | -7 to +21                     | 103 |
|                            | FF     | 2.00% ***    | 4.36% ***      | 13.64% ***    | 8.20% **        | -3 to 0                      | -12 to +30                    | 103 |
| <b>Business Groups</b>     |        |              |                |               |                 |                              |                               |     |
| MM                         | Market | 1.50%        | 3.31%          | 12.45% ***    | 18.87% ***      |                              | -14 to +30                    | 59  |
|                            | FF     | 1.56% *      | 3.61% *        | 12.86% ***    | 19.00% ***      |                              | -19 to +30                    | 59  |
| OLS                        | Market | 1.33%        | 3.07% **       | 10.56% ***    | 13.18% **       |                              | -6 to +30                     | 60  |
|                            | FF     | 1.38% *      | 3.41% **       | 9.93% ***     | 11.33% **       |                              | -6 to +30                     | 60  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The announcement effect from the Fama-French model is comparable to the Market model for each sub-set for the respective regression techniques. Plus, their level of significance is also mostly identical. Thus, qualitatively, both the financial models have similar outcomes. They both suggest positive abnormal returns around the announcement. However, the 51 day FF-CAARs exceed the Market CAARs for the non-business group sub-set by 1.5% on an average. But for the business group sub-set, there is no significant difference.

In summary, as the announcement effect difference from the two sub-groups is not different from zero in either of the financial models, there are comparably significantly positive returns for the targets from both the sub-sets, regardless of the choice of the financial model and regression technique. However, the IBG returns exceed the other and lead to stark differences in the post-event window when markets learn about the acquirer formally.

Thus, the target shareholders receive higher abnormal returns when taken over by a large IBG, and the findings do not support the tunnelling hypothesis.

## 6.4 Related Firms and Domestic Targets

This section evaluates the abnormal returns obtained by the domestic targets when taken over by a related acquirer. Related acquisitions refer to intra-group acquisitions where the two participating companies either already have an existing parent-subsidary relationship or are two distinct entities under the same ultimate parent company.

For the convenience of comparing the differences, the CAAR graphs for the two subsets—related and unrelated—are presented alongside one another for each type of regression technique.

### 6.4.1 MM Estimation Analysis

The MM regression based results are graphed here in *Figure 6.4.1* and tabulated in *Table-A 6.15* and *6.16* in the appendix.

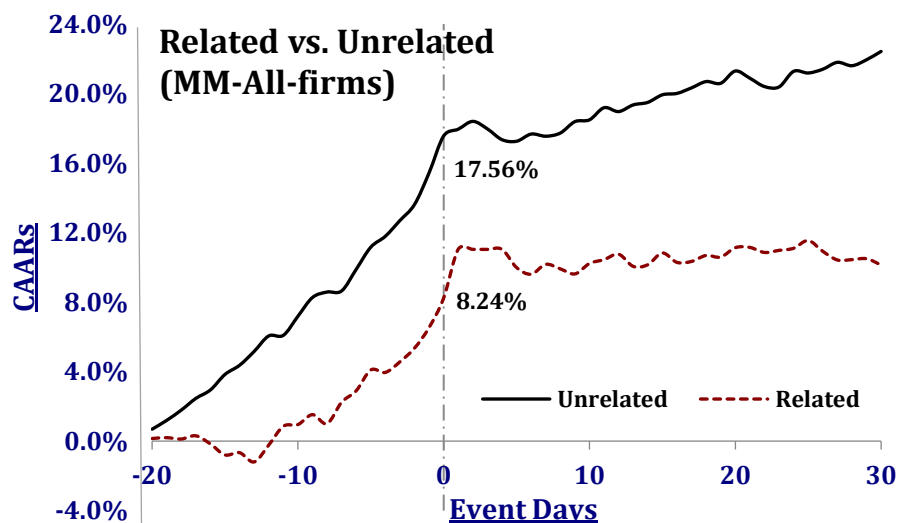


Figure 6.4.1 Domestic Targets and Relatedness Analysis (MM All-Firms)

The solid black line represents the CAARs derived from unrelated deals. The CAARs are statistically significantly positive from the Day -19. With the exception of few intermittent days, the AARs in the pre-event period are significantly positive for several days. The AAR Day-0 and the 3 day CAAR of 4.33% are also significantly greater than zero. Further, this positive impact on daily returns is just not on the announcement day, but also on the surrounding days [-3, 0]. The CAARs, while being significantly greater than zero, continue to drift upwards persistently.

The CAARs for the related sub-set, displayed by the red dotted line, are statistically

significantly greater than zero from Day -5 onwards. While they are upward sloping in the pre-event weeks, they stabilise around 10% mark on an average in the post-event weeks. The Day-0 CAAR and the 3 day CAAR of 5.69% both are significantly greater than zero at the conventional level of significance along with the AAR on Day +1.

#### 6.4.2 OLS Estimation Analysis

In the OLS analysis, out of total 170 domestic targets, 116 deals are between unrelated entities and 54 are related entities. *Figure 6.4.2* presents the CAARs for the two sub-sets.

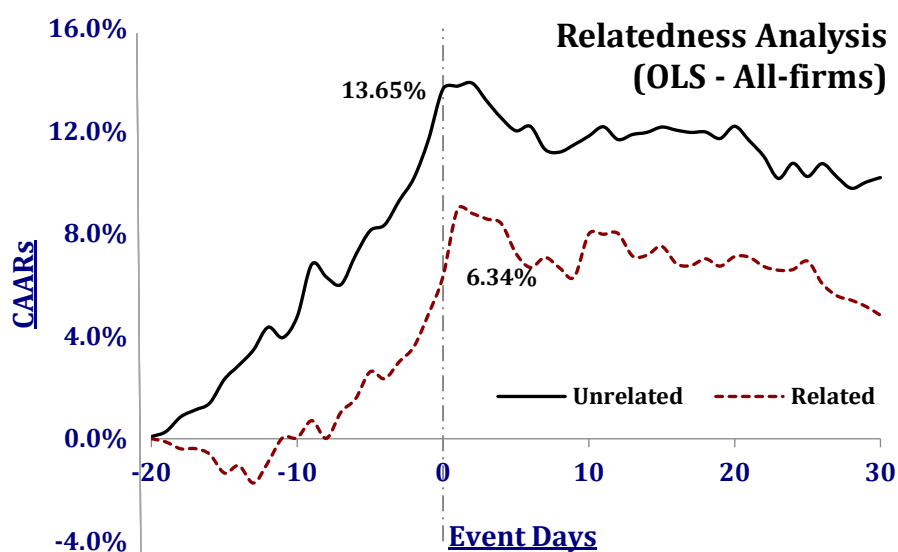


Figure 6.4.2 Domestic Targets and Relatedness Analysis (OLS All-Firms)

The CAARs derived from the unrelated deals are represented by the solid black line and are reported in the *Table-A 6.17*. The CAARs are statistically significantly positive from Day -15. The AAR Day-0 and the 3 day CAAR of 3.59% are also significantly greater than zero. Further, these positive daily returns are just not on the announcement day, but also on the surrounding days [-3, 0]. However, due to the gradual decline in the post-event daily returns from Day +3, the CAAR graph slopes downwards in the subsequent weeks.

The red dotted line represents the CAARs from the related sub-set. The results are tabulated in *Table-A 6.18*. The CAARs are statistically significantly greater than zero for the days [0, +5]. However, due to the gradual decline in the post-event daily returns, the CAAR graph slopes downwards in the subsequent weeks. The Day-0 CAAR, 3 day CAAR of 5.37% and AAR on Day +1 are all significantly positive at 5% level of significance.

Table 6.4.1 summarizes the statistical findings from the two regression methods discussed above. The comparative results for the same set of firms are graphed in Figure A 6.7 and 6.8 in the appendix, and there is no statistical difference in the results.

**Table 6.4.1 Summary of Market Returns to Targets; All-Firms (OLS & MM)**

| Market Model | Sub-set   | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|--------------|-----------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| MM           | Unrelated | 2.12% *** | 4.33% ***   | 17.56% *** | 22.43% ***   | -3 to 0                   | -19 to 30                  | 112 |
|              | Related   | 1.70%     | 5.69% ***   | 8.24% ***  | 10.14% ***   | +1                        | -3 to 30                   | 53  |
| OLS          | Unrelated | 1.98% *** | 3.59% ***   | 13.65% *** | 10.19% ***   | -3 to 0                   | -15 to 30                  | 116 |
|              | Related   | 1.48%     | 5.37% ***   | 6.34% **   | 4.82%        | +1                        | 0 to 5                     | 54  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

Though the overall magnitudes of abnormal returns from the MM estimator are higher than the OLS returns, both the regression techniques capture announcement effects with similar levels of significance for the two sub-sets. Thus, qualitatively, both the regression techniques have similar outcomes. They both suggest positive abnormal returns around the announcement. Further, the post-event OLS CAARs slope downwards for both the sub-sets. In comparison, MM CAARs for the unrelated ones continue to rise, and the related MM CAARs stabilise around the 10% mark.

To gain deeper insights, the stratum-specific differences in CAARs (unrelated – related) over selected intervals are presented in Table 6.4.2 (below).

**Table 6.4.2 Comparison Unrelated – Related Targets**

| CAAR Windows |           | MM       | OLS     |
|--------------|-----------|----------|---------|
| Pre-event    | -20 to -1 | 8.90% ** | 6.80% * |
|              | -15 to -1 | 5.79% *  | 4.80%   |
|              | -10 to -1 | 3.67%    | 2.90%   |
| Post-event   | +1 to +10 | -1.05%   | -3.48%  |
|              | +1 to 15  | -0.22%   | -2.65%  |
|              | +1 to +20 | 0.84%    | -2.22%  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01.*

The interesting finding here is that significant differences occur in the run-up period before widespread public knowledge of the event. It is not in line with Schwert (1996) which observes little variation in average run-ups of various types of deals and the reliable variation in takeover premium is reflected in mark-up period when the deal specifics are revealed. This implies that the effect of information asymmetry on the target run-up is generally comparable across deals with varying attributes. However, in this case, since the run-up varies significantly, it highlights the variation in the degree of asymmetric information in the deals.



The pre-event AARs in the unrelated sub-set are mostly significantly positive for the MM estimations, and rarely for the related sub-set. Even the CAARs of the unrelated sub-set are significantly positive for the entire run-up period, whereas it happens only in the last week for the related sub-set.

Similarly, from the OLS method, the AARs are rarely significantly positive in the run-up period for the related sub-set, and the CAARs are not significantly different from zero at all at 5% level.

To summarize, the related sub-set rarely has any noticeable activities in the run-up period which suggests informed trading is nearly non-existent in such takeovers. From the acquirers' perspective, the information asymmetry about the target valuation and the expected level of synergies is minimum. They can also effectively protect their intent of takeover by not engaging in the information gathering process externally. Thus, the run-up is low. And lower run-up implies lower mark-up (Schwert, 1996). Further, in the related sub-group, 60% of the firms have an average toehold interest of 45%, and toehold size and offer premiums are negatively correlated (Betton and Eckbo, 2000; Bris, 2002). Even, the threat of competitive bidding is also non-existent for the related deals. Thus, the mark-up should also be low. The lower the run-up and the mark-up the lower the takeover premium overall for the related targets.

For the unrelated acquirers, the level of information asymmetry about the target firms is high and hence the run-up. The acquirers face valuation risk and other uncertainties, and given them, they generally pay disproportionately higher premiums towards deal considerations.

### **6.4.3 Market vs. Fama-French Returns**

Here, the Fama-French results for all the available firms are presented and compared with those from the Market model for the same set of firms under the two regression techniques. The comparative graphs are provided in *Figure A 6.9 and 6.10* and the findings are summarized in *Table 6.4.3* (below).

**Table 6.4.3 Summary of Market vs. FF Model; OLS vs. MM - Relatedness Analysis**

| Regression       | Model        | AAR<br>Day-0 | 3-Days<br>CAAR | CAAR<br>Day-0 | 51-Days<br>CAAR | AARs<br>(**) around<br>Day-0 | CAARs<br>(**) around<br>Day-0 | n   |
|------------------|--------------|--------------|----------------|---------------|-----------------|------------------------------|-------------------------------|-----|
| <b>Unrelated</b> |              |              |                |               |                 |                              |                               |     |
| MM               | Market<br>FF | 2.03% ***    | 4.18% ***      | 17.40% ***    | 22.19% ***      | -2 to 0                      | -19 to +30                    | 108 |
|                  |              | 2.03% ***    | 4.17% ***      | 18.07% ***    | 23.02% ***      | -2 to 0                      | -19 to +30                    | 108 |
| OLS              | Market<br>FF | 1.90% ***    | 3.43% ***      | 13.51% ***    | 9.88% ***       | -3 to 0                      | -15 to +30                    | 112 |
|                  |              | 1.89% ***    | 3.47% ***      | 14.44% ***    | 11.12% ***      | -3 to 0                      | -15 to +30                    | 112 |
| <b>Related</b>   |              |              |                |               |                 |                              |                               |     |
| MM               | Market<br>FF | 1.77%        | 5.28% ***      | 9.22% ***     | 10.49% ***      | -1, +1                       | -3 to +30                     | 50  |
|                  |              | 1.77%        | 5.50% ***      | 9.71% ***     | 12.09% ***      | -1, +1                       | -6 to +30                     | 50  |
| OLS              | Market<br>FF | 1.55%        | 4.93% ***      | 7.09% **      | 4.51%           | -1, +1                       | 0 to +4                       | 51  |
|                  |              | 1.51%        | 5.20% ***      | 7.50% ***     | 5.48%           | -1, +1                       | -1 to +7                      | 51  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The magnitudes of the Day-0 AAR and CAAR and the 3 day CAAR from the two models are comparable to the respective regression techniques, and their level of significance is also mostly identical. Further, there is no difference in returns from the two financial models from both the regressions at the conventional level.

Further, the announcement effect in the two sub-groups is not significantly different from zero from either of the regression techniques for both the models. However, the overall MM CAARs for 51 day event window from the unrelated sub-set do exceed the related CAARs from both the models but only at the 10% level of significance, and that OLS CAARs do not differ at all. Possibly, the test of differences in CAARs is not significantly different from zero because of the large standard deviations in the two sub-sets, which statistically reduce the power of the test and may result in Type-II error. Thus, the impact of relatedness on the outcomes must be further evaluated in cross-sectional analysis.

In summary, there are significantly positive returns to the targets from both of the sub-sets, regardless of the choice of financial model or regression technique. The positive 3 day CAAR announcement effect is evident in both the groups. Though the overall returns from the unrelated sub-set appear to be much larger than the related ones, the difference is significant only at 10% and only with the MM regression.

Hence, the analysis thus far fails to reject the null hypothesis and concludes that there is no difference in returns to the target shareholders when taken over by the related acquirers. However, further verification of the impact is needed by cross-sectional analysis.

## 6.5 Summary - Returns to Targets

Table 6.5.1 summarizes the findings of the entire analysis of the abnormal returns to the domestic Indian target firms based on the Value Weighted Index (VWI).

**Table 6.5.1 Summary Results; Domestic Indian Targets; All-Firms - VWI**

| Model       | Regression Betas | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|-------------|------------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| Market      | MM               | 1.99% *** | 4.77% ***   | 14.57% *** | 18.48% ***   | -3 to 0                   | -19 to +30                 | 165 |
|             | OLS              | 1.82% *** | 4.15% ***   | 11.33% *** | 8.48% ***    | -3 to 0                   | -12 to +30                 | 170 |
|             | SW-1             | 1.77% *** | 4.15% ***   | 11.13% *** | 8.52% ***    | -3 to 0                   | -12 to +30                 | 170 |
|             | SW-2             | 1.80% *** | 4.19% ***   | 11.00% *** | 7.82% ***    | -3 to 0                   | -12 to +30                 | 170 |
|             | SW-3             | 1.85% *** | 4.28% ***   | 11.11% *** | 7.88% ***    | -3 to 0                   | -12 to +30                 | 170 |
| Fama-French | MM               | 1.95% *** | 4.59% ***   | 15.43% *** | 19.56% ***   | -6 to 0                   | -20 to +30                 | 158 |
|             | OLS              | 1.77% *** | 4.01% ***   | 12.27% *** | 9.36% ***    | -3 to 0                   | -14 to +30                 | 163 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The announcement effect and overall CAARs are statistically significantly positive. When rounded to the nearest integer, the announcement day return can be 2%, 3 day returns average 4% and. depending on the financial model and regression techniques, the overall positive CAARs lie somewhere between 8% and 20%.

Clearly, there is sufficient evidence that the domestic target shareholders make huge positive abnormal returns, both at the announcement and in the surrounding days.

Further, there is evidence that target firms benefit more when taken over by IBGs and thus there is no evidence of tunnelling. With respect to relatedness aspect of firms within the deal, there is no significant difference in target returns when taken over by a related acquirer which is subject to further verification in cross-sectional analysis.

## 6.6 Returns to Domestic Acquirers

The aggregate dataset has 233 firms identified as Indian acquirers. Of these, 195 firms are domestic acquirers. While the regression estimates based on the OLS method are available for each of these firms, 191 firms are determined by the MM regression.

Figure 6.6.1 compares the cumulative average abnormal returns (CAARs) obtained from the MM and the OLS regressions using Market model for *all the available firms* over the 51 day event window [-20, +30], relative to the announcement day for the target firms in India.

The solid black line presents the CAARs from the MM estimates, while those based on the OLS estimates are represented by a red dotted line.

Also, as the MM estimator has slightly lesser firms, the solid blue line labelled as ‘OLS (Same)’ represents the CAARs from the OLS estimations for *the same set of firms* (MM firms – 191 firms). It facilitates the comparison of the returns from the two regressions by controlling the sample selection bias.

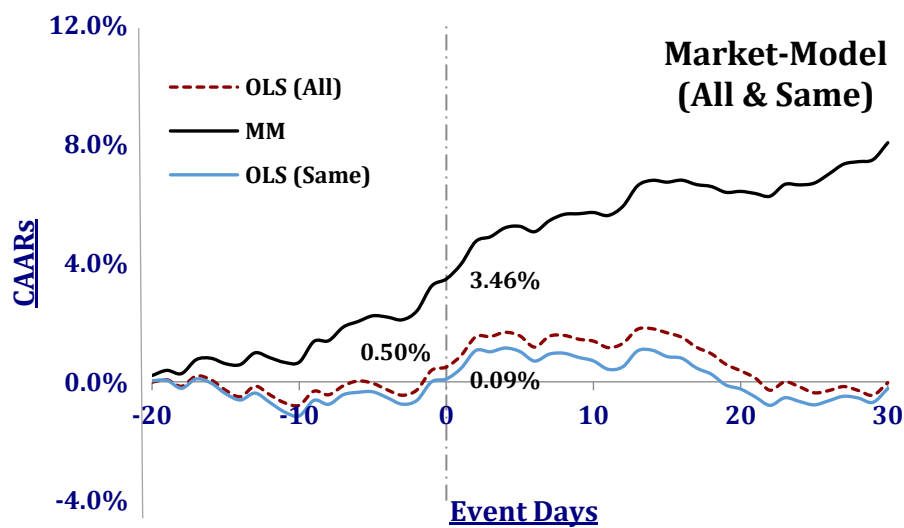


Figure 6.6.1 Market Returns to Domestic Targets – OLS vs. MM

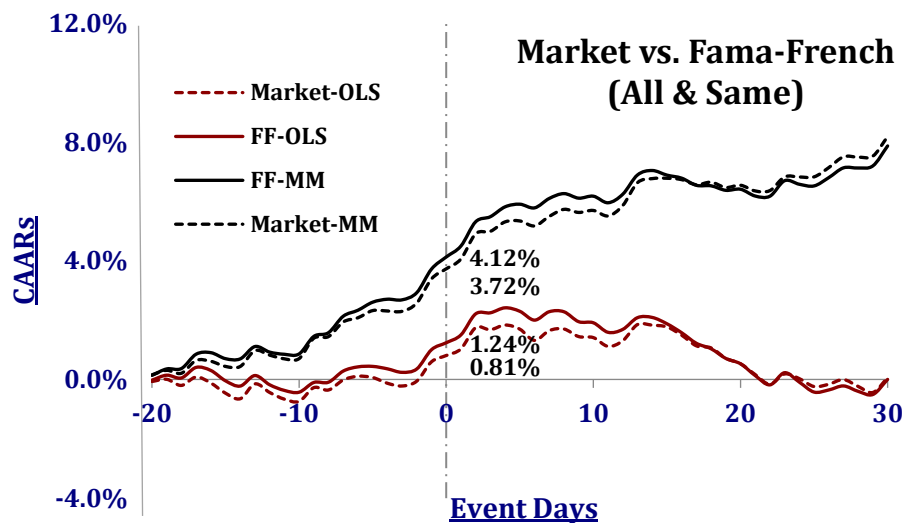
The CAARs from the MM estimations are reported in Table-A 6.19. The AARs are mostly positive around Day-0 but are not statistically significantly different from zero except for Day -1. The CAARs are significantly positive from Day -7 onwards for the rest of the event window. Also, with the t-statistics of 2.94, even the 3 day CAAR of 1.58% is significantly greater than zero. The upward drift in the CAARs is due to continuous positive share price reactions in several days after the event.

The CAARs from the OLS estimations are tabulated in *Table-A 6.20*. The CAARs are positive for the days [-1, +21] but *are never statistically different from zero for the entire event window*. So are the Day-0 AAR and CAAR. However, the 3 day CAAR [-1, +1] of 1.16% *is significantly positive* at the conventional level.

The blue line, OLS (*Same*) which is based on the MM firms sub-set, follows the same trend as the OLS (*All*) and confirms visually and statistically (tested below) that the sample variation does not change the overall properties of the results. These results are provided in *Table-A 6.21*.

### 6.6.1 Market vs. Fama-French (FF) Model

*Figure 6.6.2* presents the Fama-French results for all the available firms and compares these results with those from the Market model for the same set of firms under the two regression techniques. The OLS analysis has 177 common firms, and the MM CAARs are based on the same 173 firms.



**Figure 6.6.2 Returns to Domestic Acquirers; Market vs. FF; OLS vs MM (All & Same-Firms)**

The graphs in red are the CAARs from the OLS regression, while those in black are from the MM estimator. The dotted lines represent the CAARs from the Market model, and the solid lines denote those from the Fama-French model.

The divergence in black and red graphs reflects the differences in the regression techniques. Clearly, the MM estimator produces higher returns. Also, while the MM CAARs continue to rise in the later part, those from the OLS method decline. This is because robust

regressions down-weight the influence of outliers, making their residuals larger and more visible, while minimizing their impact on the regressions coefficients.

Comparing any solid line with the dotted line in the same colour shows the differences in the Market and the FF models for that regression technique. The solid line (FF model) has the same trajectory as the dotted lines (Market model) but it mostly lies above the dotted line. This indicates that the returns from the FF model are consistently marginally higher.

Table 6.6.1 (below) provides the statistical summary of all the CAAR graphs discussed above. The comparative results for the same set of firms based on M estimator are graphed in Figure A 6.11 and 6.12 in the appendix for the market and FF Model respectively.

**Table 6.6.1 Market Returns to Acquirers; All & Same-Firms (OLS vs. MM)**

| Model     | Regression | AAR Day-0 | 3-Days CAAR      | CAAR Day-0       | 51-Days CAAR     | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|-----------|------------|-----------|------------------|------------------|------------------|---------------------------|----------------------------|-----|
| Market    | MM         | 0.24%     | <b>1.58%</b> *** | <b>3.46%</b> *** | <b>8.05%</b> *** | -1                        | -7 to +30                  | 191 |
|           | OLS (All)  | 0.11%     | <b>1.16%</b> **  | 0.50%            | -0.03%           | -1                        |                            | 195 |
|           | OLS (Same) | 0.09%     | <b>1.08%</b> **  | 0.09%            | -0.23%           | -1                        |                            | 191 |
| FF Market | MM         | 0.41%     | <b>1.57%</b> *** | <b>4.12%</b> *** | <b>7.86%</b> *** | -1                        | -7 to +30                  | 173 |
|           |            | 0.34%     | <b>1.48%</b> *** | <b>3.72%</b> *** | <b>8.18%</b> *** | -1                        | -7 to +30                  | 173 |
| FF Market | OLS        | 0.23%     | <b>1.15%</b> **  | 1.24%            | 0.00%            | -1                        |                            | 177 |
|           |            | 0.21%     | <b>1.09%</b> **  | 0.81%            | 0.06%            | -1                        |                            | 177 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The evidence presented here rejects the null hypothesis. The significantly positive abnormal returns from M&As captured over the adjacent 3 days [-1, +1] provide sufficient evidence that the Indian acquirers gain positive abnormal returns at the announcement of domestic M&As. These CAARs are significantly positive from both the financial models and the regression techniques. This conforms to existing literature on emerging markets (Bhagat *et al.*, 2011).

Further, as consistent with the efficiency market hypothesis, rarely are there systematic significant average abnormal returns (AARs) to new investors *after* the public announcement of the event in the event window.

There is hardly any positive build-up in the run-up period from the OLS. Though the MM regression shows some significant CAARs in the pre-event period, unlike targets firms, there is no discernible pattern of significantly positive AARs to the acquirers. In theory, there is no significant impact of bidders' run-up on the takeover premium. It is possible that some investors may infer the probability of takeovers for the targets, but remain unaware of the

identity of the acquirers (Schwert, 1996) till the last. Thus, the informed trading may be non-existent and hence no strong run-up for the acquirers.

The analysis exhibits stark differences in the abnormal returns from the OLS and the MM regressions. While both the regressions indicate significantly positive abnormal returns in the days surrounding the event, the magnitudes differ. The returns based on the OLS method are relatively lower, and the difference is particularly large for the CAARs. The CAARs are also statistically significantly different from zero from the robust regression even on Day-0, and in the pre and post-event days. This is not the case with the OLS estimations. Not only that, in the post-event days, while the CAARs from the MM method continue to rise and are significantly positive, those from the OLS method declined. This explains the divergence in the post-event slopes of the red and the black graphs.

When the returns from both the models are compared for the MM and the OLS regressions, the t-statistics of the test of differences in the returns on the announcement day (AARs) is statistically not different from zero. However, the t-statistics of the differences in the CAARs from the two regression methods for the 3 days [-1, +1] and the entire event window of 51 days [-20, +30] are statistically significantly different from zero, even at the 1% level. Also, there is no significant difference between the returns from the OLS (All) and OLS (Same). This confirms that the divergence in the outcomes is fundamental to the regression techniques and is not sample specific.

Evidently, the OLS and the MM returns differ not only in the magnitudes but also in the directions of the outcomes.

Further, while comparing the FF model with the Market model return, the test of differences in the Day-0 AARs, 3 day CAARs and the total CAARs from each of the regression techniques is not significantly different from zero. Besides, they capture all the effects on the same levels of significance. Thus, the returns from the Market and the Fama-French models are qualitatively identical overall. They both suggest positive abnormal returns around the announcement. In addition, it is important to note that the Fama-French model has a limitation due to its unavailability for the entire sample period.

## 6.6.2 Market vs. Scholes and Williams

All the three SW variants, along with the unadjusted Market model, are compared in this section. The set of common firms is also the entire sample here.

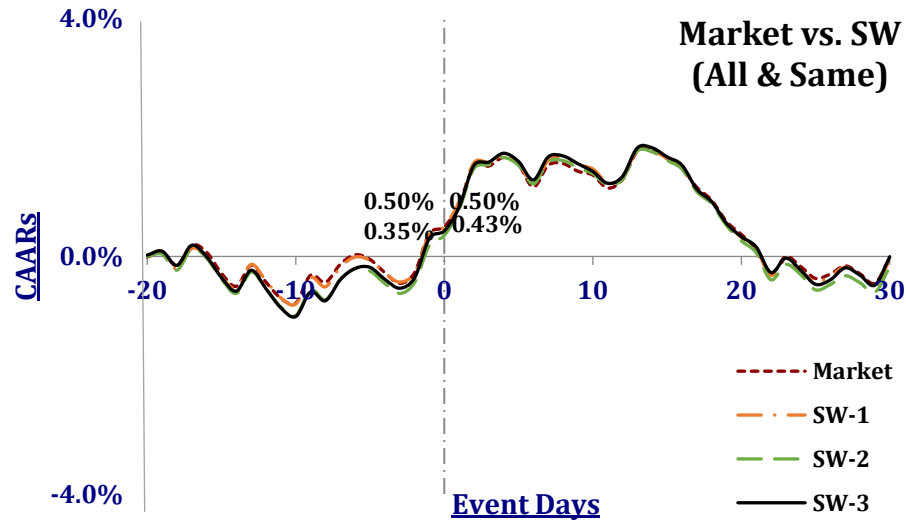


Figure 6.6.3 Returns from the Market and SW (1-3) Models; OLS (All & Same-Firms)

Figure 6.6.3 is based on Table-A 6.20, 6.26 to 6.28. It serves two purposes. Firstly, it shows the abnormal returns from all the three SW variants. Secondly, it also compares the abnormal returns with the unadjusted Market model for the same set of firms.

Table 6.2.2 provides a statistical summary of all CAARs graphed in Figure 6.6.3.

Table 6.6.2 Market and SW Variants Comparison; OLS (All & Same-Firms)

| Model  | Beta       | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|--------|------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| Market | Unadjusted | 0.11%     | 1.16% **    | 0.50%      | -0.03%       | -1                        |                            | 195 |
|        | SW-1       | 0.14%     | 1.20% **    | 0.50%      | -0.06%       | -1                        |                            | 195 |
|        | SW-2       | 0.16%     | 1.23% **    | 0.35%      | -0.17%       | -1                        |                            | 195 |
|        | SW-3       | 0.12%     | 1.19% **    | 0.43%      | 0.00%        | -1                        |                            | 195 |

*p-values: \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . n represents sample size.*

Once again, the SW adjusted betas replicate the findings of the unadjusted Market model. Qualitatively, all the relevant aspects of the analysis are statistically identical. The findings are in line with Dyckman *et al.* (1984) and Davidson and Josev (2005), which advocate no significant improvement in the model specifications or the power of tests using either of these modified betas. Thus, there is *no unique value addition to the analysis* over the unadjusted Market model analysis from the SW adjusted beta variants of Market model.



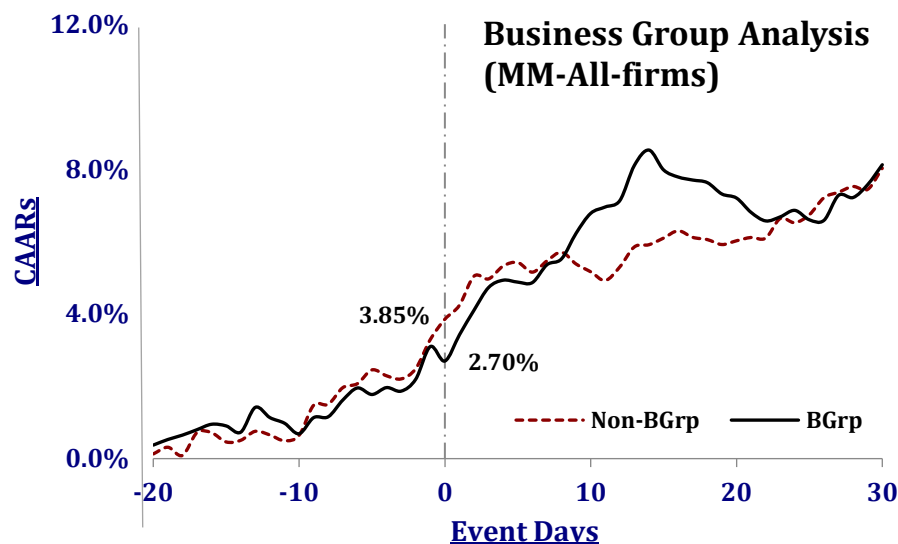
## 6.7 Business Group Acquirers

This section compares the abnormal returns obtained by the acquirers affiliated with the top 60 Indian Business Groups (IBG) and the rest.

For the convenience of comparing the differences, the CAAR graphs for the two sub-sets, Business Group and Non-Business Group, are presented alongside one another for each type of regression technique.

### 6.7.1 MM Estimation Analysis

The MM regression based results are graphed in *Figure 6.7.1* and tabulated in *Table-A 6.29 and 6.30* in the appendix.



**Figure 6.7.1 Domestic Acquirers and Business Group Analysis (MM)**

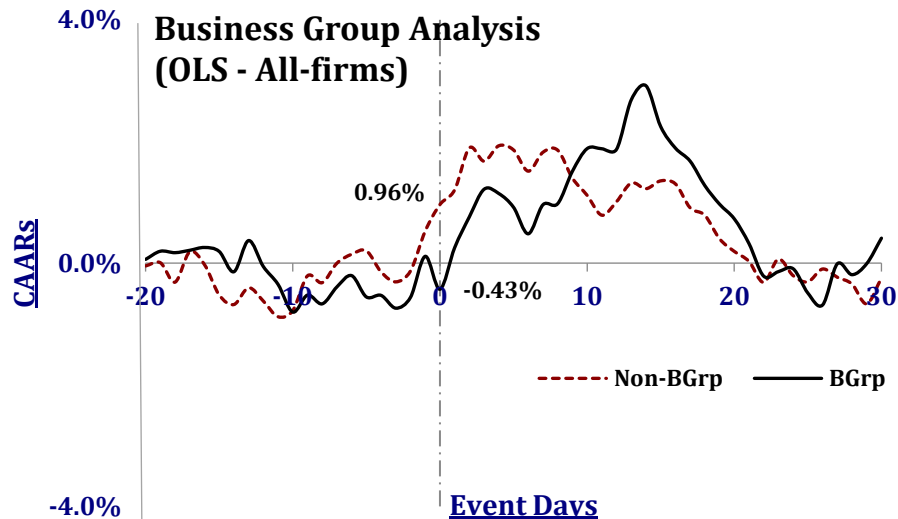
*\* BGrp implies Indian Business Group affiliated Acquirer.*

The solid black line represents the CAARs for the IBG acquirers, while the CAARs derived from the non-business group acquirers are represented by a red dotted line.

For both the sub-sets, the post-event CAARs and the 3 day CAARs are significantly positive. The CAARs drift upwards with significantly positive returns from Day -1 to reach an average of 8%.

## 6.7.2 OLS Estimation Analysis

In OLS analysis, of the total 195 domestic acquirers, 65 deals have IBG affiliated acquirers, while the remaining 130 do not. *Figure 6.7.2* presents the CAARs for the two subsets.



**Figure 6.7.2 Domestic Acquirers and Business Group Analysis (OLS All-Firms)**

The red dotted line represents the CAARs for the non-business group acquirers. The results are tabulated in Table-A 6.31. The CAARs are positive for the day [-1, +21] but otherwise are never significantly different from zero. This is also true of the Day-0 AAR, CAAR and the 3 day CAAR [-1, +1].

The CAARs derived from the Business Group acquirers are represented by the solid black line and are reported in Table-A 6.32. Similar to the case of the target firms' analysis, the business group impact is observed more in the post-event period. However, the CAARs, AARs and the 3 day CAARs [-1, +1] of 0.82% are not significantly different from zero.

*Table 6.7.1* summarizes the statistical findings from the two regression methods discussed above. The comparative results for the *same* set of firms are graphed in *Figure A 6.13 and 6.14* in the appendix, which confirms that there are no statistical differences in the results due to sample size variation.

**Table 6.7.1 Summary of Market Returns to Acquirers; OLS & MM; Business Group Analysis**

| Market Model | Sub-set           | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|--------------|-------------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| MM           | Non-BGrp          | 0.56%     | 1.75% **    | 3.85% **   | 8.02% ***    |                           | -1 to +30                  | 127 |
|              | BGrp <sup>†</sup> | -0.40%    | 1.23% **    | 2.70% *    | 8.12% ***    |                           | -1 to +30                  | 64  |
| OLS          | Non-BGrp          | 0.44%     | 1.33% *     | 0.96%      | -0.24%       |                           |                            | 130 |
|              | BGrp              | -0.54%    | 0.82%       | -0.43%     | 0.41%        |                           |                            | 65  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size. † BGrp - Indian Business Group*

Interestingly, each of the regression methods produces a dramatically different picture about the returns to the acquirers. While they both suggest that there are no abnormal returns on the announcement day (AAR Day-0), the MM estimator captures significantly positive returns in CAARs. In comparison, those from the OLS are not different from zero for the entire period. The OLS CAARs gradually decline after the event, whereas those from the MM estimator continue to rise and are significantly positive.

The stratum specific differences in the CAARs (BGrp – Non-BGrp) over selected intervals are presented in *Table 6.7.2 (below)*.

**Table 6.7.2 Comparison BGrp –Non-BGrp Acquirer**

| CAAR Windows |           | MM      | OLS    |
|--------------|-----------|---------|--------|
| Pre-event    | -20 to -1 | -0.20%  | -0.42% |
|              | -15 to -1 | -0.43%  | -0.70% |
|              | -10 to -1 | -0.68%  | -0.95% |
| Post-event   | +1 to +10 | 2.77% * | 2.16%  |
|              | +1 to 15  | 3.04%   | 2.28%  |
|              | +1 to +20 | 2.34%   | 2.09%  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01.*

The differences between the CAARs over various stratum are not reliably different from zero at the conventional level. Also, the test of differences in returns of the Day-0 AARs, as well as of the 51 day CAARs *are not different from zero* in either of the regression techniques.

Evidently, though takeovers have a positive impact on the acquirers, the involvement of a large IBG affiliate makes no difference to the overall outcome. Thus, the evidence presented here supports the null hypothesis for the acquirers—there is no difference in returns in takeovers by IBG affiliates.

### 6.7.3 Market vs. Fama-French (FF) Returns

Here, the Fama-French results are presented and compared with those from the Market model for the *same* set of firms. The comparative graphs are provided in *Figure A 6.15 and 6.16* and the findings are summarized in *Table 6.7.3*.

**Table 6.7.3 Summary of Market vs. FF Model; OLS vs. MM; Business Group Analysis**

| Regression                | Model  | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|---------------------------|--------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| <b>Non-Business Group</b> |        |           |             |            |              |                           |                            |     |
| MM                        | Market | 0.50%     | 1.78% *     | 3.67% **   | 8.03% ***    |                           | 0 to +30                   | 116 |
|                           | FF     | 0.57%     | 1.71% *     | 4.26% **   | 8.37% ***    |                           | -5 to +30                  | 116 |
| OLS                       | Market | 0.38%     | 1.37% *     | 0.79%      | -0.31%       |                           |                            | 119 |
|                           | FF     | 0.40%     | 1.27%       | 1.31%      | 0.05%        |                           |                            | 119 |
| <b>Business Groups</b>    |        |           |             |            |              |                           |                            |     |
| MM                        | Market | 0.00%     | 0.88%       | 3.84% **   | 8.47% ***    |                           | -1 to +30                  | 57  |
|                           | FF     | 0.07%     | 1.28% *     | 3.86% **   | 6.80% **     | -1                        | -1 to +30                  | 57  |
| OLS                       | Market | -0.14%    | 0.50%       | 0.85%      | 0.82%        |                           |                            | 58  |
|                           | FF     | -0.10%    | 0.90%       | 1.08%      | -0.12%       | -1                        |                            | 58  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

Comparing the two sub-sets, there is no difference in returns from the Fama-French model. The announcement impact is not significantly positive and the cumulative returns from both the sub-sets can be as high as 8% in the entire event-period.

Comparing the two financial models, the Fama-French returns for various levels of analysis are not significantly different from the Market model returns for either of the sub-groups or the respective regression techniques.

Thus, there is no difference in returns from the two financial models in either of the regression methods at the conventional level. In fact, overall returns from the Market model and the Fama-French model are qualitatively comparable.

Largely, as an acquirer, it makes no difference whether it is associated with a large IBG or not, and hence the null hypothesis is supported here.

## 6.8 Relatedness and Domestic Acquirers

This section evaluates the abnormal returns obtained by the domestic acquirers when they acquire a related target. Related acquisitions refer to intra-group acquisitions where the two participating companies either already have an existing parent-subsidiary relationship or are two distinct entities controlled by the same ultimate parent company.

For the convenience of comparing the differences, the CAAR graphs for the two subsets-related and unrelated- are presented alongside one another for each type of regression technique.

### 6.8.1 MM Estimation Analysis

The MM regression based results are graphed in *Figure 6.8.1* and tabulated in *Table-A 6.33 and 6.34* in the appendix.

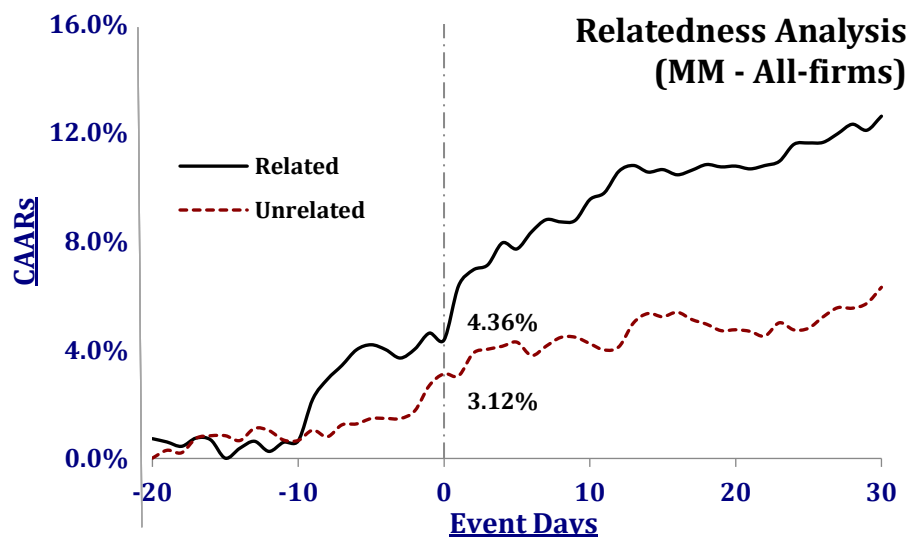


Figure 6.8.1 Domestic Acquirers and Relatedness Analysis (MM – All-Firms)

While the CAARs for the related sub-set become significantly positive from Day -7 onwards, there are no AARs that are significantly different from zero in the pre-event window. So are the Day-0 AAR and the CAAR, but the 3 day CAAR [-1, +1] of 2.33% is reliably positive. The CAARs continue to drift upwards to yield a 12.6% return.

For the unrelated deals in the red dotted line, the CAARs are significantly positive from Day -1. While the announcement day AAR is positive, it lacks statistical significance. However, the CAAR on Day-0 and the 3 day CAAR are both significantly positive. The CAARs continue to rise, with the cumulative returns as high as 6%.

## 6.8.2 OLS Estimation Analysis

In the OLS analysis, of the total 195 domestic acquirers, 141 deals were between unrelated and 54 were between related entities. *Figure 6.8.2* presents the CAARs for the two.

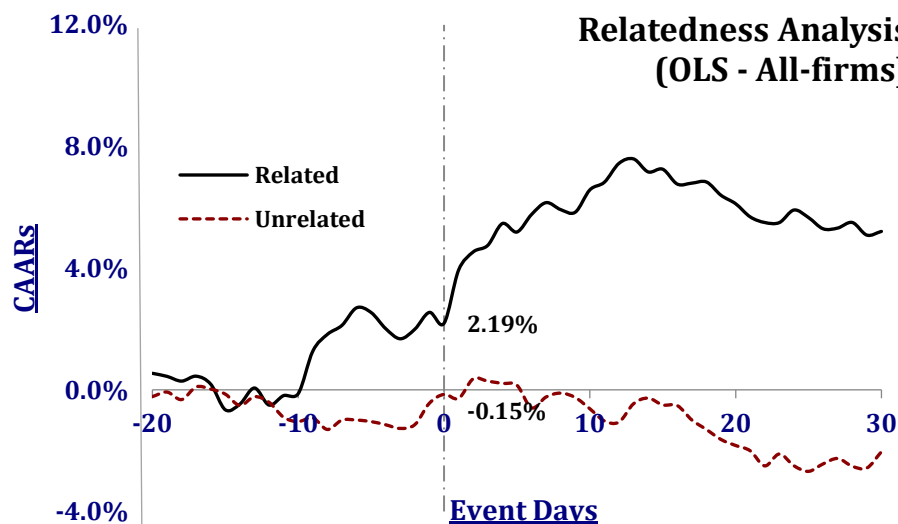


Figure 6.8.2 Domestic Acquirers and Relatedness Analysis (OLS – All-Firms)

The CAARs derived from the related deals are represented by the solid black line and are reported in *Table-A 6.35*. While the returns are mostly positive, neither of the AARs, CAARs or the 3 day CAAR is statistically significantly different from zero.

The red dotted line represents the CAARs from the unrelated sub-set. The results are tabulated in *Table-A 6.36*. The CAARs are positive only in the first week post-event but are not significantly different from zero. So, are the Day-0 AAR and the 3 day CAAR.

*Table 6.8.1* summarizes the statistical findings from the two regressions methods discussed above. The comparative results for *the same set of firms* are graphed in *Figure A 6.17 and 6.18* in the appendix and the results from the OLS estimations are still not different from zero on conventional level.

Table 6.8.1 Summary of Market Returns to Acquirers; OLS vs. MM; Relatedness Analysis

| Market Model | Sub-set   | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|--------------|-----------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| MM           | Unrelated | 0.43%     | 1.28% **    | 3.12% ***  | 6.31% ***    | -1                        | -1 to +30                  | 138 |
|              | Related   | -0.25%    | 2.33% **    | 4.36% *    | 12.61% ***   | +1                        | -7 to +30                  | 53  |
| OLS          | Unrelated | 0.29%     | 0.86% *     | -0.15%     | -2.03%       | -1                        |                            | 141 |
|              | Related   | -0.36%    | 1.94%       | 2.19%      | 5.21%        |                           |                            | 54  |

*p-values:* \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . *n* represents sample size.

Interestingly, each of the regression methods produce a dramatically different picture about the returns to the acquirers. While they both suggest that there are no abnormal returns on the announcement day, the MM estimator captures significant cumulative returns. In comparison, the returns from the OLS are negligible for the entire period, at least at the 5% level. The OLS CAARs have a mixed pattern of rising and falling, whereas those from the MM estimator rise continuously and are significantly positive.

The stratum-specific differences in CAARs (related – unrelated) over selected intervals are presented in *Table 6.8.2*.

**Table 6.8.2 Comparison Related – Unrelated Acquirers**

| CAAR Windows |                  | MM      | OLS             |
|--------------|------------------|---------|-----------------|
| Pre-event    | -20 to -1        | 1.93%   | 2.99%           |
|              | -15 to -1        | 2.08%   | 2.83%           |
|              | -10 to -1        | 2.01%   | 2.27%           |
| Post-event   | <b>+1 to +10</b> | 4.06% * | <b>4.86% **</b> |
|              | <b>+1 to 15</b>  | 4.17%   | <b>5.41% **</b> |
|              | +1 to +20        | 4.78% * | 5.61% *         |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01.*

The stratum-specific analysis suggests that the difference between the related and unrelated CAARs is always positive and is occasionally significantly more than zero in the post-event period. The overall difference in 51 day CAARs [-20, +30] of 6.30% is also nearly significant at the 10% level from the MM estimations. While, this is not the case with OLS, yet OLS estimations observe significantly higher returns for the related acquirers in the post-event period.

To summarize, the evidence about the difference in returns from the two sub-sets is mixed. Though it appears that the related acquirers are rewarded more by the market particularly in the post-event period, the MM based estimates are reliable only at 10% level of significance. Understandably, in deals with their affiliates, acquirers have an absolute advantage with respect to information asymmetry. As the target is well-known a priori, the risk of incorrect valuation and other associated uncertainties do not exist for the acquirers. As such, they benefit more in generating post-event synergies. Further, as they all belong to the same business group, such M&As may be perceived as truly strategic—they pursue pure synergistic gains without other irrationalities such as agency conflicts and the hubris effect.

However, as the results are mixed, the cross-sectional analysis will provide further verification of the impact.

### 6.8.3 Market vs. Fama-French Returns

Here, the Fama-French results for all the available firms are presented and compared with those from the Market model for the same set of firms under the two regression techniques. The comparative graphs are provided in *Figure A 6.19 and 6.20* and the findings are summarized in *Table 6.8.3* (below).

**Table 6.8.3 Summary of Market vs. FF Model; OLS vs. MM - Relatedness Analysis**

| Regression       | Model  | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|------------------|--------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| <b>Unrelated</b> |        |           |             |            |              |                           |                            |     |
| MM               | Market | 0.40%     | 1.24% **    | 3.51% ***  | 6.93% ***    | -1                        | -2 to +30                  | 129 |
|                  | FF     | 0.40%     | 1.24% **    | 3.67% ***  | 6.18% ***    | -1                        | -4 to +30                  | 129 |
| OLS              | Market | 0.25%     | 0.82%       | 0.22%      | -1.52%       | -1                        |                            | 132 |
|                  | FF     | 0.21%     | 0.78%       | 0.41%      | -1.92%       | -1                        |                            | 132 |
| <b>Related</b>   |        |           |             |            |              |                           |                            |     |
| MM               | Market | 0.17%     | 2.19%       | 4.36%      | 11.83% **    |                           | +1 to +30                  | 44  |
|                  | FF     | 0.42%     | 2.55% **    | 5.43% *    | 12.80% ***   | +1                        | -1 to +30                  | 44  |
| OLS              | Market | 0.10%     | 1.87%       | 2.51%      | 4.69%        |                           |                            | 45  |
|                  | FF     | 0.31%     | 2.23%       | 3.67%      | 5.64%        |                           |                            | 45  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

Comparing the two sub-sets based on the FF model, the overall related-CAARs exceed the unrelated-CAARs at 10% (nearly), as compared to the OLS (MM) method. There is no significant difference in the announcement effect.

When compared with the Market model, returns obtained from the Fama-French model are statistically identical, at least on the conventional level of significance. The magnitudes of the Day-0 AARs and the CAARs and the 3 day CAARs are comparable to the respective regression techniques. So is the window size of significantly positive returns around the event day for the AARs and CAARs. Even the overall CAARs do not differ significantly. However, the difference in outcomes due to the regression methods is clear. Qualitatively, there is *no difference* between the returns from the Market model and the FF model.

In summary, while the overall CAARs from the two sub-sets do not differ at a conventional level, there is an indication that the post-event CAARs from the related sub-set may exceed the others. Hence, there is some support for the hypothesis that there is a difference in returns from the two takeovers. However, that will be verified further through cross-sectional analysis.



## 6.9 Summary - Returns to Acquirers

Table 6.9.1 summarizes the findings of the entire analysis of abnormal returns to the Indian acquirer firms.

**Table 6.9.1 Summary Results; Domestic Indian Acquirers; All-Firms - VWI**

| Model       | Betas | AAR Day-0 | 3-Days CAAR      | CAAR Day-0       | 51-Days CAAR     | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|-------------|-------|-----------|------------------|------------------|------------------|---------------------------|----------------------------|-----|
| Market      | MM    | 0.24%     | <b>1.58%</b> *** | <b>3.46%</b> *** | <b>8.05%</b> *** | -1                        | -7 to +30                  | 191 |
|             | OLS   | 0.11%     | <b>1.16%</b> **  | 0.50%            | -0.03%           | -1                        |                            | 195 |
|             | SW-1  | 0.14%     | <b>1.20%</b> **  | 0.50%            | -0.06%           | -1                        |                            | 195 |
|             | SW-2  | 0.16%     | <b>1.23%</b> **  | 0.35%            | -0.17%           | -1                        |                            | 195 |
|             | SW-3  | 0.12%     | <b>1.19%</b> **  | 0.43%            | 0.00%            | -1                        |                            | 195 |
| Fama-French | MM    | 0.41%     | <b>1.57%</b> *** | <b>4.12%</b> *** | <b>7.86%</b> *** | -1                        | -7 to +30                  | 173 |
|             | OLS   | 0.23%     | <b>1.15%</b> **  | 1.24%            | 0.00%            | -1                        |                            | 177 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

When compared with the target firms, abnormal returns to the acquirers are not as high. This could be because of the size effect—acquirers are generally larger companies and the returns are calculated in percentages. The significantly positive announcement effect is observed on the Day -1 and in 3 day CAARs.

Depending on the financial model and the regression technique, the 3 day return lies between 1% and 1.50%, and overall returns in the event period can be as high as 8%.

Clearly, there is sufficient evidence that the shareholders of Indian acquirer firms receive positive abnormal returns. These findings are in line with the existing literature on the emerging markets (Bhagat *et al.*, 2011).

Further, there is no evidence of higher benefits when the acquirer is affiliated to any IBGs. There is also no clear evidence of significant difference in acquirers' returns in the takeover of the related targets.

## 6.10 Cross-Sectional Analysis

This section takes the analysis further and investigates the cross-sectional determinants of the Cumulative Average Abnormal Returns (CAARs) obtained by the participating Indian firms in the domestic dataset. This analysis regresses various firm and deal specific characteristics with the CAAR windows ranging from the days [-1, +1] to [-20, +20], with respect to the announcement day. While the smaller event windows capture the returns just in the days adjacent to the event day, the larger event windows ensure that the pre and post-event market reactions are also fully captured. The larger windows are particularly important in this study as quite often the significant CAARs in the event study analysis, occur long before and after the event.

Both the target and the acquirer firms' CAARs are regressed on a series of independent variables comprising Cash, Pct50, PctToe, BGroup, Related and Conglomerate<sup>35</sup>. The base equation takes the following form:

$$\begin{aligned} \text{CAAR}_{t_1,t_2} = & \alpha_0 + \beta_1 \text{Cash} + \beta_2 \text{Pct50} + \beta_3 \text{PctToe} + \beta_4 \text{BGroup} + \beta_5 \text{Related} \\ & + \beta_6 \text{Conglomerate} + \varepsilon_i \end{aligned} \quad (6-1)$$

where Cash variable is expected to be positive for both the sides; Pct50 should be positive for the targets and unclear for the acquirers; PctToe and Related are expected to be negative for the targets and positive for the acquirers; BGroup is ambiguous, and the Conglomerate should be negative for both.

Further, the Market model CAARs from both the estimation techniques – the OLS and the MM from the event study analysis are examined here using the OLS regression with White-Heteroskedastic robust standard errors.

This thesis confines the cross-sectional analysis to the OLS technique. Maronna and Yohai (2000) argue that the presence of multiple independent explanatory dummy variables

---

<sup>35</sup> Recall from the methodology chapter, Cash is a dummy variable wherein the value of one is assigned for a cash offer and zero for shares or a combination of cash and share; Pct50 is a dummy variable that reflects acquisition of majority stake - one is assigned when either the acquired stake is 50% or more or when the existing stake is increased to 50% or more; PctToe is a continuous variable that represents the percentage shareholding already held by the acquirer prior to the announcement of the deal; BGroup is a dummy variable where one is assigned to the deal when the acquirer belongs to the top 60 Indian Business groups; Related deals are assigned one when the participating firms belong to the same parent company or already share parent-subsidiary relation; and Conglomerate is a dummy variable which is assigned one when the participating firms belong to different industry on the basis of 2 digit SIC codes.

can easily yield to collinear sub-samples created while executing various algorithms inherent to robust regressions procedures.

### 6.10.1 Domestic Target Firms

Table 6.10.1 provides a Pearson Correlation Coefficient Matrix of the independent variables used in this analysis for the target firms. While some of the variables are significantly correlated, none of them is of a higher enough order so as to make any impact on the analysis. Further, these variables have a mean Variance Inflation Factor (VIF) of 1.10 with none exceeding 1.19 individually. Collectively, they rule out the possibility of the existence of any multicollinearity issues in the analysis.

**Table 6.10.1 Correlation Coefficient Matrix; Independent Variables - Targets**

| Variables           | Cash                | Pct50                        | PctToe                       | BGroup                       | Related             |
|---------------------|---------------------|------------------------------|------------------------------|------------------------------|---------------------|
| <b>Pct50</b>        | 0.1485<br>(0.0533)  |                              |                              |                              |                     |
| <b>PctToe</b>       | 0.0650<br>(0.4068)  | 0.0152<br>(0.8462)           |                              |                              |                     |
| <b>BGroup</b>       | 0.0973<br>(0.2069)  | <b>0.1557**</b><br>(0.0427)  | 0.0753<br>(0.3367)           |                              |                     |
| <b>Related</b>      | -0.0154<br>(0.8419) | -0.0806<br>(0.2961)          | <b>0.3260***</b><br>(0.0000) | <b>0.2083***</b><br>(0.0064) |                     |
| <b>Conglomerate</b> | -0.1442<br>(0.0606) | <b>-0.1604**</b><br>(0.0366) | -0.1133<br>(0.1474)          | -0.0628<br>(0.4161)          | -0.0910<br>(0.2378) |

*p*-values in parentheses; \*\*  $p < .05$ , \*\*\*  $p < .01$

Table 6.10.2 presents the multivariate regression results for the various CAAR windows for the domestic target firms. The CAARs referred to here come from the OLS estimation of the abnormal returns in the event study analysis. The univariate results for each of these regressions are presented separately in the appendix in Table-A 6.53 to 6.57. The discussion below refers to both the multivariate and the univariate results.

The event study analysis reveals that the CAARs that are reliably different from zero are scattered around Day-0 for several days. As the announcement effect is diluted in the run-up and mark-up, regression based on larger CAAR windows has significant F-statistics and thus provides a more comprehensive picture of the analysis. The statistical significance for the model and the constituting variables fluctuate as the window size increases.

**Table 6.10.2 Regression Analysis of the OLS CAARs – Domestic Target Firms**

| CAAR<br>Windows: | (1)<br>[-20,+20]                | (2)<br>[-15,+15]               | (3)<br>[-10,+10]                | (4)<br>[-5,+5]                | (5)<br>[-1,+1]        |
|------------------|---------------------------------|--------------------------------|---------------------------------|-------------------------------|-----------------------|
| Cash             | 0.1017<br>(1.3965)              | 0.0816<br>(1.3127)             | 0.0866<br>(1.6544)              | 0.0463<br>(1.4941)            | 0.0269<br>(1.2595)    |
| <b>Pct50</b>     | <b>0.1487 **</b><br>(2.4215)    | <b>0.1327 **</b><br>(2.2854)   | <b>0.0919 **</b><br>(2.0845)    | <b>0.1068 ***</b><br>(3.5202) | 0.0320 *<br>(1.7414)  |
| <b>PctToe</b>    | <b>-0.3144 ***</b><br>(-2.7048) | <b>-0.2549 **</b><br>(-2.5275) | <b>-0.2436 ***</b><br>(-3.2737) | -0.0225<br>(-0.4160)          | -0.0010<br>(-0.0279)  |
| BGroup           | 0.0834<br>(1.6052)              | 0.0667<br>(1.4061)             | 0.0452<br>(1.2038)              | -0.0012<br>(-0.0440)          | -0.0198<br>(-1.1356)  |
| Related          | -0.0317<br>(-0.5893)            | -0.0060<br>(-0.1239)           | 0.0319<br>(0.8196)              | 0.0122<br>(0.4662)            | 0.0207<br>(1.1621)    |
| Conglomerate     | -0.0726<br>(-1.2921)            | -0.0523<br>(-1.0160)           | -0.0327<br>(-0.7839)            | -0.0255<br>(-0.9352)          | -0.0182<br>(-1.1494)  |
| Intercept        | 0.1161 **<br>(2.0657)           | 0.0971 *<br>(1.8597)           | 0.0664<br>(1.3781)              | 0.0305<br>(1.1088)            | 0.0386 **<br>(2.5972) |
| Observations     | 165                             | 165                            | 165                             | 165                           | 165                   |
| F-Statistics     | 3.9802                          | 3.1778                         | 3.4476                          | 2.8002                        | 1.3281                |
| p-value          | <b>0.0010 ***</b>               | <b>0.0057 ***</b>              | <b>0.0032 ***</b>               | <b>0.0129 **</b>              | 0.2477                |
| Adj. R-Squared   | 0.0878                          | 0.0649                         | 0.0594                          | 0.0615                        | 0.0176                |

*t* statistics in parentheses; \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Overall, the acquisition of a majority stake (*Pct50*) and the existence of a toehold interest (*PctToe*) emerge as the main factors driving the CAARs. The signs of both of these variables are consistent with the existing literature. Even in the univariate analysis of these windows, these two variables are mostly significantly different from zero. The variable *Pct50* produces higher and economically larger returns in the range of 3% to 15% (approximately) respectively when compared with its base dummy counterpart. From the investors' perspective, acquiring a majority stake in an Indian company reflects managements' confidence, as well as a long-term commitment. Also, as explained by LLSV, majority stakes are preferred by minority shareholders in countries with weaker legal systems as they help defend their own interests. The existing toehold (*PctToe*) can reduce the takeover premium by up to 31%. Toeholds are considered to be a profitable strategy for the acquirer; one which reduces the takeover premium for the targets (Betton and Eckbo, 2000; Betton *et al.*, 2009).

*Table 6.10.3* is also focused on the target firms. However, the CAARs are based on the MM estimations of the Market model in the event study analysis. The univariate analysis of these equations is presented in *Table-A 6.58 to 6.62*.

**Table 6.10.3 Regression of CAARs based on MM Estimations - Domestic Target Firms**

| CAAR<br>Windows: | (1)<br>[-20,+20]              | (2)<br>[-15,+15]              | (3)<br>[-10,+10]               | (4)<br>[-5,+5]               | (5)<br>[-1,+1]        |
|------------------|-------------------------------|-------------------------------|--------------------------------|------------------------------|-----------------------|
| Cash             | 0.0761<br>(1.2091)            | 0.0679<br>(1.2575)            | 0.0670<br>(1.4974)             | 0.0484<br>(1.5229)           | 0.0257<br>(1.1573)    |
| <b>Pct50</b>     | <b>0.1458**</b><br>(2.3812)   | <b>0.1314**</b><br>(2.2743)   | <b>0.0985**</b><br>(2.2482)    | <b>0.0949***</b><br>(3.1341) | 0.0277<br>(1.4736)    |
| <b>PctToe</b>    | <b>-0.2449**</b><br>(-2.2792) | <b>-0.1998**</b><br>(-2.1504) | <b>-0.1967***</b><br>(-2.8896) | -0.0218<br>(-0.4082)         | -0.0042<br>(-0.1170)  |
| BGroup           | 0.0344<br>(0.6632)            | 0.0351<br>(0.7609)            | 0.0181<br>(0.5014)             | -0.0125<br>(-0.4677)         | -0.0246<br>(-1.3951)  |
| Related          | -0.0775<br>(-1.5407)          | -0.0353<br>(-0.7874)          | 0.0034<br>(0.0975)             | 0.0041<br>(0.1531)           | 0.0175<br>(0.9863)    |
| Conglomerate     | -0.0560<br>(-1.0236)          | -0.0280<br>(-0.5680)          | -0.0193<br>(-0.4976)           | -0.0252<br>(-0.9212)         | -0.0207<br>(-1.3024)  |
| Intercept        | 0.2122***<br>(4.0018)         | 0.1540***<br>(3.1802)         | 0.1105**<br>(2.5692)           | 0.0614**<br>(2.1980)         | 0.0506***<br>(3.4312) |
| Observations     | 160                           | 160                           | 160                            | 160                          | 160                   |
| F-Statistics     | 3.7484                        | 2.8741                        | 2.8895                         | 2.4003                       | 1.2053                |
| p-value          | <b>0.0017***</b>              | <b>0.0111**</b>               | <b>0.0107**</b>                | <b>0.0303**</b>              | 0.3065                |
| Adj. R-Squared   | 0.0740                        | 0.0519                        | 0.0489                         | 0.0484                       | 0.0153                |

*t* statistics in parentheses; \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Once again, the model and the variables are significantly different from zero for the larger CAAR windows. The overall results are still identical to the previous analysis. The two variables *Pct50* and *PctToe* continue to hold their dominance in the analysis in both the multivariate and the univariate analysis for the majority of the windows.

Intriguingly, in the aggregate dataset analysis, the Cash variable had large and significant coefficients for both the univariate and the multivariate analyses. However, here it is consistently not different from zero for both the analyses, at least at the 5% level. This may be because nearly a third of the domestic deals have IBG acquirers, with nearly 80% of these acquirers using shares or combinations as a method of consideration, which is also argued to have a positive impact. The collective positive impact of BGroup and share based consideration might have moderated the overall Cash impact.

Further, interestingly, depending on the length of the CAAR window, there is even signs of reversals for the variables Business Group (BGroup) and related in the regressions above. There is a cumulative effect of several factors in play here. Firstly, large mark-ups and run-ups suggest that announcement effect is not fully captured in the CAAR windows close to the event day. Secondly, the stratum-specific analysis done earlier confirms that the

Business Group (BGroup) effect is reflected more in the mark-up period which is in line with (Schwert, 1996) - the impact of significant deal characteristics is reflected more in the variation in mark-up. Likewise, stratum-specific analysis about relatedness confirms its significant impact in the distant run-up period. Thirdly, the CAARs tested here are symmetrical around Day-0. Hence, the true impact of these variables is captured only when the CAAR windows expand. To reconfirm, the regression analysis is performed again with several CAARs windows of varying lengths in both the mark-up and the run-up period.

#### *6.10.1.1 Alternative Analysis – Pre and Post-Event CAAR Windows*

As the event study makes it evident that the Business Group (BGroup) effect is prominent in the post-event days, another set of CAARs like [0, +2], [0, +5], [0, +7], [0, +10], [0, +15] is regressed with the given independent variables. Results are reported in *Table-A 6.37 and 6.38*.

In this analysis, *Pct50 and BGroup* beta coefficients are significantly positive. Thus, being taken over by a large business group is favoured by the markets. In fact, target shareholders may earn higher returns ranging from 6% to 10%, depending on the estimation method and CAAR window. Also, the variable *PctToe* loses its significance in post-event analysis. It is a variable that captures the impact of information asymmetry which is vital in determining the pre-event outcomes.

As the announcement enters the market formally, the participants see the value in being taken over by IBGs and they react positively. This supports the findings from the event study analysis, which discards the tunnelling hypothesis theory that is commonly argued for such groups.

In the run-up analysis, the related variable is consistently negative and does not have coefficients that are reliably different from zero at 10% for the [-20, -1] window when the variable *PctToe* is dropped from the equation. As both of these variables capture the scope of information asymmetry, it may be that the marginal effect of relatedness is swamped by *PctToe*, which is significantly lower than zero. Thus, there is a mild support that related deals yield lower returns for the target firms.

#### *6.10.1.2 Interactive Dummies*

In order to further understand the role of large Indian Business Groups (IBGs) acquiring majority stakes, and whether deals within the affiliates of these groups have any

distinctive bearing on the outcomes, the same regressions were run again using the two multiplicative interactive dummies: *RelBGroup* (BGroup x Related) and *BGroup50* (BGroup x Pct50). The multivariate results are reported in *Table-A 6.39 to 6.42*. The univariate results for these variables are reported alongside the other univariate tables discussed above.

The variable *RelBGroup* is mostly positive, implying that the target shareholders earn higher returns in the deals when the participating firms are affiliates of the top IBGs. This supports the findings from the event study analysis, which discards the tunnelling hypothesis theory that is generally associated with such IBGs. However, as the betas are not significantly different from zero, this is just an indication. In total, there are only 25 deals that qualify for this criterion.

The variable *BGroup50* is consistently positive and is also occasionally significantly positive in univariate analysis, though never in multivariate analysis. This indicates that being taken over by large IBGs with a majority stake may, in fact, yield higher returns. This again substantiates the findings from the event study analysis and provides some evidence to refute the tunnelling hypothesis. However, once again, the lack of betas that are significantly different from zero in multivariate analysis makes the argument merely suggestive.

Overall, the regression analysis indicates that the participation of the large IBGs has a positive impact on the returns to the target shareholders. Thus, in the spirits of (Siegel and Choudhury, 2012), there is no evidence for the tunnelling hypothesis.

The second factor that drives these returns for the target company shareholders in DMAs is the majority stake acquired by the acquiring firms, which is consistent with LLSV literature. They argue that in weaker legal systems with poor investor protection, block ownership shows a commitment against expropriation and is a way to persuade investor confidence. In a similar vein, Claessens *et al.* (1999) find higher value for corporate assets with greater insider cashflow ownership.

Thirdly, the existing toehold interest of an acquirer adversely affects the target returns. While toeholds reduce the number of shares that must be purchased in order to gain control at a higher premium if the deal is successful, they also create capital gain if the toeholds have to be sold to a rival bidder. Regardless of the outcome of the deal, toehold interest bestows *more* bargaining powers on the acquirers.

## 6.10.2 Domestic Acquirer Firms

Table 6.10.4 provides a Pearson Correlation Coefficient Matrix of the independent variables used in this analysis for the acquirer firms. While some of the variables are significantly correlated (except for the PctToe and the Related variables<sup>36</sup>), the coefficients are not of a high enough order so as to make any impact on the analysis. All these variables have a mean VIF of 1.12, with none exceeding 1.26 individually. Collectively, they rule out the possibility of any severe multicollinearity issues in the analysis.

**Table 6.10.4 Correlation Coefficient Matrix; Independent Variables - Acquirers**

| Variables           | Cash                        | Pct50                 | PctToe                       | BGroup               | Related             |
|---------------------|-----------------------------|-----------------------|------------------------------|----------------------|---------------------|
| <b>Pct50</b>        | 0.1280 *<br>(0.0746)        |                       |                              |                      |                     |
| <b>PctToe</b>       | 0.0781<br>(0.2826)          | -0.0405<br>(0.5781)   |                              |                      |                     |
| <b>BGroup</b>       | <b>0.1448**</b><br>(0.0435) | 0.0332<br>(0.6448)    | <b>0.1469**</b><br>(0.0426)  |                      |                     |
| <b>Related</b>      | 0.1061<br>(0.1399)          | -0.0747<br>(0.2993)   | <b>0.4244***</b><br>(0.0000) | 0.1216 *<br>(0.0905) |                     |
| <b>Conglomerate</b> | -0.0499<br>(0.4884)         | -0.1281 *<br>(0.0743) | <b>-0.1528**</b><br>(0.0348) | 0.0840<br>(0.2430)   | -0.0616<br>(0.3921) |

*p*-values in parentheses; \**p*<.010, \*\* *p*<.05, \*\*\* *p*<.01

Table 6.10.5 below presents the multivariate regression results for the various CAAR windows for the Domestic Acquirer firms. The CAARs used here are from the OLS estimation of the abnormal returns in the event study analysis. The univariate results for each of these regressions are presented separately in the appendix in Table-A 6.63 to 6.67. The discussion ahead refers to both the multivariate and the univariate analyses.

<sup>36</sup> While the regressions results presented here use Related variable only, the regressions based on both of these variables simultaneously and also only with PctToe are also executed. When the two variables are regressed alongside (results reported in Table-A 6.43 and Table-A 6.44) the Related variable is significantly different from zero at the 10% level. When only PctToe variable is used, it is not significantly different from zero. The F-statistics of the models still remains weak in both the scenarios.



**Table 6.10.5 Regression Analysis of the OLS CAARs – Domestic Acquirer Firms**

| <b>CAAR Windows:</b> | <b>(1)</b><br>[-20,+20]      | <b>(2)</b><br>[-15,+15]      | <b>(3)</b><br>[-10,+10]      | <b>(4)</b><br>[-5,+5] | <b>(5)</b><br>[-1,+1] |
|----------------------|------------------------------|------------------------------|------------------------------|-----------------------|-----------------------|
| Cash                 | 0.0413<br>(0.9406)           | 0.0235<br>(0.5723)           | 0.0073<br>(0.2151)           | 0.0180<br>(0.5693)    | 0.0050<br>(0.3220)    |
| Pct50                | 0.0481<br>(1.0195)           | 0.0784 *<br>(1.7139)         | 0.0487<br>(1.4142)           | 0.0118<br>(0.5293)    | 0.0070<br>(0.5373)    |
| BGroup               | -0.0143<br>(-0.4277)         | -0.0123<br>(-0.3831)         | -0.0106<br>(-0.4080)         | -0.0116<br>(-0.6487)  | -0.0082<br>(-0.7871)  |
| <b>Related</b>       | <b>0.0845 **</b><br>(2.0870) | <b>0.0842 **</b><br>(2.0754) | <b>0.0710 **</b><br>(2.3392) | 0.0156<br>(0.7698)    | 0.0126<br>(1.2116)    |
| Conglomerate         | 0.0470<br>(1.1420)           | 0.0449<br>(1.1366)           | 0.0288<br>(0.9761)           | 0.0189<br>(0.9846)    | 0.0097<br>(0.8928)    |
| Intercept            | -0.0493<br>(-1.4950)         | -0.0423<br>(-1.4028)         | -0.0188<br>(-0.7654)         | 0.0026<br>(0.1800)    | 0.0050<br>(0.5449)    |
| Observations         | 195                          | 195                          | 195                          | 195                   | 195                   |
| F-Statistics         | 1.0867                       | 1.1219                       | 1.1734                       | 0.3651                | 0.5447                |
| p-value              | 0.3691                       | 0.3502                       | 0.3238                       | 0.8720                | 0.7422                |
| Adj. R-Squared       | 0.0123                       | 0.0273                       | 0.0161                       | -0.0139               | -0.0144               |

*t* statistics in parentheses; \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ ; Without PctToe variable

The weak F-statistics for each these equations suggest that there is no significant relationship overall between the independent variables and the CAAR values at conventional levels of significance. Yet, the variable that seems to be partially governing the outcomes is the *related* variable. This implies that the related acquirers earn 7% to 8% higher returns than the unrelated ones. Further, these higher returns occur in larger CAAR windows (21 days and above), suggesting that the immediate announcement effect is unexplained. When compared with the results for the target firms, this variable is unambiguously positive, implying that taking over a related firm yields higher returns for the acquiring shareholders. Understandably, in deals with their affiliates, acquirers have an absolute advantage with respect to information asymmetry. As the target is well-known a priori, the risk of incorrect valuation and other associated uncertainties do not exist for them. As such, they benefit more in generating post-event synergies.

Table 6.10.6 is similar to the last table, except that the CAARs are taken from the MM estimations of the Market model in the event study analysis. The univariate results for each of these regressions are presented separately in the appendix in Table-A 6.68 to 6.72.

**Table 6.10.6 Regression Analysis of the MM CAARs – Domestic Acquirer Firms**

| <b>CAAR Windows:</b> | <b>(1)</b><br>[-20,+20] | <b>(2)</b><br>[-15,+15]      | <b>(3)</b><br>[-10,+10]      | <b>(4)</b><br>[-5,+5] | <b>(5)</b><br>[-1,+1] |
|----------------------|-------------------------|------------------------------|------------------------------|-----------------------|-----------------------|
| Cash                 | 0.0264<br>(0.6493)      | 0.0145<br>(0.3750)           | 0.0000<br>(0.0007)           | 0.0139<br>(0.4377)    | 0.0046<br>(0.2977)    |
| Pct50                | 0.0263<br>(0.6739)      | 0.0544<br>(1.5537)           | 0.0348<br>(1.1361)           | 0.0043<br>(0.2088)    | 0.0062<br>(0.4706)    |
| BGroup               | -0.0029<br>(-0.0880)    | 0.0027<br>(0.0903)           | 0.0009<br>(0.0354)           | -0.0082<br>(-0.4620)  | -0.0083<br>(-0.7913)  |
| <b>Related</b>       | 0.0637 *<br>(1.9188)    | <b>0.0617 **</b><br>(2.0054) | <b>0.0587 **</b><br>(2.1143) | 0.0086<br>(0.4577)    | 0.0126<br>(1.2034)    |
| Conglomerate         | 0.0326<br>(0.8832)      | 0.0283<br>(0.8552)           | 0.0203<br>(0.7298)           | 0.0140<br>(0.7618)    | 0.0091<br>(0.8203)    |
| Intercept            | 0.0255<br>(0.7587)      | 0.0154<br>(0.5218)           | 0.0179<br>(0.7010)           | 0.0244<br>(1.6453)    | 0.0096<br>(1.0078)    |
| Observations         | 191                     | 191                          | 191                          | 191                   | 191                   |
| F-Statistics         | 0.8979                  | 1.1132                       | 1.0507                       | 0.2056                | 0.5227                |
| p-value              | 0.4837                  | 0.3549                       | 0.3894                       | 0.9598                | 0.7589                |
| Adj. R-Squared       | -0.0072                 | 0.0028                       | -0.0012                      | -0.0214               | -0.0164               |

*t* statistics in parentheses; \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ ; Without PctToe variable

On the statistical significance of the model and the variables, the results are qualitatively identical to the regression analysis of the OLS CAARs documented in *Table 6.10.5*. The *related* variable generates higher returns of up to 6%, but overall, the models are weak.

Further, the negative coefficients for the BGroup variable imply that the large IBG acquirers receive lesser returns when compared with their base dummy counterpart. Likewise, the positive coefficients of the variables Pct50 and Cash imply higher returns. However, none of them is different from zero in both the multivariate and univariate analyses.

Interestingly, the Conglomerate variable, though not different from zero, has positive coefficients. This suggests that for the acquirers, diversification is seen as a positive move. Khanna and Palepu (2000) find that the affiliates of the *most* diversified IBGs have higher Tobin's  $q$ . As such, diversification across industries is key for large business houses in minimizing risks and creating internal factor markets.

### 6.10.2.1 Interactive Dummies

In order to delve deeper into the question of whether large IBGs acquiring a majority stake, and the deals within the affiliates of these groups, have any distinctive bearing on the outcomes, the same regressions were run again using the two multiplicative interactive dummies: *RelBGroup* (BGroup x Related) and *BGroup50* (BGroup x Pct50). The multivariate results are reported in *Table-A 6.45 to 6.52*. The univariate results for these are reported alongside the other univariate tables discussed above.

The variable Pct50 is mostly positive, and the BGroup variable is consistently negative. Yet, the interactive dummy, *BGroup50*, is consistently positive and also occasionally significantly greater than zero in univariate analysis, although not in the multivariate setting. This indicates that acquisitions by large IBGs yield higher returns to the acquiring shareholders, but only when a majority stake is acquired. Otherwise, the returns are lower. This supports the findings from the event study analysis and provides some evidence against the tunnelling hypothesis. However, as the results are not statistically different from zero in the multivariate analysis, it makes the argument merely suggestive.

The variable *RelBGroup* is consistently negative, implying that the acquirer shareholders earn lower returns in deals when the participating firms are related (as part of one of the top IBGs). This alludes to the fact that tunnelling may exist, but not when the acquirer belongs to any large IBG. However, as the results are not statistically different from zero, this is just an indication.

To conclude, while acquirers do get positive returns on the announcement, the only attribute - existing relationship between the target and the acquirer firms partly explains these returns.

## 6.11 Overall Summary

### 6.11.1 Abnormal Returns - Synergy

The primary objective of this chapter is to address the second hypothesis (H2) and also to evaluate synergy, agency and hubris motives in domestic M&As, which leads to the testing of two hypotheses:

*H2a: There are no abnormal returns to the Indian target firms at the announcements of domestic M&As.*

*H2b: There are no abnormal returns to the Indian acquirer firms at the announcements of domestic M&As.*

As both the targets and acquirers gain positive abnormal returns at the announcement, there is sufficient evidence to reject the null hypotheses. Further, as both the sides gain positive returns, it shows that domestic M&As create synergies and are value enhancing strategies.

Further, with regards to pre-bid returns, target returns show large run-ups, which is significantly higher than the mark-up return. This suggests that asymmetric information also plays a dominant role in the allocation of takeover premium. Whereas, for the acquirers, the pre-event window of a significantly positive CAARs is non-existent from OLS estimations, and is much smaller from the MM method relative to the target CAARs suggesting informed trading is rare.

### 6.11.2 IBG Effects

The chapter explores further the impact of participation of large IBGs as acquirers in the deals. The hypotheses thus tested are:

*H3a: There is no difference in returns to the target shareholders from the takeovers by the large Indian Business Groups.*

*H3b: There is no difference in returns to the acquiring shareholders from the takeovers by the large Indian Business Groups.*

For the target firms, there is sufficient evidence to reject the null hypothesis. The analysis overall points towards higher positive abnormal returns for the shareholders. These returns may be 5% to 10% higher than their counterparts. However, this positive influence

occurs after the announcement when the deal characteristics are learned by the market. The findings do not support tunnelling possibilities in takeovers by large IBGs.

For the acquirer firms, evidence supports the null hypothesis. Both the event study and cross-sectional analyses show that the returns to the acquiring shareholders do not correlate to the status of the acquirer as an IBG.

### **6.11.3 Relatedness Effects**

Finally, the chapter explores the role of relatedness in determining the returns generated by such deals. The two hypotheses thus tested are:

*H4a: There is no difference in returns to the target shareholders from the takeovers by the related and unrelated acquirers.*

*H4b: There is no difference in returns to the acquirer shareholders from the takeovers of the related targets.*

There is sufficient evidence to support the null hypothesis for the target firms. Although the event study analysis provides some support for lower returns for target firms in related acquisitions, as well as the coefficients in the cross-sectional analysis, they are not significantly different from zero.

On the other hand, there is sufficient evidence to reject the null hypothesis for the acquirers. Taking over related target firms yield higher returns for acquirers, and the cross-sectional coefficients are significantly positive.

### **6.11.4 Cross-Sectional Analysis**

For the target shareholders, the acquisition of a majority stake ( $\geq 50\%$ ) and being taken over by a large IBG are the two primary sources of positive abnormal returns. In comparison, the toehold interest of the acquirers leads to negative returns.

On the other side, for the acquirers, the model is not significantly different from zero, yet there is an indication that being related to the target firms partially explains the positive abnormal returns.

### 6.11.5 Snapshot – Hypotheses

| Effect                 | Hypotheses   | Targets | Acquirers | Notes  |
|------------------------|--|---------|-----------|--|
| Motive                 | <b>H2 :</b><br><i>There are no abnormal returns associated with the announcements of Domestic M&amp;As (DMA)</i>                 | x       | x         | <i>Significantly positive returns to both - the targets and acquiring shareholders at the announcement.</i>          |
|                        | <b>H5a: Synergy</b>  | ✓       | ✓         | <i>As both the targets and acquirers gain positive returns, the total effect is positive for the combined wealth</i> |
|                        | H5b: Hubris  | x       | x         |  |
| H5c: Agency            | x  | x       |           |  |
| Indian Business Groups | <b>H3 :</b><br><i>There is no difference in abnormal returns generated in the takeovers by the large Indian Business Groups.</i> | x       | ✓         | <i>Significantly positive returns to the targets but insignificantly negative returns to the acquirers.</i>          |
| Relatedness            | <b>H4 :</b><br><i>There is no difference in abnormal returns generated in the takeovers by the Related acquirers.</i>            | ✓       | x         | <i>Insignificantly negative returns to the targets, but significantly positive returns to the acquirers.</i>         |

# Chapter 7. Cross-Border Deals

---

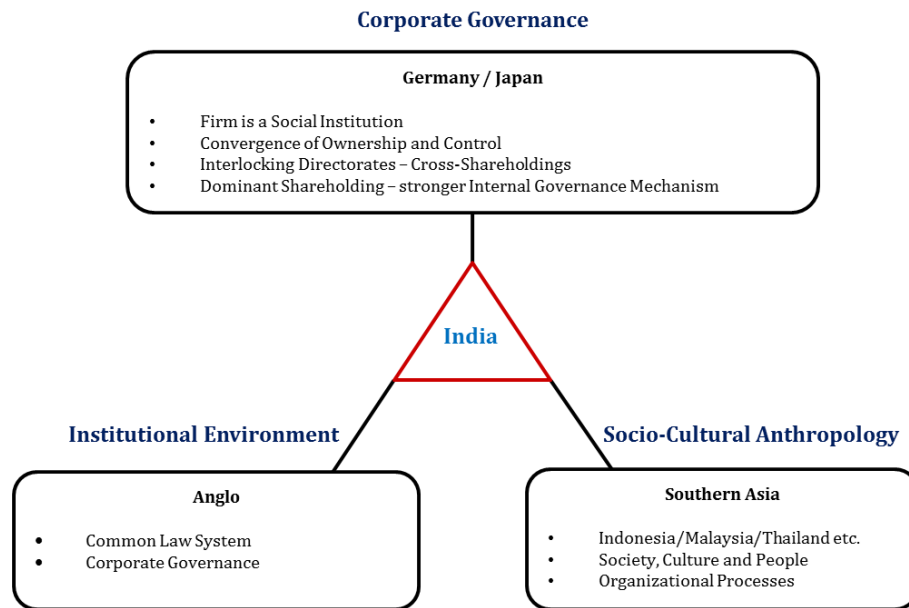
## 7.1 Introduction

This chapter focuses on the analysis of the returns to the Indian target and acquirer firms in Cross-Border M&A (CBMA) deals. The CBMA dataset is comprised of the M&A deals where one of the participating firms is based in India, and the other is not.

The first objective of this chapter is to test the M&A motive; to test whether there are synergies in the Indian CBMA deals for the shareholders, which in turn also tests for hubris and agency motives. The hypothesis tested here is: *there are no abnormal returns to the participating Indian firms in CBMAs*. And in the analysis, the total wealth effect from the deals is observed to determine the motive of CBMAs.

Further, Hofstede (1980) and House *et al.* (2002) summarize various risks in CBMAs as exposure to the incongruent *economic, regulatory and cultural structures*. Likewise, Brouthers (2002) argues the transaction costs (Economic risks), institutional (legal and regulatory environment) and cultural variables (investment risks) dictate the outcomes of the international ventures. The CAGE theory of Ghemawat (2001) suggests that the cost of these distances is often very high. Following that premises, chapter two outlined how India is placed akin to different nations on these paradigms (to recall, *Figure 7.1.1* is reproduced below), which means that India is comprised of a unique mix of attributes, with no correlation in any other nation. This thesis identifies India as a *common law country* with business structures resembling *civil law countries* and unique *socio-cultural anthropological attributes of some South Asian countries*.

This unique mix of attributes increases the complexities for Indian CBMAs. It is imperative to understand how they may affect the outcomes of CBMAs in India. Thus, another main thrust of this chapter is to evaluate the influence of various corporate governance models, institutional environments and cultures in Indian CBMAs. The hypotheses tested here are collectively described as: *there is no difference in announcement returns derived from the deals between the Indian firms and the foreign firms pursuing different corporate governance models, originating from other institutional environment and with dissimilar cultures*.



**Figure 7.1.1 The Multidimensional Aspects of India**

---

The final, yet equally important, objective of the chapter is to evaluate various deal and firm-specific characteristics to determine the main driving forces for these returns. A thorough cross-sectional analysis is conducted to isolate the decisive factors that govern these outcomes.

The chapter begins with the discussion about the Indian CBMA target firms and leads to the analysis of Indian CBMA acquirer firms. In the process, the impact of various financial models and regression techniques on the abnormal returns around the announcement day is discussed. Finally, the cross-sectional results are reported.

Chapter five provides a sound basis for all relevant aspects of the methodology employed in this thesis. To restate, the announcement effect captured by the Fama-French model is identical to the Market model outcomes. However, the overall CAARs for 51 days are 1% higher on average for targets, but not for acquirers. However, the FF model is limited by its coverage for the entire sample. The Scholes and Williams (SW) adjusted beta Market models replicate the original Market model returns. For the regression methods, the M estimators tend to follow the trend generated by the MM regressions overall for the same set of firms. However, due to the smaller sample size, they have the potential to alter the overall properties of the analysis. On the other hand, there is a significant difference between the results obtained from the MM and the OLS regressions, and unlike the M estimators, sample size variation for the MM regression does not affect the quality of the results, and can be directly compared with the OLS based returns. Besides, given the properties of the dataset,



of the two robust regressions, the MM estimator is better suited. Finally, the Equally Weighted Index (EWI) analysis replicates the results obtained from the Value Weighted Index (VWI) models for the same set of firms, thus failing to provide any additional unique insight.

Following chapter five, this chapter focuses on the outcomes from the Market model based on the VWI and with the OLS and the MM techniques. As discussed earlier, the MM regression does not estimate all the sample firms. The sub-set estimated by the MM regressions is referred to as '*MM firms*'. The Fama-French sub-set is referred to as '*FF firms*'. Further, the results from the Fama-French and the SW adjusted beta estimations are discussed for the primary hypothesis. For the other attributes, the Fama-French results are provided in Appendix Chapter 7 and are discussed in the main body.

For brevity and relevance, only the major outcomes are compared, contrasted and reported in the main body of the chapter. Other subsidiary outcomes are reported in the appendix to this chapter.

## **7.2 Returns to Indian Targets**

In the cross-border sample, after the filtering process discussed in the methodology chapter, there is a total of 138 firms identified as cross-border targets. Out of these 138 firms, 104 firms are the Indian target companies, and the remaining firms are from the other nationalities taken over by the Indian companies.

*Figure 7.2.1* compares the cumulative average abnormal returns (CAARs) obtained from the MM and the OLS regressions using the Market model for *all the available firms* over the 51 day event window [-20, +30] relative to the announcement day for the target firms in India.

Also, as the MM estimator has slightly lesser firms, the solid blue line labelled as '*OLS-Same*' represents the CAARs from the OLS estimations for the same set of firms (MM firms – 99 firms). It facilitates the comparison of the returns from the two regression techniques by controlling the sample selection bias.

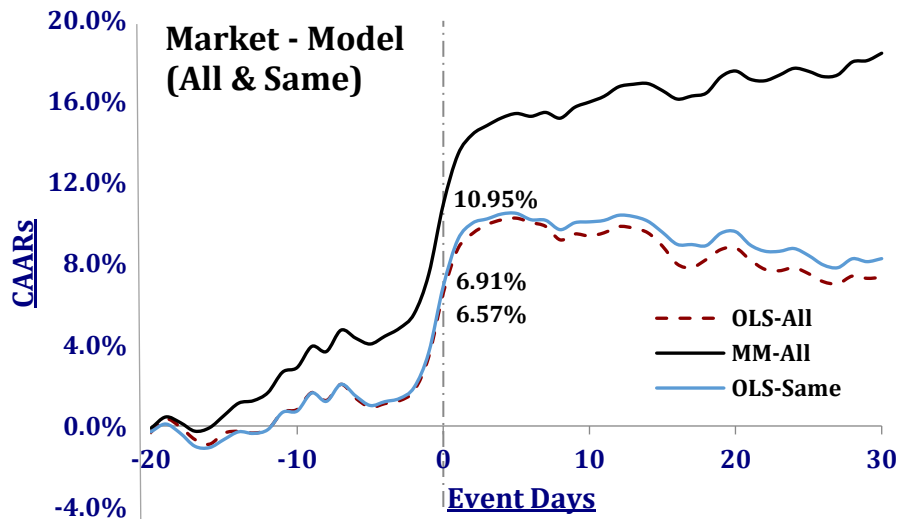


Figure 7.2.1 Market Returns to CBMA Targets - OLS vs. MM

The CAARs derived from the MM estimator are represented by the solid black line and are reported in *Table-A 7.1*. The AARs are significantly positive for the days [-2, +2]. The CAARs, while they are positive since Day -19, gain statistical significance from Day -14. Post-announcement, the CAARs drift upwards to 18%. Also, the 3 day CAAR of 7.87% is significantly greater than zero with t-statistics of 6.87.

The OLS results are tabulated in *Table-A 7.2*. Although the OLS CAARs are positive from Day -11, it is since Day -2 that they are significantly positive. The AAR and the CAAR on Day-0 and the 3 day CAAR [-1, +1] of 7.01% are all significantly greater than zero. Though there is an evidence of a slight decline in the daily returns in the days after the event, overall there is a positive impact, not only on the announcement day, but also in the surrounding days.

The blue line, *OLS-Same*, based on the MM firms sub-set, follows the same trajectory as of the *OLS-All* and confirms visually and statistically (tested below) that the sample variation does not change the overall properties of the results. These returns are presented in *Table-A 7.3*. This implies that the apparent divergence in the abnormal returns from the OLS and the MM method is purely due to the regression techniques.

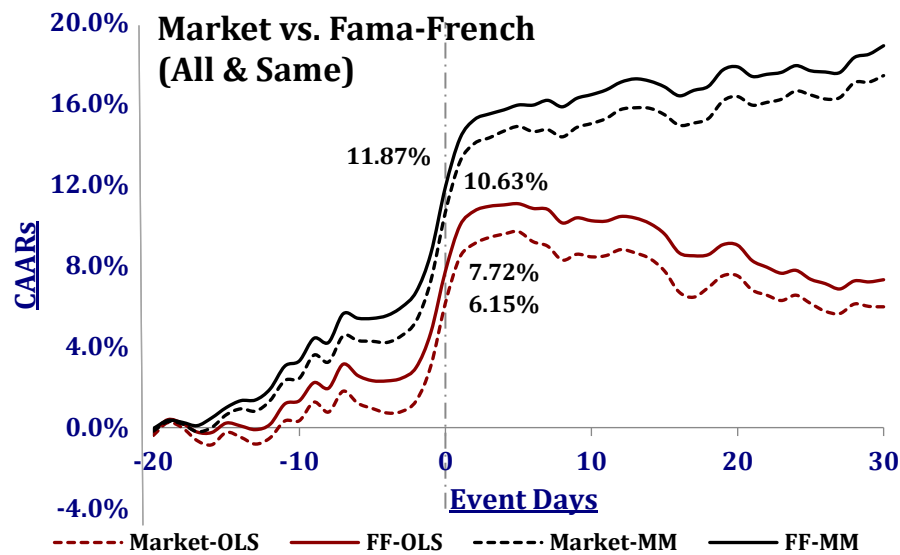
### 7.2.1 Market vs. Fama-French (FF) Model

*Figure 7.2.2* compares the two financial models and the two regression techniques for the same set of firms (FF firms). The OLS analysis is based on 93 common firms, and the

MM CAARs are based on the same 90 firms. The relevant tables are *Table-A 7.4 to 7.7* in the appendix.

The graphs in red the CAARs from the OLS regression, while the graphs in black are from the MM estimator. The dotted lines represent the CAARs from the Market model, and the solid lines denote those from the Fama-French model.

The divergence in the black and the red graphs in the post-event period reflects the differences in the regression techniques. Evidently, the MM estimator produces higher returns. Also, while the MM CAARs continue to rise in the later part, those from the OLS gradually decline.



**Figure 7.2.2 Returns to CB Targets; Market vs. FF; OLS vs. MM (All & Same-Firms)**

Comparing any solid line with the dotted line in the same colour shows the differences in the market and the FF models for that regression technique. The solid line lies above the dotted line indicating that the returns from the FF model are consistently slightly higher. Noticeable, apart from this difference, the solid lines (FF model) in both the regressions trend precisely alongside the dotted lines (Market model).

*Table 7.2.1* provides the statistical summary of the various CAARs graphed above. The CAARs from the M regression are identical to those from the MM estimations, but due to the sample size variation, they are separately presented in *Figure A 7.1 and 7.2* in the appendix.

**Table 7.2.1 Market vs. FF Model; OLS vs. MM Comparison**

| Model        | Regression | AAR<br>Day-0 | 3-Days<br>CAAR | CAAR<br>Day-0 | 51-Days<br>CAAR | AARs<br>(**) around<br>Day-0 | CAARs<br>(**) around<br>Day-0 | n   |
|--------------|------------|--------------|----------------|---------------|-----------------|------------------------------|-------------------------------|-----|
| Market       | MM         | 3.47% ***    | 7.87% ***      | 10.95% ***    | 18.40% ***      | -2 to +2                     | -14 to +30                    | 99  |
|              | OLS-All    | 3.16% ***    | 7.01% ***      | 6.57% ***     | 7.34% ***       | -1 to +1                     | -2 to +30                     | 104 |
|              | OLS-Same   | 3.28% ***    | 7.31% ***      | 6.91% ***     | 8.26% ***       | -1 to +1                     | -2 to +30                     | 99  |
| FF<br>Market | MM         | 3.29% ***    | 7.57% ***      | 11.87% ***    | 18.84% ***      | -2 to +2                     | -14 to +30                    | 90  |
|              |            | 3.39% ***    | 7.86% ***      | 10.63% ***    | 17.36% ***      | -2 to +2                     | -11 to +30                    | 90  |
| FF<br>Market | OLS        | 3.03% ***    | 7.00% ***      | 7.72% ***     | 7.29% ***       | -1 to +1                     | -9 to +30                     | 93  |
|              |            | 3.11% ***    | 7.10% ***      | 6.15% ***     | 5.96% **        | -1 to +1                     | -1 to +30                     | 93  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The evidence presented here *rejects* the null hypothesis. There is sufficient evidence that the Indian target firms gain positive abnormal returns at the announcement of CBMA deals, which is in line with the findings from existing literature. The gains occur on both the event day, and over the surrounding days.

Further, on the efficiency market hypothesis, there are no systematic significant average abnormal returns (AARs) for the days after the event. However, the impact may still last for up to two days from the announcements. Markets react relatively slowly to the announcements of CBMAs, when compared with domestic M&A (DMA) deals.

The announcement day CAARs are higher than the AARs suggesting market participants are able to partially anticipate the takeover premiums and have already incorporated that information into the price of the target shares. There is a pre-bid price run-up and some impact of informed trading here. Yet, the AARs on Day-0 are the highest abnormal returns generated in the entire event window on a single day. This suggests significant information releases only at the announcement, from which the shareholders gain positive returns.

Though a crude measure, *Table 7.2.2* (below) highlights the distribution of total premium generated between the run-ups and the mark-ups of CBMAs.

**Table 7.2.2 Run-Up vs. Mark-Up Returns to CBMA Indian Targets**

| Model  | Regression | Run-up<br>[-20, -1] | Mark-up<br>[0, +30] | Difference |
|--------|------------|---------------------|---------------------|------------|
| Market | MM         | 7.49%               | 10.91%              | -3.43%     |
|        | OLS        | 3.41%               | 3.92%               | -0.51%     |
| FF     | MM         | 8.58%               | 10.25%              | -1.67%     |
|        | OLS        | 4.69%               | 2.61%               | 2.08%      |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01.*

The significantly positive AARs and CAARs on some days in the run-up period may indicate some form of informed trading. However, the difference between the run-up and mark-up CAARs is, in fact, negative and not different from zero. This indicates that the post-event returns are higher, and that the informed traders are unable to benefit immensely. The role of information asymmetry is not that pronounced, implying that most of the uncertainty about the event is resolved only at the announcement.

Further, there are striking differences in the results from the OLS and the MM regression for both the financial models. While both the regression methods indicate significantly positive abnormal returns on both the announcement day and the surrounding days, the magnitudes differ—the OLS returns are lower than the MM estimates. Even the window for significant CAARs [-14, +30] is larger for the MM estimates. Not only that, in the post-event days, while the CAARs from the MM regression are significantly positive and drift upwards, those from the OLS estimates (also statistically significantly positive) declined. This explains the divergence in the post-event slopes of the red and the black graphs.

On comparing the two regression techniques, due to a large spread of significantly positive CAARs in the run-up and mark-up period, the test of differences in the returns on the announcement day (AAR) is statistically not different from zero. However, the differences in the CAARs for 3 day [-1, +1] and 51 day [-20, +30] are statistically different from zero at the 5% and 1% level of significance respectively. Also, there is no significant difference between the returns from the OLS-All and OLS-Same. *This confirms that the divergence in the outcomes is fundamental to the regression techniques and is not sample specific.* Evidently, as in other sub-sets, the OLS and the MM returns differ, not only in the magnitudes, but also in the directions of the outcomes.

Further, on comparing the returns from the FF model with the Market model, qualitatively, they both capture comparable announcement effects at similar conventional levels. While the Day-0 AAR and 3 day CAAR are marginally higher than the Market model, the Day-0 CAARs and 51 day CAAR are higher than the FF model. So are the window sizes of significantly positive CAARs. The tests of differences in these abnormal returns based on the OLS estimations are not different from zero. However, based on the MM estimations, the differences in 3 day and 51 day CAARs are reliably greater than zero on the conventional level. Thus, depending on the regression method, the FF returns may be higher by 1% on average.

The main finding here is that there are significant positive returns to the shareholders due to M&As and, depending on the regression method, Fama-French returns may be higher by 1% (rounded) when compared with the Market model returns. However, the FF model is limited by its unavailability for the entire sample period.

## 7.2.2 Market vs. Scholes and Williams (SW) Betas

All three SW adjusted beta variants, along with the original Market model, are compared in this section. The set of common firms used is also the entire sample set.

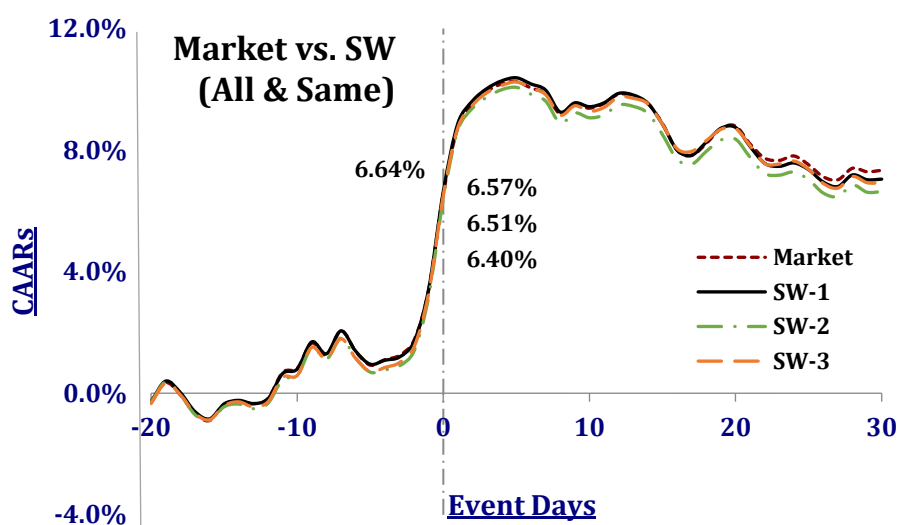


Figure 7.2.3 Returns from the Market and SW (1-3) Models; OLS (All & Same-Firms)

Figure 7.2.3 is based on Table-A 7.2, 7.8 to 7.10. It serves two purposes. Firstly, it shows the abnormal returns from all the three SW adjusted beta variants. Secondly, it compares the returns with the original Market model for the same set of firms. Table 7.2.3 provides the statistical summary of all the CAARs graphed in Figure 7.2.3.

Table 7.2.3 Market and SW Models Comparison (All & Same-Firms)

| Model  | Regression Beta | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|--------|-----------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| Market | Unadjusted      | 3.16% *** | 7.01% ***   | 6.57% ***  | 7.34% ***    | -1 to +1                  | -2 to +30                  | 104 |
|        | SW-1            | 3.21% *** | 7.19% ***   | 6.64% ***  | 7.04% ***    | -1 to +1                  | -2 to +30                  | 104 |
|        | SW-2            | 3.21% *** | 7.27% ***   | 6.40% ***  | 6.64% ***    | -1 to +1                  | -2 to +30                  | 104 |
|        | SW-3            | 3.21% *** | 7.22% ***   | 6.51% ***  | 6.92% ***    | -1 to +1                  | -2 to +30                  | 104 |

p-values: \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . n represents sample size.

The SW variants also replicate the findings of the Market model. Qualitatively, all the relevant aspects of the analysis are statistically similar. The findings are in line with

Dyckman *et al.* (1984) and Davidson and Josev (2005) which advocate no significant improvement in the specifications or the power of tests using either of these modified betas. Thus, there is *no unique value addition to the analysis* over the Market model analysis from the SW adjusted betas of Market model.

### 7.3 Corporate Governance Analysis

Following the LLSV literature about the legal origin of corporate governance models, this thesis splits the cross-border acquirers by their corporate governance models in two categories: Anglo-Saxon (AS) and German/Japanese (GJ). While classifying English and German firms is straightforward, classifying French and Scandinavian firms is more difficult. However, the consensus is that they are closer to GJ than AS (García-Castro *et al.*, 2008). Further, as some acquiring countries (Bahrain, Oman and China) are not the part of the original LLSV literature, four sample firms are thus excluded in this analysis. Hence, this analysis uses 100 firms, of which 54 are taken over by acquirers with the GJ model, and the remaining 46 are taken over by firms with an AS model.

#### 7.3.1 MM Estimation Analysis

The MM regression based results are graphed here in *Figure 7.3.1* and tabulated in *Table-A 7.11 and 7.12* in the appendix.

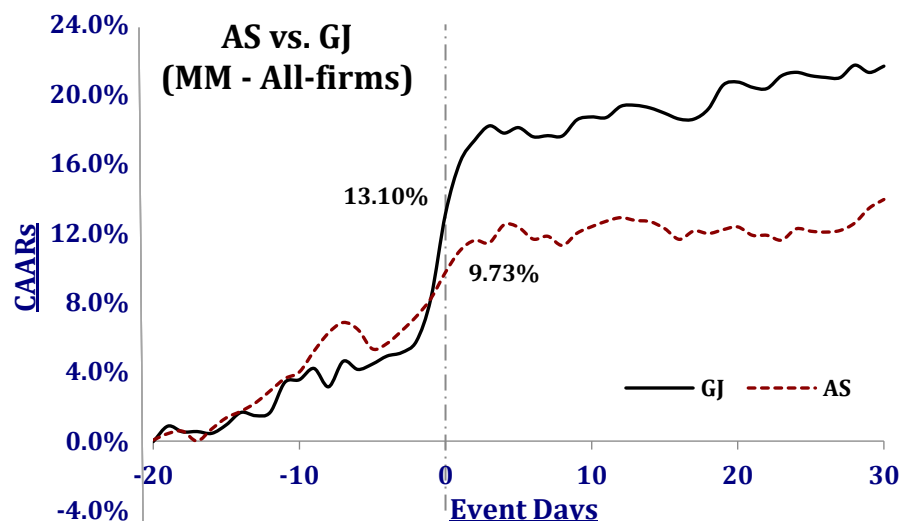


Figure 7.3.1 Indian Targets and Corporate Governance Analysis (MM)

For the German/Japanese sub-set (GJ), the overall returns are considerably higher. The Day-0 AAR and the CAAR and the 3 day CAAR, are all statistically significantly different from zero. While the AARs are significantly positive just for the days [-1, +1], the CAARs are significantly positive from Day -11. And in the post-event period, they drift upwards to 22%, implying that investors continue to make smaller gains.

With Anglo-Saxon category (AS), while the Day-0 CAAR and the 3 day CAAR of 3.80% are significantly positive, the AAR Day-0 is not reliably different from zero at the 0.05 level. Like GJ sub-set, the post-event CAARs drift upwards to 14%, implying that the market continues to generate smaller gains for subsequent weeks.

### 7.3.2 OLS Estimation Analysis

Figure 7.3.2 presents the CAARs for the two sub-sets and Table-A 7.13 and 7.14 provide the results.

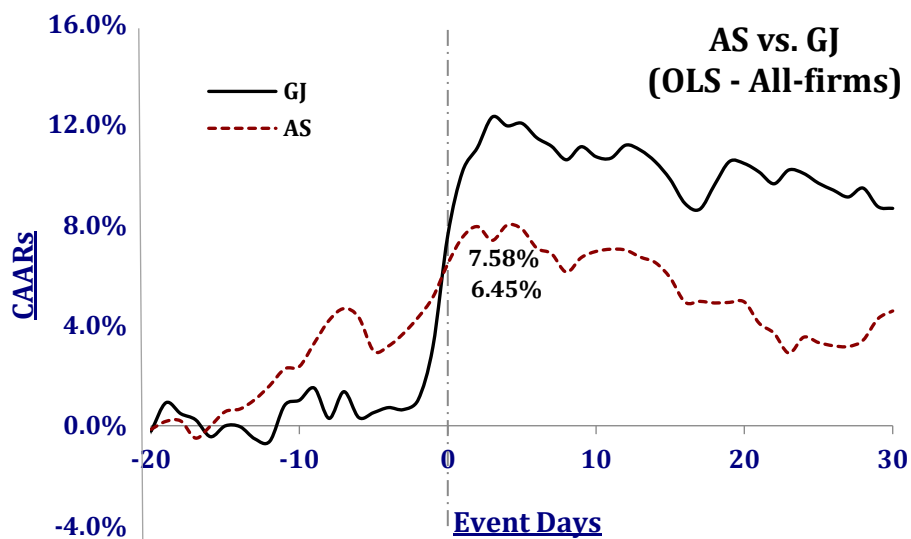


Figure 7.3.2 Indian Targets and Corporate Governance Analysis (OLS)

For the GJ category, the AAR and the CAAR on Day-0 and the 3 day CAAR all are significantly positive. Another important finding is the shape of the curve, which is very steep just around the event day. Here, the AARs and the CAARs are rarely significantly different from zero in the pre-event period which reflects investors' inability in securing early access to the information. Generally, this is not the case in other analyses, and the role of information leakage is obvious. While this explains the significance of returns around Day-0, even the returns in the surrounding days are considerably higher for the GJ sub-set when compared



with those from the AS sub-set. Just the 3 day CAAR [-1, +1] can be as high as 9% to 12% on average, which is relatively enormous.

For the AS category, the Day-0 CAAR and the 3 day CAAR of 3.20% are significantly positive. So is the case with a few days in the pre-event period. However, the AAR Day-0 is not reliably different from zero at 5%. Collectively, it suggests that the market has already partially absorbed the excess returns prior to the announcement day. Significantly positive CAARs in the days [-1, +15] suggest post-event small additional gains. The CAARs can be as high as 8%, followed by a steady decline in the later weeks.

### 7.3.3 Corporate Governance Analysis Snapshot

Table 7.3.1 (below) summarizes the statistical findings of the Market model returns from the two regression methods discussed above. The comparative results for *the same set of firms for each category* are graphed in Figure A 7.6 and 7.7 in the appendix, and there is no statistical variation in the results. Hence, the sample reduction does not alter the properties of the results obtained from the OLS estimates.

**Table 7.3.1 Summary of CG Analysis; Market Model; OLS & MM**

| Regression | Sub-set | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n  |
|------------|---------|-----------|-------------|------------|--------------|---------------------------|----------------------------|----|
| MM         | AS      | 1.52% *   | 3.80% ***   | 9.73% ***  | 13.92% ***   |                           | -11 to +30                 | 44 |
|            | GJ      | 4.88% *** | 10.33% ***  | 13.10% *** | 21.59% ***   | -1 to +1                  | -9 to +30                  | 51 |
| OLS        | AS      | 1.33% *   | 3.20% ***   | 6.45% ***  | 4.57%        |                           | -1 to +15                  | 46 |
|            | GJ      | 4.43% *** | 9.11% ***   | 7.58% ***  | 8.66% **     | -1 to +1                  | 0 to +30                   | 54 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

When the MM estimations are compared with the OLS returns, the Day-0 AARs and the CAARs are identical with respect to their significance levels. However, the magnitudes of the MM returns are higher in both the cases. Further, in another contrast to the MM estimations, the OLS returns tend to fall in subsequent weeks for both the sub-sets.

Further, following a methodology from Sicherman and Pettway (1987), Table 7.3.2 (below) presents the differences in the two sub-sets' CAARs (GJ – AS) over various strata of the event period, providing a more comprehensive understanding of the possible variations in the returns from the two sub-sets.

**Table 7.3.2 Comparison GJ –AS for Indian Targets**

| CAAR Windows |                   | MM              | OLS             |
|--------------|-------------------|-----------------|-----------------|
| Pre-event    | -10 to -1         | 0.23%           | -0.52%          |
|              | -5 to -1          | 2.31%           | 2.02%           |
|              | -3 to -1          | 0.74%           | 0.48%           |
| Event        | <b>-1 to +1</b>   | <b>6.53% **</b> | <b>5.91% **</b> |
|              | <b>0</b>          | <b>3.37% **</b> | <b>3.11% **</b> |
| Post-event   | +1 to +3          | 3.36%           | 3.79%           |
|              | +1 to 5           | 2.36%           | 3.08%           |
|              | +1 to +10         | 2.94%           | 2.64%           |
| <b>Total</b> | <b>-20 to +30</b> | <b>7.68%</b>    | <b>4.09%</b>    |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01*

Though there are significantly positive returns from the takeovers from both the sub-sets, the returns generated in the GJ group are consistently higher in all segments of the time period. The returns are significantly higher around the event, with Day-0 nearly at the 1% level. The announcement day effect can exceed by 6% to 7% (rounded). Further, despite there being a large difference in the overall CAARs visually, the test of difference in returns fails to reject the null hypothesis. However, this is because of the large standard deviations in the two sub-sets, which statistically reduce the power of the test for the total CAARs.

Evidently, being taken over by the firms using GJ corporate governance models is favoured much more than the companies pursuing AS models in the Indian market. As Hofstede (1994) argues, it is the common practices, and not the common values, that ensure multinationals work together successfully.

#### **7.3.4 Market vs. Fama-French Returns**

Here, the Fama-French results for *all the available firms* are presented and compared with those from the Market model for *the same set of firms* under the two regression techniques. The comparative graphs are provided in *Figure A 7.3 to 7.5* and the findings are summarized in *Table 7.3.3* (below).

**Table 7.3.3 Summary of CG Analysis; Market vs. FF Model; OLS & MM.**

| Regression             | Category | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n  |
|------------------------|----------|-----------|-------------|------------|--------------|---------------------------|----------------------------|----|
| <b>Anglo-Saxon</b>     |          |           |             |            |              |                           |                            |    |
| MM                     | Market   | 1.55% *   | 3.92% ***   | 10.16% *** | 15.28% ***   | +1                        | -12 to +30                 | 39 |
|                        | FF       | 1.51% *   | 4.06% ***   | 11.31% *** | 17.10% ***   | +1 to +2                  | -12 to +30                 | 39 |
| OLS                    | Market   | 1.35% *   | 3.28% ***   | 6.66% ***  | 5.03%        |                           | -2 to +13                  | 41 |
|                        | FF       | 1.33% *   | 3.68% ***   | 8.37% ***  | 7.27%        |                           | -9 to +5                   | 41 |
| <b>German/Japanese</b> |          |           |             |            |              |                           |                            |    |
| MM                     | Market   | 4.67% *** | 10.02% ***  | 12.17% *** | 19.79% ***   | -1 to +1                  | -7 to +30                  | 48 |
|                        | FF       | 4.56% *** | 9.48% ***   | 13.87% *** | 21.68% ***   | -1 to +1                  | -11 to +30                 | 48 |
| OLS                    | Market   | 4.34% *** | 9.12% ***   | 6.82% ***  | 7.24% *      | -1 to +1                  | 0 to +28                   | 49 |
|                        | FF       | 4.27% *** | 8.63% ***   | 8.74% ***  | 8.50% **     | -1 to +1                  | -1 to +30                  | 49 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

There are significantly positive returns to the targets in both the sub-sets, regardless of the choice of the financial model and regression technique. Though there is a slight variation in the magnitudes, the difference in the announcement effect and overall CAARs between the two models is not significant at the conventional level. Thus, the announcement effect from Fama-French model is comparable to the Market model and, qualitatively, both the models have similar outcomes.

Evidently, the GJ takeovers produce larger returns to the target shareholders. The difference in returns due to regression techniques is visible even in FF returns.

### **7.3.5 Corporate Governance Models and Political Framework**

While LLSV propounds that corporate governance practices are *hard-wired* into a country's legal system, Gourevitch and Shinn (2005) opine that countries have varied corporate governance systems, which may *change over time*, regardless of the legal origin of a country. This is primarily due to 'domestic politics': the institutional framework and the economic preferences of various economic stakeholders in the system that eventually determines the type of corporate governance model for a country. Consequently, numerous variants of corporate governance models may exist and eventually translate into 'Diffused' or 'Blockholding' ownership that can be either abusive or protective for investors. For instance, in France it is argued that, since the 1980s, their corporate governance model has been evolving and heading towards 'Managerialism'. The Managerialism corporate governance model features a *Diffused* ownership structure. Meanwhile, other countries like Germany, Japan and Sweden have been pursuing corporate governance models engendering Blockholders. For India, the business house culture promotes Blockholding ownership. Based

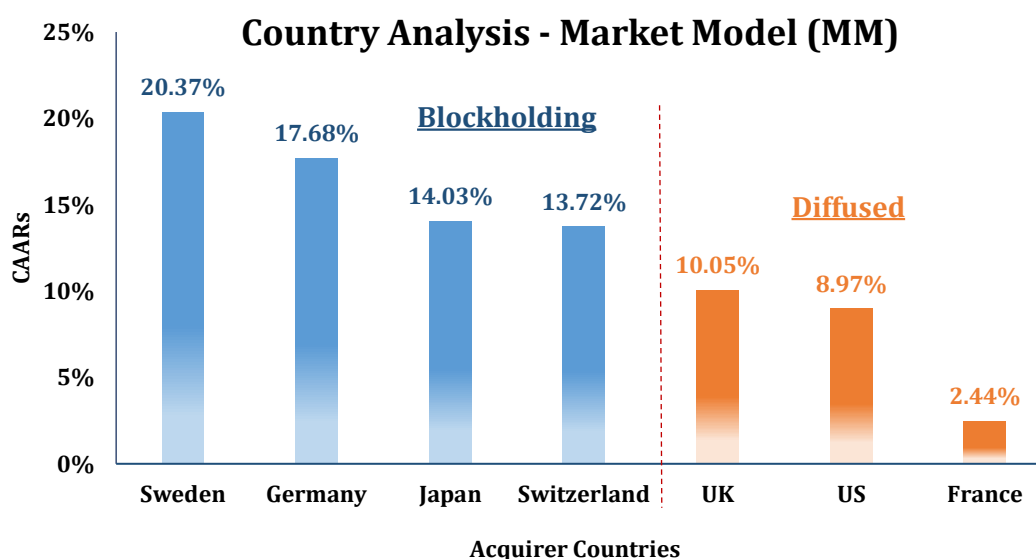
on this theory, Aguilera and Jackson (2010), in their comprehensive study on comparative international corporate governance systems, produced the following table.

**Table 7.3.4 Adopted from Aguilera & Jackson (2010 p. 515)**

| Cleavage               | Model                  | Coalition   | Outcome for share ownership | Examples                              |
|------------------------|------------------------|-------------|-----------------------------|---------------------------------------|
| Class Conflict         | Investor Model         | $O + M > W$ | Diffusion                   | South Korea                           |
|                        | Labor Model            | $O + M < W$ | Blockholding                | Sweden                                |
| Cross-Class coalitions | Corporatist            | $O < M + W$ | Blockholding                | Germany, Japan                        |
|                        | Oligarchy              | $O > M + W$ | Blockholding                | China, Russia                         |
|                        | Managerialism          | $O + W < M$ | Diffusion                   | United States, United Kingdom, France |
|                        | Transparency coalition | $O + W > M$ | Diffusion                   | Chile, Malaysia                       |

\*  $X > Y$ : X's preferences prevail in the political struggle over CG issues. O= Owners, M= Managers and W= Workers.

To observe if there are any country specific variations in the returns, the following chart provides a snapshot of the CAARs generated up until the announcement from each country. The blue bars represent the countries with corporate governance models leading to Blockholding ownership, whereas the orange bars represent the countries pursuing Diffused ownership corporate governance models. Even when arranged by 3 day CAAR or AAR Day-0, the countries with Diffused corporate governance models have lower returns.



**Figure 7.3.3 Country Specific Returns to Indian Targets (MM)**

Table 7.3.5 (below) summarizes the statistical findings from the country analysis based on the Market model, estimated through the MM regression.

**Table 7.3.5 Summary - Indian Targets and Country Analysis (MM)**

| Country     | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n  |
|-------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|----|
| Sweden      | 3.52%     | 11.16% **   | 20.37% *** | 30.60% ***   | -1                        | -1 to +30                  | 10 |
| Germany     | 9.94% **  | 17.62% **   | 17.68% **  | 29.41% **    | 0 to +1                   | 0 to +30                   | 7  |
| Japan       | 3.65% **  | 6.76% ***   | 14.03% *** | 12.50%       | 0                         | -12 to +17                 | 16 |
| Switzerland | 5.79% *   | 15.24% **   | 13.72% *   | 28.46% ***   |                           |                            | 6  |
| UK          | 2.88%     | 4.56%       | 10.05% *   | 17.57% **    |                           |                            | 12 |
| US          | 0.89%     | 3.83% ***   | 8.97% **   | 14.69% ***   | +1                        | -19 to +30                 | 24 |
| France      | 4.12%     | 5.19%       | 2.44%      | 11.35% *     |                           |                            | 6  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

It is evident that the takeovers from the countries with corporate governance models allowing ‘Blockholding ownership’ are favoured more than the takeovers with various measures. The returns from France are lowest in the spectrum.

However, one has to be cautious; the findings should be interpreted as merely indicative due to the limitations posed by the sample sizes of each country.

The next analysis is a reassessment of the corporate governance analysis, based on the models derived from the *political framework*. Following the literature, the countries are classified into the ‘Blockholder’ and ‘Diffused ownership’ sub-sets. This categorizes France with the United States and United Kingdom, and also allows for the inclusion of China in the analysis.

Figure 7.3.4 presents the Market model results based on the MM regression. It also compares the results with the legal origin models from the LLSV Anglo-Saxon and German/Japanese models.

The original CAARs from the AS and GJ models are presented in the blue graphs. The results from the models based on the political framework show even higher returns to the Blockholder<sup>37</sup> sub-set when compared with GJ returns. And the returns from the Diffused sub-set are lower when compared with the AS CAARs.

<sup>37</sup> The status of Switzerland was not clear but most likely it aligns with the blockholder model. So the analysis was performed both with and without Switzerland. There are no qualitative changes in the results.

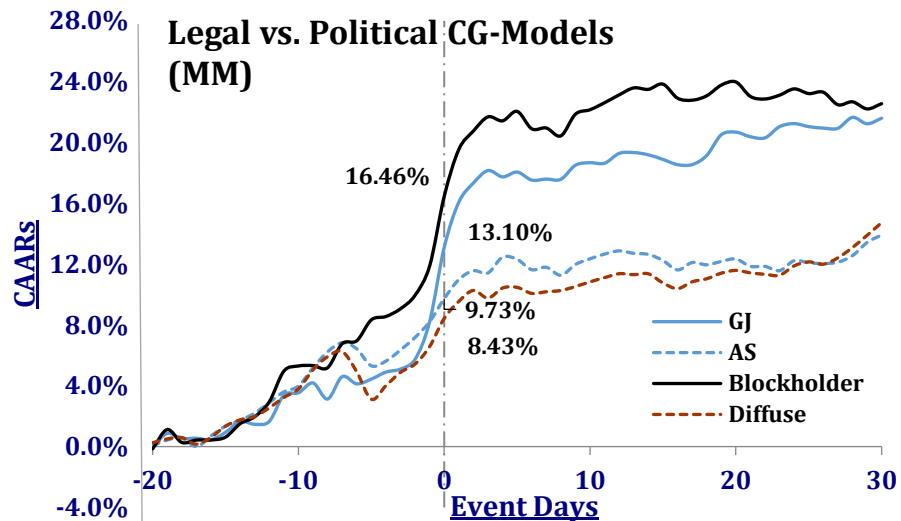


Figure 7.3.4 Blockholding vs. Diffused Ownership (MM)

Once again, despite having these returns spread out over the entire event window, the test of differences in means is *significantly different from zero* for the announcement day average returns (AAR Day-0) and 3 day CAARs for both the regression estimations. This implies that being taken over by a country pursuing the *Blockholder corporate governance model* is favoured more by the Indian market.

Interestingly, in the classical shareholder/stakeholder dichotomy, the legal origin view from LLSV, and the political framework of corporate governance systems, regardless of the differences in their origin, all the systems converge eventually at ‘ownership patterns’ as an ultimate outcome. As discussed earlier, India is very well placed with regards to its corporate governance rules but scores poorly on its institutional environment due to executional incompetency. The concentrated ownership is seen as a commitment, which induces investor confidence. As a result, a natural hedge against the risk of expropriation for minority shareholders emerges in the countries that have weaker legal systems. Thus, it is natural that the Indian investors prefer the GJ or Blockholder models more.

There is sufficient evidence to reject the null hypothesis and conclude that the returns generated by the acquirers pursuing corporate governance models promoting concentrated shareholding are favoured more in the Indian markets.

## 7.4 Cultural Analysis

Following the cultural classifications laid out in the iconic GLOBE Study in *Figure 7.4.1*, the acquiring firms, by their ultimate parent company's nationality, are divided into various cultural clusters. Such a classification is motivated by the literature that suggests that culture tends to flow from the acquirer to the target company. This classification allows the inclusion of ten additional target firms, which were acquired by an Indian firm with a parent company based overseas.

The prominent clusters and respective observations in the data are Anglo (39), Confucian (24), Germanic (15), Latin Europe (9) and Nordic (11). The remaining countries not covered in the GLOBE study are clustered as Others. As the South Asia and Others clusters have only three observations each, their results are reported in the appendix.

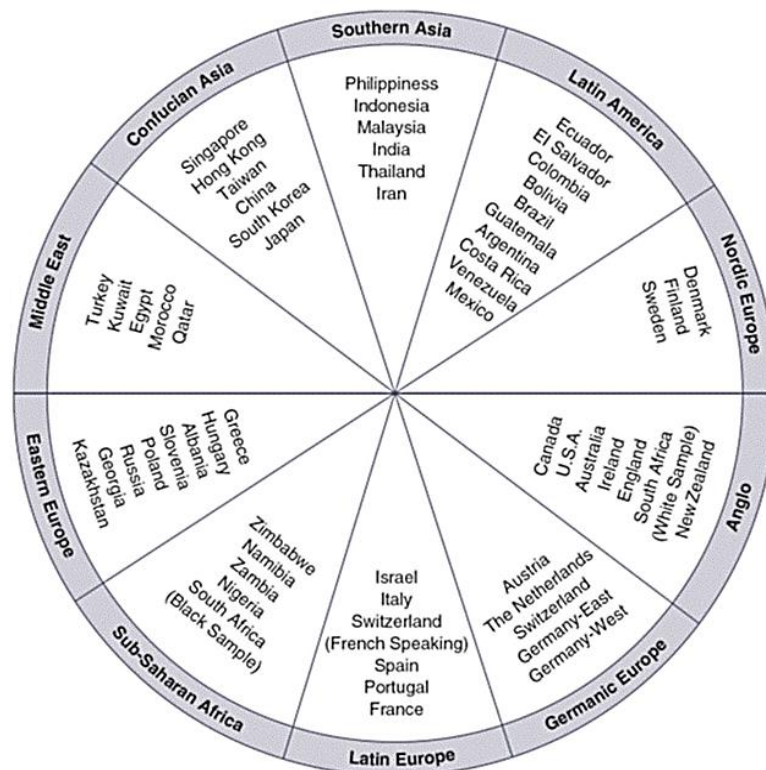


Figure 7.4.1 Country Clusters According to the GLOBE Study

Adopted from House *et al.*, (2004, p 190)

### 7.4.1 MM Estimation Analysis

*Figure 7.4.2* and *Figure 7.4.3* represent graphically the 51 day CAARs for the Indian target firms when taken over by the acquirers from the various cultural clusters. For ease of presentation and discussion, returns from these clusters have been grouped in two separate

graphs. The detailed statistical returns from these clusters are available in *Table-A 7.15 to 7.19* in the appendix.

#### 7.4.1.1 Confucian, Germanic and Nordic Clusters

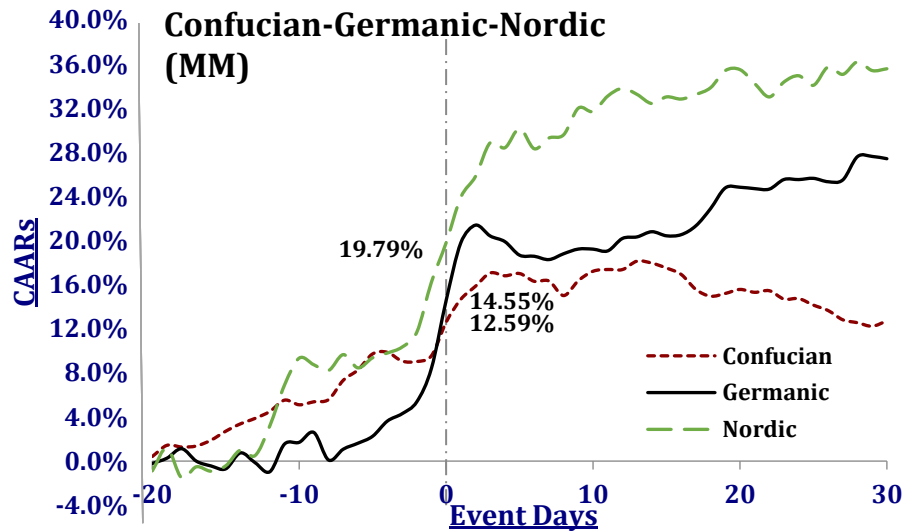


Figure 7.4.2 Market Returns; Indian Targets; Multiple Clusters - I; (MM)

In Confucian deals, the Day-0 AAR of 3% is statistically significant. While the CAARs are positive throughout, they significantly differ from zero for the days -11 to +20. The 3 day CAAR of 5.64% is also statistically significantly positive. Finally, the apparent decline in the returns in later days is not significant statistically.

For Germanic deals, the CAARs are positive for the days -11 to +30 but are not significantly different from zero up until Day -1. The Day-0 AAR, CAAR along with the 3 day CAAR of 14.42% are all significantly positive. The CAAR graph drifts upwards, suggesting small additional gains to the target shareholders.

In Nordic acquisitions, similar to the Germanic deals, the CAARs are not different than zero until Day -2 but then after that they are statistically positive till the end. The Day-0 CAAR and the 3 day CAAR of 12.24% are both significantly positive but not the AAR on Day-0. Further, the upward sloping curve with significant positive returns indicates small additional gains.



### 7.4.1.2 Anglo and Latin Europe Clusters

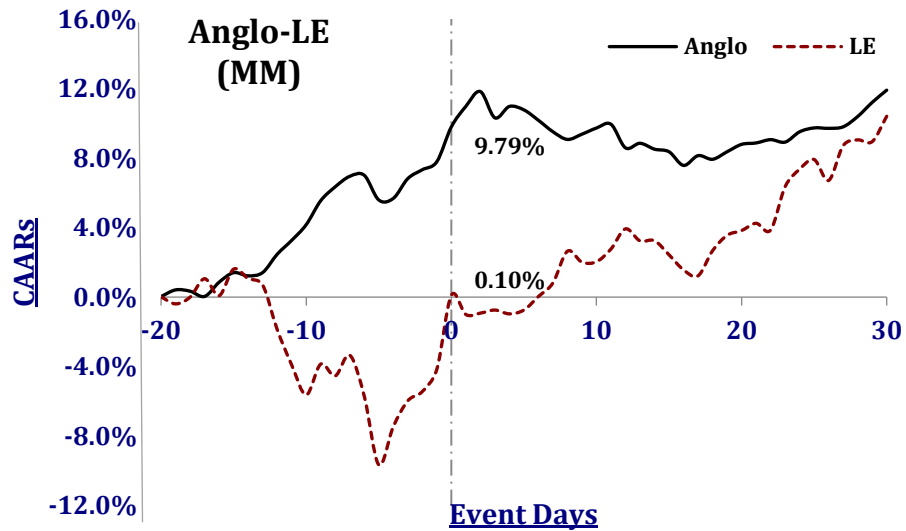


Figure 7.4.3 Market Returns; Indian Targets; Multiple Clusters - II; (MM)

In Anglo deals, the CAARs are positive throughout the event window. However, they are statistically different from zero only from Day -11. The announcement day CAAR is significantly positive, as is the 3 day CAAR of 3.65%. However, the Day-0 AAR of 2% is not statistically significant at the 5% level.

For Latin Europe deals, except for the Day-0 AAR of 4.26%, nothing else is significantly different from zero.

### 7.4.1.3 South Asian and Other Cultures

The South Asia and Other cultures categories both have three firms each and nothing is statistically significant in their analysis. While they are not graphed here, the statistical results for these clusters are provided in *Table-A 7.20 and 7.21*.

## 7.4.2 OLS Estimations Analysis

*Figure 7.4.4 and Figure 7.4.5* graphically represent the CAARs from the OLS estimations. For ease of presentation and discussion, the CAARs are presented in two separate graphs. The detailed statistical returns from these clusters are provided in *Table-A 7.22 to 7.26* in the appendix.

7.4.2.1 Confucian, Germanic and Nordic Clusters

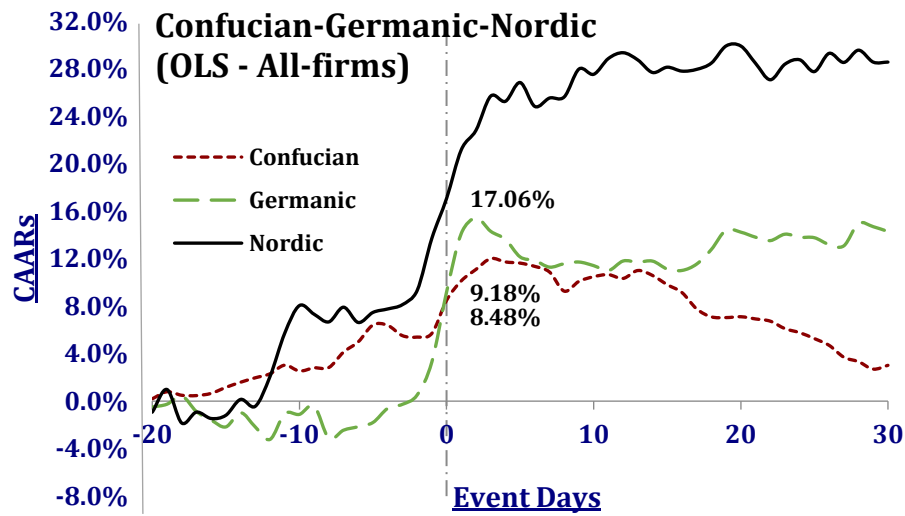


Figure 7.4.4 Market Returns; Indian Targets; Multiple Clusters - I; (OLS)

In Confucian deals, the Day-0 AAR of 2.78% is statistically significant. While the CAARs are positive throughout, they are statistically different from zero for the Days -6 to +11. The 3 day CAAR of 4.73% is also significantly positive. The apparent decline in the returns in later days is not statistically significant.

For Germanic deals, the CAARs are positive for the Days -9 to +30 but are insignificant up until the announcement day. The Day-0 AAR and CAAR, along with the 3 day CAAR of 13.60%, are all significantly different than zero. The CAAR graph drifts upwards post-announcement, and the CAARs here are significantly positive. It suggests additional gains to the target shareholders.

In Nordic acquisitions, similar to Germanic deals, the CAARs significantly positive from Day -1 until the end. The Day-0 CAAR and 3 day CAAR of 11.85% are both significantly positive, but not the AAR on Day-0. Further, the upward sloping curve with significant positive CAARs implies small additional gains.

Interestingly, of the three clusters above, the AARs and the CAARs returns from the Confucian cluster, which is the closest to the South Asian culture where India belongs, are the lowest.

### 7.4.2.2 Anglo and Latin Europe Clusters

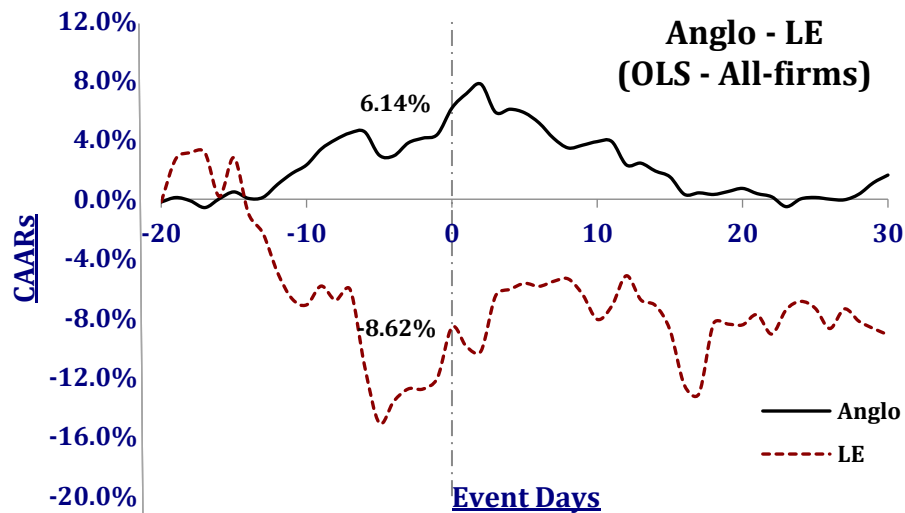


Figure 7.4.5 Market Returns; Indian Targets; Multiple Clusters - II; (OLS)

In Anglo deals, the CAARs are positive throughout the event window. However, they gain statistical significance only from the Day -9. The announcement day CAAR is significantly positive, as is the 3 day CAAR of 3%. However, the Day-0 AAR of 1.78% is not statistically significant at the conventional level.

For Latin Europe deals, all the relevant measurements are not significantly different from zero. Even the CAAR graph is erratic.

### 7.4.2.3 South Asian and Other Cultures

South Asia and Other cultures both have three firms each and nothing is statistically reliable in their analysis. While they are not graphed here, the statistical results for these clusters are provided in *Table-A 7.27 and 7.28*.

## 7.4.3 Cultural Analysis Snapshot

*Table 7.4.1* provides the summary from the two regressions for *all firms*. The graphs based on OLS for MM firms (Same) are presented in *Figure A 7.8 and 7.9*. And there are no sample size discrepancies in the quality of the results at the conventional level of significance for OLS (All) and OLS (Same).

**Table 7.4.1 Summary - Returns to Indian Targets from Various Cultures of Acquirers**

| Regression | Culture   | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n  |
|------------|-----------|-----------|-------------|------------|--------------|---------------------------|----------------------------|----|
| MM         | Nordic    | 3.57%     | 12.24% **   | 19.79% *** | 35.57% ***   | -1                        | -2 to 30                   | 11 |
|            | Germanic  | 6.15% *** | 14.42% ***  | 14.55% *** | 27.14% ***   | -1 to 1                   | -1 to 30                   | 18 |
|            | Confucian | 3.05% **  | 5.64% ***   | 12.59% *** | 12.71%       | 0 to 1                    | -11 to 18                  | 22 |
|            | Anglo     | 2.00% *   | 3.65% **    | 9.79% ***  | 11.91% ***   |                           | -11 to 30                  | 44 |
|            | LE        | 4.26% **  | 4.43%       | 0.10%      | 10.40% **    | 0                         |                            | 8  |
| OLS        | Nordic    | 3.35%     | 11.85% **   | 17.06% *** | 28.55% **    | -1                        | -1 to +30                  | 11 |
|            | Germanic  | 5.88% *** | 13.60% ***  | 9.18% ***  | 14.28% ***   | -1 to +1                  | 0 to +30                   | 18 |
|            | Confucian | 2.78% **  | 4.73% ***   | 8.48% ***  | 3.02%        | 0                         | -6 to +11                  | 24 |
|            | Anglo     | 1.78% *   | 3.00% **    | 6.14% ***  | 1.63%        |                           | -9 to +6                   | 46 |
|            | LE        | 3.42% *   | 2.86%       | -8.62% *   | -9.13% *     |                           | -6 to -1                   | 9  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

With regards to the efficiency market hypothesis, there is no evidence of systematic AARs after the event. However, significantly positive AARs and CAARs in the pre-event days indicate incorporation of probabilistic takeover gains by the market in the share price. Likewise, significantly positive CAARs in the post-event period suggest small incremental returns to the shareholders.

When the CAARs from the MM estimations are compared with those from the OLS, the curves reflect a similar trend for the Germanic, Nordic and Confucian clusters. The three clusters maintain the same order of magnitude and are also statistically significantly positive at similar levels. However, the magnitudes of the MM returns are more pronounced, especially for the latter two clusters.

When the MM CAARs of Anglo and Latin Europe clusters are compared with their respective OLS counterparts, there is a substantial difference overall. The Day-0 CAAR for Anglo cluster from the MM estimates is larger, followed by an upward drift with significantly positive CAARs throughout. Even the window for significant CAARs is considerably larger from the MM estimates. The Latin Europe cluster is significantly positive for the Day-0 AAR and also the slope of the graph changes from negative to positive.

Figure 7.4.6 provides a visual comparison of the OLS and MM CAARs up until Day-0 from each of these clusters. Except for the Latin European cluster, each of these Day-0 CAARs is significantly positive.

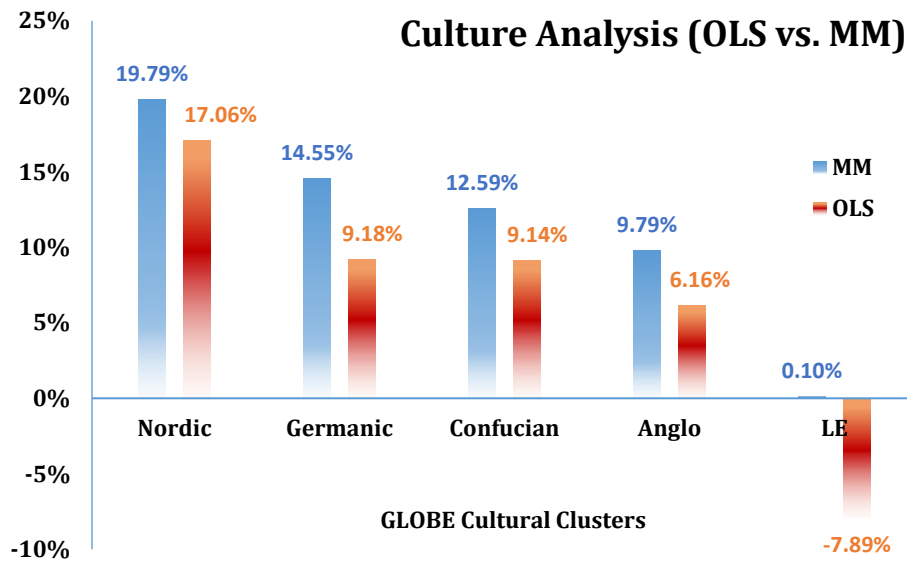


Figure 7.4.6 Cultural Analysis Snapshot

In Figure 7.4.1, adopted from the GLOBE study, each country is classified under a cluster according to identical cultural properties. In addition, adjacent clusters are placed according to their cultural proximity to one another.

Thus, if *cultural proximity* is a founding principle in CBMAs, then cluster distance can be relied upon to explain the variations in the magnitudes of the returns shown in Figure 7.4.6. The further the distance, the lower the return should be. India belongs to the Southern Asia cluster, which is diametrically opposite to the Latin Europe cluster. This might explain negative or lower returns (though insignificant) from the Latin European cluster. Likewise, India is one, two, three and four clusters away from the Confucian, Nordic, Anglo and Germanic groups respectively. This might explain the significantly positive and higher returns from the Confucian cluster, and the relatively lower returns from the Anglo cluster. However, even higher returns from the Nordic cluster (when compared with the Confucian cluster) and also the Germanic cluster (when compared with the Anglo cluster) is inconsistent with the cultural proximity argument.

Further, the statistical tests of differences in the announcement effect based on the 3 day CAARs [-1, +1] for these cultural clusters (refer Table 7.4.2) demonstrate that the Germanic and Nordic clusters generate a significantly larger announcement effect when compared with the Anglo and Confucian clusters, according to both of the regression methods (Germanic and Confucian difference is nearly significant at 5%). And since the higher returns obtained are from the distant clusters, rather than the closer cluster, it does indicate that cultural proximity may not be the factor driving those returns.

**Table 7.4.2 Cultural Comparison - Indian Targets**

| Cultures  | 3-Days CAARs<br>(MM) |           |       |        | 3-Days CAARs<br>(OLS) |           |          |        |
|-----------|----------------------|-----------|-------|--------|-----------------------|-----------|----------|--------|
|           | Anglo                | Confucian | LE    | Nordic | Anglo                 | Confucian | LE       | Nordic |
| Germanic  | 10.78% **            | 8.78% *   | 9.99% | 2.18%  | 10.60% **             | 8.87% *   | 10.74% * | 1.75%  |
| Nordic    | 8.60% ***            | 6.60% **  | 7.81% |        | 8.85% ***             | 7.12% **  | 8.99% *  |        |
| LE        | 0.79%                | -1.21%    |       |        | -0.14%                | -1.87%    |          |        |
| Confucian | 2.00%                |           |       |        | 1.73%                 |           |          |        |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01.*

Further, despite there being a large difference in the overall CAARs visually, the test of difference in returns fails to reject the null hypothesis. However, this is because of the large standard deviations in the two sub-sets, which statistically reduce the power of the test for the total CAARs and increases the chances of Type-II errors.

To summarize, as per the hypothesis, there is no evidence of higher returns from the proximate cultures and lower return from the distant ones. In fact, significantly positive abnormal returns across all cultures, bar one, give rise to the question: is culture and its proximity a dominant variable in Indian CBMAs at all? According to Hofstede (1984), culturally different firms grow as a result of the exchange of a new set of strengths capabilities, resources and knowledge. The Resource Based View (RBV) and Organisational Learning Theory suggest that the cultural and institutional differences present opportunities to acquire unique skills. Barkema *et al.* (1996) and Vermeulen and Barkema (2001) suggest that the greater the divergence, the higher the possibilities of new learning.

Further, there is a strong indication of higher returns from the Nordic, Germanic and Confucian clusters and relatively lower returns from the Anglo cluster. The closer inspection reveals that these results reemphasize the findings from the corporate governance analysis. The Nordic, Germanic and Confucian clusters are dominated by countries following German/Japanese or Blockholder ownership corporate governance models, while the Anglo and Latin European countries are the countries who follow Anglo-Saxon or Diffused ownership corporate governance models. Here, France is included in the Latin European cluster. This conclusion once again points towards the corporate governance model as the more dominant argument. The findings support the argument by Hofstede (1994), which suggests that common practices, and not common values, keep multinationals together.

#### 7.4.4 Market vs. Fama-French Returns

Finally, Fama-French analysis of these prominent cultural clusters using both the MM and the OLS estimations are graphed in *Figure A 7.10 to 7.13* in the appendix and the statistical results are summarized in *Table 7.4.3*.

**Table 7.4.3 Summary of Cultural Analysis; Market vs. FF Model; OLS & MM.**

| Regression          | Model  | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n  |
|---------------------|--------|-----------|-------------|------------|--------------|---------------------------|----------------------------|----|
| <b>Confucian</b>    |        |           |             |            |              |                           |                            |    |
| MM                  | Market | 2.80% **  | 4.99% **    | 11.47% **  | 6.24%        | 0                         | -11 to +16                 | 20 |
|                     | FF     | 2.76% **  | 4.97% **    | 10.34% *** | 5.52%        | 0                         | -7 to +16                  | 20 |
| OLS                 | Market | 2.69% **  | 4.46% **    | 7.91% **   | -3.51%       | 0                         | 0 to +5                    | 20 |
|                     | FF     | 2.66% **  | 4.47% **    | 7.10% **   | -4.05%       | 0                         | 0 to +5                    | 20 |
| <b>Germanic</b>     |        |           |             |            |              |                           |                            |    |
| MM                  | Market | 5.37% *** | 13.20% ***  | 11.84% *** | 23.63% ***   | -1 to +1                  | -1 to +30                  | 17 |
|                     | FF     | 5.27% *** | 12.67% ***  | 13.76% *** | 25.89% ***   | -1 to +1                  | -3 to +30                  | 17 |
| OLS                 | Market | 5.10% **  | 12.39% ***  | 6.55% **   | 10.72% ***   | -1 to +1                  | 0 to +30                   | 17 |
|                     | FF     | 5.02% **  | 11.90% ***  | 8.53% ***  | 13.32% ***   | 0 to +1                   | 0 to +30                   | 17 |
| <b>Nordic</b>       |        |           |             |            |              |                           |                            |    |
| MM                  | Market | 3.57%     | 12.24% **   | 19.79% *** | 35.57% ***   | -1                        | -2 to 30                   | 11 |
|                     | FF     | 3.54%     | 12.12% **   | 21.88% *** | 38.36% ***   | -1                        | -10 to +30                 | 11 |
| OLS                 | Market | 3.35%     | 11.85% **   | 17.06% *** | 28.55% **    | -1                        | -1 to 30                   | 11 |
|                     | FF     | 3.42%     | 11.65% **   | 19.05% *** | 30.64% **    | -1                        | -5 to +30                  | 11 |
| <b>Anglo</b>        |        |           |             |            |              |                           |                            |    |
| MM                  | Market | 1.69%     | 3.24% *     | 10.55% *** | 13.34 ***    |                           | -12 to +30                 | 38 |
|                     | FF     | 1.60%     | 3.14% *     | 11.13% *** | 13.47 ***    |                           | -12 to +30                 | 38 |
| OLS                 | Market | 1.42%     | 2.50% *     | 6.36% ***  | 1.53%        |                           | -9 to +6                   | 40 |
|                     | FF     | 1.38%     | 2.77% *     | 7.39% ***  | 2.02%        |                           | -9 to +5                   | 40 |
| <b>Latin Europe</b> |        |           |             |            |              |                           |                            |    |
| MM                  | Market | 4.69% *   | 5.41%       | 1.90%      | 12.45% **    |                           |                            | 7  |
|                     | FF     | 4.15% *   | 3.26%       | 6.57%      | 14.49%       |                           |                            | 7  |
| OLS                 | Market | 3.65% *   | 3.51%       | -8.29%     | -9.58%       |                           | -6 to -1                   | 8  |
|                     | FF     | 3.32%     | 2.02%       | -3.26%     | -9.41%       |                           |                            | 8  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

As earlier, Fama-French CAARs are similar to the Market model returns with their respective regressions. Although the magnitude is slightly higher on the conventional level of statistical significance, the results are qualitatively comparable.

## 7.5 Institutional Environment Analysis

The legal origin hypothesis established by LLSV is one of the most celebrated theories in finance literature. Accordingly, institutional environment analysis has been undertaken in order to understand whether the similarities in legal systems dictate the outcomes of Indian CBMAs. Weak law enforcement characterizes the emerging countries. Property rights for the acquiring firms and shareholder protection for the target firms thus become important issues. In such an environment, institutional harmonies should enhance the comfort and therefore the confidence of the participating companies.

India, being a former British colony, has inherited the common law system, which generally scores high on both property rights and shareholder protection scales in LLSV literature. Therefore, theoretically, CBMAs with Commonwealth nations should exhibit more synergies, implying higher returns. Thus, the markets should favour deals from Commonwealth countries more than deals from the other nations.

The 104 Indian CBMA target firms are reclassified into two segments: those which are taken over by acquirers from Commonwealth nations (CW), and others (NCW).

### 7.5.1 MM Estimation Analysis

The MM regression based results are graphed in *Figure 7.5.1* and tabulated in *Table-A 7.29 and 7.30* in the appendix.

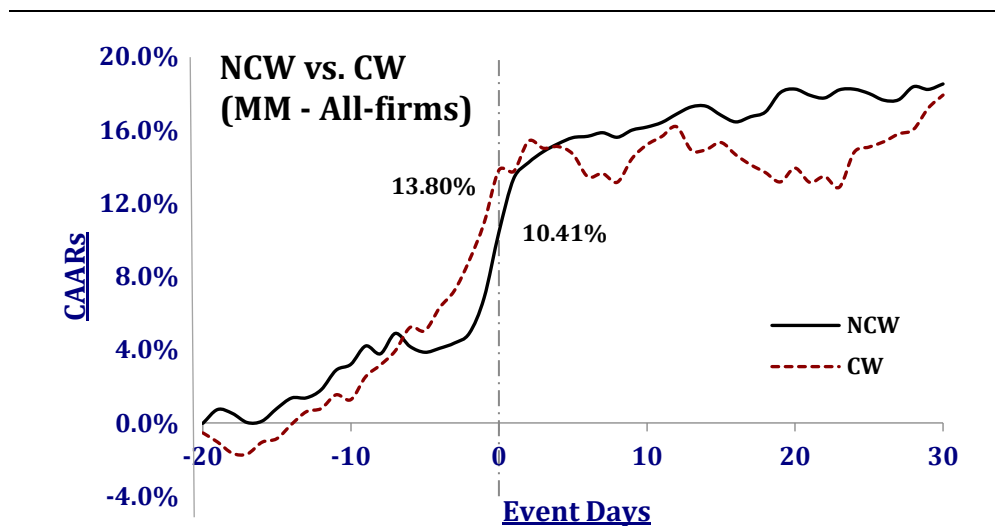


Figure 7.5.1 Indian Targets; Institutional Analysis; All-Firms (MM)



In accordance with the proposition, the Day-0 CAAR of 13.80% from the CW acquirers is numerically higher than that of NCW nations which is only 10.41%. Further, while the CAARs for days [-1 to +30] are statistically significantly positive for the CW sub-set, the announcement effect captured via AAR - Day-0 and 3 day CAAR both do not differ statistically from zero for them. The CAAR graphs for CW sub-set fluctuates due to the smaller sample size.

For the NCW acquirers, the Day-0 AAR (3.88%) is higher from the CW acquirers and also significantly different from zero. So is the 3 day CAAR of 8.45%. Likewise, the CAARs are positive and significantly different from zero for the days [-14 to +30].

### 7.5.2 Market Model OLS Estimations

Figure 7.5.2 presents the CAARs for the two sub-sets based on the OLS estimations of the abnormal returns.

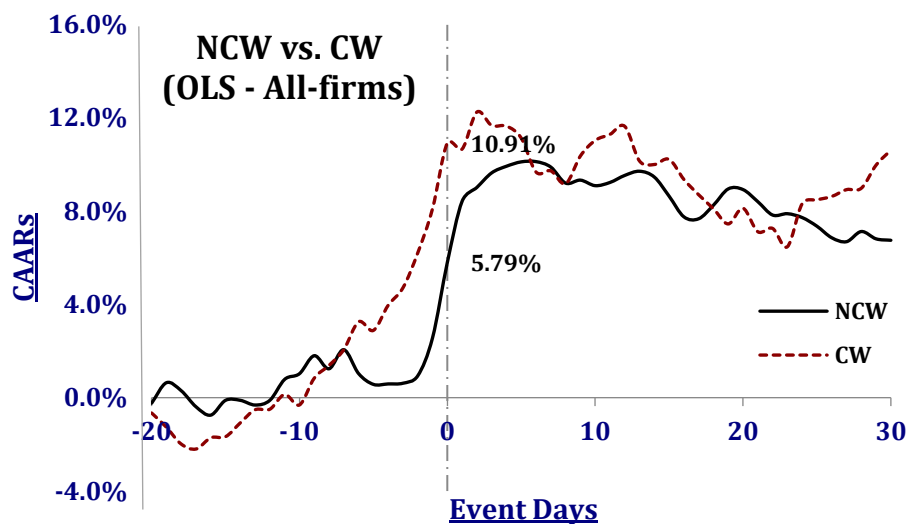


Figure 7.5.2 Indian Targets; Institutional Analysis; All-Firms (OLS)

Once again, the CAARs from the CW group are numerically larger than the CAARs from the NCW group. For the CW group, the Day-0 CAAR of 10.91% is significantly positive but not the announcement day AAR or the 3 day CAAR. The CAAR graph for CW set of firms fluctuates due to the smaller sample size.

On the other hand, the NCW group has Day-0 AAR of 3.22%, CAAR of 5.79% and a 3 day CAAR of 7.48%. All of these are statistically significantly different from zero. The CAARs are significantly positive for the days [-1 to +30].

### 7.5.3 Institutional Framework Analysis Snapshot

Table 7.5.1 (below) summarizes the statistical findings from the two regressions for all and same set of firms. The graphs based on the OLS for MM firms are presented in Figure A 7.14 and 7.15. There are no discrepancies in the quality of the results due to different sample sizes at conventional level of significance.

**Table 7.5.1 Summary of Institutional Analysis; Market Model; OLS & MM**

| Regression | Sub-set | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n  |
|------------|---------|-----------|-------------|------------|--------------|---------------------------|----------------------------|----|
| MM         | NCW     | 3.58% *** | 8.45% ***   | 10.41% *** | 18.50% ***   | -1 to +1                  | -14 to +30                 | 83 |
|            | CW      | 2.88%     | 4.86% *     | 13.80% **  | 17.89% **    |                           | -1 to +30                  | 16 |
| OLS        | NCW     | 3.22% *** | 7.48% ***   | 5.79% ***  | 6.74% **     | -1 to +1                  | -1 to +30                  | 88 |
|            | CW      | 2.81%     | 4.45%       | 10.91% **  | 10.60% *     |                           | 0 to +3                    | 16 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The Day-0 AARs and 3 day CAAR are significantly positive from the NCW sub-set but not from the CW sub-set at a conventional level. However, overall, there are positive returns to the targets from the two sub-sets but with varying magnitudes.

Further, following a methodology from Sicherman and Pettway (1987), Table 7.5.2 presents the differences in the two sub-sets' CAARs (NCW – CW) over various strata of the event period and thus provides a more comprehensive understanding of the possible variations in the returns from the two sub-sets.

**Table 7.5.2 Comparison NCW – CW for Indian Targets**

| CAAR Windows |            | MM     | OLS      |
|--------------|------------|--------|----------|
| Pre-event    | -10 to -1  | -5.43% | -6.18% * |
|              | -5 to -1   | -3.05% | -3.32%   |
|              | -3 to -1   | -1.87% | -2.17%   |
| Event        | -1 to +1   | 3.59%  | 3.03%    |
|              | 0          | 0.70%  | 0.41%    |
| Post-event   | +1 to +3   | 3.20%  | 3.09%    |
|              | +1 to 5    | 4.29%  | 4.10%    |
|              | +1 to +10  | 4.35%  | 3.18%    |
| Total        | -20 to +30 | 0.61%  | -3.86%   |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01.*

Though there are significantly positive returns from the takeovers from both the sub-sets, there is no difference in the abnormal returns obtained by the two sub-sets at the conventional level for any of these strata. Further, returns from the NCW sub-set are higher in the post-event period, which suggests that the market favours NCW takeovers more when it learns about the acquirer.

The evidence presented here supports the null hypothesis. There is sufficient evidence that the returns obtained by the Indian target firms do not vary due to the CW origin of the acquirer. Alternatively put, institutional proximity does not have a decisive role in determining the outcomes of the returns to the target firms. Also, it is worth noting that 88 (85%) of the firms in the sample set are taken over by the NCW countries, which suggests that legal system commonality is hardly a deterrent in Indian CBMAs.

#### 7.5.4 Market vs. Fama-French Returns

The Fama-French results for all the available firms are presented and compared with those from the Market model for the same set of firms under the two regression techniques. The comparative graphs are provided in the *Figure A 7.16 and 7.17* and the findings are summarized in *Table 7.5.3*.

**Table 7.5.3 Summary of Commonwealth Analysis; Market vs. FF Model; OLS & MM**

| Regression                        | Model  | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n  |
|-----------------------------------|--------|-----------|-------------|------------|--------------|---------------------------|----------------------------|----|
| <b>Non-Commonwealth Acquirers</b> |        |           |             |            |              |                           |                            |    |
| MM                                | Market | 3.44% *** | 8.34% ***   | 9.62% ***  | 16.50% ***   | -1 to +1                  | -11 to +30                 | 77 |
|                                   | FF     | 3.35% *** | 8.01% ***   | 10.92% *** | 17.89% ***   | -1 to +1                  | -16 to +30                 | 77 |
| OLS                               | Market | 3.13% *** | 7.52% ***   | 5.00% ***  | 4.69% *      | -1 to +1                  | -1 to +22                  | 80 |
|                                   | FF     | 3.08% *** | 7.43% ***   | 6.73% ***  | 6.23% **     | -1 to +1                  | -2 to +30                  | 80 |
| <b>Commonwealth Acquirers</b>     |        |           |             |            |              |                           |                            |    |
| MM                                | Market | 3.09% *   | 4.98%       | 16.64% **  | 22.48% **    |                           | -2 to +30                  | 13 |
|                                   | FF     | 2.89%     | 4.97%       | 17.47% **  | 24.35% ***   |                           | -2 to +30                  | 13 |
| OLS                               | Market | 3.03% *   | 4.52%       | 13.22% *   | 13.75% *     |                           |                            | 13 |
|                                   | FF     | 2.75% *   | 4.39%       | 13.82% **  | 13.81% *     |                           | -1 to +3                   | 13 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

There are significantly positive returns to the targets from both the sub-sets, regardless of the choice of the financial model and regression technique. Though there is a slight variation in the magnitudes, the difference in announcement effect and overall CAARs from the two models is not significant at a conventional level. Thus, the outcomes from the Fama-French model are comparable to the Market model and, qualitatively, both the models are identical.

In summary, there is no difference in returns from the two sub-sets. Analysis supports the hypothesis, which states that there is no difference in returns to the targets due to the institutional differences with the acquirers.

## 7.6 Summary - Returns to Targets

Table 7.6.1 summarizes the findings of the entire analysis of the abnormal returns to the Indian targets firms based on the Value Weighted Index (VWI).

**Table 7.6.1 Summary Results; Indian Targets; All-Firms - VWI**

| Model  | Regression Betas | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|--------|------------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| Market | MM               | 3.47% *** | 7.87% ***   | 10.95% *** | 18.40% ***   | -2 to +2                  | -14 to +30                 | 99  |
|        | OLS              | 3.16% *** | 7.01% ***   | 6.57% ***  | 7.34% ***    | -1 to +1                  | -2 to +30                  | 104 |
|        | SW-1             | 3.21% *** | 7.19% ***   | 6.64% ***  | 7.04% ***    | -1 to +1                  | -2 to +30                  | 104 |
|        | SW-2             | 3.21% *** | 7.27% ***   | 6.40% ***  | 6.64% ***    | -1 to +1                  | -2 to +30                  | 104 |
|        | SW-3             | 3.21% *** | 7.22% ***   | 6.51% ***  | 6.92% ***    | -1 to +1                  | -2 to +30                  | 104 |
| FF     | MM               | 3.29% *** | 7.57% ***   | 11.87% *** | 18.84% ***   | -2 to +2                  | -14 to +30                 | 90  |
|        | OLS              | 3.03% *** | 7.00% ***   | 7.72% ***  | 7.29% ***    | -1 to +1                  | -9 to +30                  | 93  |

*p-values: \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$ . n represents sample size.*

The announcement effect and overall CAARs are statistically significantly positive. When rounded to the nearest integer, the announcement day return ranges from 3% to 3.5% and the 3 day return is around 7% to 8%. Depending on the financial model and regression technique, the overall CAARs can generate returns between 7% and 19%.

Evidently, Indian target shareholders earn positive abnormal returns both at the announcement and in its surrounding days.

Further, with respect to institutional similarities, there is no difference in returns from acquirers from dissimilar institutional frameworks. With respect to the cultural proximities argument, there are differences in returns from culturally different countries—the countries that are culturally distant produce higher returns. However, with respect to governance structure, the corporate governance model implications are significantly different from the two regimes. The evidence rejects the hypothesis about no difference in returns, and suggests that the acquisitions by firms pursuing German/Japanese model generate higher returns.

## 7.7 Returns to Indian Acquirers

In the cross-border sample, subsequent to the filtering process discussed in the methodology chapter, there is a total of 233 firms identified as Indian acquirers. Of these 233 firms, 195 acquirers participated in DMAs and the remaining 38 firms in CBMAs<sup>38</sup>.

Figure 7.7.1 compares the cumulative average abnormal returns (CAARs) obtained from the MM and the OLS regressions using the Market model for *all the available firms* over the 51 day event window [-20, +30] for the Indian acquirers .

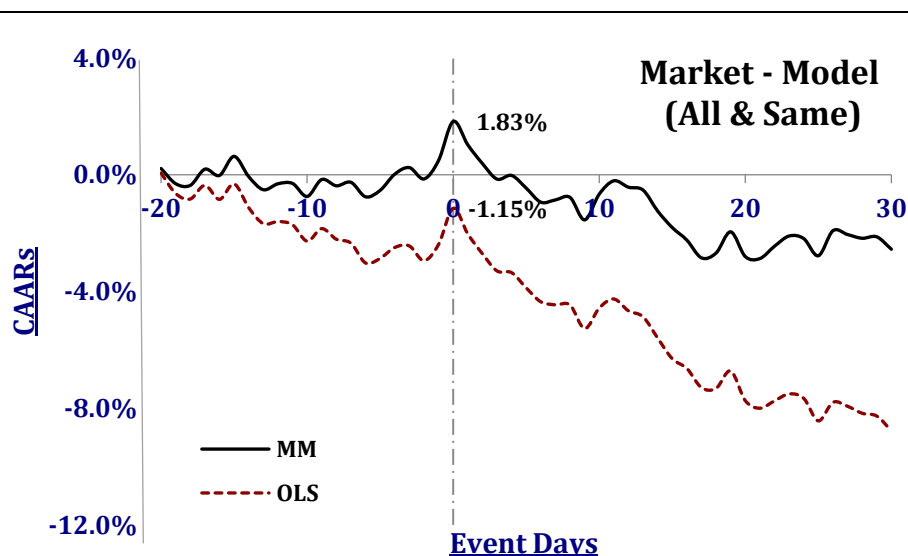


Figure 7.7.1 Returns to CB Acquirers - OLS vs. MM

The CAARs derived from the MM estimator are represented by the solid black line and are reported in *Table-A 7.33*. The Day-0 AAR of 1.34% is significantly positive. Other variables like Day-0 CAAR (1.83%) and 3 day CAAR of 1.17%, while positive, do not differ from zero statistically on the conventional level of significance.

The OLS CAARs are tabulated in *Table-A 7.34*. Similar to the MM estimations, the Day-0 AAR of 1.24% is significantly positive, but the Day-0 CAAR and 3 day CAAR do not differ from zero at conventional level. However, contrary to the positive MM CAARs (1.83%), the Day-0 CAAR (-1.15%) is negative.

<sup>38</sup> One particular firm had unusually high abnormal returns with disproportionately large standard deviation. Being a small sample size, it had an adverse negative effect on the outcomes. Hence, the return presented here are based on 37 firms. However, with 38 firms, the MM announcement returns are 1.14% and OLS AAR-Day-0 is 1.04%.

### 7.7.1 Market vs. Fama-French (FF) Model

The following compares the two financial models and the two regression techniques for the same set of firms (FF firms). The OLS and the MM analysis is based on 32 common firms<sup>39</sup>. The CAARs from the M regression are identical to those from the MM estimations, and are separately graphed in *Figure A 7.19* in the appendix.

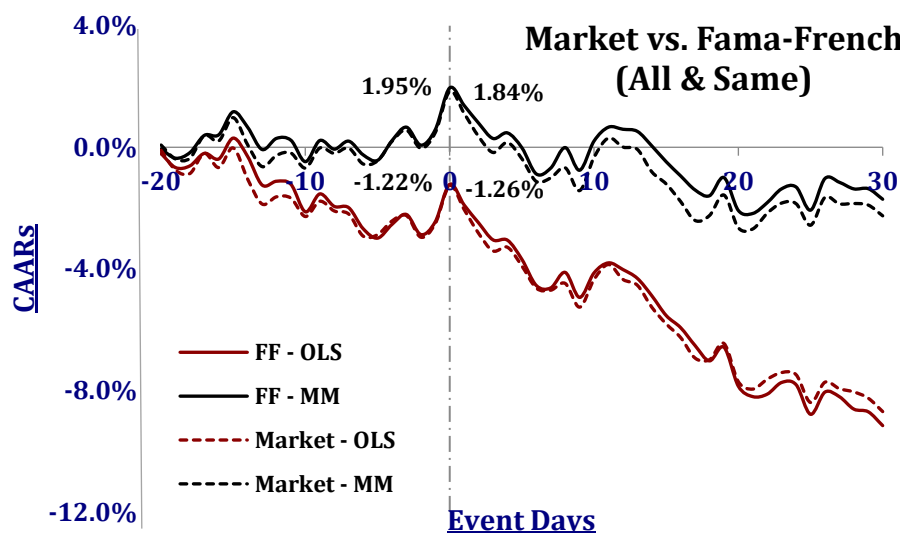


Figure 7.7.2 Returns to CB Acquirers; Market vs. FF; OLS vs MM (All & Same-Firms)

The graphs in red represent the CAARs from the OLS regression, while those in black represent the MM estimator. The dotted lines represent the CAARs from the Market model, while the solid lines denote those from the Fama-French model.

The divergence in the black and the red graphs in the post-event period reflects the differences in the regression techniques. Clearly, the MM estimator produces higher returns. Also, while the MM CAARs suggest a positive announcement effect, the OLS CAARs suggest negative returns.

Comparing any solid line with the dotted line in the same colour shows the differences in the Market model and the FF model for that regression technique. Apparently, the returns from the FF model are consistently slightly higher. Except for that difference, notably, the solid lines (FF model) in both the regressions trend precisely alongside the dotted lines (Market model).

<sup>39</sup> The troublesome firm discussed in the market model analysis is not the part of this analysis either as it did not have Fama-French variables available.

Table 7.7.1 provides a statistical summary of the various CAARs graphed above. The relevant tables for the FF model results are Table-A 7.35 to 7.38.

**Table 7.7.1 Market vs. FF Model; OLS vs. MM Comparison**

| Regression | Model | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR      | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n  |
|------------|-------|-----------|-------------|------------|-------------------|---------------------------|----------------------------|----|
| Market     | MM    | 1.34% **  | 1.17%       | 1.83%      | -2.55%            | 0                         |                            | 37 |
|            | OLS   | 1.24% **  | 0.92%       | -1.15%     | <b>-8.77%</b> *** | 0 to +1                   |                            | 37 |
| FF Market  | MM    | 1.37% **  | 1.31%       | 1.95%      | -1.71%            | 0                         |                            | 32 |
|            |       | 1.35% **  | 1.15%       | 1.84%      | -2.26%            | 0                         |                            | 32 |
| FF Market  | OLS   | 1.23% **  | 0.97%       | -1.22%     | <b>-9.16%</b> *** | 0                         |                            | 32 |
|            |       | 1.25% **  | 0.91%       | -1.26%     | <b>-8.70%</b> **  | 0                         |                            | 32 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

Both the regression techniques for both the models suggest significantly positive returns to the acquirers on the announcement day (Day-0 AAR). In conformity to the findings from other emerging countries and studies about India, there is sufficient evidence that the announcement of CBMA deals yield abnormal positive gains for the Indian acquirer firms.

The two regression techniques, while agreeing on statistically significantly positive returns to the acquirers on the announcement day, present different trends for cumulative returns. While MM regressions from both the financial models suggest positive returns overall, the OLS results do not concur with that finding. Further, the test of differences in the returns for 3 days [-1, +1] and 51 days [-20, +30] is significantly different from zero at the conventional level.

Comparing the FF model with the Market model yields no substantial difference between the two. The announcement effect (Day-0 AAR and 3 day CAAR) and the overall CAARs (51 day CAAR) are not significantly different from zero for both the regression methods.

## 7.7.2 Market vs. Scholes and Williams (SW) Adjusted Betas

All three SW adjusted beta variants along with the original Market model are compared in this section. The set of common firms used is also the entire sample set.

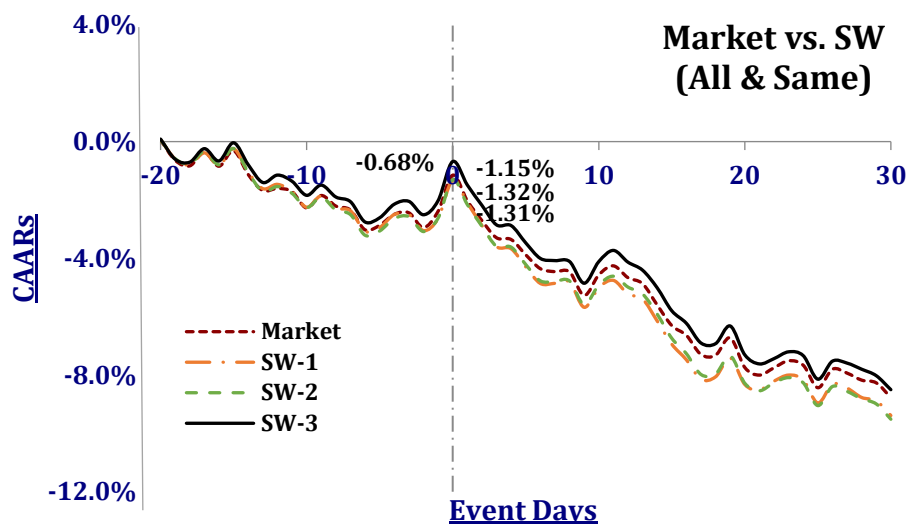


Figure 7.7.3 Returns from the Market and SW (1-3) Models; OLS (All & Same-Firms)

Figure 7.7.3 is based on Table-A 7.34 7.39 to 7.41. It serves two purposes. Firstly, it shows the CAARs from all three SW adjusted beta variants. Secondly, it compares them with the original Market model for the same set of firms.

Table 7.7.2 provides a statistical summary of all the CAARs graphed above.

Table 7.7.2 Market and SW Betas Comparison (All & Same-Firms)

| Model  | Beta       | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n  |
|--------|------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|----|
| Market | Unadjusted | 1.24% **  | 0.92%       | -1.15%     | -8.77% ***   | 0 to +1                   |                            | 37 |
|        | SW-1       | 1.31% **  | 0.95%       | -1.32%     | -9.39% ***   | 0                         |                            | 37 |
|        | SW-2       | 1.32% **  | 0.93%       | -1.31%     | -9.51% ***   | 0 to +1                   |                            | 37 |
|        | SW-3       | 1.34% **  | 1.02%       | -0.68%     | -8.50% ***   | 0                         |                            | 37 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The SW adjusted beta Market models also replicate the findings of the original Market model. Qualitatively, all the relevant aspects of the analysis are statistically similar. The findings are in line with Dyckman *et al.* (1984 and Davidson and Josev (2005), which suggest no significant improvement in the specifications or the power of tests using either of these modified betas. Thus, there is *no unique value addition to the analysis* over the unadjusted Market model analysis from the SW adjusted betas of Market model.



## 7.8 Summary Returns to Acquirers

Table 7.8.1 (below) summarizes the findings of the entire analysis of the abnormal returns to the Indian targets firms based on the Value Weighted Index (VWI).

**Table 7.8.1 Summary Results; Indian Acquirers; All-firms-VWI**

| Model  | Regression | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR      | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n  |
|--------|------------|-----------|-------------|------------|-------------------|---------------------------|----------------------------|----|
| Market | MM         | 1.34% **  | 1.17%       | 1.83%      | -2.55%            | 0                         |                            | 37 |
|        | OLS        | 1.24% **  | 0.92%       | -1.15%     | <b>-8.77%</b> *** | 0 to +1                   |                            | 37 |
|        | SW-1       | 1.31% **  | 0.95%       | -1.32%     | <b>-9.39%</b> *** | 0                         |                            | 37 |
|        | SW-2       | 1.32% **  | 0.93%       | -1.31%     | <b>-9.51%</b> *** | 0 to +1                   |                            | 37 |
|        | SW-3       | 1.34% **  | 1.02%       | -0.68%     | <b>-8.50%</b> *** | 0                         |                            | 37 |
| FF     | MM         | 1.37% **  | 1.31%       | 1.95%      | -1.71%            | 0                         |                            | 32 |
|        | OLS        | 1.23% **  | 0.97%       | -1.22%     | <b>-9.16%</b> *** | 0                         |                            | 32 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The positive announcement effect is clear, as evidenced by the positive average abnormal returns on Day-0. However, post-event CAARs tend to be negative from both the regressions.

Further, the event-study analysis for acquirers focussing on the effect of the corporate governance models, cultural and institutional distances is not conducted here due to a very small sample size available for such segmentations. Of the total 37 Indian acquirer firms in the sample, 26 takeovers occurred, with the targets based in the United States or the United Kingdom. They both rely on the Anglo-Saxon corporate governance model, and belong to the Anglo culture. Once that is factored in, any further segmentation of the sample leaves the sub-sets insufficiently small for any robust and meaningful analysis.

Instead, the impact of these aspects is studied directly in the cross-sectional analysis presented in the next section.

The explanation for the dominance of the United States and United Kingdom targets in Indian acquisitions can be explained by (i) a common business language which helps to improve communication and bridge cultural and psychic distance, (ii) the fact that they are developed countries which allows access to better technology and skills not available at home (Buckley *et al.*, 2012).

## 7.9 Cross-Sectional Analysis

This section takes the analysis further and investigates the cross-sectional determinants of the CAARs obtained by the participating Indian firms in the cross-border dataset. This analysis regresses various deal specific characteristics, in combination with the cultural, institutional and corporate governance variables, with the CAAR windows of varying time lengths ranging from the days [-1,+1] to [-10,+10] with respect to the announcement day. While the smaller event windows capture the returns just in the days adjacent to the event day, larger event windows ensure that pre and post-event market reactions are also adequately captured. However, one important difference in the CAARs of CBMAs, when compared with CAARs of the domestic dataset, is that the symmetrical window size of the CAARs is significantly different from zero, and is not as large as it is in the latter. Consequently, the largest window analysed here is [-10 to +10] with few smaller windows added to the analyses<sup>40</sup>.

Both the target and acquirer CAARs are regressed with a combination of independent variables comprising Cash, Pct50, PctToe, Related, Conglomerate, CWA, CWT, GJ, Blockhold, Germanic, Nordic, Confucian, Anglo, Latin European and South Asian<sup>41</sup>.

Further, the Market model CAARs from both the estimation techniques (the OLS and the MM from the event study analysis) are examined using the OLS regression with White-Heteroskedastic robust standard errors.

This thesis confines the cross-sectional analysis to the OLS technique only because Maronna and Yohai (2000) argue that the presence of multiple independent explanatory

---

<sup>40</sup> The analyses based on even larger windows like [-15 to +15] and [-20 to +20] is provided in the appendix. As expected, neither the models, nor the variables are statistically significant in these regressions.

<sup>41</sup> Recall from the methodology chapter, Cash is a dummy variable wherein the value of one is assigned for a cash offer and zero for shares or a combination of cash and share; Pct50 is a dummy variable that reflects acquisition of majority stake - one is assigned when either the acquired stake is 50% or more or when the existing stake is increased to 50% or more; PctToe is a continuous variable that represents the percentage shareholding already held by the acquirer prior to the announcement of the deal; Related is 1 when the both the firms have common parent company; Conglomerate is one when the firms belong to same industry based on 2 digit SIC code; CWA is a dummy variable which is assigned one when the Acquirer is from a Commonwealth nation; CWT is a dummy variable when the Target belongs to a Commonwealth nation; GJ refers to the corporate governance model of the Acquirer. It is a dummy variable and is assigned one when the acquirer has German/Japanese corporate governance model. Based on Political framework of corporate governance models, Blockhold implies if the corporate governance model pursued by the Acquirer allows for blockholding ownership. It is one for Blockholding and zero for the Diffused ownership. Germanic, Nordic Confucian, Anglo, and LE all are dummy variables that represent originating cultures of the Acquirers and are assigned one for their respective cultures.

dummy variables can easily yield to collinear sub-samples created while executing various algorithms inherent to robust regressions procedures.

### 7.9.1 Indian Target Firms

Table 7.9.1 provides a Pearson Correlation Coefficient Matrix of the independent variables used in this analysis for the target firms. It is evident that the corporate governance variables (GJ and Blockhold) are significantly correlated with each other and also with the cultural variables. And some of them are in high enough order to influence the analysis. In fact, when these variables are executed simultaneously in one equation, the mean Variation Inflation Factor (VIF) is 3.50, with the highest VIF being 9 individually, and several others exceeding 5. Considering a possibility of multicollinearity in the analysis, the impact of the two corporate governance variables and the cultural variables is tested in separate equations<sup>42</sup>:

#### Corporate Governance:

$$CAAR_{t_1,t_2} = \alpha_0 + \beta_1 \text{Cash} + \beta_2 \text{GJ} + \beta_3 \text{CWA} + \beta_4 \text{Pct50} + \beta_5 \text{PctToe} + \varepsilon_i \quad (7-1)$$

$$CAAR_{t_1,t_2} = \alpha_0 + \beta_1 \text{Cash} + \beta_2 \text{Blockhold} + \beta_3 \text{CWA} + \beta_4 \text{Pct50} + \beta_5 \text{PctToe} + \varepsilon_i \quad (7-2)$$

#### Cultural Clusters:

$$CAAR_{t_1,t_2} = \alpha_0 + \beta_1 \text{Cash} + \beta_2 \text{Germanic} + \beta_3 \text{Nordic} + \beta_4 \text{Confucian} + \beta_5 \text{LE} + \beta_6 \text{SA} + \beta_7 \text{CWA} + \beta_8 \text{Pct50} + \beta_9 \text{PctToe} + \varepsilon_i \quad (7-3)$$

where, Cash, Pct50 and CWA variables are expected to be positive; PctToe along with the Cultural variables are expected to have negative sign. The negative sign for Cultures because none of them belong to the same culture as India which is South Asian. In the corporate governance variables, the impact of Blockhold should be positive. However, the GJ variable is particularly ambiguous as, formally, India is Anglo-Saxon but, in practice, it adheres to the German/Japanese model.

---

<sup>42</sup> The variables Related and Conglomerate are also tested but not reported here as they have significant correlation with other variables and thus tend to reduce the power of the model. Besides they have expected signs and their coefficients are not significantly different from zero. They also do not change the other variables at conventional levels.

Table 7.9.1 Correlation Coefficient Matrix; Independent Variables - Targets

| Variables        | Cash                         | Pct50               | PctToe                        | CWA                            | Blockhold                      | GJ                             | Germanic                       | Nordic                         | Confucian                      | Anglo                         | LE                  |
|------------------|------------------------------|---------------------|-------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|-------------------------------|---------------------|
| <b>Pct50</b>     | -0.1955<br>(0.0501)          |                     |                               |                                |                                |                                |                                |                                |                                |                               |                     |
| <b>PctToe</b>    | <b>0.2528</b> **<br>(0.0112) | -0.0362<br>(0.7209) |                               |                                |                                |                                |                                |                                |                                |                               |                     |
| <b>CWA</b>       | 0.0933<br>(0.3536)           | 0.1125<br>(0.2625)  | -0.0519<br>(0.6078)           |                                |                                |                                |                                |                                |                                |                               |                     |
| <b>Blockhold</b> | -0.0126<br>(0.9005)          | -0.0649<br>(0.5189) | 0.1818<br>(0.0703)            | <b>-0.4212</b> ***<br>(0.0000) |                                |                                |                                |                                |                                |                               |                     |
| <b>GJ</b>        | -0.0524<br>(0.6044)          | -0.0755<br>(0.4554) | <b>0.2068</b> **<br>(0.0400)  | <b>-0.4729</b> ***<br>(0.0000) | <b>0.8867</b> ***<br>(0.0000)  |                                |                                |                                |                                |                               |                     |
| <b>Germanic</b>  | -0.0465<br>(0.6443)          | -0.0450<br>(0.6548) | 0.0792<br>(0.4337)            | -0.1812<br>(0.0698)            | <b>0.4302</b> ***<br>(0.0000)  | <b>0.3877</b> ***<br>(0.0001)  |                                |                                |                                |                               |                     |
| <b>Nordic</b>    | 0.1270<br>(0.2056)           | -0.0331<br>(0.7421) | <b>0.3458</b> ***<br>(0.0004) | -0.1517<br>(0.1300)            | <b>0.3601</b> ***<br>(0.0002)  | <b>0.3245</b> ***<br>(0.0010)  | -0.1460<br>(0.1451)            |                                |                                |                               |                     |
| <b>Confucian</b> | -0.0435<br>(0.6660)          | 0.0198<br>(0.8442)  | -0.1920<br>(0.0556)           | -0.1148<br>(0.2530)            | <b>0.3889</b> ***<br>(0.0001)  | <b>0.3137</b> ***<br>(0.0015)  | <b>-0.2332</b> **<br>(0.0189)  | -0.1952<br>(0.0505)            |                                |                               |                     |
| <b>Anglo</b>     | 0.0097<br>(0.9233)           | 0.0281<br>(0.7801)  | -0.0823<br>(0.4158)           | <b>0.3799</b> ***<br>(0.0001)  | <b>-0.7699</b> ***<br>(0.0000) | <b>-0.8663</b> ***<br>(0.0000) | <b>-0.3312</b> ***<br>(0.0007) | <b>-0.2773</b> ***<br>(0.0050) | <b>-0.4428</b> ***<br>(0.0000) |                               |                     |
| <b>LE</b>        | -0.0767<br>(0.4459)          | 0.0111<br>(0.9123)  | 0.0528<br>(0.6019)            | -0.1357<br>(0.1760)            | -0.0950<br>(0.3446)            | <b>0.2903</b> ***<br>(0.0034)  | -0.1306<br>(0.1929)            | -0.1093<br>(0.2764)            | -0.1746<br>(0.0807)            | <b>-0.2481</b> **<br>(0.0124) |                     |
| <b>SA</b>        | 0.0742<br>(0.4608)           | 0.0062<br>(0.9509)  | -0.1464<br>(0.1461)           | 0.0838<br>(0.4047)             | -0.1698<br>(0.0895)            | -0.1905<br>(0.0576)            | -0.0731<br>(0.4677)            | -0.0612<br>(0.5434)            | -0.0977<br>(0.3312)            | -0.1388<br>(0.1664)           | -0.0547<br>(0.5868) |

*p*-values in parentheses; \*\* *p*<.05, \*\*\* *p*<.01

Further, the Germanic, Nordic, Confucian and Latin European cultures share the same GJ corporate governance model. Likewise, companies emerging from the Anglo culture pursue the Anglo-Saxon corporate governance model. In the same vein, the Blockhold variable also encapsulates these cultures, apart from the Latin European culture, which is classified with the Diffused category that consists of the Anglo countries. In fact, the effect of the corporate governance variables is sliced into these cultural variables. In essence, the equation (7-3) simply splits and dilutes the corporate governance effect into various cultures. So, the main equations for the analyses are equations (7-1) and (7-2). Therefore, the results from these equations are presented and discussed here, while the results from equation (7-3) are provided in the appendix for reference.

### 7.9.1.1 Corporate Governance Analysis – Legal Origin

Table 7.9.2 and Table 7.9.3 present the multivariate regression results for the various CAAR windows for the Indian CBMA target firms. The CAARs referred to here are taken from the OLS and MM estimations of the abnormal returns in the event analysis. The univariate results for each of these regressions are presented separately in the appendix in Table-A 7.46 to 7.55.

| <b>CAAR Windows:</b> | (1)<br>[-10,+10]     | (2)<br>[-7,+7]              | (3)<br>[-5,+5]              | (4)<br>[-3,+3]               | (5)<br>[-1,+1]               |
|----------------------|----------------------|-----------------------------|-----------------------------|------------------------------|------------------------------|
| Cash                 | 0.0668*<br>(1.7555)  | 0.0501<br>(1.3601)          | 0.0379<br>(1.1159)          | 0.0143<br>(0.4251)           | -0.0118<br>(-0.4722)         |
| <b>GJ</b>            | 0.0674*<br>(1.7460)  | <b>0.0942**</b><br>(2.5484) | <b>0.0905**</b><br>(2.5541) | <b>0.0853***</b><br>(2.7286) | <b>0.0591***</b><br>(3.0076) |
| CWA                  | 0.0846<br>(1.3587)   | 0.0814<br>(1.5746)          | 0.0589<br>(1.2655)          | 0.0532<br>(1.1697)           | 0.0203<br>(0.7058)           |
| Pct50                | -0.0184<br>(-0.4996) | -0.0401<br>(-1.1673)        | -0.0101<br>(-0.2904)        | -0.0261<br>(-0.8023)         | -0.0148<br>(-0.6169)         |
| PctToe               | 0.1253<br>(1.6196)   | 0.1348*<br>(1.7541)         | 0.1246<br>(1.6479)          | 0.0606<br>(0.8524)           | 0.0684<br>(1.2805)           |
| Intercept            | -0.0268<br>(-0.6542) | -0.0319<br>(-0.9577)        | -0.0184<br>(-0.6497)        | 0.0168<br>(0.6752)           | 0.0255<br>(1.4689)           |
| Observations         | 99                   | 99                          | 99                          | 99                           | 99                           |
| F-Statistics         | 2.4182               | 3.7236                      | 3.3218                      | 2.2744                       | 2.4686                       |
| p-value              | <b>0.0415**</b>      | <b>0.0041***</b>            | <b>0.0083***</b>            | 0.0534*                      | <b>0.0380**</b>              |
| Adj. R-Squared       | 0.0767               | 0.1172                      | 0.0879                      | 0.0420                       | 0.0657                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table 7.9.3 Regression of the MM CAARs – CBMA India Target Firms - GJ**

| <b>CAAR Windows:</b> | (1)<br>[-10,+10]     | (2)<br>[-7,+7]              | (3)<br>[-5,+5]              | (4)<br>[-3,+3]              | (5)<br>[-1,+1]               |
|----------------------|----------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|
| Cash                 | 0.0464<br>(1.1542)   | 0.0401<br>(1.0258)          | 0.0270<br>(0.7512)          | 0.0093<br>(0.2576)          | -0.0135<br>(-0.4986)         |
| <b>GJ</b>            | 0.0790*<br>(1.9773)  | <b>0.0998**</b><br>(2.5395) | <b>0.0845**</b><br>(2.3616) | <b>0.0832**</b><br>(2.5438) | <b>0.0657***</b><br>(3.1125) |
| CWA                  | 0.0732<br>(1.1985)   | 0.0752<br>(1.4512)          | 0.0534<br>(1.1365)          | 0.0472<br>(1.0303)          | 0.0175<br>(0.5978)           |
| Pct50                | -0.0292<br>(-0.7541) | -0.0491<br>(-1.2923)        | -0.0304<br>(-0.8790)        | -0.0350<br>(-1.0293)        | -0.0100<br>(-0.3806)         |
| PctToe               | 0.0904<br>(1.1607)   | 0.1137<br>(1.4350)          | 0.1237<br>(1.6326)          | 0.0541<br>(0.7492)          | 0.0544<br>(0.9869)           |
| Intercept            | 0.0345<br>(0.8055)   | 0.0086<br>(0.2447)          | 0.0180<br>(0.6102)          | 0.0406<br>(1.4707)          | <b>0.0337*</b><br>(1.6666)   |
| Observations         | 94                   | 94                          | 94                          | 94                          | 94                           |
| F-Statistics         | 1.8425               | 3.3040                      | 3.0221                      | 2.0247                      | 2.4785                       |
| p-value              | 0.1128               | <b>0.0088***</b>            | <b>0.0145**</b>             | 0.0829*                     | <b>0.0378**</b>              |
| Adj. R-Squared       | 0.0470               | 0.1008                      | 0.0843                      | 0.0370                      | 0.0663                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

In both the sets of regressions above, the regression equations are mostly significant at varying levels for the different CAAR windows.

Further, the GJ corporate governance variable is the most prominent independent variable when it comes to explaining the variations in the CAARs. Even in the univariate analysis, it is consistently significantly positive. The positive coefficients here imply that the target firms gain 6% to 9% higher positive abnormal returns when taken over by companies pursuing the GJ model, when compared with those from Anglo-Saxon companies.

### 7.9.1.2 Corporate Governance Analysis – Political Framework

Following (Aguilera and Jackson, 2010) for corporate governance models, the corporate governance attribute is reclassified into Blockholding and Diffused patterns of ownership possibilities. *Table 7.9.4 and Table 7.9.5* are based on equation (7-2) and the CAARs are based on the OLS and the MM estimations respectively. The univariate analysis of these equations is presented separately in the appendix in *Table-A 7.46 to 7.55*.

**Table 7.9.4 Regression of the OLS CAARs – CBMA India Target Firms - Blockhold**

| CAAR             | (1)                           | (2)                           | (3)                           | (4)                           | (5)                           |
|------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Windows:         | [-10,+10]                     | [-7,+7]                       | [-5,+5]                       | [-3,+3]                       | [-1,+1]                       |
| <i>Cash</i>      | <b>0.0847</b> **<br>(2.0942)  | 0.0624*<br>(1.6738)           | 0.0462<br>(1.3537)            | 0.0162<br>(0.4982)            | -0.0115<br>(-0.4842)          |
| <i>Blockhold</i> | <b>0.1004</b> ***<br>(2.6589) | <b>0.1228</b> ***<br>(3.4236) | <b>0.1051</b> ***<br>(3.0353) | <b>0.0928</b> ***<br>(2.9811) | <b>0.0654</b> ***<br>(3.2619) |
| CWA              | 0.0854<br>(1.4148)            | 0.0811<br>(1.6360)            | 0.0537<br>(1.1940)            | 0.0487<br>(1.0919)            | 0.0186<br>(0.6462)            |
| Pct50            | 0.0048<br>(0.1171)            | -0.0221<br>(-0.6044)          | 0.0031<br>(0.0868)            | -0.0204<br>(-0.6532)          | -0.0120<br>(-0.5396)          |
| PctToe           | 0.0889<br>(1.1194)            | 0.1079<br>(1.4295)            | 0.1080<br>(1.4633)            | 0.0554<br>(0.8162)            | 0.0660<br>(1.3005)            |
| Intercept        | -0.0416<br>(-1.0880)          | -0.0418<br>(-1.3583)          | -0.0208<br>(-0.8001)          | 0.0186<br>(0.7972)            | 0.0263<br>(1.6065)            |
| Observations     | 100                           | 100                           | 100                           | 100                           | 100                           |
| F-Statistics     | 2.9715                        | 4.7688                        | 3.8514                        | 2.5008                        | 2.6491                        |
| p-value          | <b>0.0155</b> **              | <b>0.0006</b> ***             | <b>0.0032</b> ***             | <b>0.0358</b> **              | <b>0.0276</b> **              |
| Adj. R-Squared   | 0.1002                        | 0.1459                        | 0.1063                        | 0.0552                        | 0.0829                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table 7.9.5 Regression of the MM CAARs – CBMA India Target Firms - Blockhold**

| CAAR             | (1)                          | (2)                           | (3)                           | (4)                           | (5)                           |
|------------------|------------------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|
| Windows:         | [-10,+10]                    | [-7,+7]                       | [-5,+5]                       | [-3,+3]                       | [-1,+1]                       |
| Cash             | 0.0643<br>(1.5161)           | 0.0526<br>(1.3358)            | 0.0363<br>(1.0098)            | 0.0111<br>(0.3226)            | -0.0140<br>(-0.5503)          |
| <i>Blockhold</i> | <b>0.1017</b> **<br>(2.5567) | <b>0.1216</b> ***<br>(3.1652) | <b>0.0935</b> ***<br>(2.6644) | <b>0.0868</b> ***<br>(2.6778) | <b>0.0714</b> ***<br>(3.3783) |
| CWA              | 0.0666<br>(1.1252)           | 0.0698<br>(1.4056)            | 0.0443<br>(0.9744)            | 0.0401<br>(0.8931)            | 0.0149<br>(0.5108)            |
| Pct50            | -0.0041<br>(-0.0967)         | -0.0292<br>(-0.7411)          | -0.0154<br>(-0.4389)          | -0.0288<br>(-0.8940)          | -0.0073<br>(-0.3086)          |
| PctToe           | 0.0566<br>(0.6900)           | 0.0877<br>(1.1122)            | 0.1064<br>(1.4215)            | 0.0493<br>(0.7103)            | 0.0526<br>(1.0106)            |
| Intercept        | 0.0259<br>(0.6503)           | 0.0028<br>(0.0884)            | 0.0183<br>(0.6798)            | 0.0448*<br>(1.7640)           | 0.0357*<br>(1.9236)           |
| Observations     | 95                           | 95                            | 95                            | 95                            | 95                            |
| F-Statistics     | 2.1766                       | 3.9464                        | 3.0919                        | 2.0064                        | 2.6266                        |
| p-value          | 0.0637*                      | <b>0.0028</b> ***             | <b>0.0128</b> **              | 0.0854*                       | <b>0.0291</b> **              |
| Adj. R-Squared   | 0.0621                       | 0.1189                        | 0.0877                        | 0.0426                        | 0.0851                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

In both the sets of regressions above, the regression equations are significant at varying levels for the different CAAR windows. Once again, the corporate governance variable Blockhold emerges as the most important driver for the CAARs. The coefficients are significant mostly at the 1% level.

Thus, it is evident that the governance model that promotes concentrated ownership is the most decisive determinant for returns obtained by the Indian target firms in CBMAs. The findings support the argument by LLSV that in countries with weaker legal systems, investors' perceive ownership stake as a natural hedge against possible exploitation.

#### 7.9.1.3 Institutional Analysis

The Commonwealth (CWA) countries tend to have similar institutional features, regulations and functions as they pursue common law systems like India. The CWA variable identifies acquirers as being from one of the commonwealth nations. In tandem with the given set of variables, the CWA coefficients are positive as expected, and yet they are not statistically significant in any of these regressions. In fact, the coefficients are indeed negative in univariate analysis though not different from zero. In sum, this indicates that institutional similarities do not drive the abnormal returns for Indian target firms.

#### 7.9.1.4 Cultural Analysis

The results based on equation (7-3) for the OLS and the MM CAARs are provided in *Table-A 7.44 and 7.45*. The reference dummy used here represents the Anglo culture. The *Germanic* and *Nordic* coefficients are occasionally significantly positive at conventional level by the OLS and MM CAARs, implying significantly higher abnormal returns from them, when compared with the Anglo culture. Even the Confucian coefficients gain statistical significance at the 0.05 and 0.10 levels respectively from the OLS and MM estimations for the days [-7, +7].

The positive returns from most of these cultures, and significantly higher returns from even more distant cultures, indicate that cultural proximity is not the decisive factor. In fact, the underlying common feature of these cultures is corporate governance model similarity. As discussed earlier, this regression (equation (7-3)) tends to split the corporate governance aspect into a few independent cultural variables, which is reflected in the results here.

In other variables, interestingly, the *Toehold* and *Pct50* variables have signs not consistent with the theory. However, they both lack statistical significance at the conventional levels in both the multivariate and univariate analyses.



#### 7.9.1.5 Summary

The regression analysis thus indicates that there is a clear preference for identical corporate governance features from target shareholders. Regardless of the institutional divergences, cultural distances, cash compensation, stake acquired and existing holdings, the target shareholders prefer being taken over by the companies pursuing the German/Japanese corporate governance model, which allows for higher investor protection in a country like India.

### 7.9.2 Indian Acquirer Firms

The literature on emerging markets multinational enterprises (EMNEs) and Indian CBMA acquirers unequivocally argues that these firms seek advanced technology, knowledge and managerial skills from more progressive and wealthy nations. This is also reflected in the sample set available for this thesis: the majority of the cross-border target firms are from the United States and the United Kingdom.

Following that argument, a new variable is introduced to the analysis which measures the 'economic distance' of the Indian acquirer and the target country. This is a ratio of per capita real GDP of India over per capita real GDP of the target country  $\left( \frac{\text{Per Capita RGDP}_{\text{India}}}{\text{Per Capita RGDP}_{\text{Foreign}}} \right)$ . The fraction implies that the lower the ED ratio, the higher the economic distance of that country from India. Alternatively put, this variable captures the role of targets from the developed nations to the Indian acquirers in the CBMAs.

Further, as it is a small sub-set, mainly consisting of the United States and United Kingdom target firms, this analysis is arranged slightly differently. For corporate governance, institutional and cultural analysis, the respective dummy variables are organised as: (i) AS / Diffused variables are assigned a value of one when the target firms follow Anglo-Saxon / Diffused ownership corporate governance models, (ii) CWT is assigned a value of one when target firms originate from a commonwealth nation, and (iii) Anglo is assigned a value of one for the Anglo culture of the targets and zero for all others.

*Table 7.9.6* provides a Pearson Correlation Coefficient Matrix of all the variables available in this analysis for the Indian acquirer firms.

Table 7.9.6 Correlation Coefficient Matrix; Independent Variables - Acquirers

| Variables           | Cash                          | Pct50                        | PctToe              | CWT                 | ED                             | AST                           | Diffused                      | Anglo              |
|---------------------|-------------------------------|------------------------------|---------------------|---------------------|--------------------------------|-------------------------------|-------------------------------|--------------------|
| <b>Pct50</b>        | -0.1966<br>(0.2368)           |                              |                     |                     |                                |                               |                               |                    |
| <b>PctToe</b>       | <b>-0.3646 **</b><br>(0.0288) | <b>0.3343 **</b><br>(0.0463) |                     |                     |                                |                               |                               |                    |
| <b>CWT</b>          | -0.2820 *<br>(0.0863)         | -0.2972 *<br>(0.0700)        | 0.1440<br>(0.4021)  |                     |                                |                               |                               |                    |
| <b>ED</b>           | -0.1043<br>(0.5333)           | 0.1976<br>(0.2343)           | 0.0421<br>(0.8073)  | 0.0314<br>(0.8514)  |                                |                               |                               |                    |
| <b>AS</b>           | -0.1833<br>(0.2707)           | -0.2720 *<br>(0.0985)        | -0.1104<br>(0.5215) | 0.0405<br>(0.8091)  | <b>-0.5653 ***</b><br>(0.0002) |                               |                               |                    |
| <b>Diffused</b>     | -0.1112<br>(0.5062)           | -0.1678<br>(0.3139)          | -0.1438<br>(0.4027) | -0.0070<br>(0.9665) | <b>-0.5880 ***</b><br>(0.0001) | <b>0.9270 ***</b><br>(0.0000) |                               |                    |
| <b>Anglo</b>        | -0.0781<br>(0.6412)           | -0.1904<br>(0.2523)          | -0.0518<br>(0.7643) | 0.0063<br>(0.9699)  | <b>-0.6503 ***</b><br>(0.0000) | <b>0.7363 ***</b><br>(0.0000) | <b>0.6667 ***</b><br>(0.0000) |                    |
| <b>Conglomerate</b> | -0.1551<br>(0.3525)           | -0.2168<br>(0.1910)          | 0.1110<br>(0.5192)  | 0.1869<br>(0.2613)  | -0.0058<br>(0.9724)            | 0.0337<br>(0.8407)            | 0.0101<br>(0.9522)            | 0.0768<br>(0.6468) |

p-values in parentheses; \* p <0.10, \*\* p<.05, \*\*\* p<.01

Evidently, the corporate governance variables Anglo-Saxon and Diffused are significantly correlated with each other and also with the Anglo culture variable. Some of the higher coefficients may be influential for the analysis. In fact, when these variables are run simultaneously in one equation, the mean Variance Inflation Factor (VIF) is 4.62 with the highest one being 15 individually and few others exceeding 4. Considering a possibility of multicollinearity in the analysis, the impact of the two corporate governance variables and the cultural variable is tested in separate equations<sup>43</sup>:

**Corporate Governance:**

$$CAAR_{t_1,t_2} = \alpha_0 + \beta_1 \text{Cash} + \beta_2 \text{AS} + \beta_3 \text{ED} + \beta_4 \text{CWT} + \beta_5 \text{Pct50} + \beta_6 \text{PctToe} + \beta_7 \text{Conglomerate} + \varepsilon_i \quad (7-4)$$

$$CAAR_{t_1,t_2} = \alpha_0 + \beta_1 \text{Cash} + \beta_2 \text{Diffused} + \beta_3 \text{ED} + \beta_4 \text{CWT} + \beta_5 \text{Pct50} + \beta_6 \text{PctToe} + \beta_7 \text{Conglomerate} + \varepsilon_i \quad (7-5)$$

**Cultural Clusters:**

$$CAAR_{t_1, t_2} = \alpha_0 + \beta_1 \text{Cash} + \beta_2 \text{Anglo} + \beta_3 \text{ED} + \beta_4 \text{CWT} + \beta_5 \text{Pct50} + \beta_6 \text{PctToe} + \beta_7 \text{Conglomerate} + \varepsilon_i \quad (7-6)$$

where, Cash, Pct50 PctToe and CWT variables are expected to be positive; The cultural variable Anglo is expected to have a negative sign as it is not the same culture as India which is SA (South Asia). In the corporate governance variables, the impact of Diffused target should be negative. However, Anglo-Saxon variable is particularly ambiguous as, formally, India is Anglo-Saxon but, in practice, it adopts the German/Japanese model.

Another important revelation from the event study of CBMA acquirers is that the abnormal returns occur only in the days immediate to the announcement day. Hence, for the meaningful analysis, only the smaller CAAR windows are selected for the cross-sectional analysis presented here.

---

<sup>43</sup> The variable Related is also tested but not reported here. It is highly correlated with the variable PctToe increasing the VIF factor overall. Besides, its coefficients are not significantly different from zero.

### 7.9.2.1 Corporate Governance Analysis – Legal Origin

Table 7.9.7 presents the multivariate regression results for the various CAAR windows based on the OLS and the MM methods respectively for the Indian CBMA acquirer firms. The univariate results for each of these regressions are presented separately in the appendix in Table-A 7.58 to 7.67.

**Table 7.9.7 Regression Analysis of the OLS CAARs – CBMA Indian Acquirer Firms**

| CAAR Windows:       | (1)<br>[-7,+7]       | (2)<br>[-5,+5]                 | (3)<br>[-3,+3]                  | (4)<br>[-1,+1]                  | (5)<br>[0,+1]                   |
|---------------------|----------------------|--------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Cash                | -0.0064<br>(-0.1809) | -0.0120<br>(-0.5405)           | -0.0414 *<br>(-1.7663)          | -0.0171<br>(-0.9817)            | -0.0287 *<br>(-1.9463)          |
| <i>AST</i>          | 0.0065<br>(0.1377)   | -0.0342 *<br>(-1.7230)         | -0.0421<br>(-1.4859)            | <b>-0.0593 **</b><br>(-2.1941)  | <b>-0.0601 **</b><br>(-2.7530)  |
| <i>ED</i>           | -0.0040<br>(-0.0230) | <b>-0.2007 **</b><br>(-2.7058) | <b>-0.2785 ***</b><br>(-3.6238) | <b>-0.3904 ***</b><br>(-3.9940) | <b>-0.4417 ***</b><br>(-3.4612) |
| CWT                 | -0.0177<br>(-0.5013) | -0.0006<br>(-0.0270)           | -0.0306<br>(-1.6350)            | -0.0190<br>(-1.2367)            | -0.0088<br>(-0.5745)            |
| Pct50               | 0.0225<br>(0.5221)   | -0.0126<br>(-0.4792)           | -0.0291<br>(-0.7154)            | -0.0470<br>(-1.6559)            | -0.0160<br>(-0.9313)            |
| PctToe              | -0.0728<br>(-0.7280) | -0.0725 *<br>(-1.7366)         | -0.0063<br>(-0.1372)            | 0.0543 *<br>(1.9535)            | 0.0206<br>(0.6098)              |
| <i>Conglomerate</i> | 0.0218<br>(0.3972)   | <b>0.0554 **</b><br>(2.1021)   | 0.0163<br>(0.8490)              | -0.0122<br>(-0.7019)            | 0.0088<br>(0.7073)              |
| Intercept           | -0.0236<br>(-0.3788) | 0.0345<br>(1.0609)             | 0.0739 *<br>(1.7783)            | 0.0955 **<br>(2.5488)           | 0.0915 ***<br>(3.0212)          |
| Observations        | 35                   | 35                             | 35                              | 35                              | 35                              |
| F-Statistics        | 0.3886               | 3.1869                         | 5.3778                          | 4.7208                          | 2.5223                          |
| p-value             | 0.9008               | <b>0.0136 **</b>               | <b>0.0006 ***</b>               | <b>0.0015 ***</b>               | <b>0.0392 **</b>                |
| Adj. R-Squared      | -0.2084              | 0.0646                         | 0.0989                          | 0.3007                          | 0.3458                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

The overall model and some variables are significantly different from zero in the smaller CAAR windows. As the CAAR windows get larger, the variables and the model get statistically weaker.

The negative coefficients for *Economic Distance* imply that as the *economic distance decreases*, the *acquirers get lesser returns*. This validates the theory that EMNEs seek targets from wealthier and more advanced nations with whom they have higher economic distances. Further, the variable *Anglo-Saxon* implies that relatively lower returns are also associated with target firms with an Anglo-Saxon corporate governance model. This suggests that there is less of a preference for targets with Anglo-Saxon corporate governance models. And finally, the significantly positive *Conglomerate* variable suggests that the acquirers are favoured more when they diversify, which is inconsistent with respect to the developed world.

However, it is also true for Indian firms, as diversification is one of the key aspects of Indian business houses.

In the univariate analysis, the only variable that is consistently significantly negative is *Economic Distance*. It confirms that the acquirers are driven by the motive of acquiring targets from the advanced and wealthier nations.

**Table 7.9.8 Regression Analysis of the MM CAARs – CBMA Indian Acquirer Firms**

| <b>CAAR Windows:</b> | <b>(1)</b><br>[-7,+7] | <b>(2)</b><br>[-5,+5]        | <b>(3)</b><br>[-3,+3]           | <b>(4)</b><br>[-1,+1]           | <b>(5)</b><br>[0,+1]            |
|----------------------|-----------------------|------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Cash                 | 0.0008<br>(0.0201)    | -0.0085<br>(-0.3024)         | -0.0388<br>(-1.5394)            | -0.0161<br>(-0.8854)            | -0.0274 *<br>(-1.7682)          |
| <i>AS</i>            | 0.0241<br>(0.4971)    | -0.0234<br>(-0.9582)         | -0.0345<br>(-1.1981)            | <b>-0.0561 **</b><br>(-2.0544)  | <b>-0.0575 **</b><br>(-2.5844)  |
| <i>ED</i>            | 0.0189<br>(0.1067)    | -0.1836 *<br>(-1.7444)       | <b>-0.2647 ***</b><br>(-3.1183) | <b>-0.3854 ***</b><br>(-4.0385) | <b>-0.4373 ***</b><br>(-3.5486) |
| CWT                  | -0.0149<br>(-0.4117)  | 0.0053<br>(0.2033)           | -0.0261<br>(-1.3016)            | -0.0200<br>(-1.2667)            | -0.0117<br>(-0.7467)            |
| Pct50                | 0.0347<br>(0.7304)    | -0.0010<br>(-0.0280)         | -0.0209<br>(-0.4700)            | -0.0453<br>(-1.5533)            | -0.0164<br>(-0.9350)            |
| PctToe               | -0.0584<br>(-0.6441)  | -0.0652<br>(-1.1361)         | 0.0009<br>(0.0177)              | 0.0541 *<br>(1.8775)            | 0.0221<br>(0.6671)              |
| <i>Conglomerate</i>  | 0.0387<br>(0.7893)    | <b>0.0701 **</b><br>(2.3670) | 0.0253<br>(1.2103)              | -0.0083<br>(-0.4424)            | 0.0111<br>(0.8203)              |
| Intercept            | -0.0281<br>(-0.4192)  | 0.0298<br>(0.7005)           | 0.0697<br>(1.5802)              | 0.0957 **<br>(2.5251)           | 0.0924 ***<br>(2.9693)          |
| Observations         | 35                    | 35                           | 35                              | 35                              | 35                              |
| F-Statistics         | 0.4126                | 1.8514                       | 3.4628                          | 6.5102                          | 2.5437                          |
| p-value              | 0.8860                | 0.1179                       | <b>0.0089 ***</b>               | <b>0.0002 ***</b>               | <b>0.0379 **</b>                |
| Adj. R-Squared       | -0.1891               | 0.0208                       | 0.0768                          | 0.2675                          | 0.3210                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

However, while there is a strong indication of the relevance of Economic Distance, the prevailing corporate governance model and diversification, the results should be interpreted with caution as the sample size is small.

### 7.9.2.2 Corporate Governance Analysis – Political Framework

Following (Aguilera and Jackson, 2010) for corporate governance models, the corporate governance attribute is reclassified into *Diffused* and other possible patterns of ownership. *Table 7.9.9 and Table 7.9.10* (below) are based on equation (7-5) and the CAARs are based on the OLS and the MM estimations respectively. The univariate results for each of these regressions are presented separately in the appendix in *Table-A 7.58 to 7.67*.

Once again, both the tables demonstrate the significant results in the smaller CAAR windows. As the CAAR windows grow larger, the variables, along with the models, become statistically weaker.

**Table 7.9.9 Regression of the OLS CAARs – CBMA India Acquirer Firms - Diffused**

| CAAR<br>Windows:    | (1)<br>[-7,+7]       | (2)<br>[-5,+5]                 | (3)<br>[-3,+3]                  | (4)<br>[-1,+1]                  | (5)<br>[0,+1]                   |
|---------------------|----------------------|--------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Cash                | -0.0076<br>(-0.2311) | -0.0080<br>(-0.3833)           | -0.0360 *<br>(-1.7132)          | -0.0081<br>(-0.4323)            | -0.0221<br>(-1.4482)            |
| <i>Diffused</i>     | 0.0040<br>(0.0849)   | -0.0306 *<br>(-1.7310)         | -0.0353<br>(-1.4946)            | -0.0438<br>(-1.6793)            | <b>-0.0549 **</b><br>(-2.3368)  |
| <i>ED</i>           | -0.0102<br>(-0.0534) | <b>-0.1963 **</b><br>(-2.6823) | <b>-0.2660 ***</b><br>(-3.1658) | <b>-0.3551 ***</b><br>(-3.3260) | <b>-0.4376 ***</b><br>(-3.1183) |
| CWT                 | -0.0183<br>(-0.5215) | 0.0016<br>(0.0726)             | -0.0277<br>(-1.5736)            | -0.0144<br>(-0.9334)            | -0.0051<br>(-0.3271)            |
| Pct50               | 0.0208<br>(0.5077)   | -0.0046<br>(-0.1789)           | -0.0190<br>(-0.4877)            | -0.0320<br>(-0.9411)            | -0.0021<br>(-0.1011)            |
| PctToe              | -0.0730<br>(-0.7204) | -0.0760 *<br>(-1.8942)         | -0.0095<br>(-0.2166)            | 0.0522 *<br>(1.8347)            | 0.0139<br>(0.4412)              |
| <i>Conglomerate</i> | 0.0215<br>(0.3916)   | <b>0.0567 **</b><br>(2.1240)   | 0.0180<br>(1.0214)              | -0.0098<br>(-0.5802)            | 0.0111<br>(0.9144)              |
| Intercept           | -0.0204<br>(-0.3362) | 0.0284<br>(0.9702)             | 0.0637 *<br>(1.8483)            | 0.0745 *<br>(2.0434)            | 0.0822 **<br>(2.6800)           |
| Observations        | 35                   | 35                             | 35                              | 35                              | 35                              |
| F-Statistics        | 0.4001               | 3.2049                         | 5.7046                          | 3.1003                          | 2.0281                          |
| p-value             | 0.8938               | <b>0.0133 **</b>               | <b>0.0004 ***</b>               | <b>0.0156 **</b>                | 0.0881 *                        |
| Adj. R-Squared      | -0.2088              | 0.0537                         | 0.0674                          | 0.2018                          | 0.3077                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

The variable *Economic Distance* emerges as the most prominent feature that unambiguously explains the returns obtained by the Indian acquirer firms in CBMAs. It is mostly significant even at the 1% level. This implies that, as the economic distance decreases, the acquirers receive lesser returns. This validates the theory that EMNEs seek targets from wealthier and more advanced nations. Further, relatively lower returns are associated with target firms that possess a corporate governance model that encourages Diffused ownership patterns. This suggests that the identical corporate governance models are relevant for the CBMA acquirers as well. And finally, the significantly positive *Conglomerate* variable suggests that acquirers are favoured more when they diversify—diversification is not necessarily a negative aspect of M&As in emerging world.

**Table 7.9.10 Regression of the OLS CAARs – CBMA India Acquirer Firms - Diffused**

| CAAR<br>Windows:    | (1)<br>[-7,+7]       | (2)<br>[-5,+5]               | (3)<br>[-3,+3]                  | (4)<br>[-1,+1]                  | (5)<br>[0,+1]                   |
|---------------------|----------------------|------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Cash                | -0.0023<br>(-0.0665) | -0.0057<br>(-0.2186)         | -0.0343<br>(-1.5289)            | -0.0075<br>(-0.3879)            | -0.0210<br>(-1.3351)            |
| <i>Diffused</i>     | 0.0202<br>(0.4277)   | -0.0205<br>(-0.9773)         | -0.0284<br>(-1.2217)            | -0.0409<br>(-1.5562)            | <b>-0.0526 **</b><br>(-2.2068)  |
| <i>ED</i>           | 0.0116<br>(0.0605)   | -0.1793 *<br>(-1.7499)       | <b>-0.2528 ***</b><br>(-2.7798) | <b>-0.3504 ***</b><br>(-3.3677) | <b>-0.4336 ***</b><br>(-3.1989) |
| CWT                 | -0.0165<br>(-0.4629) | 0.0068<br>(0.2654)           | -0.0237<br>(-1.2577)            | -0.0157<br>(-0.9873)            | -0.0081<br>(-0.5126)            |
| Pct50               | 0.0289<br>(0.6576)   | 0.0045<br>(0.1432)           | -0.0126<br>(-0.3030)            | -0.0311<br>(-0.9083)            | -0.0031<br>(-0.1474)            |
| PctToe              | -0.0565<br>(-0.6075) | -0.0674<br>(-1.1871)         | -0.0015<br>(-0.0304)            | 0.0524 *<br>(1.8276)            | 0.0157<br>(0.5089)              |
| <i>Conglomerate</i> | 0.0377<br>(0.7701)   | <b>0.0710 **</b><br>(2.3744) | 0.0267<br>(1.3491)              | -0.0060<br>(-0.3259)            | 0.0133<br>(1.0041)              |
| Intercept           | -0.0222<br>(-0.3506) | 0.0251<br>(0.6710)           | 0.0607<br>(1.6825)              | 0.0752 *<br>(2.0483)            | 0.0836 **<br>(2.6591)           |
| Observations        | 35                   | 35                           | <b>35</b>                       | <b>35</b>                       | <b>35</b>                       |
| F-Statistics        | 0.4242               | 1.8205                       | 3.9029                          | 4.2890                          | 2.1109                          |
| p-value             | 0.8786               | 0.1241                       | <b>0.0046 ***</b>               | <b>0.0027 ***</b>               | 0.0769 *                        |
| Adj. R-Squared      | -0.1920              | 0.0164                       | 0.0549                          | 0.1789                          | 0.2874                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

In the univariate analysis, the only variable that is consistently significantly negative is *Economic Distance*. This confirms that acquirers are driven by the motive of securing better resources, both tangible and intangible, from advanced, and wealthier nations. The other variables have no significant influence on the decision.

### 7.9.2.3 Cultural Analysis

Further, as explained earlier, the cultural clusters simply dilute the corporate governance effect. Hence, the results based on the equation (7-6) are reported in the appendix in the *Table-A 7.58 to 7.67*.

The Anglo-Saxon variable is occasionally significantly negative in the multivariate analysis, but never in the univariate analysis. This implies lower abnormal returns from Anglo targets when compared with the other cultures, which are comprised of targets from the Germanic, Confucian, South Asian, Eastern and Latin European cultures. Thus, cultural proximity does not appear to be a decisive factor in selecting targets for the Indian acquirers.

Further, it is counter-intuitive that the Anglo culture yields lower returns, though acquisitions of firms from developed countries is significant. The coefficients values suggest that the benefits of developed firms outweigh the cost of cultural distance.

#### 7.9.2.4 *Institutional Analysis*

The Commonwealth countries tend to have similar institutional features, regulations and functions as they pursue a common law system, such as in India. The CWT variable suggests that if the target is from a commonwealth nation. It is not statistically significantly different from zero in any of these regressions. This indicates that the institutional similarities do not drive abnormal returns for Indian acquiring firms, which is not consistent with the findings of Buckley *et al.* (2012).

### 7.9.3 **Summary**

The regression analysis for acquirers indicates that there is a clear preference for targets from wealthy nations. Also, there are lower returns for acquiring targets with a corporate governance model that supports *Diffused* ownership. Further, there is no support for institutional similarities or cultural proximities with the target country in explaining CAARs.



## 7.10 Domestic vs. Cross-Border M&As

This section compares the domestic M&As with the cross-border M&As. The analysis begins with a discussion about target firms in the two sub-sets. *Figure 7.10.1* and *Figure 7.10.2* present Market model CAARs from the MM and OLS regressions respectively for the Indian target firms.

### 7.10.1 Return to Target Firms

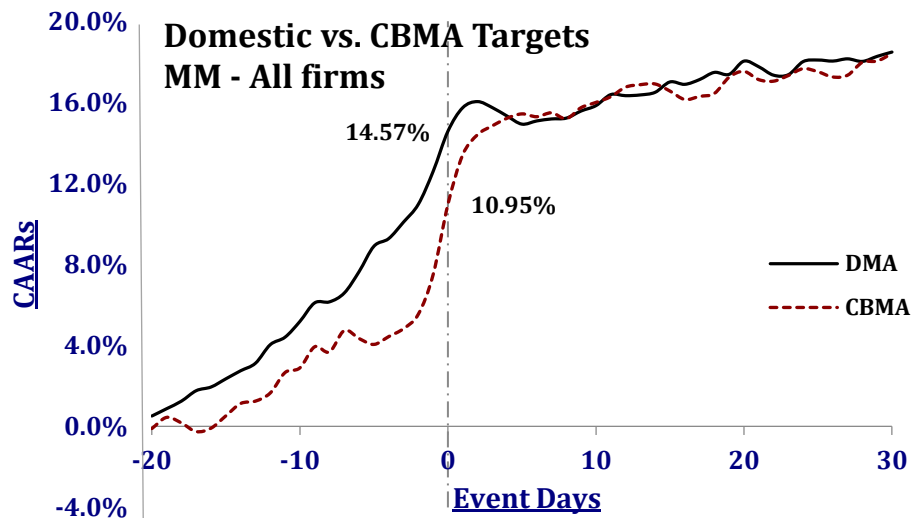


Figure 7.10.1 DMA vs. CBMA Indian Target Firms (MM)

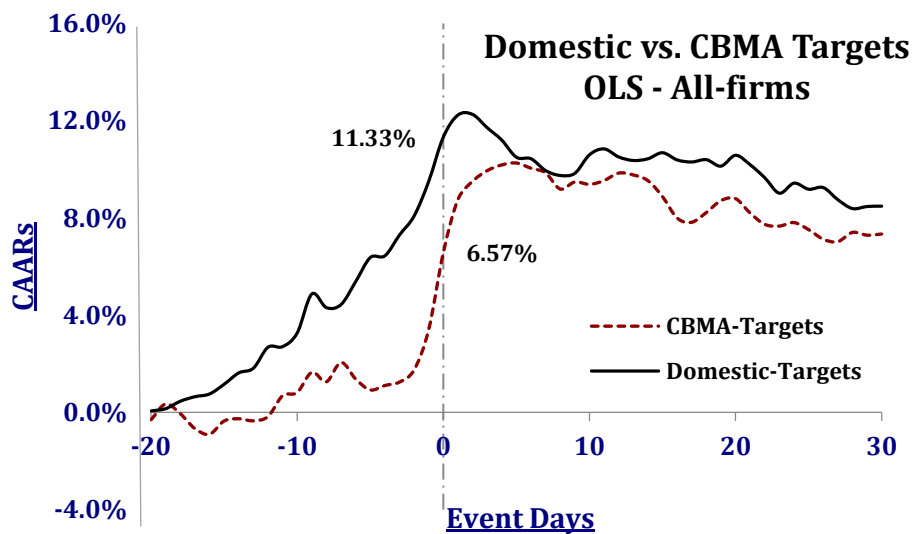


Figure 7.10.2 DMA vs. CBMA Indian Target Firms (OLS)

Though domestic returns are consistently slightly higher, the overall trend in the returns from both the sub-sets is identical. *Table 7.10.1* summarizes the main findings from the Market and FF models for the two sub-sets.

**Table 7.10.1 Summary Returns DMA vs. CBMA; Indian Targets**

| Model                               | Regression | AAR<br>Day-0 | 3-Days<br>CAAR | CAAR<br>Day-0 | 51-Days<br>CAAR | AARs<br>(**) around<br>Day-0 | CAARs<br>(**) around<br>Day-0 | n   |
|-------------------------------------|------------|--------------|----------------|---------------|-----------------|------------------------------|-------------------------------|-----|
| <b>Domestic M&amp;As (DMA)</b>      |            |              |                |               |                 |                              |                               |     |
| Market                              | MM         | 1.99% ***    | 4.77% ***      | 14.57% ***    | 18.48% ***      | -3 to 0                      | -19 to +30                    | 165 |
|                                     | OLS        | 1.82% ***    | 4.15% ***      | 11.33% ***    | 8.48% ***       | -3 to 0                      | -12 to +30                    | 170 |
| FF                                  | MM         | 1.95% ***    | 4.59% ***      | 15.43% ***    | 19.56% ***      | -6 to 0                      | -20 to +30                    | 158 |
|                                     | OLS        | 1.77% ***    | 4.01% ***      | 12.27% ***    | 9.36% ***       | -3 to 0                      | -14 to +30                    | 163 |
| <b>Cross-border M&amp;As (CBMA)</b> |            |              |                |               |                 |                              |                               |     |
| Market                              | MM         | 3.47% ***    | 7.87% ***      | 10.95% ***    | 18.40% ***      | -2 to +2                     | -14 to +30                    | 99  |
|                                     | OLS        | 3.16% ***    | 7.01% ***      | 6.57% ***     | 7.34% ***       | -1 to +1                     | -2 to +30                     | 104 |
| FF                                  | MM         | 3.29% ***    | 7.57% ***      | 11.87% ***    | 18.84% ***      | -2 to +2                     | -14 to +30                    | 90  |
|                                     | OLS        | 3.03% ***    | 7.00% ***      | 7.72% ***     | 7.29% ***       | -1 to +1                     | -9 to +30                     | 93  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

Evidently, the target shareholders in both the sub-sets gain positive abnormal returns at the announcement of M&A deals. The overall returns can be as high as 20%. However, interestingly, both the sub-sets generate these returns differently with respect to the timing relative to the announcement day. *Table 7.10.2* presents the differences between the run-ups and the mark-ups of the two sub-sets.

**Table 7.10.2 Run-up vs Mark-Up Comparison; DMA vs. CBMA; Indian Targets**

| Model                      | Regression | Run-up<br>[-20, -1] | Mark-up<br>[0, +30] | Difference |
|----------------------------|------------|---------------------|---------------------|------------|
| <b>Domestic (DMA)</b>      |            |                     |                     |            |
| Market                     | MM         | 12.58%              | 5.90%               | 6.69% ***  |
|                            | OLS        | 9.50%               | -1.02%              | 10.53% *** |
| FF                         | MM         | 13.48%              | 6.08%               | 7.40% ***  |
|                            | OLS        | 10.50%              | -1.14%              | 11.64% *** |
| <b>Cross-Border (CBMA)</b> |            |                     |                     |            |
| Market                     | MM         | 7.49%               | 10.91%              | -3.43%     |
|                            | OLS        | 3.41%               | 3.92%               | -0.51%     |
| FF                         | MM         | 8.58%               | 10.25%              | -1.67%     |
|                            | OLS        | 4.69%               | 2.61%               | 2.08%      |

Clearly, there is a mark difference between the distributions of the total premium to the target shareholders in both the sub-sets. For domestic deals, the run-up is significantly higher than the mark-up, implying that the higher proportion of the total takeover premium is credited to traders' active in the pre-event period. Alternatively put, the impact of information asymmetry and insider trading is more pronounced in domestic M&As. The event study analysis reports that significantly positive AARs and CAARs in the pre-event window for the domestic target firms occur frequently. However, for the CBMAs, the

difference between the run-up and mark-up CAARs is, in fact, negative and not different from zero. This indicates that the post-event returns are higher and that the informed traders are unable to benefit immensely at the cost of other shareholders. Thus, the role of information asymmetry is not so pronounced.

Further, a closer inspection of the returns generated suggests that the announcement effect captured in Day-0 AARs and 3 day CAARs is actually higher from the CBMAs. The test of differences in the returns from both the regressions for the two sub-sets suggest Day-0 AAR is higher from CBMAs at 10% and 3 day at nearly 10%. This explains why in the cross-sectional analysis of the aggregate database in chapter five, the Cross-Border variable was positive for smaller CAAR windows and negative for larger CAAR windows. Further, the stratum specific test of differences finds no significant difference in various post-event windows. However, the domestic deals yield significantly higher returns in pre-event windows at the 10% level. Finally, the overall CAARs generated from both the types of deals are not significantly different from zero.

Clearly, the impact of information asymmetry varies in the two types of deals and that has implications in the allocation of total takeover premium generated during the event.

### 7.10.2 Returns to Acquirer Firms

Figure 7.10.3 and Figure 7.10.4 represent Market model CAARs from the MM and OLS regressions respectively for the Indian acquirer firms.

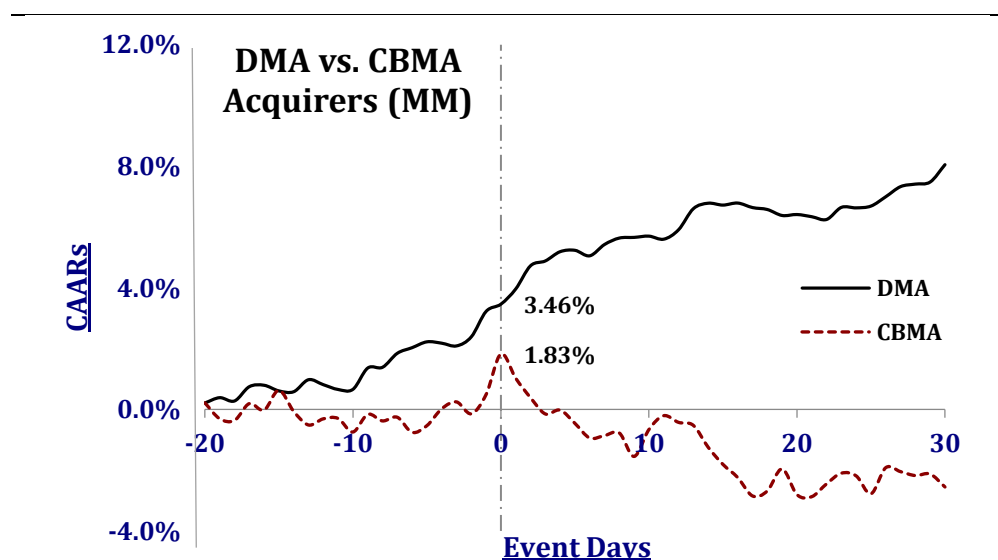


Figure 7.10.3 DMA vs. CBMA Indian Acquirer Firms (MM)

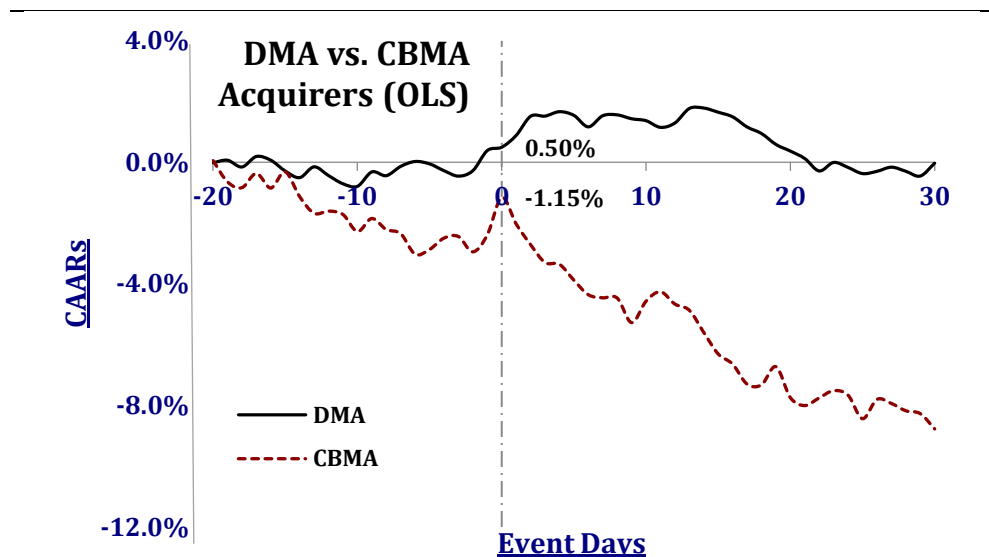


Figure 7.10.4 DMA vs. CBMA Indian Acquirer Firms (OLS)

The divergence in the CAAR graphs for both the sub-sets from both the regression methods suggest that the market reacts differently to the announcements of M&As. The CAARs from domestic acquisitions are higher than the cross-border deals for the acquirers. Table 7.10.3 provides a summary of the CAAR results from both the models and the regressions.

Table 7.10.3 Summary Returns DMA vs. CBMA; Indian Acquirers

| Model                               | Regression | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|-------------------------------------|------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| <b>Domestic M&amp;As (DMA)</b>      |            |           |             |            |              |                           |                            |     |
| Market                              | MM         | 0.24%     | 1.58% ***   | 3.46% ***  | 8.05% ***    | -1                        | -7 to +30                  | 191 |
|                                     | OLS        | 0.11%     | 1.16% **    | 0.50%      | -0.03%       | -1                        |                            | 195 |
| FF                                  | MM         | 0.41%     | 1.57% ***   | 4.12% ***  | 7.86% ***    | -1                        | -7 to +30                  | 173 |
|                                     | OLS        | 0.23%     | 1.15% **    | 1.24%      | 0.00%        | -1                        |                            | 177 |
| <b>Cross-border M&amp;As (CBMA)</b> |            |           |             |            |              |                           |                            |     |
| Market                              | MM         | 1.34% **  | 1.17%       | 1.83%      | -2.55%       | 0                         |                            | 37  |
|                                     | OLS        | 1.24% **  | 0.92%       | -1.15%     | -8.77% ***   | 0 to +1                   |                            | 37  |
| FF                                  | MM         | 1.37% **  | 1.31%       | 1.95%      | -1.71%       | 0                         |                            | 32  |
|                                     | OLS        | 1.23% **  | 0.97%       | -1.22%     | -9.16% ***   | 0                         |                            | 32  |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

The significantly positive announcement effect is captured on Day-0 for the CBMAs, whereas for domestic deals it occurs over 3 days [-1,+1]. However, the tests of differences between the two sub-sets for the returns on Day-0 or for 3 day CAARs are not significantly different from zero. Likewise, the tests of differences in pre-event returns are also not significantly different. However, the post-event returns are higher for domestic deals at 5% from the MM method and at 10% from the OLS. And the overall 51 day CAARs are also

higher at 5% from both the regressions techniques for domestic deals. Similarly, the FF returns are not different for Day-0 AARs, 3 day CAARs and the pre-event period. However, the post-event returns and the overall CAARs are higher at the 10% and 5% level respectively for domestic deals from both the regression techniques. The results are not consistent with the findings of (Rani *et al.*, 2014) which report higher results for Indian acquires in CBMAs.

Clearly, while there are significantly positive and comparable returns from both types of M&As at the announcements, as the market learns about the acquirer in the deal, the market participants favour domestic acquirers more.

### 7.11 Foreign Firms

The synergy motive argues that both the targets and the acquirers should receive positive outcomes on the announcement of M&As. Thus, this section briefly looks at the outcomes on the foreign participants in deals with the Indian firms.

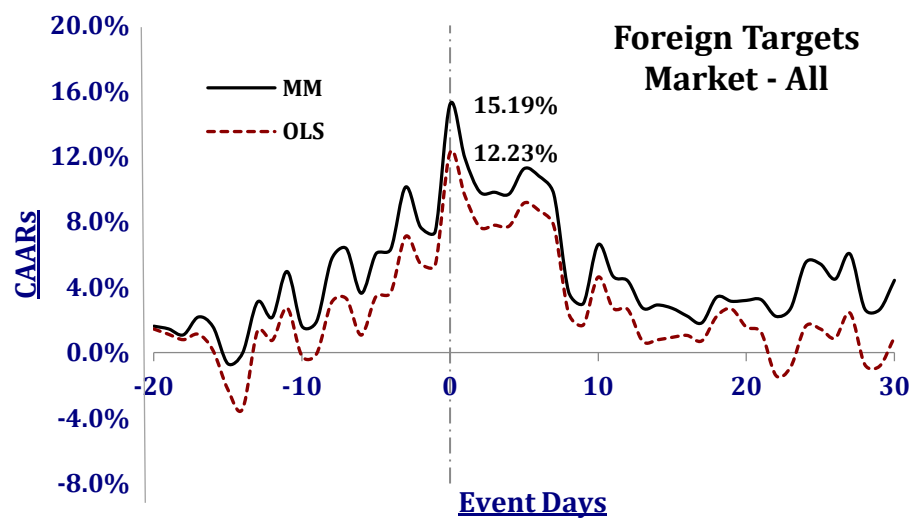


Figure 7.11.1 Return to Foreign Targets; MM vs. OLS

As the sample size is small, the CAAR graphs fluctuate. However, it is evident that there are positive abnormal returns to foreign targets when taken over by an Indian firms. In fact, the announcement day AARs range between 6% to 8%, depending upon the regression method of estimation.

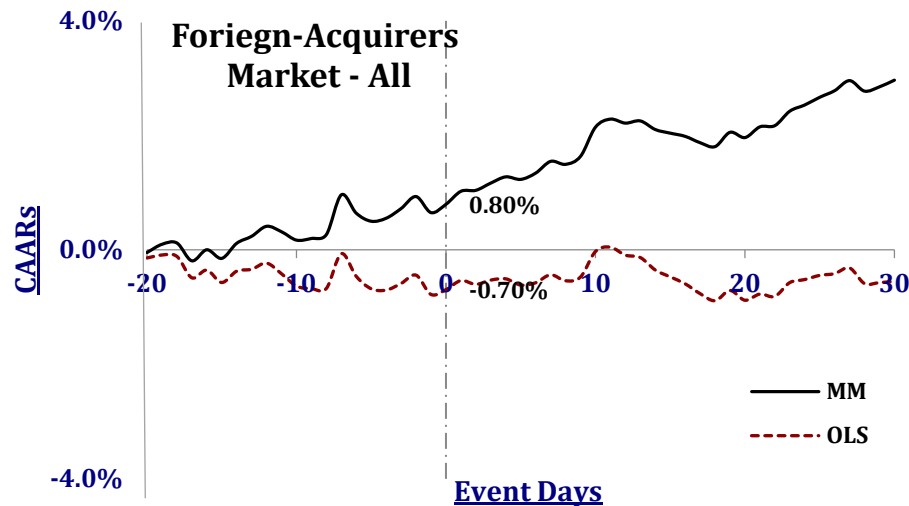


Figure 7.11.2 Return to Foreign Acquirers; MM vs. OLS

Depending on the regression method, the foreign acquirers may or may not have positive returns overall. *Table 7.11.1* summarizes the statistical findings for the foreign targets and the acquirers.

Table 7.11.1 Summary of Foreign Firms; Market Model; OLS & MM

| Regression       | AAR Day-0 | 3-Days CAAR | CAAR Day-0 | 51-Days CAAR | AARs (**)<br>around Day-0 | CAARs (**)<br>around Day-0 | n   |
|------------------|-----------|-------------|------------|--------------|---------------------------|----------------------------|-----|
| <b>Targets</b>   |           |             |            |              |                           |                            |     |
| MM               | 7.99% **  | 4.22%       | 15.91% **  | 4.42%        | 0                         | 0                          | 30  |
| OLS              | 6.88% **  | 4.15% **    | 12.23% *** | 0.95%        | 0                         | 0 to +7                    | 34  |
| <b>Acquirers</b> |           |             |            |              |                           |                            |     |
| MM               | 0.15%     | 0.09%       | 0.80%      | 2.96% **     |                           |                            | 111 |
| OLS              | 0.08%     | -0.09%      | -0.70%     | -0.55%       |                           |                            | 112 |

*p-values: \* p<.10, \*\* p<.05, \*\*\* p<.01. n represents sample size.*

There is clear evidence that the foreign target firms yield significantly positive returns when taken over by the Indian firms. However, for the foreign acquirers, while the announcement day returns Day-0 AARs are positive, they are not significantly different from zero. Further, the MM estimations are always positive, and the OLS estimations are mostly negative.

To assess whether the corporate governance model plays a role here, as it does in the case of Indian targets, the returns to the acquirers are split into the Anglo-Saxon (AS) and German/Japanese (GJ) categories. *Figure 7.11.3* and *Figure 7.11.4* show the CAAR graphs from the MM and the OLS regression respectively.

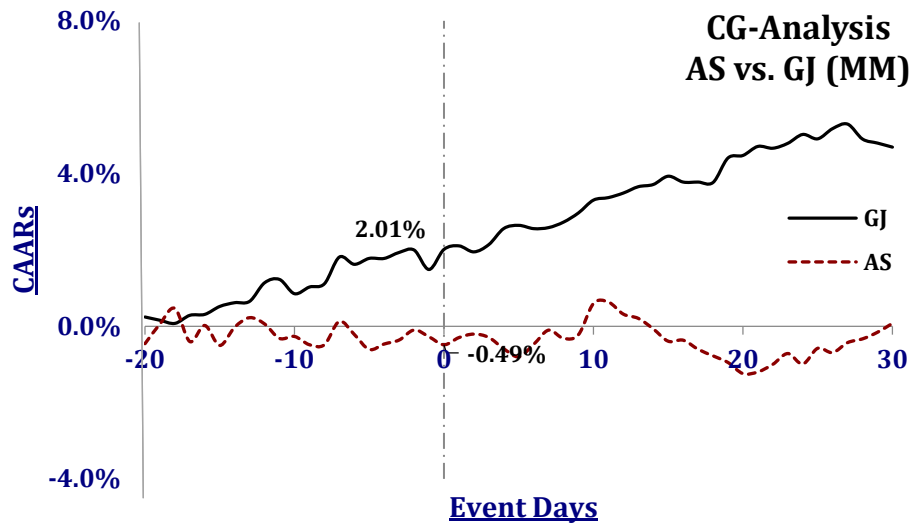


Figure 7.11.3 CG-Analysis Foreign Acquirers; MM

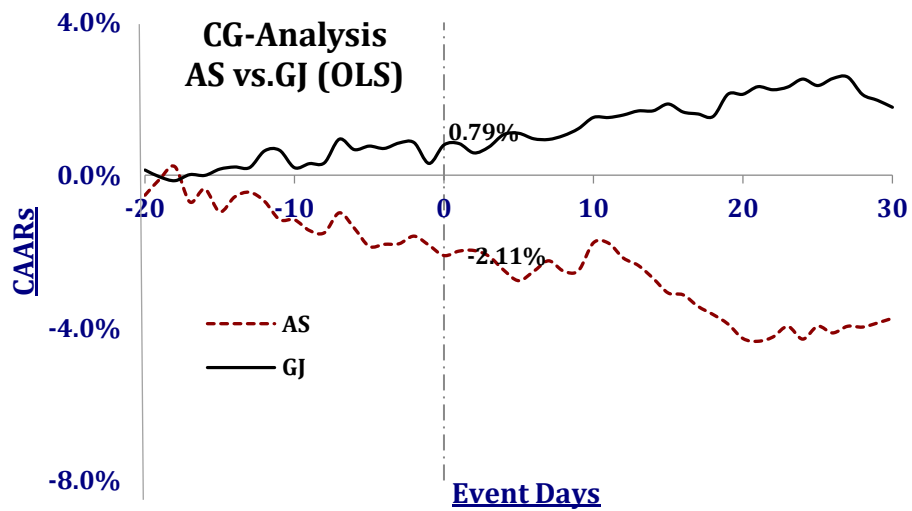


Figure 7.11.4 CG-Analysis Foreign Acquirers; OLS

The test of differences between the overall CAARs from the GJ and AS sub-sets from both the regressions is significantly different from zero at the 10% level. Thus, there is mild support for the theory that corporate governance models matter, even for the acquiring nations.

## 7.12 Overall Summary

### 7.12.1 Abnormal Returns - Synergy

The primary objective of this chapter is to address the fifth hypothesis (H5) and to evaluate synergy, agency and hubris motives in domestic M&As, leading to the testing of two hypotheses:

***H5a: There are no abnormal returns to the Indian target firms at the announcements of cross-border M&As.***

***H5b: There are no abnormal returns to the Indian acquirer firms at the announcement of cross-border M&As.***

The evidence presented here supports two null hypotheses. The target shareholders, whether Indian or from other nationalities, make abnormal positive returns at the announcement of CBMAs. In terms of acquirers, the Indian acquirers make significantly positive returns in cross-border takeovers. However, the foreign acquirers make positive returns but are not different from zero when they take over Indian firms. Thus, the evidence overall supports the synergy hypothesis. It implies that M&As increase the combined wealth of the shareholders on both of the sides and, as such, CBMAs are generally beneficial.

Further, the premise of this chapter is based on the set of characteristics unique to India. Chapter three summarizes the multidimensional aspects of India. This thesis identifies India as a *common law country* with business structures resembling *civil law countries* and with unique *socio-cultural anthropological attributes of some South Asian countries*. Thus, this chapter evaluates the influence of various corporate governance models, institutional environments and cultures in Indian CBMAs.

### 7.12.2 Corporate Governance Effect

To understand the roles that various corporate governance models play in the announcement returns of the two sides, the hypotheses tested are:

***H6a: There is no difference in returns to the target shareholders from the takeovers by the firms with identical corporate governance models.***

***H6b: There is no difference in returns to the acquirer shareholders from the takeovers of the firms with identical corporate governance models.***



The evidence presented rejects the null hypothesis and confirms that the corporate governance model matters in Indian CBMAs for both the sides.

For the target firms, there is sufficient evidence of higher returns when taken over by an acquirer pursuing the German/Japanese corporate governance model. In fact, the announcement day effect can be exceeded by 6% to 7% (rounded) in such cases. Further, based on Aguilera and Jackson (2010) argument, when French acquirers are treated as Anglo-Saxon to focus on the ownership pattern, the results are more pronounced than those of the GJ model analysis. It appears that the potential of Blockholding is the real driving factor in CBMAs in India.

For the acquirers, Indian acquirers show significantly lower returns when pursuing targets with the Anglo-Saxon model.

### **7.12.3 Cultural Proximity Effect**

As M&As are also described as marriage of two organizations, it is essentially an amalgamation of two cultures, particularly when it is cross-border in nature. Thus, *Cultural Analysis* is conducted to test whether socio-cultural-anthropological similarities explain the returns in CBMAs. The hypotheses tested are:

***H7a: There is no difference in returns to the target shareholders from the takeovers by the culturally proximate acquirers.***

***H7b: There is no difference in returns to the acquirer shareholders from the takeovers of the culturally proximate targets.***

The evidence presented here does not support the null hypotheses. On the contrary, takeovers by culturally distant countries generate higher returns.

The target returns show that there are significantly positive returns from the acquirers from multiple cultures and that the distant cultures produce higher returns than cultures in close proximity. Thus, the evidence rejects the hypothesis that there is no difference in returns from the culturally proximate. In fact, it suggest that culturally distant firms generate higher returns and the cultural proximity is not relevant.

Even for the acquirers, Anglo-Saxon culture is associated with lower returns. More than culture, they are driven by the economic distance of the target nations.

To sum, of the three dimensions presented here, an identical corporate governance model, which eventually translates into *investor protection*, is the most relevant aspect that drives the returns of the CBMAs in India.

#### **7.12.4 Institutional Framework Effect**

The *Commonwealth Inheritance* effect is analysed to understand whether common institutional environments drive higher returns. The following hypothesis is tested to understand the role of institutional similarities in CBMAs:

*H8a: There is no difference in returns to the target shareholders from the takeovers by the firms with identical institutional framework.*

*H8b: There is no difference in returns to the acquirer shareholders from the takeovers of the firms with identical institutional framework.*

The evidence presented supports the null hypotheses. It suggests that institutional similarity neither drives nor deters CBMAs on either of the sides.

For the targets, 80% of the takeovers are by Non-Commonwealth acquirers and there is no significant difference between the results from the Commonwealth and Non-Commonwealth returns.

Similarly, for the acquirers, the Commonwealth attribute is not significantly different from zero.

### 7.12.5 Snapshot - Hypotheses

| Effect                         | Hypotheses   | Targets | Acquirers | Notes   |
|--------------------------------|--|---------|-----------|---|
| <b>Motive</b>                  | <b>H5 :</b><br><i>There are no abnormal returns associated with the announcements of cross-border M&amp;As (CBMA)</i>                                  | ✗       | ✗         | <i>Significantly positive returns to both the targets and acquiring shareholders at the announcement.</i>                                       |
|                                | <b>H5a: Synergy</b>  | ✓       | ✓         | <i>As both the targets and acquirers gain positive returns, the total effect is positive for the combined wealth.</i>                           |
|                                | H5b: Hubris  | ✗       | ✗         |   |
|                                | H5c: Agency  | ✗       | ✗         |   |
| <b>Corporate Governance</b>    | <b>H6 :</b><br><i>There is no difference in abnormal returns generated in the deals with the firms with the identical corporate governance models.</i> | ✗       | ✗         | <i>Indian targets and the acquirers both show significantly higher returns when dealing with the firms with German/Japanese model.</i>          |
| <b>Cultural Proximity</b>      | <b>H7 :</b><br><i>There is no difference in abnormal returns generated in the deals with the firms with cultural proximity.</i>                        | ✗       | ✗         | <i>There is significant difference in returns from firms from different cultures and that the distant cultures produce higher returns.</i>      |
| <b>Institutional Framework</b> | <b>H8 :</b><br><i>There is no difference in abnormal returns generated in the deals with the firms with the similar Institutional framework.</i>       | ✓       | ✓         | <i>There is no significant difference between the returns from the deals with the firms with or without identical institutional frameworks.</i> |

# Chapter 8. Conclusion

---

## 8.1 Introduction

This chapter outlines the main propositions and the findings from each of the chapters discussed earlier. It also discusses the limitations of this thesis and proposes possible directions for future research.

## 8.2 Recapitulation

### *Chapter 1*

Chapter one highlights the multidimensional contribution of this thesis to the existing literature. *Firstly*, it contributes to an understanding of the emerging markets, where there is a paucity of literature. These markets are gaining prominence in the global business landscape, and the finance literature argues that emerging market multinational enterprises (EMNEs) are *fundamentally* different from those in developed countries. Thus, with the prevailing need for deliberate research into emerging markets, this research is well-timed.

*Secondly*, this research is based on India's markets. Not only is India one of the BRICS countries, it is also one of the fastest growing economies in the world. Apart from the rising and shining facts about India, this thesis highlights some contradictory and intriguingly puzzling attributes about India. It is these attributes which make India a unique country amongst other emerging markets and thus necessitates further research.

*Thirdly*, following the latest discussions about event-study methodology in statistical papers, this thesis introduces a robust regression technique to capture announcement effects in the analysis and compares them with the traditional OLS estimates. Thus, there is a methodological contribution to the literature in this work.

### *Chapter 2*

Chapter two provides a detailed literature review aimed at identifying gaps in the literature on Indian M&As. It sifts through the wealth of literature about M&As in general, and about emerging and Indian markets in particular. It identifies the key elements that may have a bearing on Indian M&As. Emerging markets are characterized by weaker legal systems and large business groups which own majority stakes in the firms they control. Typically, these large shareholders are also the managers of the company. Alternatively put,

in an agency theory context, the principal and agents are the same identities. This is in sharp contrast to firms in the developed world. The direct outcome of such a system is that the outside shareholders become minority shareholders and face a risk of expropriation of their wealth by the majority stock owners. A typical threat of a takeover to control errant managers, which is one powerful tool in the hands of outside shareholders in the developed world, does not work here. Further, even the weaker legal system may not rescue these minority shareholders. Announcing M&As in such a setting surely yields a unique share market response. Further, in cross-border settings, this thesis develops a comprehensive framework which projects India as a *common-law country* with business structures and corporate governance model resembling *civil-law countries*. And yet, India is distant from either of the two in terms of its *socio-cultural anthropological attributes*. By defying existing principle theories in finance literature on various dimensions characteristically, India thus portrays a contradictory and intriguingly puzzling image. Therefore, to resolve this mystery, this chapter outlines a set of hypotheses focusing on the impact of factors such as ownership stake, cultural proximity, related institutional frameworks, comparable corporate governance models and economic distances on the returns obtained by the Indian shareholders. These hypotheses are subsequently tested in chapters five, six and seven.

### ***Chapter 3***

Chapter three details the methodology employed in the analysis. It is a two-stage analysis. The stage one is the event study which, aims to determine any abnormal returns associated with the announcements of M&As to the Indian shareholders in the deal. Stage two is a cross-sectional analysis which aims at identifying the factors that may explain the sources of abnormal returns obtained by these shareholders. The two financial models - Market and Fama-French three-factor - are used to calculate the abnormal returns for the event study. These abnormal returns are determined by using OLS and robust regression techniques. For cross-sectional analysis, the key factors identified in the literature are regressed with cumulative abnormal returns to isolate the ones that determine the source of these returns. Chapters five, six and seven, compare and report the returns from the two financial models along with the outcomes from a cross-sectional analysis.

### ***Chapter 4***

Chapter four outlines the description of the data used for the analysis. The deals are shortlisted from 1989 to 2013. The Fama-French variables are available from 1992 to 2012. Equally Weighted Index data is also available from 2000 to 2013. This chapter discusses the

limitations imposed by the data on the analysis and various measures adopted to deal with them.

## ***Chapter 5***

Chapter five contributes to this thesis in two ways: it investigates the overall abnormal returns from the *aggregate dataset*, and it also compares and contrasts the outcomes from the two financial models, their variants, two indices, and the regression techniques employed in this thesis. There are a number of key findings from this chapter.

This chapter tests the first hypothesis (H1) about the creation of synergies with M&As by Indian firms. The following hypothesis is tested for both the targets and the acquirers.

***H1: There are no abnormal returns associated with the announcements of M&As to the participating Indian firms.***

The analysis rejects the hypothesis for both the sides in the deal as *there are significantly positive abnormal returns* associated with the announcements of M&As.

For the target shareholders, the Day-0 return is around 2.5%, and the 3 day return is nearly 6%. Another important finding here is that the targets' pre-bid run-up returns exceed the mark-up CAARs and the difference is statistically significant, which suggests that the higher proportion of the total takeover premium generated is gleaned away by the informed participants trading in run-up period. Thus, the role of asymmetric information and the extent of informed trading is dominant in determining the level of returns shareholders receive. The cross-sectional analysis for the target firms suggests that the abnormal returns occur when acquirers take a majority stake ( $\geq 50\%$ ), and when they use cash as a consideration for settlement.

For the acquirers, the announcement day impact is not statistically significant, but the 3 day returns range between 1% and 1.5%, depending on the estimation method. Further, in comparison to the domestic deals, the cross-border deals yield lesser returns, and there is some indication of higher returns when a majority stake is acquired.

There is no evidence of systematic average abnormal returns (AARs) to the new investors immediately *after* the public announcement of the event, which supports the efficiency market hypothesis.

## **Methodological Contributions**

### *a. Financial Models*

Secondly, comparing the two financial models, the Fama-French model replicates the trends of the Market model returns. Thus, while numerically Fama-French returns are marginally higher, on the announcement effect, qualitatively they are statistically alike. However, the overall 51 day CAARs [-20, +30] from the Fama-French model exceed the Market model CAARs statistically by 1% on average and that too only for the target shareholders. This implies that Fama-French models differ only for cumulated larger magnitudes.

The Scholes and Williams adjusted betas replicate the returns obtained from the unadjusted Market model. Likewise, there is no inherent difference in the abnormal returns obtained from Market models calculated using equally weighted index and value weighted index.

Overall, the Market model based on value weighted index appears to capture returns adequately and using other models or variants do not add unique values to the analysis.

### *b. Regression Methods*

However, for regressions techniques, there are significant differences in the results from the robust and the OLS regressions. Quite often, the difference is not only in the magnitude of the returns but also in the direction and overall trend. OLS CAARs for the acquirers are mostly negative, whereas those from the robust regressions are significantly positive. These differences become more evident and amplify on a comparison of the returns for the entire event window (51 day CAARs). It clearly indicates that the event study outcomes are sensitive to the type of regression technique used. And if the data is affected by the outliers, robust regression techniques provide more reliable results as they weigh down their influence in the estimations and make residuals larger and more visible.

Evidently, FF models may yield marginally higher returns *overall* but more than the financial models, the abnormal returns are *sensitive* to the regression techniques.

## **Chapter 6**

Chapter six narrows down the analysis to *domestic deals* where the target and the acquiring firms both originate in India. Following the arguments presented in chapter two,

this chapter focuses on synergy effects, the role of Indian Business Groups as an acquirer and the relatedness effects when the participating firms are affiliated with each other.

For evaluating synergy effects, the following hypothesis is tested for both the targets and the acquirers.

***H2: There are no abnormal returns associated with the announcements of domestic M&As (DMAs) to the participating Indian firms.***

The analysis rejects the hypothesis for both the sides in the deal as *there are significantly positive abnormal returns* associated with the announcements of domestic M&As. Thus, there is sufficient evidence to support the synergy creation hypothesis.

The 3 day announcement returns for the targets are around 4% and, depending on the regression methods, event period return can be as high as 20%. Further, with regards to pre-bid returns, target returns show a large run-up, which is significantly higher than the mark-up return, suggesting that asymmetric information also plays a dominant role.

For the acquirers, 3 day returns are in the range of 1% to 1.5%, depending on the regression methods and model. The pre-bid window of significantly positive CAARs is non-existent from OLS estimations and is lot smaller from the MM method, relative to the target CAARs, suggesting absence of informed trading.

The chapter further explores the impact of the participation of large Indian Business Groups as acquirers in the deals. The hypotheses thus tested is:

***H3: There is no difference in abnormal returns at the announcement of takeovers when acquirers belong to Indian Business Groups.***

The analysis rejects the hypothesis for the targets and fails to reject it for the acquirers.

For the target firms, the analysis overall points towards positive abnormal returns to the shareholders. These returns may be 5% to 10% higher from their counterparts. However, this positive influence occurs after the announcement, once the type of deal is learned by the market. The findings indicate a lack of tunnelling possibilities in takeovers involving large Indian Business Groups as acquirers.

For the acquirer firms, there is clear evidence from both the analyses (event study and cross-sectional) that the returns to the acquiring shareholders are uncorrelated with the status of the acquirer as Indian Business Group or others.



Finally, the chapter explores the role of relatedness in determining the returns generated by such deals. The hypothesis tested is:

***H4: There is no difference in abnormal returns at the announcement of takeovers when the targets and the acquirer are already affiliated.***

The analysis fails to reject the hypothesis for the targets and rejects it for the acquirers.

For the target firms, acquisitions by related acquirers yield lower returns in event studies, as well as in cross-sectional analysis. But the difference in returns however or the negative correlation coefficient is not different from zero at the conventional level.

On the other hand, for the acquirers, taking over related target firms yield higher returns, and the cross-sectional coefficients are significantly positive.

### ***Chapter 7***

The primary aim of chapter seven was to divulge the important aspects that drive returns to Indian firms in cross-border M&As. The premises of this chapter is based on the set of characteristics unique to India as explained in *Figure 2.4.7 The Multidimensional Aspects of India* (pg. 2-59). It further compares the returns between domestic and cross-border outcomes.

For evaluating synergy effects, the following hypothesis is tested for both the targets and the acquirers.

***H5: There are no abnormal returns associated with the announcements of cross-border M&As (CBMAs) to the participating Indian firms.***

The target shareholders, whether Indian or from other nationalities, make significant abnormal positive returns at the announcement of CBMAs. For the acquirers, the Indian acquirers make significantly positive returns in cross-border takeovers however the foreign acquirers though make positive returns but are not different from zero when they take over Indian firms.

Thus, the evidence overall supports the synergy hypothesis in Indian acquisitions of foreign firms, and such CBMAs are beneficial in general. However, it also alludes towards *hubris effect* for foreign acquirers.

The chapter further explores the impact of varying corporate governance practices of Indian and the foreign in the deals. The hypothesis tested is:

***H6: There is no difference in returns to the Indian shareholders in the takeover deals with the firms with identical corporate governance models.***

Interestingly, Indian target shareholders respond more favourably to acquirers with the German/Japanese model of corporate governance, with overwhelming support from both the MM and OLS estimations. The returns are large and the test of differences of means for Day-0 returns is significant.

Further, based on (Aguilera and Jackson, 2010) argument that when French acquires are treated as Anglo-Saxon to isolate ownership pattern, the results from the GJ model are more pronounced. It appears that the potential of *Blockholding or higher investor protection* is the real driving factor in CBMAs in India.

Indian acquirers show significantly lower returns when pursuing targets with Anglo-Saxon model.

Thus, the evidence presented here rejects the null hypothesis and confirms that the corporate governance model matters in Indian CBMAs for both the sides.

Further, institutional distance has always been pointed out as one major hurdle in M&A integrations. The legal origin is described as fundamental to institutional frameworks of the nations. Hence, the *Commonwealth Inheritance* effect is analysed to understand whether a common institutional environment drives higher returns. The following hypothesis is tested to understand the role of institutional similarities in CBMAs:

***H7: There is no difference in returns to the Indian shareholders from the takeovers deals with the culturally proximate firms.***

The target returns show that there are significantly positive returns from the acquirers from multiple cultures and that the distant cultures produce higher returns than the ones in proximity. Thus, the evidence rejects the hypothesis that there is no difference in returns from the culturally proximate. In fact, it suggest that the culturally distant firms generate higher returns and the cultural proximity is not relevant.

The results are interesting in that distant cultures produce higher returns than cultures in close proximity. Moreover, while the returns are positive and CAARs are significant in

almost all the cases, the test of differences of mean fails to show that inter-cultural differences are important.

***H8: There is no difference in returns to the Indian shareholders from the takeovers by the firms with identical institutional framework.***

For the targets, 80% of the takeovers are by Non-Commonwealth acquirers and there is no significant difference between the results from the Commonwealth and Non-Commonwealth returns.

Similarly, for the acquirers, the Commonwealth attribute is not significantly different from zero.

Thus, the analysis suggests that institutional similarity neither drives nor deters CBMAs from both the sides.

As M&As are also described as a marriage of two organizations, it is essentially an amalgamation of two cultures, especially when it is cross-border in nature. Thus, cultural analysis is conducted to ensure if socio-cultural-anthropological similarities explain the returns in CBMAs.

To sum, of the three dimensions presented here, an identical corporate governance model, which eventually translates into higher *investor protection*, is the most relevant aspect that drives returns of the CBMAs in India.

#### **DMA vs. CBMA**

Finally, the returns between domestic and cross-border mergers are compared to understand if they vary significantly from each others.

There are significantly positive and comparable returns from both the types of M&As at the announcements. However, as the market learns about the acquirer in the deal, the market participants favour domestic acquirers more, as reflected in overall CAARs generated in DMAs. However, the results also show stark differences in the patterns of the returns. There is no significant difference in the run-up or mark-up for the returns in targets for CBMAs, which implies lesser role of asymmetric information in CBMAs. This explains why the announcement effect is higher in CBMAs, yet overall CAARs are significantly less in CBMAs.

### **8.3 Research Limitation and Proposed Future Work**

The focus of this thesis is to analyse the successful M&A deals between publicly listed firms at the time of the announcement using the event study methodology in the Indian market, which is an emerging country.

The premises of the analysis imposes a number of inherent restrictions on the scope of the analysis. Being an emerging country, the archives lack sufficient richness of data, especially for any long-term studies. Thus, this thesis is limited, and substantially affected, by the non-availability of data which could have added more dimensions to the analysis otherwise. The missing firms coupled with the missing data (both share price and accounting figures) restricted the sample size and comparative analysis of targets and the acquirers.

Further, the event study methodology has a pre-requisite of an event window that is clear of other prominent events. This also affected the sample size as business world dynamics force companies to make major choices continually and frequently. This impact is more severe when a long event window is chosen. Further, as M&As tend to occur in waves, there is a concentration of takeovers in just a few years. A long event window quite often excludes the deals completed in rapid succession involving the same acquirers or targets under the purview of confounding effects. This thesis lost a large number of deals from the sample due to frequent takeover activities, especially in the large business houses which thrive on expansion and diversification and do so swiftly when conducive.

Apart from these premises, future research should also account for other attributes like unsuccessful deals which are withdrawn later or are rumoured to occur earlier. As the literature suggests that the price reactions around such events do not fall back to the original levels, it would be interesting to compare their returns with successful bids. If available, more accounting variables pertaining to various relative measures of the participating firms should be incorporated to gain deeper insights.

Further, though in the Indian context, (Bahl (2006), Tripathi (2008) and Taneja (2010) favour the three factor model as a better estimator of stock returns, this thesis reports no significant difference in the announcements returns from the Market or Fama-French models. The overall CAARs from Fama-French model, however, may be slightly higher but no difference in the trends at all. This finding is in line with MacKinlay (1997) who argues that for the event studies, gains from the multifactor models are limited. Future work should

consider the finding that the Market model, though relatively simple, captures the returns sufficiently.

Further, the difference between robust regressions and OLS techniques is quite large to the extent that they portray entirely different scenarios of the outcomes. The magnitudes and the directions differs and future research should consider employing robust regressions in the analysis.

## 8.4 Overall Summary

This section outlines the various hypotheses tested in this thesis and the final outcomes of the analysis.

| Aggregate Analysis           |   |         |           |   |
|------------------------------|---|---------|-----------|---|
| Effect                       | Hypothesis  | Targets | Acquirers | Notes   |
| Motive                       | <i>H1: There are no abnormal returns associated with the announcements of M&amp;As.</i>                               | ✗       | ✗         | <i>Significantly positive returns to both the targets and acquiring shareholders at the announcement.</i>                             |
|                              | <b>H1a: Synergy</b>   | ✓       | ✓         | <i>As both targets and acquirers gain positive abnormal returns, the total effect is positive for the combined wealth.</i>            |
|                              | H1b: Hubris   | ✗       | ✗         |   |
|                              | H1c: Agency   | ✗       | ✗         |   |
| Domestic Analysis (DMA)      |   |         |           |   |
| Effect                       | Hypotheses  | Targets | Acquirers | Notes   |
| Motive                       | <i>H2: There are no abnormal returns associated with the announcements of domestic M&amp;As.</i>                      | ✗       | ✗         | <i>Significantly positive returns to both the targets and acquiring shareholders at the announcement.</i>                             |
|                              | <b>H2a: Synergy</b>   | ✓       | ✓         | <i>As both targets and acquirers gain positive abnormal returns on average, the total effect is positive for the combined wealth.</i> |
|                              | H2b: Hubris   | ✗       | ✗         |   |
|                              | H2c: Agency   | ✗       | ✗         |   |
| <b>Indian Business Group</b> | <i>H3: There is no difference in abnormal returns generated in the takeovers by the large Indian Business Groups.</i> | ✗       | ✓         | <i>Significantly positive returns to the targets but insignificantly negative returns to the acquirers.</i>                           |

|                                      |  |                |                  |   |
|--------------------------------------|--|----------------|------------------|---|
| <b>Relatedness</b>                   | <b>H4 :</b><br><i>There is no difference in abnormal returns generated in the takeovers by the Related acquirers.</i>                                    | ✓              | ✗                | <i>Insignificantly negative returns to the targets, but significantly positive returns to the acquirers.</i>                                    |
| <b>Cross- border Analysis (CBMA)</b> |  |                |                  |   |
| <b>Effect</b>                        | <b>Hypotheses</b>  | <b>Targets</b> | <b>Acquirers</b> | <b>Notes</b>  |
| <b>Motive</b>                        | <b>H5 :</b><br><i>There are no abnormal returns associated with the announcements of cross-border M&amp;As.</i>  | ✗              | ✗                | <i>Significantly positive returns to both the targets and acquiring shareholders at the announcement.</i>                                       |
|                                      | <b>H1a: Synergy</b>  | ✓              | ✓                | <i>As both targets and acquirers gain positive returns, the total effect is positive for the combined wealth.</i>                               |
|                                      | H1b: Hubris  | ✗              | ✗                |   |
| H1c: Agency                          | ✗  | ✗              |                  |   |
| <b>Corporate Governance</b>          | <b>H6 :</b><br><i>There is no difference in abnormal returns generated in the takeovers of the firms with the identical corporate governance models.</i> | ✗              | ✗                | <i>Indian targets and the acquirers both show significantly higher returns when dealing with the firms with German/Japanese model.</i>          |
| <b>Cultural Proximity</b>            | <b>H7 :</b><br><i>There is no difference in abnormal returns generated in the takeovers of the firms with the cultural proximity.</i>                    | ✗              | ✗                | <i>There is difference in returns with different cultures and that the distant cultures produce higher returns.</i>                             |
| <b>Institutional Framework</b>       | <b>H8 :</b><br><i>There is no difference in abnormal returns generated in the takeovers of the firms with the identical Institutional framework.</i>     | ✓              | ✓                | <i>There is no significant difference between the returns from the deals with the firms with or without identical Institutional frameworks.</i> |



# References

---

- Agarwalla, S, Jacob, J & Varma, J 2013, 'Four Factor Model in Indian Equities Market', *Working Paper No. 2013-09-05*, Indian Institute of Management, Ahmedabad.
- Agrawal, A, Jaffe, J F & Mandelker, G N 1992, 'The Post-Merger Performance of Acquiring Firms: A Re-Examination of an Anomaly', *Journal of Finance*, vol. 47, no. 4, pp. 1605-21.
- Aguilera, R V & Jackson, G 2010, 'Comparative and International Corporate Governance', *The Academy of Management Annals*, vol. 4, no. 1, pp. 485-556.
- Ahmad, K M, Ashraf, S & Ahmed, S 2006, 'Testing Weak Form Efficiency for Indian Stock Markets', *Economic and Political Weekly*, vol. 41, no. 1, pp. 49-56.
- Alesina, A & Giuliano, P 2013, *Culture and Institutions*, National Bureau of Economic Research.
- Armour, J, Deakin, S, Lele, P & Siems, M 2009, 'How Do Legal Rules Evolve? Evidence from a Cross-Country Comparison of Shareholder, Creditor, and Worker Protection', *The American Journal of Comparative Law*, pp. 579-629.
- Asquith, P, Bruner, R F & Mullins, D W 1983, 'The Gains to Bidding Firms from Merger', *Journal of Financial Economics*, vol. 11, no. 1, pp. 121-39.
- Aybar, B & Ficici, A 2009, 'Cross-Border Acquisitions and Firm Value: An Analysis of Emerging-Market Multinationals', *Journal of International Business Studies*, vol. 40, no. 8, pp. 1317-38.
- Bahl, B 2006, 'Testing the Fama and French Three-Factor Model and Its Variants for the Indian Stock Returns', *Available at SSRN 950899*.
- Balasubramanian, B N, Barua, S K, Bhagavatula, S & George, R 2011, 'Board Interlocks and Their Impact on Corporate Governance: The Indian Experience-Coping with Corporate Cholesterol', Indian Institute of Management Ahmedabad, Research and Publication Department.
- Ball, R & Brown, P 1968, 'An Empirical Evaluation of Accounting Income Numbers', *Journal of Accounting Research*, vol. 6, no. 2, pp. 159-78.
- Banz, R W 1981, 'The Relationship between Return and Market Value of Common Stocks', *Journal of Financial Economics*, vol. 9, no. 1, pp. 3-18.
- Barkema, H, Bell, J & Pennings, J 1996, 'Foreign Entry, Cultural Barriers and Learning', *Strategic Management Journal*, pp. 151-66.
- Barney, J 1991, 'Firm Resources and Sustained Competitive Advantage', *Journal of management*, vol. 17, no. 1, pp. 99-120.
- Bartlett, C A & Ghoshal, S 1999, *Managing across Borders: The Transnational Solution*, vol. 2, Taylor & Francis.
- Bartlett, D 2007, 'The M&A Surge', *European Business Forum*, no. 30, p. 2.
- Basu, S 1983, 'The Relationship between Earnings' Yield, Market Value and Return for Nyse Common Stocks: Further Evidence', *Journal of Financial Economics*, vol. 12, no. 1, pp. 129-56.
- Berger, P G & Ofek, E 1995, 'Diversification's Effect on Firm Value', *Journal of Financial Economics*, vol. 37, no. 1, pp. 39-65.



- 1996, 'Bustup Takeovers of Value-Destroying Diversified Firms', *Journal of Finance*, vol. 51, no. 4, pp. 1175-200.
- Berkovitch, E & Narayanan, M 1990, 'Competition and the Medium of Exchange in Takeovers', *Review of Financial Studies*, vol. 3, no. 2, pp. 153-74.
- 1993, 'Motives for Takeovers: An Empirical Investigation', *Journal of Financial and Quantitative Analysis*, vol. 28, no. 3.
- Berle, A & Means, G 1932, 'The Modern Corporate and Private Property', *McMillan, New York, NY*.
- Bertrand, M, Mehta, P & Mullainathan, S 2002, 'Ferretting out Tunneling: An Application to Indian Business Groups', *The Quarterly Journal of Economics*, vol. 117, no. 1, pp. 121-48.
- Betton, S & Eckbo, B E 2000, 'Toeholds, Bid Jumps, and Expected Payoffs in Takeovers', *Review of Financial Studies*, vol. 13, no. 4.
- Betton, S, Eckbo, B E & Thorburn, K S 2008, 'Markup Pricing Revisited', *Tuck school of business working paper*, no. 2008-45.
- 2009, 'Merger Negotiations and the Toehold Puzzle', *Journal of Financial Economics*, vol. 91, no. 2, pp. 158-78.
- Bhagat, S, Malhotra, S & Zhu, P 2011, 'Emerging Country Cross-Border Acquisitions: Characteristics, Acquirer Returns and Cross-Sectional Determinants', *Emerging Markets Review*, vol. 12, no. 3, pp. 250-71.
- Bhandari, L C 1988, 'Debt/Equity Ratio and Expected Common Stock Returns: Empirical Evidence', *The Journal of Finance*, vol. 43, no. 2, pp. 507-28.
- Bhaumik, S K & Selarka, E 2008, 'Impact of M&A on Firm Performance in India: Implications for Concentration of Ownership and Insider Entrenchment'.
- 2012, 'Does Ownership Concentration Improve M&A Outcomes in Emerging Markets?: Evidence from India', *Journal of Corporate Finance*, vol. 18, no. 4, pp. 717-26.
- Binder, J 1998, 'The Event Study Methodology since 1969', *Review of quantitative Finance and Accounting*, vol. 11, no. 2, pp. 111-37.
- Boehmer, E, Masumeci, J & Poulsen, A B 1991, 'Event-Study Methodology under Conditions of Event-Induced Variance', *Journal of Financial Economics*, vol. 30, no. 2, pp. 253-72.
- Bowman, R G 1983, 'Understanding and Conducting Event Studies', *Journal of Business Finance & Accounting*, vol. 10, no. 4, pp. 561-84.
- Bradley, M 1980, 'Interfirm Tender Offers and the Market for Corporate Control', *Journal of Business*, pp. 345-76.
- Bradley, M, Desai, A & Kim., E H 1983, 'The Rationale Behind Interfirm Tender Offers: Information or Synergy?', *Journal of Financial Economics*, vol. 11, no. 1, pp. 183-206.
- 1988, 'Synergistic Gains from Corporate Acquisitions and Their Division between the Stockholders of Target and Acquiring Firms', *Journal of Financial Economics*, vol. 21, no. 1, pp. 3-40.
- Brealey, R, Myers, S & Marcus, A 2001, *Fundamentals of Corporate Finance*, 3rd edn, McGraw Hill Irwin.
- Bris, A 2002, 'Toeholds, Takeover Premium, and the Probability of Being Acquired', *Journal of Corporate Finance*, vol. 8, no. 3, pp. 227-53.
- Bris, A & Cabolis, C 2002, 'Corporate Governance Convergence by Contract: Evidence from Cross-Border Mergers'.

- Bromiley, P, Govekar, M & Marcus, A 1988, 'On Using Event-Study Methodology in Strategic Management Research', *Technovation*, vol. 8, no. 1, pp. 25-42.
- Brouthers, K D 2002, 'Institutional, Cultural and Transaction Cost Influences on Entry Mode Choice and Performance', *Journal of International Business Studies*, vol. 33, no. 2, pp. 203-21.
- Brouthers, K D & Brouthers, L E 2000, 'Acquisition or Greenfield Start-Up? Institutional, Cultural and Transaction Cost Influences', *Strategic Management Journal*, vol. 21, no. 1, pp. 89-97.
- Brown, K, Harlow, W & Tinic, S 1988, 'Risk Aversion, Uncertain Information, and Market Efficiency', *Journal of Financial Economics*, vol. 22, no. 2, pp. 355-85.
- Brown, S & Warner, J 1980, 'Measuring Security Price Performance', *Journal of Financial Economics*, vol. 8, no. 3, pp. 205-58.
- 1985, 'Using Daily Stock Returns: The Case of Event Studies', *Journal of Financial Economics*, vol. 14, no. 1, pp. 3-31.
- Bruner, R F 2002, 'Does M&A Pay? A Survey of Evidence for the Decision-Maker', *Journal of Applied Finance*, vol. 12, no. 1, pp. 48-68.
- Buckley, P J, Forsans, N & Munjal, S 2012, 'Host–Home Country Linkages and Host–Home Country Specific Advantages as Determinants of Foreign Acquisitions by Indian Firms', *International business review*, vol. 21, no. 5, pp. 878-90.
- Buckley, P J, Munjal, S, Enderwick, P & Forsans, N 2015, 'Cross-Border Acquisitions by Indian Multinationals: Asset Exploitation or Asset Augmentation?', *International business review*.
- Cai, J, Song, M H & Walkling, R A 2011, 'Anticipation, Acquisitions, and Bidder Returns: Industry Shocks and the Transfer of Information across Rivals', *Review of Financial Studies*, vol. 24, no. 7, pp. 2242-85.
- Calori, R, Lubatkin, M & Very, P 1994, 'Control Mechanisms in Cross-Border Acquisitions: An International Comparison', *Organization studies*, vol. 15, no. 3, pp. 361-79.
- Campbell, J Y, Lo, A W & MacKinlay, A C 1997, 'Event-Study Analysis', *The Econometrics of Financial Markets*, pp. 149-80.
- Canabal, A & White, G O 2008, 'Entry Mode Research: Past and Future', *International business review*, vol. 17, no. 3, pp. 267-84.
- Capron, L, Dussauge, P & Mitchell, W 1998, 'Resource Redeployment Following Horizontal Acquisitions in Europe and North America, 1988–1992', *Strategic Management Journal*, vol. 19, no. 7, pp. 631-61.
- Chacar, A & Vissa, B 2005, 'Are Emerging Economies Less Efficient? Performance Persistence and the Impact of Business Group Affiliation', *Strategic Management Journal*, vol. 26, no. 10, pp. 933-46.
- Chakrabarti, R, Gupta-Mukherjee, S & Jayaraman, N 2009, 'Mars–Venus Marriages: Culture and Cross-Border M&A', *Journal of International Business Studies*, vol. 40, no. 2, pp. 216-36.
- Chang, R & Moore, K 2011, *Corporate Finance*, vol. 3, 6 vols., CFA Program Curriculum Level-2, Pearson.
- Charest, G 1978, 'Dividend Information, Stock Returns and Market Efficiency-I', *Journal of Financial Economics*, vol. 6, no. 2, pp. 297-330.
- Chari, A, Ouimet, P P & Tesar, L L 2009, 'The Value of Control in Emerging Markets', *Review of Financial Studies*, p. hhp090.

- Chhibber, P K & Majumdar, S K 1999, 'Foreign Ownership and Profitability: Property Rights, Control, and the Performance of Firms in Indian Industry\*', *The Journal of Law and Economics*, vol. 42, no. 1, pp. 209-38.
- 2005, 'Property Rights and the Control of Strategy: Foreign Ownership Rules and Domestic Firm Globalization in Indian Industry', *Law & Policy*, vol. 27, no. 1, pp. 52-80.
- Chhokar, J S 2002, 'Leadership and Culture in India: The Globe Research Project 1'.
- Choi, D 1991, 'Toehold Acquisitions, Shareholder Wealth, and the Market for Corporate Control', *Journal of Financial & Quantitative Analysis*, vol. 26, no. 3, pp. 391-407.
- Claessens, S, Djankov, S, Fan, J P & Lang, L H 1999, *Expropriation of Minority Shareholders: Evidence from East Asia*, Citeseer.
- Coase, R 1937, 'The Nature of the Firm', *Economica*, vol. 4, no. 16, pp. 386-405.
- Cook, R D 1977, 'Detection of Influential Observation in Linear Regression', *Technometrics*, pp. 15-8.
- Copeland, T, Weston, J F & Shastri, K 2005, *Financial Theory and Corporate Policy*, Fourth edn, Pearson Addison Wesley.
- Dann, L Y 1981, 'Common Stock Repurchases: An Analysis of Returns to Bondholders and Stockholders', *Journal of Financial Economics*, vol. 9, no. 2, pp. 113-38.
- Datta, D K & Puia, G 1995, 'Cross-Border Acquisitions: An Examination of the Influence of Relatedness and Cultural Fit on Shareholder Value Creation in Us Acquiring Firms', *MIR: Management International Review*, pp. 337-59.
- Davidson, S & Josev, T 2005, 'The Impact of Thin Trading Adjustments on Australian Beta Estimates', *Accounting Research Journal*, vol. 18, no. 2, pp. 111-7.
- Davis, G F & Stout, S K 1992, 'Organization Theory and the Market for Corporate Control: A Dynamic Analysis of the Characteristics of Large Takeover Targets, 1980-1990', *Administrative Science Quarterly*, pp. 605-33.
- Davis, P, Desai, A & Francis, J 2000, 'Mode of International Entry: An Isomorphism Perspective', *Journal of International Business Studies*, pp. 239-58.
- Dikova, D, Sahib, P R & Van Witteloostuijn, A 2010, 'Cross-Border Acquisition Abandonment and Completion: The Effect of Institutional Differences and Organizational Learning in the International Business Service Industry, 1981-2001', *Journal of International Business Studies*, vol. 41, no. 2, pp. 223-45.
- DiMaggio, P & Powell, W W 1983, 'The Iron Cage Revisited: Collective Rationality and Institutional Isomorphism in Organizational Fields', *American Sociological Review*, vol. 48, no. 2, pp. 147-60.
- Dimson, E 1979, 'Risk Measurement When Shares Are Subject to Infrequent Trading', *Journal of Financial Economics*, vol. 7, no. 2, pp. 197-226.
- Dodd, P 1980, 'Merger Proposals, Management Discretion and Stockholder Wealth', *Journal of Financial Economics*, vol. 8, no. 2, pp. 105-37.
- Dodd, P & Ruback, R 1977, 'Tender Offers and Stockholder Returns: An Empirical Analysis', *Journal of Financial Economics*, vol. 5, no. 3, pp. 351-73.
- Dolley, J C 1933, 'Characteristics and Procedure of Common Stock Split-Ups', *Harvard Business Review*, vol. 11, no. 3, pp. 316-26.
- Dunning, J H 1980, 'Towards an Eclectic Theory of International Production: Some Empirical Tests', *Journal of International Business Studies*, vol. 11, no. 1, pp. 9-31.

- 1985, *Multinational Enterprises, Economic Structure, and International Competitiveness*, John Wiley & Sons Inc.
- 2006a, 'Comment on Dragon Multinationals: New Players in 21 St Century Globalization', *Asia Pacific journal of management*, vol. 23, no. 2, pp. 139-41.
- 2006b, 'Towards a New Paradigm of Development: Implications for the Determinants of International Business', *Transnational corporations*, vol. 15, no. 1, pp. 173-227.
- Dutz, M A 1989, 'Horizontal Mergers in Declining Industries: Theory and Evidence', *International Journal of Industrial Organization*, vol. 7, no. 1, pp. 11-33.
- Dyckman, T, Philbrick, D & Stephan, J 1984, 'A Comparison of Event Study Methodologies Using Daily Stock Returns: A Simulation Approach', *Journal of Accounting Research*, pp. 1-30.
- Eckbo, B E 1983, 'Horizontal Mergers, Collusion, and Stockholder Wealth', *Journal of Financial Economics*, vol. 11, no. 1-4, pp. 241-73.
- Eckbo, B E, Giammarino, R M & Heinkel, R L 1990, 'Asymmetric Information and the Medium of Exchange in Takeovers: Theory and Tests', *Review of Financial Studies*, vol. 3, no. 4, pp. 651-75.
- Edith, P 1959, *The Theory of the Growth of the Firm*, Oxford.
- Ellert, J C 1976, 'Mergers, Antitrust Law Enforcement and Stockholder Returns', *The Journal of Finance*, vol. 31, no. 2, pp. 715-32.
- Erickson, M 1998, 'Research Reports: The Effect of Taxes on the Structure of Corporate Acquisitions', *Journal of Accounting Research*, vol. 36, no. 2, pp. 279-98.
- Faccio, M & Masulis, R W 2005, 'The Choice of Payment Method in European Mergers and Acquisitions', *Journal of Finance*, vol. 60, no. 3, pp. 1345-88.
- Fama, E, Fisher, L, Jensen, M & Roll, R 1969, 'The Adjustment of Stock Prices to New Information', *International economic review*, vol. 10, no. 1, pp. 1-21.
- Fama, E & French, K 1992, 'The Cross-Section of Expected Stock Returns', *The Journal of Finance*, vol. 47, no. 2, pp. 427-65.
- 1993, 'Common Risk Factors in the Returns on Stocks and Bonds', *Journal of Financial Economics*, vol. 33, no. 1, pp. 3-56.
- 1996, 'Multifactor Explanations of Asset Pricing Anomalies', *The Journal of Finance*, vol. 51, no. 1, pp. 55-84.
- Fan, J P, Wei, K & Xu, X 2011, 'Corporate Finance and Governance in Emerging Markets: A Selective Review and an Agenda for Future Research', *Journal of Corporate Finance*, vol. 17, no. 2, pp. 207-14.
- Fan, J P & Wong, T J 2002, 'Corporate Ownership Structure and the Informativeness of Accounting Earnings in East Asia', *Journal of accounting and economics*, vol. 33, no. 3, pp. 401-25.
- Fishman, M J 1989, 'Preemptive Bidding and the Role of the Medium of Exchange in Acquisitions', *Journal of Finance*, vol. 44, no. 1, pp. 41-57.
- Fowler, D J & Rorke, C H 1983, 'Risk Measurement When Shares Are Subject to Infrequent Trading: Comment', *Journal of Financial Economics*, vol. 12, no. 2, pp. 279-83.
- Francis, B B, Hasan, I & Sun, X 2008, 'Financial Market Integration and the Value of Global Diversification: Evidence for Us Acquirers in Cross-Border Mergers and Acquisitions', *Journal of Banking & Finance*, vol. 32, no. 8, pp. 1522-40.

- Franks, J R & Harris, R S 1989, 'Shareholder Wealth Effects of Corporate Takeovers: The UK Experience 1955–1985', *Journal of Financial Economics*, vol. 23, no. 2, pp. 225-49.
- Freeman, R E & Reed, D 1983, 'Stockholders and Stakeholders: A New Perspective in Corporate Governance', *California Management Review*, vol. 25, no. 3, pp. 88-106.
- Fuller, K, Netter, J & Stegemoller, M 2002, 'What Do Returns to Acquiring Firms Tell Us? Evidence from Firms That Make Many Acquisitions', *Journal of Finance*, vol. 57, no. 4, pp. 1763-93.
- García-Castro, R, Ariño, M A, Rodriguez, M A & Ayuso, S 2008, 'A Cross-National Study of Corporate Governance and Employment Contracts', *Business Ethics: A European Review*, vol. 17, no. 3, pp. 259-84.
- Gaughan, P A 2010, *Mergers, Acquisitions, and Corporate Restructurings*, 4th edn, Wiley.
- Ghatak, M & Kali, R 2001, 'Financially Interlinked Business Groups', *Journal of Economics and Management Strategy*, vol. 10, no. 4, pp. 591-619.
- Ghemawat, P 2001, 'Distance Still Matters', *Harvard Business Review*, vol. 79, no. 8, pp. 137-47.
- Gopalan, R, Nanda, V & Seru, A 2007, 'Affiliated Firms and Financial Support: Evidence from Indian Business Groups', *Journal of Financial Economics*, vol. 86, no. 3, pp. 759-95.
- Gorton, G, Kahl, M & Rosen, R 2005, 'Eat or Be Eaten: A Theory of Mergers and Merger Waves', *Working Papers -- Financial Institutions Center at The Wharton School*.
- Gourevitch, P A & Shinn, J 2005, *Political Power and Corporate Control: The New Global Politics of Corporate Governance*, Princeton University Press.
- Gubbi, S R, Aulakh, P S, Ray, S, Sarkar, M & Chittoor, R 2010, 'Do International Acquisitions by Emerging-Economy Firms Create Shareholder Value? the Case of Indian Firms', *Journal of International Business Studies*, vol. 41, no. 3, pp. 397-418.
- Hansen, R G 1987, 'A Theory for the Choice of Exchange Medium in Mergers and Acquisitions', *Journal of Business*, pp. 75-95.
- Heflebower, R B 1963, 'Corporate Mergers: Policy and Economic Analysis', *The Quarterly Journal of Economics*, vol. 77, no. 4, pp. 537-58.
- Heitor, V A & Daniel, W 2006, 'A Theory of Pyramidal Ownership and Family Business Groups', *The Journal of Finance*, vol. 61, no. 6, pp. 2637-80.
- Henderson, J G V 1990, 'Problems and Solutions in Conducting Event Studies', *Journal of Risk and Insurance*, pp. 282-306.
- Hennart, J F 2012, 'Emerging Market Multinationals and the Theory of the Multinational Enterprise', *Global Strategy Journal*, vol. 2, no. 3, pp. 168-87.
- Hitt, M, Dacin, M, Tyler, B B & Park, D 1997, 'Understanding the Differences in Korean and US Executives' Strategic Orientations', *Strategic Management Journal*, vol. 18, no. 2, pp. 159-67.
- Hofstede, G 1980, 'Motivation, Leadership, and Organization: Do American Theories Apply Abroad?', *Organizational dynamics*, vol. 9, no. 1, pp. 42-63.
- 1984, *Culture's Consequences: International Differences in Work-Related Values*, vol. 5, sage.
- 1993, 'Cultural Constraints in Management Theories', *The Academy of Management Executive*, vol. 7, no. 1, pp. 81-94.
- 1994, 'The Business of International Business Is Culture', *International business review*, vol. 3, no. 1, pp. 1-14.

- Holl, P & Kyriaziz, D 1996, 'The Determinants of Outcome in UK Take-over Bids', *International Journal of the Economics of Business*, vol. 3, no. 2, pp. 165-84.
- Hoshi, T, Kashyap, A & Scharfstein, D 1991, 'Corporate Structure, Liquidity, and Investment: Evidence from Japanese Industrial Groups', *The Quarterly Journal of Economics*, vol. 106, no. 1, pp. 33-60.
- House, R, Javidan, M, Hanges, P & Dorfman, P 2002, 'Understanding Cultures and Implicit Leadership Theories across the Globe: An Introduction to Project Globe', *Journal of World Business*, vol. 37, no. 1, pp. 3-10.
- House, R J, Hanges, P J, Javidan, M, Dorfman, P W & Gupta, V 2004, *Culture, Leadership, and Organizations: The Globe Study of 62 Societies*, Sage publications.
- Huber, P J 1973, 'Robust Regression: Asymptotics, Conjectures and Monte Carlo', *The Annals of Statistics*, pp. 799-821.
- Inkpen, A C, Sundaram, A K & Rockwood, K 2000, 'Cross-Border Acquisitions of US Technology Assets', *California Management Review*, vol. 42, no. 3, pp. 50-71.
- Jaffe, J F 1974, 'The Effect of Regulation Changes on Insider Trading', *The Bell Journal of Economics and Management Science*, pp. 93-121.
- Jain, P 1986, 'Analyses of the Distribution of Security Market Model Prediction Errors for Daily Returns Data', *Journal of Accounting Research*, pp. 76-96.
- Jain, S 2013, 'Fama-French Three Factor Model in Indian Stock Market', *The Current Global Trends*, vol. 2, no. 1, pp. 7-13.
- Jarrell, G A, Brickley, J A & Netter, J M 1988, 'The Market for Corporate Control: The Empirical Evidence since 1980', *The Journal of Economic Perspectives*, vol. 2, no. 1, pp. 49-68.
- Jensen, M C 1984, 'Takeovers: Folklore and Science', *Harvard Business Review*, November-December.
- 1986, 'Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers', *The American Economic Review*, vol. 76, no. 2, pp. 323-9.
- 1987, 'The Free Cash Flow Theory of Takeovers: A Financial Perspective on Mergers and Acquisitions and the Economy', *The merger boom*, pp. 102-43.
- Jensen, M C & Ruback, R 1983, 'The Market for Corporate Control: The Scientific Evidence', *Journal of Financial Economics*, vol. 11, no. 1-4, pp. 5-50.
- Jones, T M 1995, 'Instrumental Stakeholder Theory: A Synthesis of Ethics and Economics', *Academy of Management Review*, vol. 20, no. 2, pp. 404-37.
- Kaiser, K M J & Stouraitis, A 2001, 'Reversing Corporate Diversification and the Use of the Proceeds from Asset Sales: The Case of Thorn Emi', *Financial Management (Blackwell Publishing Limited)*, vol. 30, no. 4, pp. 63-102.
- Kalay, A & Loewenstein, U 1985, 'Predictable Events and Excess Returns: The Case of Dividend Announcements', *Journal of Financial Economics*, vol. 14, no. 3, pp. 423-49.
- Kaplan, S N & Weisbach, M S 1992, 'The Success of Acquisitions: Evidence from Divestitures', *Journal of Finance*, vol. 47, no. 1, pp. 107-38.
- Kar, R N & Soni, A 2008, *Mergers and Acquisitions in India: A Strategic Impact Analysis for the Corporate Enterprises in the Post Liberalisation Period*, IGIDR Working Paper Series, WP-2008-31.
- Keown, A J & Pinkerton, J M 1981, 'Merger Announcements and Insider Trading Activity: An Empirical Investigation', *The Journal of Finance*, vol. 36, no. 4, pp. 855-69.

- Khanna, T 2000, 'Business Groups and Social Welfare in Emerging Markets: Existing Evidence and Unanswered Questions', *European Economic Review*, vol. 44, no. 4, pp. 748-61.
- Khanna, T & Palepu, K 1999, *Emerging Market Business Groups, Foreign Investors, and Corporate Governance*, National bureau of economic research.
- 2000, 'Is Group Affiliation Profitable in Emerging Markets? An Analysis of Diversified Indian Business Groups', *The Journal of Finance*, vol. 55, no. 2, pp. 867-91.
- Khanna, T & Yafeh, Y 2007, 'Business Groups in Emerging Markets: Paragons or Parasites?', *Journal of economic literature*, vol. 45, no. 2, pp. 331-72.
- Klein, F C 1978, 'Merger Leaks Abound Causing Many Stocks to Rise before the Fact', *Wall Street Journal*, July 12, p. 31.
- Kogut, B & Singh, H 1988, 'The Effect of National Culture on the Choice of Entry Mode', *Journal of International Business Studies*, pp. 411-32.
- Kolari, J W & Pynnönen, S 2010, 'Event Study Testing with Cross-Sectional Correlation of Abnormal Returns', *Review of Financial Studies*, p. hhq072.
- Kostova, T 1999, 'Transnational Transfer of Strategic Organizational Practices: A Contextual Perspective', *Academy of management review*, vol. 24, no. 2, pp. 308-24.
- Kostova, T & Zaheer, S 1999, 'Organizational Legitimacy under Conditions of Complexity: The Case of the Multinational Enterprise', *Academy of management review*, vol. 24, no. 1, pp. 64-81.
- Kothari, S & Warner, J 2006, *Econometrics of Event Studies*, vol. 1, Handbook of Empirical Corporate Finance.
- Kumar, N 2009, 'How Emerging Giants Are Rewriting the Rules of M&A', *Harvard Business Review*, vol. 87, no. 5, pp. 115-21.
- La Porta, R, Florencio, L-D-S & Shleifer, A 1999, 'Corporate Ownership around the World', *The Journal of Finance*, vol. 54, no. 2, pp. 471-517.
- La Porta, R, Florencio, L-D-S, Shleifer, A & Vishny, R W 1998, 'Law and Finance', *Journal of Political Economy*, vol. 106, no. 6, pp. 1113-55.
- 2002, 'Investor Protection and Corporate Valuation', *The Journal of Finance*, pp. 1147-70.
- La Porta, R, Lopez-de-Silanes, F, Shleifer, A & Vishny, Robert W 1997, 'Legal Determinants of External Finance'.
- Lang, L H, Stulz, M & Walkling, R 1989, 'Managerial Performance, Tobin's Q, and the Gains from Successful Tender Offers', *Journal of Financial Economics*, vol. 24, no. 1, pp. 137-54.
- Langtieg, T C 1978, 'An Application of a Three-Factor Performance Index to Measure Stockholder Gains from Merger', *Journal of Financial Economics*, vol. 6, no. 4, pp. 365-83.
- Latane, H A & Jones, C P 1979, 'Standardized Unexpected Earnings—1971–77', *The Journal of Finance*, vol. 34, no. 3, pp. 717-24.
- Licht, A N, Goldschmidt, C & Schwartz, S H 2005, 'Culture, Law, and Corporate Governance', *International review of law and economics*, vol. 25, no. 2, pp. 229-55.
- Linn, S C & Switzer, J A 2001, 'Are Cash Acquisitions Associated with Better Postcombination Operating Performance Than Stock Acquisitions?', *Journal of Banking & Finance*, vol. 25, no. 6, pp. 1113-38.
- Lintner, J 1971, 'Expectations, Mergers and Equilibrium in Purely Competitive Securities Market', *American Economic review*, vol. 61, no. 2, p. 11.

- Lipton, M 2006, *Merger Waves in the 19 Th, 20 Th and 21 St Centuries*.
- Lo, A W & MacKinlay, C A 1990, 'An Econometric Analysis of Nonsynchronous Trading', *Journal of Econometrics*, vol. 45, no. 1, pp. 181-211.
- Long, M & Walkling, R 1984, 'Agency Theory, Managerial Welfare, and Takeover Bid Resistance', *Rand Journal of Economics*, vol. 15, no. 1, pp. 54-68.
- Loughran, T & Vijh, A M 1997, 'Do Long-Term Shareholders Benefit from Corporate Acquisitions?', *Journal of Finance*, vol. 52, no. 5, pp. 1765-90.
- Lubatkin, M, Calori, R, Very, P & Veiga, J F 1998, 'Managing Mergers across Borders: A Two-Nation Exploration of a Nationally Bound Administrative Heritage', *Organization Science*, vol. 9, no. 6, pp. 670-84.
- Machold, S & Vasudevan, A K 2004, 'Corporate Governance Models in Emerging Markets: The Case of India', *International Journal of Business Governance and Ethics*, vol. 1, no. 1, pp. 56-77.
- MacKinlay, A C 1997, 'Event Studies in Economics and Finance', *Journal of economic literature*, vol. 35, no. 1, pp. 13-39.
- Mandelker, G 1974, 'Risk and Return: The Case of Merging Firms', *Journal of Financial Economics*, vol. 1, no. 4, pp. 303-35.
- Mann, B J S & Kohli, R 2011, 'Target Shareholders' Wealth Creation in Domestic and Cross-Border Acquisitions in India', *International Journal of Commerce and Management*, vol. 21, no. 1, pp. 63-81.
- Marisetty, V B, Marsden, A & Veeraraghavan, M 2008, 'Price Reaction to Rights Issues in the Indian Capital Market', *Pacific-Basin Finance Journal*, vol. 16, no. 3, pp. 316-40.
- Marisetty, V B & Subrahmanyam, M G 2010, 'Group Affiliation and the Performance of Ipos in the Indian Stock Market', *Journal of Financial Markets*, vol. 13, no. 1, pp. 196-223.
- Maronna, R A & Yohai, V c J 2000, 'Robust Regression with Both Continuous and Categorical Predictors', *Journal of Statistical Planning and Inference*, vol. 89, no. 1, pp. 197-214.
- Martin, K J 1996, 'The Method of Payment in Corporate Acquisitions, Investment Opportunities, and Management Ownership', *Journal of Finance*, vol. 51, no. 4, pp. 1227-46.
- Masulis, R W 1978, 'The Effects of Capital Structure Change on Security Prices', University of Chicago.
- Mathews, J A 2006, 'Dragon Multinationals: New Players in 21st Century Globalization', *Asia Pacific journal of management*, vol. 23, no. 1, pp. 5-27.
- McWilliams, A & Siegel, D 1997, 'Event Studies in Management Research: Theoretical and Empirical Issues', *Academy of Management Journal*, vol. 40, no. 3, pp. 626-57.
- Meulbroek, L K 1992, 'An Empirical Analysis of Illegal Insider Trading', *Journal of Finance*, vol. 47, no. 5, pp. 1661-99.
- Meyer, J W & Rowan, B 1977, 'Institutionalized Organizations: Formal Structure as Myth and Ceremony', *American journal of sociology*, pp. 340-63.
- Meyer, K E & Nguyen, H V 2005, 'Foreign Investment Strategies and Sub-National Institutions in Emerging Markets: Evidence from Vietnam\*', *Journal of Management Studies*, vol. 42, no. 1, pp. 63-93.
- Mikkelson, W H & Ruback, R S 1985, 'An Empirical Analysis of the Interfirm Equity Investment Process', *Journal of Financial Economics*, vol. 14, no. 4, pp. 523-53.



- Moeller, S B & Schlingemann, F P 2005, 'Global Diversification and Bidder Gains: A Comparison between Cross-Border and Domestic Acquisitions', *Journal of Banking & Finance*, vol. 29, no. 3, pp. 533-64.
- Moeller, S B, Schlingemann, F P & Stulz, R M 2004, 'Firm Size and the Gains from Acquisitions', *Journal of Financial Economics*, vol. 73, no. 2, pp. 201-28.
- 2005, 'Wealth Destruction on a Massive Scale? A Study of Acquiring-Firm Returns in the Recent Merger Wave', *Journal of Finance*, vol. 60, no. 2, pp. 757-82.
- Morck, R, Shleifer, A & Vishny, R W 1988, 'Characteristics of Targets of Hostile and Friendly Takeovers', in *Corporate Takeovers: Causes and Consequences*, University of Chicago Press, pp. 101-36.
- 1990, 'Do Managerial Objectives Drive Bad Acquisitions?', *Journal of Finance*, vol. 45, no. 1, pp. 31-48.
- Morellec, E & Zhdanov, A 2005, 'The Dynamics of Mergers and Acquisitions', *Journal of Financial Economics*, vol. 77, no. 3, pp. 649-72.
- Mulherin, J H & Boone, A L 2000, 'Comparing Acquisitions and Divestitures', *Journal of Corporate Finance*, vol. 6, no. 2, pp. 117-39.
- Murphy, K J 1985, 'Corporate Performance and Managerial Remuneration: An Empirical Analysis', *Journal of accounting and economics*, vol. 7, no. 1-3, pp. 11-42.
- Myers, S C & Majluf, N S 1984, 'Corporate Financing and Investment Decisions When Firms Have Information That Investors Do Not Have', *Journal of Financial Economics*, vol. 13, no. 2, pp. 187-221.
- Narula, R 2006, 'Globalization, New Ecologies, New Zoologies, and the Purported Death of the Eclectic Paradigm', *Asia Pacific journal of management*, vol. 23, no. 2, pp. 143-51.
- Nayar, B R 2014, *Globalization and India's Economic Integration*, Georgetown University Press.
- Nicholson, R R & Salaber, J 2013, 'The Motives and Performance of Cross-Border Acquirers from Emerging Economies: Comparison between Chinese and Indian Firms', *International business review*, vol. 22, no. 6, pp. 963-80.
- North, D C 1990, *Institutions, Institutional Change and Economic Performance*, Cambridge university press.
- Olie, R 1994, 'Shades of Culture and Institutions-in International Mergers', *Organization studies*, vol. 15, no. 3, pp. 381-405.
- Otchere, I & Ip, E 2006, 'Intra-Industry Effects of Completed and Cancelled Cross Border Acquisitions in Australia: A Test of the Acquisition Probability Hypothesis', *Pacific-Basin Finance Journal*, vol. 14, no. 2, pp. 209-30.
- Pandey, A 2003, 'Efficiency of Indian Stock Market', *Available at SSRN 474921*.
- Patell, J M 1976, 'Corporate Forecasts of Earnings Per Share and Stock Price Behavior: Empirical Test', *Journal of Accounting Research*, pp. 246-76.
- Patell, J M & Wolfson, M A 1984, 'The Intraday Speed of Adjustment of Stock Prices to Earnings and Dividend Announcements', *Journal of Financial Economics*, vol. 13, no. 2, pp. 223-52.
- Penman, S H 1982, 'Insider Trading and the Dissemination of Firms' Forecast Information', *Journal of Business*, pp. 479-503.
- Peterson, P P 1989, 'Event Studies: A Review of Issues and Methodology', *Quarterly Journal of Business & Economics*, vol. 28, no. 3.

- Porter, M E 1987, 'From Competitive Advantage to Corporate Strategy', *Harvard Business Review*, vol. 65, no. 3, pp. 43-59.
- Poshakwale, S 1996, 'Evidence on Weak Form Efficiency and Day of the Week Effect in the Indian Stock Market', *Finance India*, vol. 10, no. 3, pp. 605-16.
- Rani, N, Yadav, S S & Jain, P 2014, 'Impact of Domestic and Cross-Border Acquisitions on Acquirer Shareholders' Wealth: Empirical Evidence from Indian Corporate', *International Journal of Business and Management*, vol. 9, no. 3, p. p88.
- Rao, K C, Murthy, M & Ranganathan, K 1999, 'Some Aspects of the Indian Stock Market in the Post-Liberalisation Period', *Journal of Indian School of Political Economy*, vol. 11, no. 4, pp. 595-621.
- Ravenscraft, D J & Scherer, F M 1987, *Mergers, Sell-Offs, and Economic Efficiency*, Brookings Institution Press.
- Roe, M J 1996, *Strong Managers, Weak Owners: The Political Roots of American Corporate Finance*, Princeton University Press.
- Roll, R 1986, 'The Hubris Hypothesis of Corporate Takeovers', *Journal of Business*, pp. 197-216.
- Rosenberg, B, Reid, K & Lanstein, R 1985, 'Persuasive Evidence of Market Inefficiency', *The Journal of Portfolio Management*, vol. 11, no. 3, pp. 9-16.
- Rossi, S & Volpin, P F 2004, 'Cross-Country Determinants of Mergers and Acquisitions', *Journal of Financial Economics*, vol. 74, no. 2, pp. 277-304.
- Saboo, S & Gopi, S 2009, 'Comparison of Post-Merger Performance of Acquiring Firms (India) Involved in Domestic and Cross-Border Acquisitions'.
- Salinger, M 1992, 'Standard Errors in Event Studies', *Journal of Financial and Quantitative Analysis*, vol. 27, no. 01, pp. 39-53.
- Sarkar, J & Sarkar, S 2000, 'Large Shareholder Activism in Corporate Governance in Developing Countries: Evidence from India', *International Review of Finance*, vol. 1, no. 3, pp. 161-94.
- Sarkar, J, Sarkar, S & Sen, K 2013, 'Insider Control, Group Affiliation and Earnings Management in Emerging Economies: Evidence from India'.
- Schneider, S C 1988, 'National Vs. Corporate Culture: Implications for Human Resource Management', *Human Resource Management*, vol. 27, no. 2, pp. 231-46.
- Scholes, M & Williams, J 1977, 'Estimating Betas from Nonsynchronous Data', *Journal of Financial Economics*, vol. 5, no. 3, pp. 309-27.
- Schwartz, S H 1994, *Beyond Individualism/Collectivism: New Cultural Dimensions of Values*, Sage Publications, Inc.
- Schwert, G W 1996, 'Markup Pricing in Mergers and Acquisitions', *Journal of Financial Economics*, vol. 41, no. 2, pp. 153-92.
- Scott, W R 1995, *Institutions and Organizations*, Sage Thousand Oaks, CA.
- Seiler, M J 2004, *Performing Financial Studies: A Methodological Cookbook*, Prentice Hall.
- Selarka, E 2005, 'Ownership Concentration and Firm Value: A Study from the Indian Corporate Sector', *Emerging Markets Finance and Trade*, vol. 41, no. 6, pp. 83-108.
- Servaes, H 1991, 'Tobin's Q and Gains from Takeovers', *Journal of Finance*, vol. 46, no. 1, pp. 409-19.
- Seth, A, Song, K P & Pettit, R 2000, 'Synergy, Managerialism or Hubris? An Empirical Examination of Motives for Foreign Acquisitions of Us Firms', *Journal of International Business Studies*, vol. 31, no. 3, pp. 387-405.

- 2002, 'Value Creation and Destruction in Cross-Border Acquisitions: An Empirical Analysis of Foreign Acquisitions of Us Firms', *Strategic Management Journal*, vol. 23, no. 10, pp. 921-40.
- Sharma, P & Rao, A S 2000, 'Successor Attributes in Indian and Canadian Family Firms: A Comparative Study', *Family Business Review*, vol. 13, no. 4, pp. 313-30.
- Shimizu, K, Hitt, M A, Vaidyanath, D & Pisano, V 2004, 'Theoretical Foundations of Cross-Border Mergers and Acquisitions: A Review of Current Research and Recommendations for the Future', *Journal of International Management*, vol. 10, no. 3, pp. 307-53.
- Shleifer, A & Vishny, R W 1997, 'A Survey of Corporate Governance', *The Journal of Finance*, vol. 52, no. 2, pp. 737-83.
- Sicherman, N W & Pettway, R H 1987, 'Acquisition of Divested Assets and Shareholders' Wealth', *Journal of Finance*, vol. 42, no. 5, pp. 1261-73.
- Siegel, J & Choudhury, P 2012, 'A Reexamination of Tunneling and Business Groups: New Data and New Methods', *Review of Financial Studies*, p. hhs008.
- Smith, P B 2015, 'Cultural Distance', in *Wiley Encyclopedia of Management*, John Wiley & Sons, Ltd, vol. 6.
- Sorokina, N, Booth, D E & Thornton Jr, J H 2013, 'Robust Methods in Event Studies: Empirical Evidence and Theoretical Implications', *Journal of Data Science*, vol. 11, no. 3, pp. 575-606.
- Stahl, G & Voigt, A 2008, 'Do Cultural Differences Matter in Mergers and Acquisitions? A Tentative Model and Examination', *Organization Science*, vol. 19, no. 1, pp. 160-76.
- Stahl, G K, Björkman, I & Morris, S 2012, *Handbook of Research in International Human Resource Management*, Edward Elgar Publishing.
- Stattman, D 1980, 'Book Values and Stock Returns', *The Chicago MBA: A journal of selected papers*, vol. 4, no. 1, pp. 25-45.
- Stigler, G J 1950, 'Monopoly and Oligopoly by Merger', *American Economic review*, no. May p. 12.
- 1964, 'A Theory of Oligopoly', *Journal of Political Economy*, vol. 72, no. 1, pp. 44-61.
- Strickland, D, Martin, D R & Cotter, J F 2010, 'Toeholds as an M&A Strategy?', *Journal of Corporate Accounting & Finance*, vol. 21, no. 5, pp. 57-61.
- Stulz, R M 1988, 'Managerial Control of Voting Rights: Financing Policies and the Market for Corporate Control', *Journal of Financial Economics*, vol. 20, no. 1/2, pp. 25-54.
- Suchman, M C 1995, 'Managing Legitimacy: Strategic and Institutional Approaches', *Academy of management review*, vol. 20, no. 3, pp. 571-610.
- Taneja, Y P 2010, 'Revisiting Fama French Three-Factor Model in Indian Stock Market', *Vision: The Journal of Business Perspective*, vol. 14, no. 4, pp. 267-74.
- Travlos, N G 1987, 'Corporate Takeover Bids, Methods of Payment, and Bidding Firms' Stock Returns', *Journal of Finance*, vol. 42, no. 4, pp. 943-63.
- Tripathi, V 2008, 'Company Fundamentals and Equity Returns in India', *Available at SSRN 1134651*.
- Venkatesh, P & Chiang, R 1986, 'Information Asymmetry and the Dealer's Bid-Ask Spread: A Case Study of Earnings and Dividend Announcements', *The Journal of Finance*, vol. 41, no. 5, pp. 1089-102.
- Vermeulen, F & Barkema, H 2001, 'Learning through Acquisitions', *Academy of Management Journal*, vol. 44, no. 3, pp. 457-76.

- Very, P, Lubatkin, M & Calori, R 1996, 'A Cross-National Assessment of Acculturative Stress in Recent European Mergers', *International Studies of Management & Organization*, vol. 26, no. 1, pp. 59-86.
- Wansley, J W, Lane, W R & Yang, H C 1987, 'Gains to Bidder Firms in Cash and Securities Transactions', *Financial Review*, vol. 22, no. 4, pp. 403-14.
- Weber, Y, Shenkar, O & Raveh, A 1996, 'National and Corporate Cultural Fit in Mergers/Acquisitions: An Exploratory Study', *Management science*, vol. 42, no. 8, pp. 1215-27.
- Weiss, J W & Bloom, S 1990, 'Managing in China: Expatriate Experiences and Training Recommendations', *Business Horizons*, vol. 33, no. 3, pp. 23-9.
- Williamson, O E 1979, 'Transaction-Cost Economics: The Governance of Contractual Relations', *Journal of law and economics*, pp. 233-61.
- 1996, *The Mechanisms of Governance*, Oxford University Press.
- Yohai, V J 1987, 'High Breakdown-Point and High Efficiency Robust Estimates for Regression', *The Annals of Statistics*, pp. 642-56.
- Zattoni, A & Judge, W 2012, *Corporate Governance and Initial Public Offerings: An International Perspective*, Cambridge University Press.
- Zucker, L G 1987, 'Institutional Theories of Organization', *Annual review of sociology*, pp. 443-64.

# *Appendix*

---

## Appendix Chapter 5

The secondary graphs and detailed statistical findings are tabulated in Appendix Chapter 5 . These tables are labelled to provide the name of the financial model; type of firm; the type of sample set; the regression technique and the number of observations (in parenthesis) and the index used. For each day in the entire event window - Days [-20, +30], these tables provide average abnormal returns - AAR, median AARs, cumulative average abnormal returns - CAARs, averaged Standardized Abnormal Returns (SARa) along with their standard deviations and t-statistics, and averaged Standardized CAARs (SCARa) along with the respective standard deviations and the t-statistics. Finally, the tables also earmark the t-statistics significant at the 5% and 10% level for SARa and SCARa. While, the t-statistics, significant at the 10% level, is provided in bold and italic numbers, that at 5% is further highlighted. Also, a 3-day analysis of the days [-1, +1] is provided. Other relevant graphs and various cross-sectional results are also presented here.

## Fama-French Analysis based on M-firms sub-set

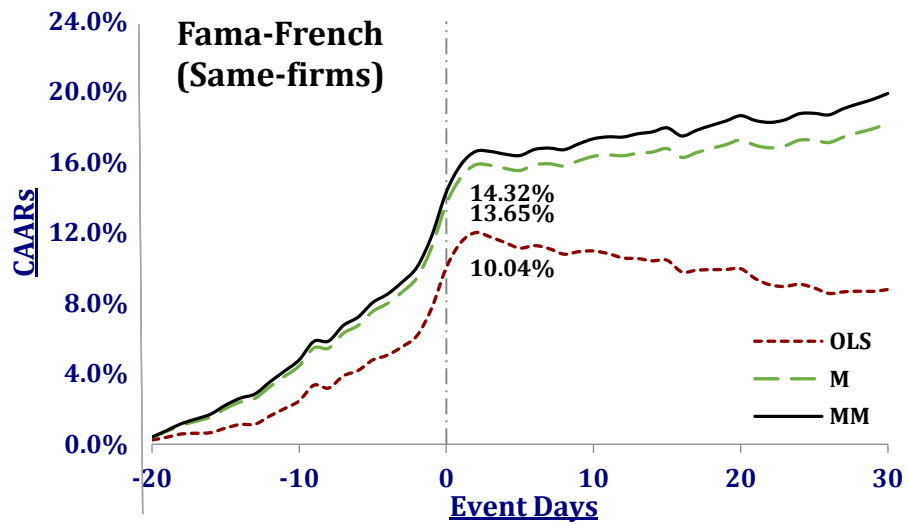


Figure A 5.1 Returns to All Targets from FF- Model (M-firms)

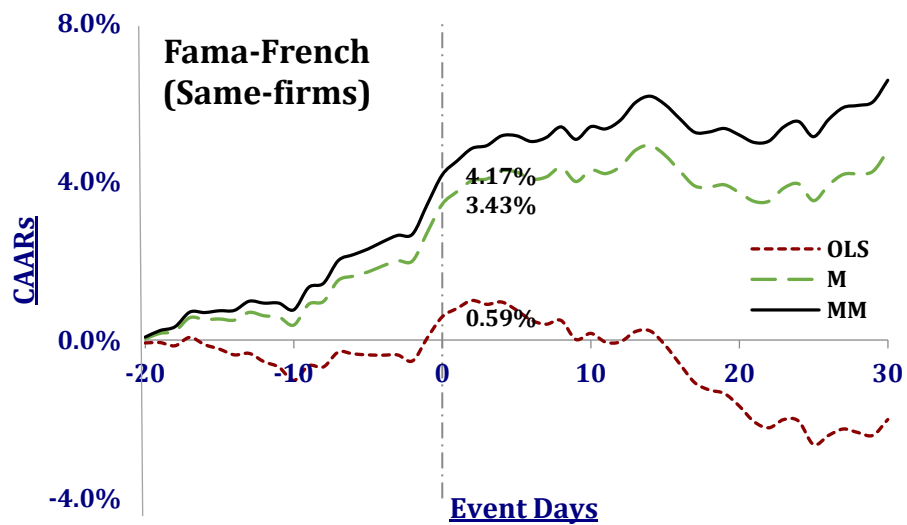


Figure A 5.2 Returns to All Acquirers from FF- Model (M-firms)

**Table-A 5.1 Market returns to Targets; All-firms; (MM, 264); VWI**

| Days           | AAR          | Median       | CAAR          | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|---------------|----------------------|----------------|---------------|---------------|----------------|
| -20            | 0.28%        | 0.10%        | 0.28%         | 0.1110        | 1.2181               | 1.5061         | 0.1110        | 1.2181        | 1.5061         |
| -19            | 0.43%        | 0.15%        | 0.71%         | 0.1921        | 1.0388               | <b>3.0569</b>  | 0.2143        | 1.1850        | <b>2.9894</b>  |
| -18            | 0.13%        | -0.08%       | 0.84%         | 0.0589        | 1.1950               | 0.8149         | 0.2089        | 1.1303        | <b>3.0564</b>  |
| -17            | 0.16%        | 0.02%        | 1.01%         | 0.0833        | 1.2682               | 1.0857         | 0.2226        | 1.2621        | <b>2.9160</b>  |
| -16            | 0.18%        | -0.01%       | 1.18%         | 0.0431        | 1.1312               | 0.6301         | 0.2184        | 1.2602        | <b>2.8650</b>  |
| -15            | 0.48%        | 0.18%        | 1.66%         | 0.1313        | 1.0884               | <b>1.9949</b>  | 0.2530        | 1.2555        | <b>3.3311</b>  |
| -14            | 0.48%        | 0.16%        | 2.14%         | 0.1660        | 1.3124               | <b>2.0915</b>  | 0.2969        | 1.2494        | <b>3.9297</b>  |
| -13            | 0.28%        | -0.07%       | 2.42%         | 0.0980        | 1.2785               | 1.2680         | 0.3124        | 1.2712        | <b>4.0637</b>  |
| -12            | 0.72%        | 0.17%        | 3.14%         | 0.2201        | 1.1704               | <b>3.1095</b>  | 0.3679        | 1.3430        | <b>4.5298</b>  |
| -11            | 0.61%        | 0.36%        | 3.75%         | 0.1822        | 1.2905               | <b>2.3339</b>  | 0.4067        | 1.3481        | <b>4.9874</b>  |
| -10            | 0.57%        | 0.24%        | 4.32%         | 0.1450        | 1.3360               | <b>1.7946</b>  | 0.4314        | 1.3843        | <b>5.1532</b>  |
| -9             | 0.96%        | 0.29%        | 5.28%         | 0.2825        | 1.3858               | <b>3.3710</b>  | 0.4946        | 1.3765        | <b>5.9414</b>  |
| -8             | -0.06%       | -0.04%       | 5.22%         | 0.0398        | 1.1648               | 0.5647         | 0.4863        | 1.3951        | <b>5.7629</b>  |
| -7             | 0.67%        | 0.26%        | 5.89%         | 0.1824        | 1.2549               | <b>2.4030</b>  | 0.5173        | 1.3687        | <b>6.2493</b>  |
| -6             | 0.51%        | 0.06%        | 6.40%         | 0.2120        | 1.3937               | <b>2.5146</b>  | 0.5545        | 1.3706        | <b>6.6894</b>  |
| -5             | 0.67%        | 0.19%        | 7.07%         | 0.1941        | 1.4128               | <b>2.2718</b>  | 0.5854        | 1.3653        | <b>7.0896</b>  |
| -4             | 0.38%        | -0.12%       | 7.46%         | 0.1098        | 1.2157               | 1.4938         | 0.5946        | 1.3606        | <b>7.2253</b>  |
| -3             | 0.66%        | 0.19%        | 8.11%         | 0.2254        | 1.3454               | <b>2.7696</b>  | 0.6310        | 1.3630        | <b>7.6539</b>  |
| -2             | 0.82%        | 0.26%        | 8.93%         | 0.2671        | 1.2603               | <b>3.5044</b>  | 0.6754        | 1.3638        | <b>8.1884</b>  |
| -1             | 1.74%        | 0.90%        | 10.67%        | 0.5966        | 1.7538               | <b>5.6246</b>  | 0.7917        | 1.4239        | <b>9.1934</b>  |
| <b>0</b>       | <b>2.54%</b> | <b>1.30%</b> | <b>13.21%</b> | <b>0.8245</b> | <b>2.3215</b>        | <b>5.8720</b>  | <b>0.9525</b> | <b>1.4911</b> | <b>10.5625</b> |
| 1              | 1.64%        | 0.71%        | 14.86%        | 0.3804        | 2.1500               | <b>2.9255</b>  | 1.0118        | 1.5358        | <b>10.8920</b> |
| 2              | 0.56%        | 0.08%        | 15.42%        | 0.1527        | 1.4729               | <b>1.7143</b>  | 1.0214        | 1.5839        | <b>10.6615</b> |
| 3              | -0.02%       | -0.03%       | 15.40%        | -0.0202       | 1.5130               | -0.2204        | 0.9957        | 1.6201        | <b>10.1619</b> |
| 4              | -0.12%       | -0.05%       | 15.28%        | -0.0186       | 1.3061               | -0.2349        | 0.9719        | 1.5902        | <b>10.1053</b> |
| 5              | -0.17%       | -0.14%       | 15.11%        | -0.0264       | 1.0169               | -0.4295        | 0.9479        | 1.5666        | <b>10.0037</b> |
| 6              | 0.05%        | -0.06%       | 15.16%        | 0.0252        | 1.1020               | 0.3787         | 0.9350        | 1.5527        | <b>9.9561</b>  |
| 7              | 0.13%        | 0.01%        | 15.29%        | 0.0595        | 1.1160               | 0.8814         | 0.9294        | 1.5498        | <b>9.9149</b>  |
| 8              | -0.08%       | -0.16%       | 15.21%        | 0.0001        | 1.1453               | 0.0020         | 0.9132        | 1.5504        | <b>9.7394</b>  |
| 9              | 0.42%        | 0.16%        | 15.63%        | 0.1693        | 1.1677               | <b>2.3973</b>  | 0.9288        | 1.5757        | <b>9.7463</b>  |
| 10             | 0.26%        | 0.22%        | 15.89%        | 0.0922        | 0.9540               | 1.5984         | 0.9303        | 1.5826        | <b>9.7187</b>  |
| 11             | 0.45%        | 0.21%        | 16.34%        | 0.1184        | 1.1444               | <b>1.7107</b>  | 0.9366        | 1.5982        | <b>9.6892</b>  |
| 12             | 0.14%        | 0.10%        | 16.48%        | 0.0391        | 1.4923               | 0.4332         | 0.9291        | 1.6626        | <b>9.2392</b>  |
| 13             | 0.07%        | 0.00%        | 16.55%        | 0.0042        | 1.0927               | 0.0634         | 0.9160        | 1.6404        | <b>9.2326</b>  |
| 14             | 0.09%        | 0.06%        | 16.64%        | 0.0275        | 0.9153               | 0.4964         | 0.9075        | 1.6332        | <b>9.1869</b>  |
| 15             | 0.19%        | -0.06%       | 16.83%        | 0.0472        | 1.0201               | 0.7652         | 0.9027        | 1.6198        | <b>9.2138</b>  |
| 16             | -0.23%       | -0.03%       | 16.60%        | -0.0836       | 1.1139               | -1.2415        | 0.8766        | 1.6334        | <b>8.8734</b>  |
| 17             | 0.20%        | 0.06%        | 16.81%        | 0.0674        | 1.0412               | 1.0703         | 0.8759        | 1.6395        | <b>8.8339</b>  |
| 18             | 0.28%        | -0.01%       | 17.09%        | 0.0368        | 1.1779               | 0.5159         | 0.8705        | 1.6274        | <b>8.8444</b>  |
| 19             | 0.24%        | 0.21%        | 17.32%        | 0.0811        | 1.0567               | 1.2693         | 0.8724        | 1.6209        | <b>8.8990</b>  |
| 20             | 0.51%        | 0.13%        | 17.84%        | 0.1759        | 1.0070               | <b>2.8881</b>  | 0.8892        | 1.6101        | <b>9.1306</b>  |
| 21             | -0.33%       | -0.22%       | 17.51%        | -0.0630       | 0.9816               | -1.0620        | 0.8688        | 1.6038        | <b>8.9564</b>  |
| 22             | -0.29%       | -0.12%       | 17.23%        | -0.0786       | 0.9538               | -1.3623        | 0.8466        | 1.6016        | <b>8.7403</b>  |
| 23             | 0.12%        | 0.01%        | 17.35%        | 0.0331        | 0.9759               | 0.5604         | 0.8420        | 1.6079        | <b>8.6579</b>  |
| 24             | 0.53%        | 0.24%        | 17.88%        | 0.1602        | 1.0033               | <b>2.6399</b>  | 0.8564        | 1.5800        | <b>8.9619</b>  |
| 25             | -0.01%       | -0.04%       | 17.87%        | 0.0198        | 0.9492               | 0.3450         | 0.8500        | 1.5782        | <b>8.9051</b>  |
| 26             | -0.13%       | 0.03%        | 17.74%        | -0.0096       | 0.8958               | -0.1766        | 0.8395        | 1.5664        | <b>8.8612</b>  |
| 27             | 0.10%        | 0.05%        | 17.84%        | 0.0330        | 1.0353               | 0.5273         | 0.8355        | 1.5580        | <b>8.8665</b>  |
| 28             | 0.16%        | 0.07%        | 18.00%        | 0.0320        | 0.9881               | 0.5361         | 0.8315        | 1.5502        | <b>8.8686</b>  |
| 29             | 0.18%        | 0.03%        | 18.18%        | 0.0790        | 1.1099               | 1.1771         | 0.8343        | 1.5443        | <b>8.9324</b>  |
| 30             | 0.27%        | 0.24%        | 18.45%        | 0.0818        | 0.9037               | 1.4971         | 0.8375        | 1.5407        | <b>8.9882</b>  |
| <b>-1 to 1</b> |              |              | <b>5.93%</b>  |               | <b>StdDev(AAR-0)</b> | <b>0.06381</b> | 1.0401        | 2.1633        | <b>7.9493</b>  |

**Table-A 5.2 Market returns to Targets; All-firms; (OLS, 274); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.08%       | -0.09%       | -0.08%       | 0.0100               | 1.0202        | 0.1679         | 0.0100        | 1.0202        | 0.1679        |
| -19            | 0.30%        | 0.03%        | 0.23%        | 0.0981               | 0.9257        | <b>1.8206</b>  | 0.0764        | 0.9818        | 1.3373        |
| -18            | 0.04%        | -0.20%       | 0.26%        | 0.0149               | 0.9946        | 0.2569         | 0.0710        | 0.9578        | 1.2733        |
| -17            | -0.12%       | -0.12%       | 0.15%        | 0.0221               | 1.0177        | 0.3736         | 0.0726        | 1.0148        | 1.2280        |
| -16            | -0.02%       | -0.10%       | 0.13%        | -0.0087              | 0.9893        | -0.1502        | 0.0610        | 1.0153        | 1.0324        |
| -15            | 0.45%        | 0.08%        | 0.58%        | 0.0902               | 0.9614        | 1.6114         | 0.0925        | 1.0495        | 1.5143        |
| -14            | 0.32%        | 0.08%        | 0.91%        | 0.0745               | 1.0837        | 1.1811         | 0.1138        | 1.0389        | <b>1.8820</b> |
| -13            | 0.09%        | -0.24%       | 1.00%        | 0.0342               | 1.0819        | 0.5425         | 0.1186        | 1.0641        | <b>1.9137</b> |
| -12            | 0.60%        | 0.05%        | 1.60%        | 0.1391               | 1.0057        | <b>2.3759</b>  | 0.1582        | 1.1183        | <b>2.4291</b> |
| -11            | 0.34%        | 0.35%        | 1.94%        | 0.1009               | 1.0827        | 1.6010         | 0.1820        | 1.1314        | <b>2.7621</b> |
| -10            | 0.40%        | 0.08%        | 2.34%        | 0.0783               | 1.0956        | 1.2277         | 0.1971        | 1.1664        | <b>2.9024</b> |
| -9             | 1.31%        | 0.19%        | 3.65%        | 0.2264               | 1.3911        | <b>2.7953</b>  | 0.2541        | 1.1735        | <b>3.7184</b> |
| -8             | -0.50%       | -0.25%       | 3.15%        | -0.0284              | 1.0389        | -0.4688        | 0.2363        | 1.1793        | <b>3.4405</b> |
| -7             | 0.38%        | 0.00%        | 3.53%        | 0.0895               | 1.0688        | 1.4374         | 0.2516        | 1.1628        | <b>3.7155</b> |
| -6             | 0.33%        | -0.01%       | 3.86%        | 0.1167               | 1.1109        | <b>1.8038</b>  | 0.2732        | 1.1698        | <b>4.0102</b> |
| -5             | 0.44%        | 0.06%        | 4.30%        | 0.1337               | 1.1958        | <b>1.9202</b>  | 0.2979        | 1.1600        | <b>4.4107</b> |
| -4             | 0.11%        | -0.28%       | 4.42%        | 0.0335               | 1.0345        | 0.5562         | 0.2972        | 1.1605        | <b>4.3972</b> |
| -3             | 0.58%        | 0.00%        | 5.00%        | 0.1571               | 1.1201        | <b>2.4088</b>  | 0.3258        | 1.1481        | <b>4.8733</b> |
| -2             | 0.67%        | 0.02%        | 5.67%        | 0.1849               | 1.0551        | <b>3.0104</b>  | 0.3595        | 1.1444        | <b>5.3956</b> |
| -1             | 1.52%        | 0.51%        | 7.19%        | 0.4416               | 1.4353        | <b>5.2832</b>  | 0.4492        | 1.1662        | <b>6.6144</b> |
| <b>0</b>       | <b>2.33%</b> | <b>1.22%</b> | <b>9.52%</b> | <b>0.6628</b>        | <b>1.9439</b> | <b>5.8557</b>  | <b>0.5830</b> | <b>1.2114</b> | <b>8.2651</b> |
| 1              | 1.39%        | 0.30%        | 10.91%       | 0.2757               | 1.6800        | <b>2.8184</b>  | 0.6284        | 1.2549        | <b>8.5992</b> |
| 2              | 0.30%        | -0.17%       | 11.21%       | 0.0747               | 1.2542        | 1.0226         | 0.6301        | 1.2993        | <b>8.3287</b> |
| 3              | -0.17%       | -0.26%       | 11.04%       | -0.0717              | 1.3462        | -0.9147        | 0.6022        | 1.3242        | <b>7.8101</b> |
| 4              | -0.23%       | -0.32%       | 10.81%       | -0.0785              | 1.1336        | -1.1896        | 0.5744        | 1.3181        | <b>7.4836</b> |
| 5              | -0.41%       | -0.34%       | 10.40%       | -0.0661              | 0.9239        | -1.2283        | 0.5502        | 1.3016        | <b>7.2598</b> |
| 6              | -0.12%       | -0.32%       | 10.29%       | -0.0097              | 0.9823        | -0.1689        | 0.5381        | 1.2940        | <b>7.1417</b> |
| 7              | -0.37%       | -0.13%       | 9.91%        | -0.0884              | 1.0758        | -1.4106        | 0.5117        | 1.3015        | <b>6.7518</b> |
| 8              | -0.38%       | -0.35%       | 9.53%        | -0.0877              | 1.0168        | -1.4806        | 0.4865        | 1.3038        | <b>6.4082</b> |
| 9              | 0.17%        | -0.07%       | 9.70%        | 0.0760               | 0.9824        | 1.3294         | 0.4922        | 1.3236        | <b>6.3865</b> |
| 10             | 0.44%        | -0.02%       | 10.13%       | 0.0808               | 1.1137        | 1.2454         | 0.4987        | 1.3311        | <b>6.4346</b> |
| 11             | 0.21%        | 0.00%        | 10.34%       | 0.0213               | 0.9787        | 0.3736         | 0.4946        | 1.3461        | <b>6.3105</b> |
| 12             | -0.09%       | -0.02%       | 10.26%       | -0.0303              | 1.2514        | -0.4164        | 0.4818        | 1.3891        | <b>5.9567</b> |
| 13             | -0.12%       | -0.15%       | 10.14%       | -0.0245              | 0.9344        | -0.4507        | 0.4705        | 1.3689        | <b>5.9023</b> |
| 14             | -0.04%       | -0.10%       | 10.09%       | -0.0088              | 0.8027        | -0.1890        | 0.4622        | 1.3591        | <b>5.8403</b> |
| 15             | -0.10%       | -0.18%       | 10.00%       | -0.0376              | 0.8586        | -0.7518        | 0.4495        | 1.3498        | <b>5.7185</b> |
| 16             | -0.52%       | -0.27%       | 9.48%        | -0.1636              | 0.9169        | <b>-3.0644</b> | 0.4165        | 1.3650        | <b>5.2398</b> |
| 17             | -0.12%       | -0.16%       | 9.36%        | -0.0332              | 0.9335        | -0.6104        | 0.4056        | 1.3705        | <b>5.0818</b> |
| 18             | 0.21%        | -0.07%       | 9.57%        | 0.0433               | 1.0238        | 0.7263         | 0.4073        | 1.3588        | <b>5.1471</b> |
| 19             | 0.02%        | -0.03%       | 9.59%        | 0.0047               | 0.8820        | 0.0908         | 0.4029        | 1.3542        | <b>5.1093</b> |
| 20             | 0.31%        | -0.04%       | 9.90%        | 0.0652               | 0.8002        | 1.3984         | 0.4081        | 1.3474        | <b>5.2014</b> |
| 21             | -0.47%       | -0.34%       | 9.43%        | -0.1092              | 0.9022        | <b>-2.0782</b> | 0.3864        | 1.3382        | <b>4.9585</b> |
| 22             | -0.51%       | -0.27%       | 8.92%        | -0.1367              | 0.8713        | <b>-2.6936</b> | 0.3610        | 1.3380        | <b>4.6338</b> |
| 23             | -0.42%       | -0.21%       | 8.50%        | -0.0901              | 1.0655        | -1.4514        | 0.3433        | 1.3550        | <b>4.3511</b> |
| 24             | 0.31%        | 0.08%        | 8.81%        | 0.0835               | 0.8836        | 1.6238         | 0.3519        | 1.3325        | <b>4.5356</b> |
| 25             | -0.27%       | -0.28%       | 8.55%        | -0.0462              | 0.8551        | -0.9282        | 0.3413        | 1.3289        | <b>4.4103</b> |
| 26             | -0.11%       | -0.13%       | 8.44%        | -0.0398              | 0.9767        | -0.7002        | 0.3318        | 1.3143        | <b>4.3355</b> |
| 27             | -0.35%       | -0.11%       | 8.09%        | -0.0260              | 1.0844        | -0.4110        | 0.3246        | 1.2969        | <b>4.2981</b> |
| 28             | -0.08%       | -0.07%       | 8.01%        | -0.0262              | 0.8287        | -0.5431        | 0.3175        | 1.2899        | <b>4.2272</b> |
| 29             | 0.01%        | -0.08%       | 8.02%        | 0.0194               | 0.9500        | 0.3499         | 0.3171        | 1.2838        | <b>4.2412</b> |
| 30             | 0.03%        | 0.10%        | 8.05%        | 0.0176               | 0.7937        | 0.3814         | 0.3164        | 1.2740        | <b>4.2650</b> |
| <b>-1 to 1</b> |              |              | <b>5.24%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06397</b> | 0.7968        | 1.7690        | <b>7.7355</b> |



**Table-A 5.3 Market returns to Targets; MM firms; (OLS, 264); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.08%        | -0.07%       | 0.08%        | 0.0393               | 0.9740        | 0.6678         | 0.0393        | 0.9740        | 0.6678        |
| -19            | 0.23%        | 0.03%        | 0.32%        | 0.0960               | 0.8845        | <b>1.7972</b>  | 0.0956        | 0.9490        | <b>1.6691</b> |
| -18            | -0.08%       | -0.27%       | 0.23%        | 0.0089               | 1.0004        | 0.1471         | 0.0832        | 0.9318        | 1.4793        |
| -17            | -0.05%       | -0.19%       | 0.19%        | 0.0156               | 1.0108        | 0.2552         | 0.0798        | 1.0140        | 1.3043        |
| -16            | -0.04%       | -0.10%       | 0.15%        | -0.0144              | 0.9738        | -0.2450        | 0.0650        | 1.0160        | 1.0593        |
| -15            | 0.26%        | 0.01%        | 0.41%        | 0.0630               | 0.9455        | 1.1046         | 0.0850        | 1.0449        | 1.3483        |
| -14            | 0.25%        | 0.03%        | 0.66%        | 0.0664               | 1.0541        | 1.0438         | 0.1038        | 1.0288        | <b>1.6720</b> |
| -13            | 0.09%        | -0.25%       | 0.75%        | 0.0220               | 1.0867        | 0.3362         | 0.1049        | 1.0524        | <b>1.6518</b> |
| -12            | 0.49%        | 0.02%        | 1.24%        | 0.1272               | 1.0005        | <b>2.1059</b>  | 0.1413        | 1.1043        | <b>2.1200</b> |
| -11            | 0.42%        | 0.35%        | 1.66%        | 0.0989               | 1.0778        | 1.5204         | 0.1653        | 1.1196        | <b>2.4466</b> |
| -10            | 0.38%        | 0.01%        | 2.04%        | 0.0888               | 1.0990        | 1.3380         | 0.1844        | 1.1665        | <b>2.6190</b> |
| -9             | 0.78%        | 0.19%        | 2.82%        | 0.1948               | 1.1529        | <b>2.7989</b>  | 0.2328        | 1.1577        | <b>3.3312</b> |
| -8             | -0.26%       | -0.25%       | 2.56%        | -0.0060              | 1.0021        | -0.0998        | 0.2220        | 1.1812        | <b>3.1133</b> |
| -7             | 0.47%        | 0.00%        | 3.03%        | 0.1030               | 1.0780        | 1.5835         | 0.2414        | 1.1694        | <b>3.4206</b> |
| -6             | 0.31%        | -0.06%       | 3.34%        | 0.1017               | 1.0878        | 1.5489         | 0.2595        | 1.1756        | <b>3.6572</b> |
| -5             | 0.49%        | 0.09%        | 3.83%        | 0.1478               | 1.2011        | <b>2.0382</b>  | 0.2882        | 1.1692        | <b>4.0840</b> |
| -4             | 0.18%        | -0.28%       | 4.01%        | 0.0418               | 1.0375        | 0.6680         | 0.2898        | 1.1704        | <b>4.1014</b> |
| -3             | 0.43%        | -0.02%       | 4.44%        | 0.1378               | 1.1174        | <b>2.0436</b>  | 0.3141        | 1.1564        | <b>4.4995</b> |
| -2             | 0.60%        | 0.02%        | 5.04%        | 0.1829               | 1.0568        | <b>2.8677</b>  | 0.3477        | 1.1491        | <b>5.0127</b> |
| -1             | 1.53%        | 0.55%        | 6.57%        | 0.4541               | 1.4478        | <b>5.1967</b>  | 0.4404        | 1.1717        | <b>6.2270</b> |
| <b>0</b>       | <b>2.35%</b> | <b>1.30%</b> | <b>8.92%</b> | <b>0.6831</b>        | <b>1.9696</b> | <b>5.7462</b>  | <b>0.5789</b> | <b>1.2202</b> | <b>7.8594</b> |
| 1              | 1.47%        | 0.46%        | 10.39%       | 0.2983               | 1.7008        | <b>2.9058</b>  | 0.6292        | 1.2654        | <b>8.2374</b> |
| 2              | 0.36%        | -0.16%       | 10.76%       | 0.0853               | 1.2731        | 1.1106         | 0.6331        | 1.3130        | <b>7.9885</b> |
| 3              | -0.22%       | -0.24%       | 10.53%       | -0.0679              | 1.3075        | -0.8604        | 0.6059        | 1.3405        | <b>7.4890</b> |
| 4              | -0.31%       | -0.32%       | 10.22%       | -0.0661              | 1.1051        | -0.9907        | 0.5805        | 1.3285        | <b>7.2390</b> |
| 5              | -0.37%       | -0.36%       | 9.86%        | -0.0656              | 0.8811        | -1.2326        | 0.5563        | 1.3121        | <b>7.0246</b> |
| 6              | -0.15%       | -0.32%       | 9.71%        | -0.0199              | 0.9351        | -0.3526        | 0.5421        | 1.3047        | <b>6.8841</b> |
| 7              | -0.09%       | -0.07%       | 9.62%        | -0.0261              | 0.9330        | -0.4628        | 0.5274        | 1.3023        | <b>6.7095</b> |
| 8              | -0.28%       | -0.33%       | 9.34%        | -0.0523              | 0.9759        | -0.8877        | 0.5085        | 1.2971        | <b>6.4952</b> |
| 9              | 0.23%        | -0.07%       | 9.58%        | 0.0946               | 0.9688        | 1.6183         | 0.5173        | 1.3145        | <b>6.5192</b> |
| 10             | 0.05%        | -0.01%       | 9.62%        | 0.0339               | 0.8024        | 0.7009         | 0.5150        | 1.3190        | <b>6.4683</b> |
| 11             | 0.23%        | 0.00%        | 9.85%        | 0.0269               | 0.9765        | 0.4566         | 0.5116        | 1.3328        | <b>6.3596</b> |
| 12             | -0.07%       | 0.01%        | 9.78%        | -0.0256              | 1.2697        | -0.3334        | 0.4993        | 1.3790        | <b>5.9992</b> |
| 13             | -0.12%       | -0.18%       | 9.66%        | -0.0322              | 0.9268        | -0.5762        | 0.4864        | 1.3648        | <b>5.9046</b> |
| 14             | -0.17%       | -0.12%       | 9.50%        | -0.0287              | 0.7859        | -0.6055        | 0.4746        | 1.3583        | <b>5.7882</b> |
| 15             | -0.02%       | -0.17%       | 9.48%        | -0.0115              | 0.8418        | -0.2269        | 0.4660        | 1.3438        | <b>5.7451</b> |
| 16             | -0.42%       | -0.25%       | 9.06%        | -0.1331              | 0.8778        | <b>-2.5118</b> | 0.4378        | 1.3520        | <b>5.3646</b> |
| 17             | 0.02%        | -0.12%       | 9.08%        | 0.0114               | 0.8562        | 0.2207         | 0.4338        | 1.3487        | <b>5.3291</b> |
| 18             | 0.07%        | -0.09%       | 9.16%        | 0.0044               | 0.9155        | 0.0790         | 0.4289        | 1.3420        | <b>5.2952</b> |
| 19             | 0.03%        | -0.04%       | 9.19%        | 0.0098               | 0.8859        | 0.1839         | 0.4251        | 1.3389        | <b>5.2600</b> |
| 20             | 0.29%        | -0.06%       | 9.48%        | 0.0636               | 0.8112        | 1.2990         | 0.4298        | 1.3318        | <b>5.3469</b> |
| 21             | -0.55%       | -0.39%       | 8.93%        | -0.1302              | 0.8174        | <b>-2.6396</b> | 0.4046        | 1.3182        | <b>5.0847</b> |
| 22             | -0.51%       | -0.32%       | 8.42%        | -0.1178              | 0.8027        | <b>-2.4309</b> | 0.3819        | 1.3095        | <b>4.8314</b> |
| 23             | -0.12%       | -0.20%       | 8.31%        | -0.0302              | 0.8376        | -0.5979        | 0.3730        | 1.3141        | <b>4.7020</b> |
| 24             | 0.32%        | 0.05%        | 8.63%        | 0.0843               | 0.8719        | 1.6025         | 0.3814        | 1.2914        | <b>4.8926</b> |
| 25             | -0.23%       | -0.28%       | 8.40%        | -0.0509              | 0.8408        | -1.0038        | 0.3697        | 1.2935        | <b>4.7350</b> |
| 26             | -0.35%       | -0.14%       | 8.05%        | -0.0745              | 0.7564        | -1.6315        | 0.3549        | 1.2850        | <b>4.5753</b> |
| 27             | -0.11%       | -0.11%       | 7.94%        | -0.0057              | 0.8375        | -0.1137        | 0.3503        | 1.2750        | <b>4.5519</b> |
| 28             | -0.05%       | -0.04%       | 7.89%        | -0.0237              | 0.8332        | -0.4722        | 0.3433        | 1.2667        | <b>4.4905</b> |
| 29             | -0.02%       | -0.14%       | 7.87%        | 0.0149               | 0.9310        | 0.2651         | 0.3420        | 1.2646        | <b>4.4804</b> |
| 30             | 0.06%        | 0.08%        | 7.93%        | 0.0119               | 0.7724        | 0.2549         | 0.3403        | 1.2598        | <b>4.4751</b> |
| <b>-1 to 1</b> |              |              | <b>5.36%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06426</b> | 0.8288        | 1.7738        | <b>7.7414</b> |

Table-A 5.4 Market returns to Targets; M firms; (M, 241); VWI

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.30%        | 0.06%        | 0.30%         | 0.1118               | 1.5056        | 1.1426         | 0.1118        | 1.5056        | 1.1426        |
| -19            | 0.40%        | 0.10%        | 0.70%         | 0.2315               | 1.3030        | <b>2.7341</b>  | 0.2427        | 1.4707        | <b>2.5400</b> |
| -18            | 0.24%        | -0.10%       | 0.95%         | 0.0648               | 1.4288        | 0.6984         | 0.2356        | 1.3683        | <b>2.6500</b> |
| -17            | 0.26%        | 0.02%        | 1.21%         | 0.0661               | 1.6925        | 0.6015         | 0.2371        | 1.5490        | <b>2.3559</b> |
| -16            | 0.15%        | -0.07%       | 1.36%         | 0.0444               | 1.3156        | 0.5198         | 0.2320        | 1.5024        | <b>2.3761</b> |
| -15            | 0.49%        | 0.19%        | 1.84%         | 0.1939               | 1.4320        | <b>2.0845</b>  | 0.2909        | 1.5094        | <b>2.9664</b> |
| -14            | 0.39%        | 0.29%        | 2.23%         | 0.2242               | 1.5336        | <b>2.2503</b>  | 0.3541        | 1.4727        | <b>3.7005</b> |
| -13            | 0.22%        | -0.19%       | 2.45%         | 0.0508               | 1.6158        | 0.4834         | 0.3492        | 1.5102        | <b>3.5584</b> |
| -12            | 0.61%        | 0.14%        | 3.06%         | 0.2091               | 1.4022        | <b>2.2954</b>  | 0.3989        | 1.6088        | <b>3.8161</b> |
| -11            | 0.52%        | 0.43%        | 3.58%         | 0.2214               | 1.5147        | <b>2.2492</b>  | 0.4484        | 1.5849        | <b>4.3545</b> |
| -10            | 0.64%        | 0.23%        | 4.22%         | 0.1696               | 1.9366        | 1.3480         | 0.4787        | 1.6606        | <b>4.4368</b> |
| -9             | 0.93%        | 0.30%        | 5.15%         | 0.3181               | 1.7069        | <b>2.8681</b>  | 0.5502        | 1.6728        | <b>5.0617</b> |
| -8             | 0.00%        | -0.06%       | 5.14%         | 0.0397               | 1.4260        | 0.4287         | 0.5396        | 1.6912        | <b>4.9104</b> |
| -7             | 0.73%        | 0.29%        | 5.87%         | 0.2074               | 1.5427        | <b>2.0692</b>  | 0.5754        | 1.6648        | <b>5.3192</b> |
| -6             | 0.37%        | -0.02%       | 6.24%         | 0.1770               | 1.5176        | <b>1.7950</b>  | 0.6016        | 1.6632        | <b>5.5666</b> |
| -5             | 0.60%        | 0.26%        | 6.83%         | 0.1699               | 1.8219        | 1.4349         | 0.6249        | 1.6805        | <b>5.7234</b> |
| -4             | 0.44%        | -0.03%       | 7.28%         | 0.1706               | 1.5114        | <b>1.7371</b>  | 0.6477        | 1.6449        | <b>6.0600</b> |
| -3             | 0.60%        | 0.19%        | 7.88%         | 0.2632               | 1.5468        | <b>2.6190</b>  | 0.6915        | 1.6491        | <b>6.4530</b> |
| -2             | 0.96%        | 0.25%        | 8.84%         | 0.3499               | 1.5303        | <b>3.5192</b>  | 0.7533        | 1.6280        | <b>7.1214</b> |
| -1             | 1.70%        | 0.97%        | 10.54%        | 0.6408               | 2.1828        | <b>4.5181</b>  | 0.8775        | 1.7045        | <b>7.9231</b> |
| <b>0</b>       | <b>2.63%</b> | <b>1.59%</b> | <b>13.17%</b> | <b>1.0083</b>        | <b>2.8402</b> | <b>5.4639</b>  | <b>1.0764</b> | <b>1.7673</b> | <b>9.3736</b> |
| 1              | 1.67%        | 0.73%        | 14.84%        | 0.4585               | 2.7860        | <b>2.5327</b>  | 1.1494        | 1.8330        | <b>9.6507</b> |
| 2              | 0.61%        | 0.12%        | 15.45%        | 0.1325               | 1.7834        | 1.1438         | 1.1518        | 1.9068        | <b>9.2961</b> |
| 3              | 0.13%        | 0.07%        | 15.58%        | -0.0614              | 2.2715        | -0.4158        | 1.1150        | 1.9776        | <b>8.6774</b> |
| 4              | -0.01%       | -0.06%       | 15.58%        | -0.0047              | 1.5859        | -0.0459        | 1.0915        | 1.9316        | <b>8.6969</b> |
| 5              | -0.12%       | -0.20%       | 15.46%        | -0.0261              | 1.2823        | -0.3133        | 1.0652        | 1.8976        | <b>8.6393</b> |
| 6              | 0.18%        | -0.12%       | 15.63%        | 0.0264               | 1.3702        | 0.2961         | 1.0504        | 1.8736        | <b>8.6282</b> |
| 7              | 0.03%        | 0.01%        | 15.66%        | 0.0323               | 1.4124        | 0.3516         | 1.0375        | 1.8979        | <b>8.4136</b> |
| 8              | -0.04%       | -0.24%       | 15.62%        | -0.0297              | 1.5299        | -0.2986        | 1.0140        | 1.8901        | <b>8.2562</b> |
| 9              | 0.37%        | 0.16%        | 15.99%        | 0.1911               | 1.3881        | <b>2.1189</b>  | 1.0318        | 1.9215        | <b>8.2645</b> |
| 10             | 0.33%        | 0.19%        | 16.33%        | 0.1234               | 1.1046        | <b>1.7189</b>  | 1.0372        | 1.9300        | <b>8.2710</b> |
| 11             | 0.20%        | 0.01%        | 16.53%        | 0.0346               | 1.2847        | 0.4148         | 1.0270        | 1.9557        | <b>8.0817</b> |
| 12             | 0.08%        | 0.14%        | 16.61%        | -0.0047              | 2.1195        | -0.0340        | 1.0105        | 2.0732        | <b>7.5012</b> |
| 13             | 0.15%        | 0.03%        | 16.76%        | 0.0341               | 1.3233        | 0.3969         | 1.0014        | 2.0483        | <b>7.5239</b> |
| 14             | 0.11%        | 0.05%        | 16.87%        | 0.0290               | 1.0800        | 0.4130         | 0.9919        | 2.0428        | <b>7.4726</b> |
| 15             | 0.19%        | -0.02%       | 17.06%        | 0.0255               | 1.3866        | 0.2833         | 0.9822        | 2.0417        | <b>7.4042</b> |
| 16             | -0.55%       | -0.16%       | 16.51%        | -0.2147              | 1.4728        | <b>-2.2432</b> | 0.9336        | 2.0678        | <b>6.9484</b> |
| 17             | 0.25%        | 0.03%        | 16.75%        | 0.0412               | 1.2632        | 0.5014         | 0.9279        | 2.0868        | <b>6.8431</b> |
| 18             | 0.13%        | -0.08%       | 16.88%        | -0.0222              | 1.5860        | -0.2153        | 0.9124        | 2.0774        | <b>6.7594</b> |
| 19             | 0.17%        | 0.24%        | 17.06%        | 0.0720               | 1.3558        | 0.8174         | 0.9123        | 2.0714        | <b>6.7780</b> |
| 20             | 0.31%        | 0.03%        | 17.37%        | 0.1535               | 1.1304        | <b>2.0892</b>  | 0.9250        | 2.0436        | <b>6.9664</b> |
| 21             | -0.37%       | -0.34%       | 17.01%        | -0.0672              | 1.4440        | -0.7163        | 0.9036        | 2.0176        | <b>6.8926</b> |
| 22             | -0.17%       | -0.04%       | 16.83%        | -0.1049              | 1.4835        | -1.0880        | 0.8770        | 2.0489        | <b>6.5877</b> |
| 23             | 0.12%        | -0.03%       | 16.95%        | 0.0304               | 1.1269        | 0.4146         | 0.8716        | 2.0500        | <b>6.5435</b> |
| 24             | 0.39%        | 0.20%        | 17.34%        | 0.1663               | 1.2111        | <b>2.1129</b>  | 0.8866        | 2.0150        | <b>6.7719</b> |
| 25             | 0.06%        | -0.04%       | 17.40%        | 0.0518               | 1.2143        | 0.6567         | 0.8846        | 1.9896        | <b>6.8427</b> |
| 26             | -0.14%       | 0.02%        | 17.26%        | -0.0138              | 1.0344        | -0.2060        | 0.8731        | 1.9747        | <b>6.8047</b> |
| 27             | 0.21%        | 0.15%        | 17.48%        | 0.0153               | 1.2726        | 0.1846         | 0.8662        | 1.9752        | <b>6.7489</b> |
| 28             | 0.14%        | 0.05%        | 17.61%        | 0.0819               | 1.4392        | 0.8758         | 0.8690        | 1.9506        | <b>6.8565</b> |
| 29             | 0.14%        | 0.03%        | 17.75%        | 0.0865               | 1.3348        | 0.9972         | 0.8725        | 1.9484        | <b>6.8918</b> |
| 30             | 0.15%        | 0.20%        | 17.90%        | 0.0668               | 1.0341        | 0.9935         | 0.8732        | 1.9488        | <b>6.8961</b> |
| <b>-1 to 1</b> |              |              | <b>6.00%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06212</b> | 1.2168        | 2.7605        | <b>6.7840</b> |

**Table-A 5.5 Market returns to Targets; M firms; (OLS, 241); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.16%        | -0.10%       | 0.16%        | 0.0445               | 0.9927        | 0.6921         | 0.0445        | 0.9927        | 0.6921        |
| -19            | 0.23%        | 0.00%        | 0.38%        | 0.0987               | 0.8965        | <b>1.7004</b>  | 0.1013        | 0.9638        | 1.6225        |
| -18            | 0.06%        | -0.27%       | 0.44%        | 0.0255               | 1.0234        | 0.3842         | 0.0974        | 0.9517        | 1.5801        |
| -17            | 0.09%        | -0.22%       | 0.53%        | 0.0375               | 1.0229        | 0.5659         | 0.1031        | 1.0317        | 1.5429        |
| -16            | -0.03%       | -0.12%       | 0.49%        | -0.0154              | 0.9929        | -0.2389        | 0.0853        | 1.0304        | 1.2788        |
| -15            | 0.28%        | 0.01%        | 0.78%        | 0.0700               | 0.9638        | 1.1224         | 0.1065        | 1.0670        | 1.5411        |
| -14            | 0.20%        | 0.20%        | 0.98%        | 0.0781               | 1.0370        | 1.1636         | 0.1281        | 1.0513        | <b>1.8819</b> |
| -13            | 0.07%        | -0.31%       | 1.05%        | 0.0066               | 1.1006        | 0.0921         | 0.1222        | 1.0852        | <b>1.7385</b> |
| -12            | 0.42%        | 0.08%        | 1.47%        | 0.1359               | 1.0228        | <b>2.0524</b>  | 0.1605        | 1.1376        | <b>2.1787</b> |
| -11            | 0.37%        | 0.39%        | 1.84%        | 0.1044               | 1.0881        | 1.4820         | 0.1853        | 1.1476        | <b>2.4931</b> |
| -10            | 0.49%        | 0.11%        | 2.32%        | 0.1187               | 1.1161        | 1.6429         | 0.2124        | 1.1921        | <b>2.7521</b> |
| -9             | 0.79%        | 0.20%        | 3.12%        | 0.2074               | 1.1680        | <b>2.7420</b>  | 0.2633        | 1.1845        | <b>3.4323</b> |
| -8             | -0.17%       | -0.18%       | 2.95%        | 0.0069               | 0.9964        | 0.1073         | 0.2549        | 1.2113        | <b>3.2493</b> |
| -7             | 0.56%        | 0.07%        | 3.51%        | 0.1147               | 1.0893        | 1.6266         | 0.2763        | 1.2005        | <b>3.5536</b> |
| -6             | 0.21%        | -0.13%       | 3.72%        | 0.0933               | 1.1038        | 1.3058         | 0.2910        | 1.2090        | <b>3.7168</b> |
| -5             | 0.45%        | 0.11%        | 4.17%        | 0.1475               | 1.2241        | <b>1.8611</b>  | 0.3186        | 1.2039        | <b>4.0871</b> |
| -4             | 0.28%        | -0.20%       | 4.45%        | 0.0704               | 1.0487        | 1.0371         | 0.3262        | 1.2043        | <b>4.1828</b> |
| -3             | 0.42%        | 0.01%        | 4.88%        | 0.1313               | 1.1043        | <b>1.8359</b>  | 0.3479        | 1.1876        | <b>4.5245</b> |
| -2             | 0.80%        | 0.04%        | 5.67%        | 0.2175               | 1.0689        | <b>3.1423</b>  | 0.3886        | 1.1754        | <b>5.1052</b> |
| -1             | 1.53%        | 0.63%        | 7.20%        | 0.4714               | 1.4845        | <b>4.9034</b>  | 0.4841        | 1.1899        | <b>6.2831</b> |
| <b>0</b>       | <b>2.48%</b> | <b>1.38%</b> | <b>9.68%</b> | <b>0.7270</b>        | <b>2.0114</b> | <b>5.5815</b>  | <b>0.6311</b> | <b>1.2346</b> | <b>7.8939</b> |
| 1              | 1.54%        | 0.54%        | 11.23%       | 0.3214               | 1.7542        | <b>2.8293</b>  | 0.6851        | 1.2837        | <b>8.2422</b> |
| 2              | 0.45%        | -0.12%       | 11.68%       | 0.0924               | 1.3082        | 1.0905         | 0.6893        | 1.3361        | <b>7.9674</b> |
| 3              | -0.04%       | -0.17%       | 11.64%       | -0.0372              | 1.3496        | -0.4253        | 0.6672        | 1.3663        | <b>7.5415</b> |
| 4              | -0.16%       | -0.33%       | 11.48%       | -0.0440              | 1.1053        | -0.6146        | 0.6449        | 1.3527        | <b>7.3627</b> |
| 5              | -0.28%       | -0.32%       | 11.20%       | -0.0497              | 0.8982        | -0.8539        | 0.6227        | 1.3341        | <b>7.2075</b> |
| 6              | 0.02%        | -0.33%       | 11.22%       | -0.0109              | 0.9395        | -0.1787        | 0.6089        | 1.3241        | <b>7.1018</b> |
| 7              | -0.16%       | -0.09%       | 11.06%       | -0.0389              | 0.9341        | -0.6427        | 0.5906        | 1.3273        | <b>6.8715</b> |
| 8              | -0.19%       | -0.32%       | 10.87%       | -0.0385              | 0.9809        | -0.6058        | 0.5732        | 1.3157        | <b>6.7281</b> |
| 9              | 0.22%        | -0.02%       | 11.09%       | 0.1096               | 0.9839        | <b>1.7207</b>  | 0.5836        | 1.3358        | <b>6.7468</b> |
| 10             | 0.15%        | -0.01%       | 11.24%       | 0.0355               | 0.7951        | 0.6891         | 0.5805        | 1.3387        | <b>6.6959</b> |
| 11             | 0.03%        | -0.17%       | 11.28%       | -0.0003              | 0.9561        | -0.0054        | 0.5713        | 1.3574        | <b>6.4991</b> |
| 12             | -0.09%       | 0.01%        | 11.18%       | -0.0190              | 1.3084        | -0.2239        | 0.5592        | 1.4071        | <b>6.1378</b> |
| 13             | 0.01%        | -0.09%       | 11.19%       | -0.0195              | 0.9217        | -0.3264        | 0.5476        | 1.3951        | <b>6.0615</b> |
| 14             | -0.10%       | -0.06%       | 11.09%       | -0.0207              | 0.7945        | -0.4015        | 0.5362        | 1.3885        | <b>5.9642</b> |
| 15             | 0.03%        | -0.15%       | 11.11%       | -0.0010              | 0.8416        | -0.0190        | 0.5286        | 1.3724        | <b>5.9479</b> |
| 16             | -0.71%       | -0.37%       | 10.41%       | -0.1815              | 0.8828        | <b>-3.1754</b> | 0.4915        | 1.3867        | <b>5.4738</b> |
| 17             | 0.11%        | -0.09%       | 10.51%       | 0.0262               | 0.8339        | 0.4854         | 0.4893        | 1.3803        | <b>5.4739</b> |
| 18             | -0.04%       | -0.11%       | 10.47%       | -0.0092              | 0.9252        | -0.1532        | 0.4815        | 1.3762        | <b>5.4032</b> |
| 19             | 0.00%        | -0.03%       | 10.47%       | 0.0131               | 0.8972        | 0.2256         | 0.4775        | 1.3730        | <b>5.3709</b> |
| 20             | 0.13%        | -0.08%       | 10.60%       | 0.0358               | 0.7937        | 0.6972         | 0.4772        | 1.3663        | <b>5.3940</b> |
| 21             | -0.56%       | -0.42%       | 10.04%       | -0.1402              | 0.8338        | <b>-2.5966</b> | 0.4499        | 1.3511        | <b>5.1422</b> |
| 22             | -0.36%       | -0.25%       | 9.68%        | -0.0890              | 0.8050        | <b>-1.7077</b> | 0.4311        | 1.3411        | <b>4.9636</b> |
| 23             | -0.09%       | -0.21%       | 9.59%        | -0.0247              | 0.8560        | -0.4454        | 0.4224        | 1.3447        | <b>4.8510</b> |
| 24             | 0.21%        | 0.04%        | 9.80%        | 0.0678               | 0.8688        | 1.2054         | 0.4278        | 1.3231        | <b>4.9932</b> |
| 25             | -0.12%       | -0.24%       | 9.68%        | -0.0401              | 0.8593        | -0.7210        | 0.4172        | 1.3233        | <b>4.8688</b> |
| 26             | -0.31%       | -0.13%       | 9.37%        | -0.0735              | 0.7701        | -1.4743        | 0.4020        | 1.3152        | <b>4.7204</b> |
| 27             | 0.02%        | -0.05%       | 9.39%        | 0.0074               | 0.8065        | 0.1411         | 0.3989        | 1.3042        | <b>4.7230</b> |
| 28             | -0.05%       | -0.02%       | 9.34%        | -0.0228              | 0.8330        | -0.4218        | 0.3915        | 1.2936        | <b>4.6741</b> |
| 29             | -0.02%       | -0.07%       | 9.32%        | 0.0200               | 0.9405        | 0.3285         | 0.3904        | 1.2944        | <b>4.6580</b> |
| 30             | -0.03%       | -0.02%       | 9.29%        | 0.0005               | 0.7723        | 0.0094         | 0.3866        | 1.2919        | <b>4.6220</b> |
| <b>-1 to 1</b> |              |              | <b>5.55%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06264</b> | 0.8774        | 1.8287        | <b>7.4095</b> |

**Table-A 5.6 Market returns to Targets; M-firms; (MM, 241); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|----------------|
| -20            | 0.34%        | 0.10%        | 0.34%         | 0.1211               | 1.2175        | 1.5353         | 0.1211        | 1.2175        | 1.5353         |
| -19            | 0.43%        | 0.14%        | 0.77%         | 0.1876               | 1.0402        | <b>2.7844</b>  | 0.2183        | 1.1812        | <b>2.8528</b>  |
| -18            | 0.28%        | -0.11%       | 1.05%         | 0.0835               | 1.2074        | 1.0677         | 0.2265        | 1.1276        | <b>3.1000</b>  |
| -17            | 0.30%        | 0.02%        | 1.34%         | 0.1107               | 1.2681        | 1.3480         | 0.2515        | 1.2510        | <b>3.1032</b>  |
| -16            | 0.18%        | -0.02%       | 1.53%         | 0.0490               | 1.1261        | 0.6715         | 0.2469        | 1.2381        | <b>3.0777</b>  |
| -15            | 0.52%        | 0.23%        | 2.04%         | 0.1478               | 1.0894        | <b>2.0944</b>  | 0.2857        | 1.2545        | <b>3.5153</b>  |
| -14            | 0.43%        | 0.25%        | 2.47%         | 0.1847               | 1.2417        | <b>2.2954</b>  | 0.3343        | 1.2424        | <b>4.1532</b>  |
| -13            | 0.25%        | -0.18%       | 2.72%         | 0.0769               | 1.2697        | 0.9354         | 0.3399        | 1.2789        | <b>4.1026</b>  |
| -12            | 0.65%        | 0.20%        | 3.37%         | 0.2238               | 1.1856        | <b>2.9138</b>  | 0.3951        | 1.3502        | <b>4.5163</b>  |
| -11            | 0.56%        | 0.45%        | 3.92%         | 0.1952               | 1.2825        | <b>2.3497</b>  | 0.4365        | 1.3429        | <b>5.0176</b>  |
| -10            | 0.67%        | 0.28%        | 4.59%         | 0.1896               | 1.3342        | <b>2.1937</b>  | 0.4734        | 1.3786        | <b>5.3004</b>  |
| -9             | 0.97%        | 0.31%        | 5.56%         | 0.2914               | 1.3841        | <b>3.2501</b>  | 0.5374        | 1.3827        | <b>5.9989</b>  |
| -8             | 0.03%        | 0.03%        | 5.59%         | 0.0601               | 1.1541        | 0.8042         | 0.5330        | 1.4092        | <b>5.8377</b>  |
| -7             | 0.76%        | 0.34%        | 6.35%         | 0.2025               | 1.2621        | <b>2.4760</b>  | 0.5677        | 1.3853        | <b>6.3252</b>  |
| -6             | 0.40%        | 0.05%        | 6.75%         | 0.1700               | 1.2904        | <b>2.0333</b>  | 0.5923        | 1.3964        | <b>6.5475</b>  |
| -5             | 0.63%        | 0.26%        | 7.38%         | 0.1964               | 1.4299        | <b>2.1204</b>  | 0.6226        | 1.3980        | <b>6.8743</b>  |
| -4             | 0.48%        | -0.04%       | 7.86%         | 0.1524               | 1.2218        | <b>1.9257</b>  | 0.6410        | 1.3915        | <b>7.1103</b>  |
| -3             | 0.64%        | 0.24%        | 8.51%         | 0.2329               | 1.3089        | <b>2.7461</b>  | 0.6778        | 1.3903        | <b>7.5253</b>  |
| -2             | 1.00%        | 0.29%        | 9.50%         | 0.3166               | 1.2506        | <b>3.9070</b>  | 0.7324        | 1.3806        | <b>8.1880</b>  |
| -1             | 1.74%        | 0.99%        | 11.24%        | 0.6164               | 1.7941        | <b>5.3026</b>  | 0.8516        | 1.4321        | <b>9.1794</b>  |
| <b>0</b>       | <b>2.67%</b> | <b>1.64%</b> | <b>13.91%</b> | <b>0.8888</b>        | <b>2.3646</b> | <b>5.8019</b>  | <b>1.0251</b> | <b>1.4947</b> | <b>10.5860</b> |
| 1              | 1.72%        | 0.77%        | 15.63%        | 0.4080               | 2.2193        | <b>2.8378</b>  | 1.0885        | 1.5448        | <b>10.8764</b> |
| 2              | 0.65%        | 0.08%        | 16.27%        | 0.1587               | 1.5154        | 1.6166         | 1.0977        | 1.6005        | <b>10.5858</b> |
| 3              | 0.16%        | 0.10%        | 16.43%        | 0.0211               | 1.5501        | 0.2105         | 1.0789        | 1.6376        | <b>10.1692</b> |
| 4              | 0.03%        | -0.03%       | 16.46%        | -0.0123              | 1.2579        | -0.1515        | 1.0546        | 1.6090        | <b>10.1169</b> |
| 5              | -0.09%       | -0.13%       | 16.37%        | -0.0042              | 1.0304        | -0.0626        | 1.0333        | 1.5824        | <b>10.0793</b> |
| 6              | 0.21%        | -0.06%       | 16.58%        | 0.0403               | 1.1019        | 0.5641         | 1.0217        | 1.5655        | <b>10.0744</b> |
| 7              | 0.06%        | 0.04%        | 16.64%        | 0.0419               | 1.0907        | 0.5935         | 1.0112        | 1.5738        | <b>9.9179</b>  |
| 8              | 0.00%        | -0.16%       | 16.64%        | 0.0199               | 1.1464        | 0.2685         | 0.9974        | 1.5665        | <b>9.8277</b>  |
| 9              | 0.40%        | 0.19%        | 17.04%        | 0.1817               | 1.1646        | <b>2.4085</b>  | 1.0138        | 1.5977        | <b>9.7943</b>  |
| 10             | 0.36%        | 0.20%        | 17.40%        | 0.1063               | 0.9192        | <b>1.7848</b>  | 1.0164        | 1.6022        | <b>9.7915</b>  |
| 11             | 0.24%        | 0.09%        | 17.65%        | 0.0715               | 1.0926        | 1.0095         | 1.0130        | 1.6243        | <b>9.6264</b>  |
| 12             | 0.11%        | 0.11%        | 17.75%        | 0.0436               | 1.5257        | 0.4414         | 1.0051        | 1.6929        | <b>9.1646</b>  |
| 13             | 0.18%        | 0.04%        | 17.94%        | 0.0310               | 1.0547        | 0.4543         | 0.9956        | 1.6741        | <b>9.1791</b>  |
| 14             | 0.15%        | 0.12%        | 18.09%        | 0.0517               | 0.9055        | 0.8815         | 0.9900        | 1.6658        | <b>9.1734</b>  |
| 15             | 0.23%        | -0.06%       | 18.32%        | 0.0554               | 1.0004        | 0.8552         | 0.9854        | 1.6493        | <b>9.2222</b>  |
| 16             | -0.52%       | -0.14%       | 17.80%        | -0.1441              | 1.1193        | <b>-1.9865</b> | 0.9483        | 1.6709        | <b>8.7602</b>  |
| 17             | 0.29%        | 0.11%        | 18.09%        | 0.0859               | 0.9959        | 1.3308         | 0.9496        | 1.6736        | <b>8.7586</b>  |
| 18             | 0.16%        | -0.06%       | 18.25%        | 0.0288               | 1.1613        | 0.3831         | 0.9420        | 1.6660        | <b>8.7275</b>  |
| 19             | 0.21%        | 0.25%        | 18.46%        | 0.0822               | 1.0351        | 1.2253         | 0.9432        | 1.6561        | <b>8.7904</b>  |
| 20             | 0.35%        | 0.09%        | 18.81%        | 0.1323               | 0.9328        | <b>2.1890</b>  | 0.9522        | 1.6446        | <b>8.9373</b>  |
| 21             | -0.33%       | -0.32%       | 18.48%        | -0.0776              | 0.9772        | -1.2252        | 0.9289        | 1.6342        | <b>8.7732</b>  |
| 22             | -0.13%       | -0.06%       | 18.34%        | -0.0394              | 0.9383        | -0.6484        | 0.9120        | 1.6276        | <b>8.6490</b>  |
| 23             | 0.15%        | 0.00%        | 18.49%        | 0.0336               | 0.9749        | 0.5319         | 0.9066        | 1.6314        | <b>8.5780</b>  |
| 24             | 0.42%        | 0.24%        | 18.91%        | 0.1375               | 0.9838        | <b>2.1575</b>  | 0.9170        | 1.6033        | <b>8.8286</b>  |
| 25             | 0.10%        | 0.01%        | 19.00%        | 0.0256               | 0.9603        | 0.4114         | 0.9108        | 1.5989        | <b>8.7922</b>  |
| 26             | -0.10%       | 0.04%        | 18.90%        | -0.0039              | 0.8899        | -0.0675        | 0.9004        | 1.5901        | <b>8.7408</b>  |
| 27             | 0.25%        | 0.19%        | 19.15%        | 0.0574               | 0.9949        | 0.8912         | 0.8993        | 1.5821        | <b>8.7742</b>  |
| 28             | 0.17%        | 0.08%        | 19.32%        | 0.0493               | 0.9738        | 0.7818         | 0.8971        | 1.5724        | <b>8.8067</b>  |
| 29             | 0.17%        | 0.05%        | 19.50%        | 0.0846               | 1.1016        | 1.1858         | 0.9001        | 1.5727        | <b>8.8340</b>  |
| 30             | 0.19%        | 0.24%        | 19.68%        | 0.0735               | 0.8856        | 1.2803         | 0.9015        | 1.5739        | <b>8.8409</b>  |
| <b>-1 to 1</b> |              |              | <b>6.12%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06222</b> | 1.1046        | 2.2229        | <b>7.6698</b>  |

Table-A 5.7 FF returns to Targets; All-firms; (MM, 248); VWI

| Days           | AAR          | Median       | CAAR          | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|---------------|----------------------|----------------|---------------|---------------|----------------|
| -20            | 0.33%        | 0.04%        | 0.33%         | 0.1502        | 1.1917               | <b>2.0491</b>  | 0.1502        | 1.1917        | <b>2.0491</b>  |
| -19            | 0.43%        | 0.16%        | 0.76%         | 0.1872        | 1.0051               | <b>3.0217</b>  | 0.2380        | 1.1603        | <b>3.3354</b>  |
| -18            | 0.27%        | 0.03%        | 1.04%         | 0.0949        | 1.1713               | 1.3173         | 0.2495        | 1.1061        | <b>3.6673</b>  |
| -17            | 0.23%        | 0.00%        | 1.26%         | 0.1105        | 1.1609               | 1.5469         | 0.2713        | 1.2170        | <b>3.6237</b>  |
| -16            | 0.26%        | -0.06%       | 1.52%         | 0.0888        | 1.1133               | 1.2970         | 0.2824        | 1.2062        | <b>3.8058</b>  |
| -15            | 0.45%        | 0.01%        | 1.98%         | 0.1169        | 1.0961               | <b>1.7333</b>  | 0.3054        | 1.1993        | <b>4.1407</b>  |
| -14            | 0.35%        | 0.10%        | 2.33%         | 0.1193        | 1.2608               | 1.5382         | 0.3276        | 1.1989        | <b>4.4428</b>  |
| -13            | 0.27%        | 0.07%        | 2.60%         | 0.0811        | 1.2150               | 1.0858         | 0.3352        | 1.1939        | <b>4.5645</b>  |
| -12            | 0.78%        | 0.17%        | 3.38%         | 0.2456        | 1.1652               | <b>3.4270</b>  | 0.3979        | 1.2512        | <b>5.1707</b>  |
| -11            | 0.68%        | 0.41%        | 4.06%         | 0.2226        | 1.2753               | <b>2.8311</b>  | 0.4475        | 1.2721        | <b>5.7192</b>  |
| -10            | 0.57%        | 0.16%        | 4.62%         | 0.1612        | 1.2516               | <b>2.0934</b>  | 0.4752        | 1.3134        | <b>5.8826</b>  |
| -9             | 1.02%        | 0.30%        | 5.64%         | 0.3260        | 1.3925               | <b>3.8056</b>  | 0.5491        | 1.3346        | <b>6.6892</b>  |
| -8             | 0.07%        | 0.07%        | 5.71%         | 0.0923        | 1.1533               | 1.3018         | 0.5532        | 1.3581        | <b>6.6223</b>  |
| -7             | 0.85%        | 0.30%        | 6.56%         | 0.2442        | 1.2783               | <b>3.0994</b>  | 0.5978        | 1.3382        | <b>7.2629</b>  |
| -6             | 0.61%        | -0.06%       | 7.17%         | 0.2354        | 1.4123               | <b>2.7099</b>  | 0.6387        | 1.3303        | <b>7.8055</b>  |
| -5             | 0.88%        | 0.18%        | 8.05%         | 0.2451        | 1.4135               | <b>2.8195</b>  | 0.6797        | 1.3529        | <b>8.1679</b>  |
| -4             | 0.39%        | -0.11%       | 8.45%         | 0.1281        | 1.1949               | <b>1.7428</b>  | 0.6904        | 1.3650        | <b>8.2232</b>  |
| -3             | 0.68%        | 0.31%        | 9.13%         | 0.2585        | 1.3594               | <b>3.0909</b>  | 0.7318        | 1.3724        | <b>8.6690</b>  |
| -2             | 0.78%        | 0.08%        | 9.91%         | 0.2663        | 1.2793               | <b>3.3844</b>  | 0.7733        | 1.3681        | <b>9.1894</b>  |
| -1             | 1.79%        | 1.00%        | 11.70%        | 0.6084        | 1.8334               | <b>5.3951</b>  | 0.8896        | 1.4403        | <b>10.0417</b> |
| <b>0</b>       | <b>2.43%</b> | <b>1.42%</b> | <b>14.13%</b> | <b>0.7899</b> | <b>2.1779</b>        | <b>5.8968</b>  | <b>1.0405</b> | <b>1.5023</b> | <b>11.2603</b> |
| 1              | 1.44%        | 0.87%        | 15.58%        | 0.3254        | 2.0979               | <b>2.5215</b>  | 1.0860        | 1.5484        | <b>11.4020</b> |
| 2              | 0.59%        | 0.06%        | 16.16%        | 0.1605        | 1.4937               | <b>1.7468</b>  | 1.0956        | 1.5940        | <b>11.1741</b> |
| 3              | -0.16%       | -0.08%       | 16.01%        | -0.0640       | 1.5302               | -0.6796        | 1.0592        | 1.6383        | <b>10.5115</b> |
| 4              | -0.28%       | -0.31%       | 15.73%        | -0.0605       | 1.2783               | -0.7699        | 1.0258        | 1.6016        | <b>10.4128</b> |
| 5              | -0.13%       | -0.12%       | 15.60%        | -0.0171       | 1.0345               | -0.2689        | 1.0026        | 1.5852        | <b>10.2822</b> |
| 6              | 0.15%        | -0.03%       | 15.75%        | 0.0770        | 1.1140               | 1.1242         | 0.9987        | 1.5804        | <b>10.2737</b> |
| 7              | 0.10%        | 0.07%        | 15.85%        | 0.0543        | 1.1311               | 0.7808         | 0.9909        | 1.5842        | <b>10.1693</b> |
| 8              | -0.10%       | -0.20%       | 15.75%        | -0.0104       | 1.2161               | -0.1390        | 0.9718        | 1.5876        | <b>9.9514</b>  |
| 9              | 0.39%        | 0.08%        | 16.15%        | 0.1686        | 1.2085               | <b>2.2675</b>  | 0.9863        | 1.6092        | <b>9.9640</b>  |
| 10             | 0.19%        | 0.28%        | 16.34%        | 0.0814        | 1.0048               | 1.3170         | 0.9849        | 1.6158        | <b>9.9096</b>  |
| 11             | 0.36%        | 0.11%        | 16.70%        | 0.1003        | 1.1901               | 1.3699         | 0.9871        | 1.6346        | <b>9.8181</b>  |
| 12             | 0.05%        | -0.03%       | 16.74%        | 0.0020        | 1.5439               | 0.0215         | 0.9722        | 1.7084        | <b>9.2517</b>  |
| 13             | 0.12%        | 0.01%        | 16.87%        | 0.0178        | 1.1244               | 0.2567         | 0.9609        | 1.6861        | <b>9.2648</b>  |
| 14             | 0.02%        | -0.01%       | 16.89%        | 0.0207        | 0.9484               | 0.3541         | 0.9505        | 1.6808        | <b>9.1934</b>  |
| 15             | 0.29%        | 0.07%        | 17.18%        | 0.0732        | 1.0079               | 1.1787         | 0.9494        | 1.6613        | <b>9.2905</b>  |
| 16             | -0.22%       | -0.10%       | 16.96%        | -0.0742       | 1.1759               | -1.0230        | 0.9243        | 1.6800        | <b>8.9444</b>  |
| 17             | 0.25%        | 0.10%        | 17.20%        | 0.0927        | 1.0232               | 1.4701         | 0.9270        | 1.6826        | <b>8.9574</b>  |
| 18             | 0.40%        | 0.06%        | 17.60%        | 0.0697        | 1.1719               | 0.9654         | 0.9262        | 1.6732        | <b>8.9990</b>  |
| 19             | 0.25%        | 0.19%        | 17.85%        | 0.1002        | 1.0301               | 1.5775         | 0.9303        | 1.6661        | <b>9.0775</b>  |
| 20             | 0.44%        | 0.01%        | 18.30%        | 0.1514        | 1.0262               | <b>2.3886</b>  | 0.9423        | 1.6454        | <b>9.3109</b>  |
| 21             | -0.29%       | -0.33%       | 18.01%        | -0.0393       | 1.0198               | -0.6237        | 0.9250        | 1.6406        | <b>9.1669</b>  |
| 22             | -0.20%       | -0.12%       | 17.80%        | -0.0631       | 0.9655               | -1.0572        | 0.9047        | 1.6376        | <b>8.9815</b>  |
| 23             | 0.09%        | 0.01%        | 17.89%        | 0.0272        | 0.9619               | 0.4563         | 0.8985        | 1.6480        | <b>8.8636</b>  |
| 24             | 0.51%        | 0.32%        | 18.40%        | 0.1611        | 0.9985               | <b>2.6057</b>  | 0.9122        | 1.6289        | <b>9.1048</b>  |
| 25             | -0.02%       | -0.16%       | 18.38%        | 0.0248        | 0.9678               | 0.4134         | 0.9059        | 1.6247        | <b>9.0652</b>  |
| 26             | -0.11%       | -0.08%       | 18.27%        | -0.0091       | 0.9247               | -0.1593        | 0.8950        | 1.6175        | <b>8.9958</b>  |
| 27             | 0.10%        | 0.01%        | 18.37%        | 0.0475        | 1.0273               | 0.7469         | 0.8924        | 1.6126        | <b>8.9973</b>  |
| 28             | 0.19%        | 0.04%        | 18.56%        | 0.0385        | 1.0187               | 0.6097         | 0.8888        | 1.6019        | <b>9.0200</b>  |
| 29             | 0.31%        | 0.06%        | 18.86%        | 0.1161        | 1.1119               | <b>1.6871</b>  | 0.8961        | 1.5970        | <b>9.1228</b>  |
| 30             | 0.43%        | 0.27%        | 19.29%        | 0.1252        | 0.9295               | <b>2.1759</b>  | 0.9047        | 1.5967        | <b>9.2112</b>  |
| <b>-1 to 1</b> |              |              | <b>5.67%</b>  |               | <b>StdDev(AAR-0)</b> | <b>0.05998</b> | 0.9952        | 2.1352        | <b>7.5775</b>  |



Table-A 5.8 FF returns to Targets; All-firms; (OLS, 256); VWI

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.00%        | -0.12%       | 0.00%         | 0.0448               | 1.0004        | 0.7536         | 0.0448        | 1.0004        | 0.7536        |
| -19            | 0.30%        | 0.06%        | 0.30%         | 0.0989               | 0.9089        | <b>1.8291</b>  | 0.1014        | 0.9582        | <b>1.7832</b> |
| -18            | 0.19%        | -0.08%       | 0.49%         | 0.0362               | 0.9963        | 0.6116         | 0.1041        | 0.9352        | <b>1.8748</b> |
| -17            | -0.10%       | -0.10%       | 0.40%         | 0.0348               | 0.9869        | 0.5940         | 0.1075        | 0.9867        | <b>1.8344</b> |
| -16            | 0.06%        | -0.21%       | 0.45%         | 0.0223               | 0.9850        | 0.3816         | 0.1061        | 0.9709        | <b>1.8406</b> |
| -15            | 0.43%        | -0.11%       | 0.88%         | 0.0786               | 0.9774        | 1.3554         | 0.1290        | 0.9945        | <b>2.1842</b> |
| -14            | 0.25%        | -0.01%       | 1.13%         | 0.0419               | 1.0408        | 0.6782         | 0.1350        | 0.9826        | <b>2.3142</b> |
| -13            | 0.06%        | -0.33%       | 1.19%         | 0.0063               | 1.0592        | 0.0999         | 0.1285        | 0.9941        | <b>2.1779</b> |
| -12            | 0.70%        | 0.00%        | 1.89%         | 0.1661               | 1.0116        | <b>2.7665</b>  | 0.1766        | 1.0390        | <b>2.8626</b> |
| -11            | 0.42%        | 0.29%        | 2.31%         | 0.1333               | 1.0622        | <b>2.1087</b>  | 0.2094        | 1.0588        | <b>3.3317</b> |
| -10            | 0.40%        | -0.01%       | 2.71%         | 0.0913               | 1.0559        | 1.4560         | 0.2272        | 1.0862        | <b>3.5228</b> |
| -9             | 1.41%        | 0.16%        | 4.12%         | 0.2593               | 1.4328        | <b>3.0488</b>  | 0.2924        | 1.1230        | <b>4.3856</b> |
| -8             | -0.37%       | -0.11%       | 3.76%         | 0.0104               | 1.0431        | 0.1683         | 0.2838        | 1.1295        | <b>4.2323</b> |
| -7             | 0.56%        | 0.10%        | 4.32%         | 0.1337               | 1.0898        | <b>2.0615</b>  | 0.3089        | 1.1161        | <b>4.6624</b> |
| -6             | 0.46%        | 0.06%        | 4.78%         | 0.1352               | 1.1351        | <b>2.0061</b>  | 0.3334        | 1.1201        | <b>5.0142</b> |
| -5             | 0.58%        | -0.12%       | 5.35%         | 0.1479               | 1.2410        | <b>2.0071</b>  | 0.3598        | 1.1466        | <b>5.2858</b> |
| -4             | 0.15%        | -0.25%       | 5.50%         | 0.0537               | 1.0436        | 0.8674         | 0.3621        | 1.1594        | <b>5.2606</b> |
| -3             | 0.65%        | 0.27%        | 6.16%         | 0.1911               | 1.1619        | <b>2.7701</b>  | 0.3969        | 1.1537        | <b>5.7947</b> |
| -2             | 0.64%        | 0.03%        | 6.80%         | 0.1852               | 1.0798        | <b>2.8889</b>  | 0.4288        | 1.1512        | <b>6.2741</b> |
| -1             | 1.59%        | 0.99%        | 8.39%         | 0.4488               | 1.4994        | <b>5.0413</b>  | 0.5182        | 1.1834        | <b>7.3755</b> |
| <b>0</b>       | <b>2.23%</b> | <b>1.18%</b> | <b>10.62%</b> | <b>0.6251</b>        | <b>1.8236</b> | <b>5.7743</b>  | <b>0.6421</b> | <b>1.2162</b> | <b>8.8929</b> |
| 1              | 1.28%        | 0.73%        | 11.90%        | 0.2572               | 1.6578        | <b>2.6135</b>  | 0.6822        | 1.2608        | <b>9.1134</b> |
| 2              | 0.32%        | -0.08%       | 12.22%        | 0.0783               | 1.2721        | 1.0368         | 0.6835        | 1.3028        | <b>8.8374</b> |
| 3              | -0.32%       | -0.30%       | 11.90%        | -0.1055              | 1.3693        | -1.2976        | 0.6474        | 1.3360        | <b>8.1619</b> |
| 4              | -0.37%       | -0.58%       | 11.52%        | -0.1297              | 1.1343        | <b>-1.9266</b> | 0.6084        | 1.3237        | <b>7.7416</b> |
| 5              | -0.39%       | -0.39%       | 11.13%        | -0.0740              | 0.9183        | -1.3575        | 0.5821        | 1.3125        | <b>7.4704</b> |
| 6              | -0.06%       | -0.27%       | 11.07%        | 0.0127               | 0.9470        | 0.2251         | 0.5737        | 1.3110        | <b>7.3713</b> |
| 7              | -0.41%       | -0.06%       | 10.66%        | -0.0828              | 1.0924        | -1.2760        | 0.5477        | 1.3198        | <b>6.9894</b> |
| 8              | -0.37%       | -0.32%       | 10.29%        | -0.0996              | 1.0626        | -1.5787        | 0.5196        | 1.3235        | <b>6.6133</b> |
| 9              | 0.14%        | -0.10%       | 10.43%        | 0.0662               | 1.0015        | 1.1129         | 0.5230        | 1.3318        | <b>6.6146</b> |
| 10             | 0.41%        | 0.05%        | 10.83%        | 0.0735               | 1.1815        | 1.0477         | 0.5277        | 1.3394        | <b>6.6367</b> |
| 11             | 0.08%        | -0.25%       | 10.92%        | -0.0117              | 1.0134        | -0.1953        | 0.5174        | 1.3553        | <b>6.4299</b> |
| 12             | -0.19%       | -0.23%       | 10.72%        | -0.0714              | 1.3054        | -0.9196        | 0.4969        | 1.4061        | <b>5.9521</b> |
| 13             | -0.11%       | -0.14%       | 10.62%        | -0.0213              | 0.9844        | -0.3650        | 0.4859        | 1.3868        | <b>5.9017</b> |
| 14             | -0.09%       | -0.05%       | 10.53%        | -0.0074              | 0.8427        | -0.1483        | 0.4776        | 1.3795        | <b>5.8318</b> |
| 15             | 0.01%        | -0.04%       | 10.53%        | -0.0184              | 0.8541        | -0.3624        | 0.4679        | 1.3665        | <b>5.7676</b> |
| 16             | -0.47%       | -0.34%       | 10.06%        | -0.1583              | 0.9829        | <b>-2.7075</b> | 0.4356        | 1.3865        | <b>5.2919</b> |
| 17             | -0.10%       | -0.02%       | 9.96%         | -0.0247              | 0.9162        | -0.4525        | 0.4258        | 1.3876        | <b>5.1693</b> |
| 18             | 0.15%        | -0.04%       | 10.11%        | 0.0467               | 1.0032        | 0.7816         | 0.4278        | 1.3838        | <b>5.2066</b> |
| 19             | 0.00%        | 0.03%        | 10.12%        | 0.0102               | 0.8527        | 0.2012         | 0.4240        | 1.3814        | <b>5.1696</b> |
| 20             | 0.21%        | -0.08%       | 10.33%        | 0.0385               | 0.8294        | 0.7781         | 0.4247        | 1.3672        | <b>5.2326</b> |
| 21             | -0.49%       | -0.57%       | 9.84%         | -0.1228              | 0.9174        | <b>-2.2456</b> | 0.4008        | 1.3593        | <b>4.9668</b> |
| 22             | -0.44%       | -0.29%       | 9.40%         | -0.1301              | 0.8867        | <b>-2.4606</b> | 0.3764        | 1.3594        | <b>4.6643</b> |
| 23             | -0.49%       | -0.20%       | 8.90%         | -0.1148              | 1.0722        | <b>-1.7917</b> | 0.3551        | 1.3779        | <b>4.3404</b> |
| 24             | 0.32%        | 0.16%        | 9.23%         | 0.0817               | 0.9080        | 1.5049         | 0.3632        | 1.3611        | <b>4.4944</b> |
| 25             | -0.31%       | -0.42%       | 8.92%         | -0.0469              | 0.8631        | -0.9087        | 0.3524        | 1.3554        | <b>4.3793</b> |
| 26             | -0.09%       | -0.23%       | 8.83%         | -0.0397              | 1.0418        | -0.6374        | 0.3429        | 1.3506        | <b>4.2769</b> |
| 27             | -0.42%       | -0.21%       | 8.41%         | -0.0317              | 1.1281        | -0.4700        | 0.3349        | 1.3292        | <b>4.2433</b> |
| 28             | -0.05%       | -0.10%       | 8.35%         | -0.0225              | 0.8655        | -0.4347        | 0.3283        | 1.3211        | <b>4.1855</b> |
| 29             | 0.10%        | -0.08%       | 8.45%         | 0.0457               | 0.9645        | 0.7931         | 0.3314        | 1.3158        | <b>4.2425</b> |
| 30             | 0.16%        | 0.01%        | 8.61%         | 0.0449               | 0.8413        | 0.8932         | 0.3344        | 1.3093        | <b>4.3019</b> |
| <b>-1 to 1</b> |              |              | <b>5.10%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06019</b> | 0.7685        | 1.7282        | <b>7.4906</b> |

Table-A 5.9 FF returns to Targets; MM firms; (OLS, 248); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.15%        | -0.12%       | 0.15%        | 0.0744               | 0.9518        | 1.2747         | 0.0744        | 0.9518        | 1.2747        |
| -19            | 0.20%        | 0.06%        | 0.35%        | 0.0877               | 0.8614        | <b>1.6564</b>  | 0.1145        | 0.9263        | <b>2.0155</b> |
| -18            | 0.08%        | -0.11%       | 0.43%        | 0.0310               | 0.9984        | 0.5057         | 0.1118        | 0.9087        | <b>2.0054</b> |
| -17            | -0.01%       | -0.10%       | 0.42%        | 0.0317               | 0.9726        | 0.5313         | 0.1126        | 0.9855        | <b>1.8621</b> |
| -16            | 0.02%        | -0.21%       | 0.45%        | 0.0138               | 0.9645        | 0.2327         | 0.1068        | 0.9715        | <b>1.7928</b> |
| -15            | 0.22%        | -0.22%       | 0.67%        | 0.0463               | 0.9570        | 0.7888         | 0.1164        | 0.9889        | <b>1.9194</b> |
| -14            | 0.17%        | -0.02%       | 0.83%        | 0.0337               | 0.9989        | 0.5508         | 0.1203        | 0.9709        | <b>2.0202</b> |
| -13            | 0.06%        | -0.33%       | 0.89%        | -0.0075              | 1.0589        | -0.1148        | 0.1099        | 0.9768        | <b>1.8349</b> |
| -12            | 0.57%        | -0.05%       | 1.46%        | 0.1496               | 1.0052        | <b>2.4262</b>  | 0.1535        | 1.0182        | <b>2.4580</b> |
| -11            | 0.49%        | 0.28%        | 1.95%        | 0.1276               | 1.0545        | <b>1.9680</b>  | 0.1857        | 1.0405        | <b>2.9103</b> |
| -10            | 0.37%        | -0.05%       | 2.32%        | 0.1023               | 1.0509        | 1.5876         | 0.2079        | 1.0822        | <b>3.1323</b> |
| -9             | 0.85%        | 0.17%        | 3.17%        | 0.2284               | 1.1807        | <b>3.1543</b>  | 0.2650        | 1.1028        | <b>3.9183</b> |
| -8             | -0.11%       | -0.06%       | 3.06%        | 0.0346               | 1.0002        | 0.5635         | 0.2642        | 1.1290        | <b>3.8157</b> |
| -7             | 0.65%        | 0.16%        | 3.71%        | 0.1485               | 1.0983        | <b>2.1997</b>  | 0.2940        | 1.1211        | <b>4.2758</b> |
| -6             | 0.43%        | -0.03%       | 4.14%        | 0.1217               | 1.1091        | <b>1.7886</b>  | 0.3155        | 1.1238        | <b>4.5775</b> |
| -5             | 0.64%        | -0.05%       | 4.78%        | 0.1705               | 1.2433        | <b>2.2359</b>  | 0.3481        | 1.1540        | <b>4.9186</b> |
| -4             | 0.19%        | -0.25%       | 4.97%        | 0.0564               | 1.0467        | 0.8785         | 0.3514        | 1.1685        | <b>4.9030</b> |
| -3             | 0.47%        | 0.22%        | 5.44%        | 0.1686               | 1.1566        | <b>2.3765</b>  | 0.3812        | 1.1610        | <b>5.3533</b> |
| -2             | 0.55%        | 0.02%        | 6.00%        | 0.1809               | 1.0832        | <b>2.7225</b>  | 0.4125        | 1.1555        | <b>5.8205</b> |
| -1             | 1.59%        | 0.99%        | 7.59%        | 0.4579               | 1.5081        | <b>4.9509</b>  | 0.5044        | 1.1896        | <b>6.9129</b> |
| <b>0</b>       | <b>2.24%</b> | <b>1.25%</b> | <b>9.82%</b> | <b>0.6439</b>        | <b>1.8405</b> | <b>5.7040</b>  | <b>0.6327</b> | <b>1.2249</b> | <b>8.4215</b> |
| 1              | 1.32%        | 0.73%        | 11.14%       | 0.2712               | 1.6747        | <b>2.6401</b>  | 0.6760        | 1.2711        | <b>8.6704</b> |
| 2              | 0.39%        | -0.08%       | 11.53%       | 0.0887               | 1.2877        | 1.1229         | 0.6796        | 1.3159        | <b>8.4205</b> |
| 3              | -0.40%       | -0.30%       | 11.13%       | -0.1068              | 1.3318        | -1.3070        | 0.6433        | 1.3514        | <b>7.7610</b> |
| 4              | -0.46%       | -0.57%       | 10.67%       | -0.1133              | 1.0937        | <b>-1.6894</b> | 0.6076        | 1.3324        | <b>7.4354</b> |
| 5              | -0.34%       | -0.42%       | 10.32%       | -0.0694              | 0.8993        | -1.2574        | 0.5823        | 1.3223        | <b>7.1799</b> |
| 6              | -0.04%       | -0.25%       | 10.29%       | 0.0211               | 0.9564        | 0.3605         | 0.5755        | 1.3197        | <b>7.1108</b> |
| 7              | -0.15%       | -0.04%       | 10.14%       | -0.0351              | 0.9566        | -0.5987        | 0.5585        | 1.3229        | <b>6.8830</b> |
| 8              | -0.32%       | -0.30%       | 9.82%        | -0.0773              | 1.0284        | -1.2251        | 0.5344        | 1.3201        | <b>6.6004</b> |
| 9              | 0.20%        | -0.07%       | 10.02%       | 0.0797               | 0.9974        | 1.3025         | 0.5400        | 1.3261        | <b>6.6394</b> |
| 10             | -0.05%       | 0.05%        | 9.97%        | 0.0139               | 0.8520        | 0.2655         | 0.5337        | 1.3268        | <b>6.5585</b> |
| 11             | 0.09%        | -0.21%       | 10.06%       | -0.0023              | 1.0182        | -0.0365        | 0.5249        | 1.3403        | <b>6.3855</b> |
| 12             | -0.18%       | -0.22%       | 9.87%        | -0.0695              | 1.3219        | -0.8560        | 0.5046        | 1.3951        | <b>5.8978</b> |
| 13             | -0.09%       | -0.14%       | 9.78%        | -0.0257              | 0.9750        | -0.4291        | 0.4928        | 1.3818        | <b>5.8150</b> |
| 14             | -0.23%       | -0.07%       | 9.55%        | -0.0296              | 0.8277        | -0.5835        | 0.4807        | 1.3777        | <b>5.6886</b> |
| 15             | 0.10%        | 0.04%        | 9.65%        | 0.0059               | 0.8378        | 0.1152         | 0.4750        | 1.3603        | <b>5.6933</b> |
| 16             | -0.39%       | -0.32%       | 9.26%        | -0.1287              | 0.9468        | <b>-2.2114</b> | 0.4474        | 1.3731        | <b>5.3130</b> |
| 17             | 0.04%        | 0.00%        | 9.30%        | 0.0186               | 0.8460        | 0.3584         | 0.4445        | 1.3658        | <b>5.3065</b> |
| 18             | 0.16%        | -0.04%       | 9.45%        | 0.0270               | 0.9172        | 0.4795         | 0.4431        | 1.3663        | <b>5.2872</b> |
| 19             | 0.01%        | -0.01%       | 9.47%        | 0.0150               | 0.8511        | 0.2875         | 0.4398        | 1.3656        | <b>5.2515</b> |
| 20             | 0.19%        | -0.15%       | 9.66%        | 0.0362               | 0.8395        | 0.7007         | 0.4400        | 1.3506        | <b>5.3123</b> |
| 21             | -0.57%       | -0.65%       | 9.08%        | -0.1279              | 0.8612        | <b>-2.4100</b> | 0.4152        | 1.3379        | <b>5.0600</b> |
| 22             | -0.44%       | -0.30%       | 8.64%        | -0.1194              | 0.8323        | <b>-2.3297</b> | 0.3923        | 1.3285        | <b>4.8146</b> |
| 23             | -0.15%       | -0.17%       | 8.49%        | -0.0451              | 0.8337        | -0.8761        | 0.3811        | 1.3370        | <b>4.6478</b> |
| 24             | 0.29%        | 0.13%        | 8.79%        | 0.0717               | 0.8969        | 1.2956         | 0.3875        | 1.3221        | <b>4.7784</b> |
| 25             | -0.26%       | -0.42%       | 8.53%        | -0.0493              | 0.8645        | -0.9241        | 0.3761        | 1.3216        | <b>4.6397</b> |
| 26             | -0.34%       | -0.23%       | 8.19%        | -0.0754              | 0.8015        | -1.5242        | 0.3612        | 1.3187        | <b>4.4659</b> |
| 27             | -0.17%       | -0.22%       | 8.02%        | -0.0084              | 0.8586        | -0.1578        | 0.3563        | 1.3088        | <b>4.4384</b> |
| 28             | -0.04%       | -0.10%       | 7.98%        | -0.0225              | 0.8684        | -0.4200        | 0.3495        | 1.2995        | <b>4.3847</b> |
| 29             | 0.04%        | -0.10%       | 8.01%        | 0.0337               | 0.9470        | 0.5770         | 0.3507        | 1.2985        | <b>4.4039</b> |
| 30             | 0.21%        | 0.01%        | 8.22%        | 0.0402               | 0.8183        | 0.7954         | 0.3528        | 1.2971        | <b>4.4354</b> |
| <b>-1 to 1</b> |              |              | <b>5.15%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06006</b> | 0.7927        | 1.7265        | <b>7.4861</b> |

Table-A 5.10 Market returns to Targets; FF-Firms; (OLS, 256); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.10%       | -0.07%       | -0.10%       | 0.0121               | 1.0146        | 0.1977         | 0.0121        | 1.0146        | 0.1977        |
| -19            | 0.33%        | 0.06%        | 0.23%        | 0.1025               | 0.9062        | <b>1.8797</b>  | 0.0810        | 0.9533        | 1.4122        |
| -18            | 0.13%        | -0.20%       | 0.36%        | 0.0279               | 0.9664        | 0.4794         | 0.0822        | 0.9487        | 1.4406        |
| -17            | -0.20%       | -0.15%       | 0.16%        | -0.0059              | 0.9848        | -0.0990        | 0.0683        | 0.9960        | 1.1394        |
| -16            | 0.02%        | -0.10%       | 0.18%        | 0.0100               | 0.9817        | 0.1689         | 0.0655        | 1.0027        | 1.0862        |
| -15            | 0.49%        | 0.09%        | 0.66%        | 0.0959               | 0.9390        | <b>1.6971</b>  | 0.0989        | 1.0276        | 1.6006        |
| -14            | 0.18%        | -0.03%       | 0.84%        | 0.0273               | 1.0591        | 0.4284         | 0.1019        | 0.9987        | <b>1.6966</b> |
| -13            | 0.03%        | -0.25%       | 0.87%        | 0.0067               | 1.0470        | 0.1071         | 0.0977        | 1.0314        | 1.5751        |
| -12            | 0.60%        | 0.02%        | 1.47%        | 0.1359               | 1.0130        | <b>2.2296</b>  | 0.1374        | 1.0918        | <b>2.0925</b> |
| -11            | 0.33%        | 0.38%        | 1.80%        | 0.1073               | 1.0880        | 1.6389         | 0.1643        | 1.1202        | <b>2.4381</b> |
| -10            | 0.31%        | 0.01%        | 2.11%        | 0.0589               | 1.0482        | 0.9345         | 0.1744        | 1.1586        | <b>2.5026</b> |
| -9             | 1.40%        | 0.16%        | 3.51%        | 0.2362               | 1.4147        | <b>2.7751</b>  | 0.2352        | 1.1705        | <b>3.3400</b> |
| -8             | -0.51%       | -0.27%       | 3.00%        | -0.0179              | 1.0518        | -0.2833        | 0.2210        | 1.1875        | <b>3.0933</b> |
| -7             | 0.46%        | 0.05%        | 3.46%        | 0.1043               | 1.0737        | 1.6154         | 0.2408        | 1.1715        | <b>3.4171</b> |
| -6             | 0.38%        | -0.01%       | 3.84%        | 0.1250               | 1.1264        | <b>1.8446</b>  | 0.2649        | 1.1855        | <b>3.7147</b> |
| -5             | 0.55%        | 0.02%        | 4.39%        | 0.1423               | 1.2015        | <b>1.9691</b>  | 0.2921        | 1.1776        | <b>4.1234</b> |
| -4             | 0.00%        | -0.28%       | 4.39%        | 0.0248               | 1.0235        | 0.4026         | 0.2894        | 1.1802        | <b>4.0761</b> |
| -3             | 0.61%        | 0.01%        | 5.00%        | 0.1651               | 1.1329        | <b>2.4221</b>  | 0.3201        | 1.1655        | <b>4.5661</b> |
| -2             | 0.68%        | 0.02%        | 5.68%        | 0.1909               | 1.0680        | <b>2.9708</b>  | 0.3554        | 1.1596        | <b>5.0947</b> |
| -1             | 1.60%        | 0.57%        | 7.29%        | 0.4450               | 1.4448        | <b>5.1200</b>  | 0.4459        | 1.1819        | <b>6.2713</b> |
| <b>0</b>       | <b>2.27%</b> | <b>1.07%</b> | <b>9.56%</b> | <b>0.6124</b>        | <b>1.8150</b> | <b>5.6091</b>  | <b>0.5687</b> | <b>1.2073</b> | <b>7.8314</b> |
| 1              | 1.19%        | 0.26%        | 10.75%       | 0.2262               | 1.6333        | <b>2.3021</b>  | 0.6039        | 1.2500        | <b>8.0315</b> |
| 2              | 0.28%        | -0.19%       | 11.03%       | 0.0664               | 1.2646        | 0.8730         | 0.6045        | 1.2891        | <b>7.7955</b> |
| 3              | -0.34%       | -0.32%       | 10.69%       | -0.1125              | 1.3538        | -1.3815        | 0.5688        | 1.3120        | <b>7.2069</b> |
| 4              | -0.25%       | -0.33%       | 10.44%       | -0.0890              | 1.1603        | -1.2747        | 0.5395        | 1.3086        | <b>6.8537</b> |
| 5              | -0.43%       | -0.34%       | 10.00%       | -0.0808              | 0.9168        | -1.4660        | 0.5132        | 1.2916        | <b>6.6049</b> |
| 6              | -0.25%       | -0.33%       | 9.75%        | -0.0476              | 0.9358        | -0.8459        | 0.4944        | 1.2827        | <b>6.4077</b> |
| 7              | -0.38%       | -0.09%       | 9.37%        | -0.0782              | 1.0856        | -1.1982        | 0.4707        | 1.2918        | <b>6.0574</b> |
| 8              | -0.38%       | -0.35%       | 8.99%        | -0.0906              | 1.0311        | -1.4604        | 0.4457        | 1.2901        | <b>5.7434</b> |
| 9              | 0.20%        | -0.10%       | 9.19%        | 0.0836               | 0.9825        | 1.4147         | 0.4535        | 1.3100        | <b>5.7545</b> |
| 10             | 0.48%        | -0.01%       | 9.67%        | 0.0957               | 1.1377        | 1.3987         | 0.4633        | 1.3203        | <b>5.8335</b> |
| 11             | 0.18%        | -0.09%       | 9.85%        | 0.0102               | 0.9931        | 0.1708         | 0.4578        | 1.3377        | <b>5.6891</b> |
| 12             | -0.15%       | -0.08%       | 9.70%        | -0.0467              | 1.2765        | -0.6082        | 0.4427        | 1.3806        | <b>5.3306</b> |
| 13             | -0.15%       | -0.15%       | 9.55%        | -0.0248              | 0.9455        | -0.4358        | 0.4319        | 1.3599        | <b>5.2794</b> |
| 14             | -0.08%       | -0.11%       | 9.47%        | -0.0165              | 0.8024        | -0.3412        | 0.4229        | 1.3498        | <b>5.2080</b> |
| 15             | -0.06%       | -0.19%       | 9.41%        | -0.0321              | 0.8561        | -0.6233        | 0.4116        | 1.3364        | <b>5.1202</b> |
| 16             | -0.55%       | -0.33%       | 8.86%        | -0.1757              | 0.9428        | <b>-3.0988</b> | 0.3771        | 1.3525        | <b>4.6352</b> |
| 17             | -0.17%       | -0.22%       | 8.70%        | -0.0462              | 0.9525        | -0.8061        | 0.3646        | 1.3603        | <b>4.4561</b> |
| 18             | 0.28%        | -0.07%       | 8.97%        | 0.0604               | 1.0406        | 0.9651         | 0.3696        | 1.3527        | <b>4.5422</b> |
| 19             | 0.05%        | -0.02%       | 9.02%        | 0.0172               | 0.9033        | 0.3157         | 0.3677        | 1.3487        | <b>4.5320</b> |
| 20             | 0.26%        | -0.08%       | 9.28%        | 0.0551               | 0.8191        | 1.1188         | 0.3718        | 1.3414        | <b>4.6072</b> |
| 21             | -0.51%       | -0.44%       | 8.77%        | -0.1265              | 0.8771        | <b>-2.3976</b> | 0.3478        | 1.3302        | <b>4.3465</b> |
| 22             | -0.47%       | -0.34%       | 8.30%        | -0.1362              | 0.8664        | <b>-2.6142</b> | 0.3229        | 1.3304        | <b>4.0355</b> |
| 23             | -0.48%       | -0.24%       | 7.82%        | -0.1006              | 1.0714        | -1.5611        | 0.3041        | 1.3526        | <b>3.7374</b> |
| 24             | 0.38%        | 0.09%        | 8.20%        | 0.1058               | 0.8907        | <b>1.9757</b>  | 0.3165        | 1.3304        | <b>3.9545</b> |
| 25             | -0.37%       | -0.34%       | 7.83%        | -0.0721              | 0.8477        | -1.4139        | 0.3024        | 1.3267        | <b>3.7889</b> |
| 26             | -0.12%       | -0.16%       | 7.71%        | -0.0490              | 0.9965        | -0.8181        | 0.2920        | 1.3135        | <b>3.6955</b> |
| 27             | -0.32%       | -0.10%       | 7.38%        | -0.0162              | 1.1038        | -0.2442        | 0.2866        | 1.2991        | <b>3.6675</b> |
| 28             | -0.05%       | 0.00%        | 7.34%        | -0.0185              | 0.8471        | -0.3634        | 0.2810        | 1.2912        | <b>3.6181</b> |
| 29             | 0.03%        | -0.08%       | 7.37%        | 0.0294               | 0.9662        | 0.5056         | 0.2823        | 1.2844        | <b>3.6544</b> |
| 30             | 0.02%        | 0.08%        | 7.39%        | 0.0192               | 0.8057        | 0.3969         | 0.2822        | 1.2736        | <b>3.6843</b> |
| <b>-1 to 1</b> |              |              | <b>5.06%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06181</b> | 0.7410        | 1.7114        | <b>7.1986</b> |



Table-A 5.11 Market returns to Targets; FF-Firms; (MM, 248); VWI

| Days           | AAR          | Median       | CAAR          | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|---------------|----------------------|----------------|---------------|---------------|----------------|
| -20            | 0.28%        | 0.13%        | 0.28%         | 0.1207        | 1.2087               | 1.6006         | 0.1207        | 1.2087        | 1.6006         |
| -19            | 0.44%        | 0.15%        | 0.71%         | 0.1895        | 1.0111               | <b>3.0049</b>  | 0.2193        | 1.1551        | <b>3.0443</b>  |
| -18            | 0.23%        | -0.07%       | 0.94%         | 0.0771        | 1.1529               | 1.0723         | 0.2236        | 1.1098        | <b>3.2301</b>  |
| -17            | 0.10%        | 0.02%        | 1.05%         | 0.0613        | 1.1730               | 0.8382         | 0.2243        | 1.2198        | <b>2.9482</b>  |
| -16            | 0.22%        | -0.01%       | 1.26%         | 0.0635        | 1.1233               | 0.9060         | 0.2290        | 1.2301        | <b>2.9847</b>  |
| -15            | 0.49%        | 0.22%        | 1.76%         | 0.1290        | 1.0528               | <b>1.9650</b>  | 0.2617        | 1.2159        | <b>3.4511</b>  |
| -14            | 0.32%        | 0.07%        | 2.08%         | 0.1052        | 1.2728               | 1.3245         | 0.2821        | 1.1971        | <b>3.7777</b>  |
| -13            | 0.23%        | -0.06%       | 2.31%         | 0.0699        | 1.2144               | 0.9222         | 0.2885        | 1.2217        | <b>3.7865</b>  |
| -12            | 0.71%        | 0.15%        | 3.01%         | 0.2138        | 1.1642               | <b>2.9448</b>  | 0.3433        | 1.2984        | <b>4.2392</b>  |
| -11            | 0.61%        | 0.40%        | 3.62%         | 0.1853        | 1.2899               | <b>2.3027</b>  | 0.3843        | 1.3232        | <b>4.6563</b>  |
| -10            | 0.48%        | 0.24%        | 4.10%         | 0.1171        | 1.2468               | 1.5063         | 0.4017        | 1.3717        | <b>4.6953</b>  |
| -9             | 1.03%        | 0.27%        | 5.13%         | 0.2987        | 1.3844               | <b>3.4592</b>  | 0.4709        | 1.3659        | <b>5.5266</b>  |
| -8             | -0.05%       | -0.04%       | 5.08%         | 0.0507        | 1.1666               | 0.6972         | 0.4664        | 1.3988        | <b>5.3463</b>  |
| -7             | 0.75%        | 0.34%        | 5.83%         | 0.1998        | 1.2613               | <b>2.5392</b>  | 0.5029        | 1.3732        | <b>5.8712</b>  |
| -6             | 0.59%        | 0.07%        | 6.42%         | 0.2306        | 1.4083               | <b>2.6252</b>  | 0.5454        | 1.3796        | <b>6.3378</b>  |
| -5             | 0.81%        | 0.19%        | 7.24%         | 0.2237        | 1.3969               | <b>2.5670</b>  | 0.5840        | 1.3718        | <b>6.8248</b>  |
| -4             | 0.27%        | -0.13%       | 7.50%         | 0.0906        | 1.1828               | 1.2275         | 0.5885        | 1.3726        | <b>6.8739</b>  |
| -3             | 0.67%        | 0.19%        | 8.17%         | 0.2354        | 1.3493               | <b>2.7974</b>  | 0.6274        | 1.3725        | <b>7.3285</b>  |
| -2             | 0.82%        | 0.28%        | 8.99%         | 0.2705        | 1.2709               | <b>3.4119</b>  | 0.6727        | 1.3688        | <b>7.8793</b>  |
| -1             | 1.83%        | 0.98%        | 10.82%        | 0.6042        | 1.7624               | <b>5.4962</b>  | 0.7908        | 1.4286        | <b>8.8742</b>  |
| <b>0</b>       | <b>2.47%</b> | <b>1.24%</b> | <b>13.29%</b> | <b>0.7707</b> | <b>2.1758</b>        | <b>5.6787</b>  | <b>0.9399</b> | <b>1.4727</b> | <b>10.2318</b> |
| 1              | 1.43%        | 0.65%        | 14.73%        | 0.3009        | 2.0558               | <b>2.3469</b>  | 0.9824        | 1.5148        | <b>10.3983</b> |
| 2              | 0.55%        | 0.08%        | 15.28%        | 0.1449        | 1.4748               | 1.5757         | 0.9911        | 1.5541        | <b>10.2239</b> |
| 3              | -0.19%       | -0.13%       | 15.09%        | -0.0760       | 1.5029               | -0.8111        | 0.9547        | 1.5880        | <b>9.6383</b>  |
| 4              | -0.14%       | -0.05%       | 14.95%        | -0.0244       | 1.3327               | -0.2932        | 0.9305        | 1.5598        | <b>9.5646</b>  |
| 5              | -0.19%       | -0.14%       | 14.76%        | -0.0372       | 1.0351               | -0.5762        | 0.9052        | 1.5367        | <b>9.4435</b>  |
| 6              | -0.02%       | -0.07%       | 14.74%        | 0.0022        | 1.1113               | 0.0314         | 0.8887        | 1.5191        | <b>9.3786</b>  |
| 7              | 0.12%        | 0.03%        | 14.86%        | 0.0597        | 1.1356               | 0.8430         | 0.8839        | 1.5194        | <b>9.3267</b>  |
| 8              | -0.09%       | -0.17%       | 14.77%        | -0.0082       | 1.1668               | -0.1121        | 0.8670        | 1.5152        | <b>9.1740</b>  |
| 9              | 0.44%        | 0.12%        | 15.21%        | 0.1724        | 1.1780               | <b>2.3457</b>  | 0.8839        | 1.5424        | <b>9.1879</b>  |
| 10             | 0.26%        | 0.26%        | 15.47%        | 0.0989        | 0.9679               | 1.6383         | 0.8873        | 1.5543        | <b>9.1525</b>  |
| 11             | 0.44%        | 0.23%        | 15.91%        | 0.1161        | 1.1643               | 1.5993         | 0.8939        | 1.5714        | <b>9.1201</b>  |
| 12             | 0.09%        | 0.05%        | 16.00%        | 0.0214        | 1.5144               | 0.2267         | 0.8840        | 1.6375        | <b>8.6544</b>  |
| 13             | 0.07%        | 0.01%        | 16.06%        | 0.0075        | 1.0916               | 0.1096         | 0.8721        | 1.6153        | <b>8.6566</b>  |
| 14             | 0.04%        | 0.05%        | 16.10%        | 0.0109        | 0.9095               | 0.1923         | 0.8614        | 1.6082        | <b>8.5879</b>  |
| 15             | 0.22%        | -0.07%       | 16.33%        | 0.0551        | 1.0214               | 0.8641         | 0.8586        | 1.5907        | <b>8.6536</b>  |
| 16             | -0.25%       | -0.03%       | 16.08%        | -0.0916       | 1.1440               | -1.2841        | 0.8318        | 1.6059        | <b>8.3044</b>  |
| 17             | 0.18%        | 0.05%        | 16.26%        | 0.0604        | 1.0526               | 0.9200         | 0.8306        | 1.6154        | <b>8.2433</b>  |
| 18             | 0.36%        | 0.01%        | 16.62%        | 0.0636        | 1.1887               | 0.8580         | 0.8301        | 1.6080        | <b>8.2761</b>  |
| 19             | 0.27%        | 0.27%        | 16.89%        | 0.0941        | 1.0816               | 1.3948         | 0.8345        | 1.6024        | <b>8.3494</b>  |
| 20             | 0.47%        | 0.06%        | 17.35%        | 0.1618        | 1.0250               | <b>2.5313</b>  | 0.8495        | 1.5912        | <b>8.5595</b>  |
| 21             | -0.34%       | -0.27%       | 17.02%        | -0.0594       | 0.9955               | -0.9573        | 0.8302        | 1.5831        | <b>8.4073</b>  |
| 22             | -0.25%       | -0.16%       | 16.76%        | -0.0824       | 0.9504               | -1.3901        | 0.8079        | 1.5796        | <b>8.2001</b>  |
| 23             | 0.11%        | -0.04%       | 16.87%        | 0.0331        | 0.9762               | 0.5433         | 0.8037        | 1.5903        | <b>8.1018</b>  |
| 24             | 0.59%        | 0.24%        | 17.47%        | 0.1852        | 1.0048               | <b>2.9554</b>  | 0.8223        | 1.5641        | <b>8.4290</b>  |
| 25             | -0.07%       | -0.10%       | 17.39%        | -0.0024       | 0.9569               | -0.0398        | 0.8130        | 1.5619        | <b>8.3446</b>  |
| 26             | -0.14%       | -0.06%       | 17.25%        | -0.0167       | 0.9044               | -0.2955        | 0.8018        | 1.5510        | <b>8.2882</b>  |
| 27             | 0.16%        | 0.14%        | 17.41%        | 0.0512        | 1.0181               | 0.8067         | 0.8008        | 1.5475        | <b>8.2969</b>  |
| 28             | 0.20%        | 0.11%        | 17.61%        | 0.0464        | 1.0030               | 0.7422         | 0.7993        | 1.5382        | <b>8.3305</b>  |
| 29             | 0.19%        | 0.03%        | 17.80%        | 0.0866        | 1.1290               | 1.2300         | 0.8035        | 1.5319        | <b>8.4090</b>  |
| 30             | 0.28%        | 0.24%        | 18.08%        | 0.0878        | 0.9082               | 1.5492         | 0.8078        | 1.5270        | <b>8.4819</b>  |
| <b>-1 to 1</b> |              |              | <b>5.74%</b>  |               | <b>StdDev(AAR-0)</b> | <b>0.06171</b> | 0.9675        | 2.0994        | <b>7.3886</b>  |

Table-A 5.12 SW-1 returns to Targets; All-Firms; (OLS, 274); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.05%       | -0.06%       | -0.05%       | 0.0174               | 1.0111        | 0.2976         | 0.0174        | 1.0111        | 0.2976        |
| -19            | 0.30%        | 0.14%        | 0.25%        | 0.0987               | 0.9275        | <b>1.8426</b>  | 0.0821        | 0.9744        | 1.4586        |
| -18            | 0.04%        | -0.11%       | 0.29%        | 0.0171               | 1.0016        | 0.2951         | 0.0769        | 0.9581        | 1.3893        |
| -17            | -0.13%       | -0.15%       | 0.15%        | 0.0148               | 1.0156        | 0.2515         | 0.0740        | 1.0143        | 1.2624        |
| -16            | 0.00%        | -0.06%       | 0.15%        | -0.0074              | 0.9769        | -0.1313        | 0.0628        | 1.0038        | 1.0838        |
| -15            | 0.42%        | 0.02%        | 0.58%        | 0.0817               | 0.9651        | 1.4662         | 0.0907        | 1.0403        | 1.5100        |
| -14            | 0.31%        | 0.07%        | 0.89%        | 0.0694               | 1.0828        | 1.1090         | 0.1102        | 1.0245        | <b>1.8625</b> |
| -13            | 0.05%        | -0.26%       | 0.94%        | 0.0230               | 1.0796        | 0.3692         | 0.1112        | 1.0478        | <b>1.8380</b> |
| -12            | 0.63%        | 0.11%        | 1.56%        | 0.1436               | 1.0040        | <b>2.4768</b>  | 0.1527        | 1.0990        | <b>2.4063</b> |
| -11            | 0.31%        | 0.36%        | 1.87%        | 0.0912               | 1.0971        | 1.4396         | 0.1738        | 1.1147        | <b>2.6987</b> |
| -10            | 0.39%        | 0.07%        | 2.27%        | 0.0749               | 1.0900        | 1.1897         | 0.1883        | 1.1541        | <b>2.8240</b> |
| -9             | 1.32%        | 0.23%        | 3.59%        | 0.2256               | 1.3875        | <b>2.8153</b>  | 0.2454        | 1.1552        | <b>3.6775</b> |
| -8             | -0.51%       | -0.30%       | 3.07%        | -0.0341              | 1.0494        | -0.5625        | 0.2263        | 1.1635        | <b>3.3671</b> |
| -7             | 0.37%        | 0.02%        | 3.44%        | 0.0879               | 1.0706        | 1.4207         | 0.2415        | 1.1465        | <b>3.6476</b> |
| -6             | 0.33%        | -0.04%       | 3.78%        | 0.1196               | 1.1067        | <b>1.8708</b>  | 0.2642        | 1.1544        | <b>3.9626</b> |
| -5             | 0.46%        | 0.01%        | 4.23%        | 0.1351               | 1.1976        | <b>1.9527</b>  | 0.2896        | 1.1437        | <b>4.3840</b> |
| -4             | 0.10%        | -0.25%       | 4.34%        | 0.0299               | 1.0266        | 0.5045         | 0.2882        | 1.1447        | <b>4.3589</b> |
| -3             | 0.58%        | -0.04%       | 4.92%        | 0.1574               | 1.1161        | <b>2.4421</b>  | 0.3172        | 1.1319        | <b>4.8518</b> |
| -2             | 0.65%        | 0.08%        | 5.57%        | 0.1760               | 1.0552        | <b>2.8871</b>  | 0.3491        | 1.1252        | <b>5.3717</b> |
| -1             | 1.55%        | 0.61%        | 7.11%        | 0.4446               | 1.4233        | <b>5.4080</b>  | 0.4397        | 1.1448        | <b>6.6495</b> |
| <b>0</b>       | <b>2.31%</b> | <b>1.10%</b> | <b>9.43%</b> | <b>0.6568</b>        | <b>1.9408</b> | <b>5.8589</b>  | <b>0.5724</b> | <b>1.1931</b> | <b>8.3059</b> |
| 1              | 1.44%        | 0.34%        | 10.87%       | 0.2868               | 1.6723        | <b>2.9696</b>  | 0.6204        | 1.2332        | <b>8.7095</b> |
| 2              | 0.35%        | -0.09%       | 11.22%       | 0.0851               | 1.2554        | 1.1742         | 0.6245        | 1.2789        | <b>8.4543</b> |
| 3              | -0.20%       | -0.26%       | 11.02%       | -0.0780              | 1.3510        | -0.9993        | 0.5954        | 1.3003        | <b>7.9283</b> |
| 4              | -0.24%       | -0.31%       | 10.78%       | -0.0773              | 1.1306        | -1.1843        | 0.5679        | 1.2952        | <b>7.5919</b> |
| 5              | -0.40%       | -0.36%       | 10.38%       | -0.0659              | 0.9258        | -1.2322        | 0.5440        | 1.2803        | <b>7.3564</b> |
| 6              | -0.11%       | -0.30%       | 10.27%       | -0.0060              | 0.9842        | -0.1064        | 0.5327        | 1.2717        | <b>7.2516</b> |
| 7              | -0.37%       | -0.15%       | 9.90%        | -0.0870              | 1.0827        | -1.3905        | 0.5066        | 1.2792        | <b>6.8568</b> |
| 8              | -0.41%       | -0.32%       | 9.49%        | -0.0966              | 1.0208        | -1.6376        | 0.4799        | 1.2819        | <b>6.4814</b> |
| 9              | 0.17%        | -0.04%       | 9.66%        | 0.0804               | 0.9845        | 1.4144         | 0.4865        | 1.3003        | <b>6.4776</b> |
| 10             | 0.43%        | -0.11%       | 10.09%       | 0.0794               | 1.1195        | 1.2286         | 0.4929        | 1.3090        | <b>6.5188</b> |
| 11             | 0.20%        | -0.15%       | 10.30%       | 0.0224               | 0.9860        | 0.3936         | 0.4891        | 1.3242        | <b>6.3941</b> |
| 12             | -0.10%       | -0.10%       | 10.20%       | -0.0359              | 1.2514        | -0.4964        | 0.4753        | 1.3643        | <b>6.0323</b> |
| 13             | -0.09%       | -0.09%       | 10.10%       | -0.0191              | 0.9251        | -0.3579        | 0.4650        | 1.3487        | <b>5.9697</b> |
| 14             | -0.11%       | -0.08%       | 10.00%       | -0.0217              | 0.8010        | -0.4701        | 0.4547        | 1.3403        | <b>5.8730</b> |
| 15             | -0.13%       | -0.24%       | 9.87%        | -0.0481              | 0.8599        | -0.9693        | 0.4403        | 1.3308        | <b>5.7280</b> |
| 16             | -0.51%       | -0.19%       | 9.36%        | -0.1626              | 0.9142        | <b>-3.0793</b> | 0.4076        | 1.3460        | <b>5.2424</b> |
| 17             | -0.09%       | -0.16%       | 9.27%        | -0.0250              | 0.9404        | -0.4597        | 0.3981        | 1.3530        | <b>5.0941</b> |
| 18             | 0.26%        | 0.02%        | 9.53%        | 0.0514               | 1.0200        | 0.8723         | 0.4012        | 1.3432        | <b>5.1712</b> |
| 19             | 0.03%        | 0.00%        | 9.56%        | 0.0037               | 0.8721        | 0.0726         | 0.3967        | 1.3376        | <b>5.1349</b> |
| 20             | 0.30%        | -0.01%       | 9.85%        | 0.0603               | 0.7948        | 1.3129         | 0.4013        | 1.3309        | <b>5.2200</b> |
| 21             | -0.49%       | -0.38%       | 9.36%        | -0.1158              | 0.8952        | <b>-2.2398</b> | 0.3786        | 1.3222        | <b>4.9575</b> |
| 22             | -0.56%       | -0.32%       | 8.81%        | -0.1515              | 0.8780        | <b>-2.9880</b> | 0.3511        | 1.3204        | <b>4.6032</b> |
| 23             | -0.43%       | -0.27%       | 8.38%        | -0.0909              | 1.0778        | -1.4600        | 0.3333        | 1.3372        | <b>4.3161</b> |
| 24             | 0.27%        | 0.04%        | 8.65%        | 0.0709               | 0.8726        | 1.4073         | 0.3402        | 1.3135        | <b>4.4843</b> |
| 25             | -0.20%       | -0.25%       | 8.45%        | -0.0319              | 0.8653        | -0.6374        | 0.3318        | 1.3091        | <b>4.3877</b> |
| 26             | -0.11%       | -0.17%       | 8.34%        | -0.0381              | 0.9791        | -0.6745        | 0.3227        | 1.2929        | <b>4.3209</b> |
| 27             | -0.32%       | -0.13%       | 8.02%        | -0.0266              | 1.0765        | -0.4283        | 0.3154        | 1.2754        | <b>4.2821</b> |
| 28             | -0.07%       | -0.12%       | 7.95%        | -0.0267              | 0.8265        | -0.5596        | 0.3084        | 1.2670        | <b>4.2141</b> |
| 29             | -0.03%       | -0.09%       | 7.92%        | 0.0116               | 0.9565        | 0.2095         | 0.3069        | 1.2581        | <b>4.2239</b> |
| 30             | 0.04%        | 0.03%        | 7.96%        | 0.0215               | 0.7924        | 0.4699         | 0.3069        | 1.2493        | <b>4.2533</b> |
| <b>-1 to 1</b> |              |              | <b>5.31%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06531</b> | 0.8015        | 1.7589        | <b>7.8890</b> |

Table-A 5.13 SW-2 returns to Targets; All-Firms; (OLS, 274); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.08%       | -0.08%       | -0.08%       | 0.0175               | 1.0007        | 0.3041         | 0.0175        | 1.0007        | 0.3041        |
| -19            | 0.33%        | 0.12%        | 0.25%        | 0.1035               | 0.9315        | <b>1.9287</b>  | 0.0856        | 0.9733        | 1.5263        |
| -18            | 0.04%        | -0.14%       | 0.29%        | 0.0140               | 0.9970        | 0.2439         | 0.0780        | 0.9544        | 1.4180        |
| -17            | -0.11%       | -0.14%       | 0.19%        | 0.0220               | 1.0141        | 0.3770         | 0.0785        | 1.0101        | 1.3495        |
| -16            | 0.05%        | -0.01%       | 0.24%        | 0.0019               | 0.9753        | 0.0342         | 0.0711        | 1.0010        | 1.2330        |
| -15            | 0.43%        | 0.02%        | 0.67%        | 0.0830               | 0.9689        | 1.4873         | 0.0988        | 1.0347        | <b>1.6574</b> |
| -14            | 0.25%        | 0.07%        | 0.91%        | 0.0574               | 1.0729        | 0.9283         | 0.1131        | 1.0132        | <b>1.9386</b> |
| -13            | 0.01%        | -0.22%       | 0.93%        | 0.0145               | 1.0687        | 0.2354         | 0.1110        | 1.0326        | <b>1.8655</b> |
| -12            | 0.64%        | 0.17%        | 1.56%        | 0.1456               | 1.0027        | <b>2.5214</b>  | 0.1532        | 1.0829        | <b>2.4554</b> |
| -11            | 0.24%        | 0.25%        | 1.80%        | 0.0781               | 1.1002        | 1.2322         | 0.1700        | 1.0962        | <b>2.6921</b> |
| -10            | 0.36%        | -0.02%       | 2.16%        | 0.0676               | 1.0835        | 1.0833         | 0.1825        | 1.1331        | <b>2.7956</b> |
| -9             | 1.30%        | 0.25%        | 3.47%        | 0.2179               | 1.3782        | <b>2.7452</b>  | 0.2376        | 1.1356        | <b>3.6326</b> |
| -8             | -0.52%       | -0.27%       | 2.94%        | -0.0350              | 1.0539        | -0.5772        | 0.2186        | 1.1447        | <b>3.3149</b> |
| -7             | 0.36%        | -0.02%       | 3.30%        | 0.0892               | 1.0668        | 1.4522         | 0.2345        | 1.1286        | <b>3.6066</b> |
| -6             | 0.34%        | -0.04%       | 3.64%        | 0.1191               | 1.1210        | <b>1.8444</b>  | 0.2573        | 1.1368        | <b>3.9290</b> |
| -5             | 0.44%        | 0.03%        | 4.08%        | 0.1272               | 1.1852        | <b>1.8637</b>  | 0.2809        | 1.1297        | <b>4.3167</b> |
| -4             | 0.09%        | -0.25%       | 4.17%        | 0.0274               | 1.0279        | 0.4632         | 0.2792        | 1.1305        | <b>4.2869</b> |
| -3             | 0.56%        | 0.00%        | 4.73%        | 0.1516               | 1.1068        | <b>2.3779</b>  | 0.3070        | 1.1186        | <b>4.7650</b> |
| -2             | 0.61%        | 0.04%        | 5.34%        | 0.1665               | 1.0559        | <b>2.7383</b>  | 0.3371        | 1.1086        | <b>5.2785</b> |
| -1             | 1.58%        | 0.78%        | 6.92%        | 0.4434               | 1.4173        | <b>5.4311</b>  | 0.4277        | 1.1286        | <b>6.5784</b> |
| <b>0</b>       | <b>2.34%</b> | <b>1.11%</b> | <b>9.25%</b> | <b>0.6552</b>        | <b>1.9339</b> | <b>5.8815</b>  | <b>0.5603</b> | <b>1.1802</b> | <b>8.2428</b> |
| 1              | 1.44%        | 0.46%        | 10.70%       | 0.2844               | 1.6689        | <b>2.9586</b>  | 0.6081        | 1.2185        | <b>8.6638</b> |
| 2              | 0.36%        | -0.07%       | 11.06%       | 0.0853               | 1.2632        | 1.1728         | 0.6125        | 1.2655        | <b>8.4030</b> |
| 3              | -0.20%       | -0.30%       | 10.85%       | -0.0768              | 1.3610        | -0.9794        | 0.5839        | 1.2861        | <b>7.8824</b> |
| 4              | -0.23%       | -0.22%       | 10.62%       | -0.0783              | 1.1330        | -1.1998        | 0.5565        | 1.2807        | <b>7.5435</b> |
| 5              | -0.44%       | -0.30%       | 10.19%       | -0.0695              | 0.9359        | -1.2895        | 0.5320        | 1.2665        | <b>7.2929</b> |
| 6              | -0.14%       | -0.29%       | 10.04%       | -0.0142              | 0.9766        | -0.2527        | 0.5194        | 1.2583        | <b>7.1654</b> |
| 7              | -0.41%       | -0.18%       | 9.63%        | -0.0938              | 1.0826        | -1.5035        | 0.4923        | 1.2678        | <b>6.7412</b> |
| 8              | -0.46%       | -0.25%       | 9.17%        | -0.1029              | 1.0241        | <b>-1.7449</b> | 0.4646        | 1.2739        | <b>6.3316</b> |
| 9              | 0.18%        | -0.04%       | 9.35%        | 0.0810               | 0.9919        | 1.4182         | 0.4716        | 1.2945        | <b>6.3246</b> |
| 10             | 0.37%        | -0.16%       | 9.72%        | 0.0702               | 1.1166        | 1.0920         | 0.4765        | 1.3042        | <b>6.3433</b> |
| 11             | 0.18%        | -0.05%       | 9.91%        | 0.0211               | 0.9884        | 0.3714         | 0.4728        | 1.3216        | <b>6.2104</b> |
| 12             | -0.10%       | -0.06%       | 9.80%        | -0.0375              | 1.2526        | -0.5201        | 0.4590        | 1.3621        | <b>5.8503</b> |
| 13             | -0.11%       | -0.10%       | 9.70%        | -0.0206              | 0.9323        | -0.3841        | 0.4487        | 1.3484        | <b>5.7769</b> |
| 14             | -0.10%       | -0.11%       | 9.59%        | -0.0186              | 0.8027        | -0.4019        | 0.4391        | 1.3404        | <b>5.6869</b> |
| 15             | -0.16%       | -0.24%       | 9.43%        | -0.0545              | 0.8600        | -1.0997        | 0.4239        | 1.3291        | <b>5.5367</b> |
| 16             | -0.49%       | -0.21%       | 8.94%        | -0.1551              | 0.9085        | <b>-2.9629</b> | 0.3926        | 1.3438        | <b>5.0720</b> |
| 17             | -0.10%       | -0.07%       | 8.85%        | -0.0193              | 0.9272        | -0.3614        | 0.3843        | 1.3502        | <b>4.9408</b> |
| 18             | 0.23%        | 0.04%        | 9.07%        | 0.0421               | 1.0272        | 0.7114         | 0.3861        | 1.3407        | <b>4.9990</b> |
| 19             | -0.02%       | -0.02%       | 9.05%        | -0.0040              | 0.8733        | -0.0791        | 0.3806        | 1.3353        | <b>4.9480</b> |
| 20             | 0.25%        | 0.02%        | 9.30%        | 0.0528               | 0.8013        | 1.1429         | 0.3841        | 1.3261        | <b>5.0289</b> |
| 21             | -0.44%       | -0.35%       | 8.86%        | -0.1105              | 0.8961        | <b>-2.1414</b> | 0.3625        | 1.3173        | <b>4.7773</b> |
| 22             | -0.56%       | -0.30%       | 8.30%        | -0.1514              | 0.8787        | <b>-2.9904</b> | 0.3352        | 1.3133        | <b>4.4307</b> |
| 23             | -0.41%       | -0.25%       | 7.89%        | -0.0939              | 1.0885        | -1.4977        | 0.3172        | 1.3305        | <b>4.1387</b> |
| 24             | 0.26%        | 0.07%        | 8.15%        | 0.0664               | 0.8632        | 1.3363         | 0.3235        | 1.3074        | <b>4.2961</b> |
| 25             | -0.23%       | -0.28%       | 7.92%        | -0.0405              | 0.8480        | -0.8289        | 0.3140        | 1.3000        | <b>4.1936</b> |
| 26             | -0.14%       | -0.11%       | 7.78%        | -0.0430              | 0.9761        | -0.7648        | 0.3044        | 1.2819        | <b>4.1225</b> |
| 27             | -0.32%       | -0.03%       | 7.46%        | -0.0294              | 1.0847        | -0.4705        | 0.2970        | 1.2643        | <b>4.0778</b> |
| 28             | -0.06%       | -0.16%       | 7.40%        | -0.0250              | 0.8330        | -0.5205        | 0.2904        | 1.2588        | <b>4.0045</b> |
| 29             | -0.05%       | -0.11%       | 7.34%        | 0.0045               | 0.9596        | 0.0808         | 0.2881        | 1.2487        | <b>4.0050</b> |
| 30             | 0.02%        | 0.00%        | 7.37%        | 0.0179               | 0.7932        | 0.3923         | 0.2877        | 1.2409        | <b>4.0255</b> |
| <b>-1 to 1</b> |              |              | <b>5.36%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06532</b> | 0.7985        | 1.7521        | <b>7.9116</b> |

Table-A 5.14 SW-3 returns to Targets; All-Firms; (OLS, 274); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.08%       | -0.09%       | -0.08%       | 0.0154               | 0.9906        | 0.2707         | 0.0154        | 0.9906        | 0.2707        |
| -19            | 0.33%        | 0.08%        | 0.25%        | 0.1024               | 0.9249        | <b>1.9289</b>  | 0.0833        | 0.9611        | 1.5099        |
| -18            | 0.04%        | -0.13%       | 0.30%        | 0.0122               | 0.9875        | 0.2149         | 0.0751        | 0.9405        | 1.3901        |
| -17            | -0.09%       | -0.16%       | 0.21%        | 0.0238               | 1.0120        | 0.4091         | 0.0769        | 0.9983        | 1.3415        |
| -16            | 0.06%        | -0.02%       | 0.27%        | -0.0014              | 0.9706        | -0.0243        | 0.0682        | 0.9904        | 1.1988        |
| -15            | 0.45%        | -0.04%       | 0.72%        | 0.0847               | 0.9672        | 1.5248         | 0.0968        | 1.0248        | 1.6451        |
| -14            | 0.26%        | 0.07%        | 0.98%        | 0.0606               | 1.0674        | 0.9888         | 0.1125        | 1.0042        | <b>1.9516</b> |
| -13            | -0.03%       | -0.28%       | 0.95%        | 0.0012               | 1.0735        | 0.0196         | 0.1057        | 1.0237        | <b>1.7980</b> |
| -12            | 0.67%        | 0.14%        | 1.62%        | 0.1481               | 1.0031        | <b>2.5714</b>  | 0.1490        | 1.0727        | <b>2.4192</b> |
| -11            | 0.24%        | 0.16%        | 1.86%        | 0.0751               | 1.1071        | 1.1814         | 0.1651        | 1.0902        | <b>2.6376</b> |
| -10            | 0.34%        | 0.03%        | 2.20%        | 0.0623               | 1.0792        | 1.0050         | 0.1762        | 1.1305        | <b>2.7144</b> |
| -9             | 1.31%        | 0.21%        | 3.51%        | 0.2198               | 1.3808        | <b>2.7722</b>  | 0.2321        | 1.1318        | <b>3.5724</b> |
| -8             | -0.54%       | -0.34%       | 2.98%        | -0.0412              | 1.0544        | -0.6802        | 0.2116        | 1.1433        | <b>3.2235</b> |
| -7             | 0.35%        | 0.00%        | 3.33%        | 0.0833               | 1.0722        | 1.3539         | 0.2262        | 1.1290        | <b>3.4895</b> |
| -6             | 0.36%        | 0.00%        | 3.69%        | 0.1182               | 1.1126        | <b>1.8502</b>  | 0.2490        | 1.1404        | <b>3.8034</b> |
| -5             | 0.43%        | 0.09%        | 4.11%        | 0.1246               | 1.1921        | <b>1.8212</b>  | 0.2723        | 1.1306        | <b>4.1948</b> |
| -4             | 0.13%        | -0.19%       | 4.25%        | 0.0337               | 1.0163        | 0.5783         | 0.2723        | 1.1316        | <b>4.1918</b> |
| -3             | 0.57%        | -0.01%       | 4.82%        | 0.1506               | 1.0992        | <b>2.3860</b>  | 0.3001        | 1.1198        | <b>4.6684</b> |
| -2             | 0.60%        | 0.02%        | 5.42%        | 0.1560               | 1.0614        | <b>2.5603</b>  | 0.3279        | 1.1105        | <b>5.1435</b> |
| -1             | 1.58%        | 0.69%        | 7.00%        | 0.4443               | 1.4107        | <b>5.4859</b>  | 0.4190        | 1.1302        | <b>6.4573</b> |
| <b>0</b>       | <b>2.37%</b> | <b>1.36%</b> | <b>9.37%</b> | <b>0.6644</b>        | <b>1.9173</b> | <b>6.0359</b>  | <b>0.5539</b> | <b>1.1779</b> | <b>8.1903</b> |
| 1              | 1.45%        | 0.37%        | 10.82%       | 0.2874               | 1.6622        | <b>3.0117</b>  | 0.6024        | 1.2157        | <b>8.6310</b> |
| 2              | 0.38%        | -0.04%       | 11.20%       | 0.0829               | 1.2580        | 1.1480         | 0.6065        | 1.2594        | <b>8.3875</b> |
| 3              | -0.20%       | -0.25%       | 10.99%       | -0.0764              | 1.3563        | -0.9810        | 0.5781        | 1.2821        | <b>7.8536</b> |
| 4              | -0.24%       | -0.28%       | 10.75%       | -0.0734              | 1.1182        | -1.1428        | 0.5517        | 1.2760        | <b>7.5315</b> |
| 5              | -0.43%       | -0.29%       | 10.32%       | -0.0682              | 0.9405        | -1.2638        | 0.5276        | 1.2596        | <b>7.2961</b> |
| 6              | -0.14%       | -0.34%       | 10.18%       | -0.0143              | 0.9776        | -0.2545        | 0.5150        | 1.2512        | <b>7.1695</b> |
| 7              | -0.43%       | -0.20%       | 9.75%        | -0.0964              | 1.0704        | -1.5689        | 0.4875        | 1.2595        | <b>6.7425</b> |
| 8              | -0.46%       | -0.31%       | 9.29%        | -0.1022              | 1.0296        | <b>-1.7296</b> | 0.4601        | 1.2670        | <b>6.3246</b> |
| 9              | 0.19%        | 0.01%        | 9.47%        | 0.0846               | 0.9845        | 1.4971         | 0.4678        | 1.2842        | <b>6.3447</b> |
| 10             | 0.38%        | -0.15%       | 9.85%        | 0.0694               | 1.1212        | 1.0785         | 0.4726        | 1.2941        | <b>6.3618</b> |
| 11             | 0.19%        | -0.10%       | 10.04%       | 0.0241               | 0.9985        | 0.4206         | 0.4695        | 1.3135        | <b>6.2253</b> |
| 12             | -0.14%       | -0.11%       | 9.90%        | -0.0444              | 1.2649        | -0.6115        | 0.4546        | 1.3549        | <b>5.8439</b> |
| 13             | -0.12%       | -0.12%       | 9.78%        | -0.0253              | 0.9204        | -0.4786        | 0.4435        | 1.3422        | <b>5.7552</b> |
| 14             | -0.11%       | -0.12%       | 9.67%        | -0.0215              | 0.8071        | -0.4638        | 0.4335        | 1.3377        | <b>5.6444</b> |
| 15             | -0.15%       | -0.27%       | 9.52%        | -0.0489              | 0.8508        | -1.0011        | 0.4193        | 1.3263        | <b>5.5063</b> |
| 16             | -0.48%       | -0.16%       | 9.04%        | -0.1513              | 0.8960        | <b>-2.9420</b> | 0.3887        | 1.3380        | <b>5.0597</b> |
| 17             | -0.08%       | -0.12%       | 8.96%        | -0.0129              | 0.9073        | -0.2469        | 0.3814        | 1.3418        | <b>4.9514</b> |
| 18             | 0.20%        | 0.05%        | 9.16%        | 0.0300               | 1.0150        | 0.5143         | 0.3813        | 1.3316        | <b>4.9879</b> |
| 19             | -0.01%       | -0.07%       | 9.15%        | -0.0059              | 0.8688        | -0.1180        | 0.3756        | 1.3267        | <b>4.9312</b> |
| 20             | 0.25%        | 0.03%        | 9.40%        | 0.0533               | 0.7948        | 1.1671         | 0.3793        | 1.3178        | <b>5.0135</b> |
| 21             | -0.43%       | -0.32%       | 8.97%        | -0.1084              | 0.8954        | <b>-2.1093</b> | 0.3580        | 1.3079        | <b>4.7680</b> |
| 22             | -0.59%       | -0.40%       | 8.38%        | -0.1589              | 0.8723        | <b>-3.1725</b> | 0.3296        | 1.3014        | <b>4.4116</b> |
| 23             | -0.36%       | -0.28%       | 8.03%        | -0.0801              | 1.0851        | -1.2853        | 0.3138        | 1.3151        | <b>4.1559</b> |
| 24             | 0.23%        | 0.12%        | 8.25%        | 0.0569               | 0.8615        | 1.1496         | 0.3187        | 1.2927        | <b>4.2947</b> |
| 25             | -0.23%       | -0.31%       | 8.02%        | -0.0383              | 0.8558        | -0.7798        | 0.3096        | 1.2836        | <b>4.2012</b> |
| 26             | -0.14%       | -0.19%       | 7.88%        | -0.0439              | 0.9713        | -0.7877        | 0.2999        | 1.2673        | <b>4.1218</b> |
| 27             | -0.29%       | -0.07%       | 7.59%        | -0.0260              | 1.0800        | -0.4199        | 0.2930        | 1.2480        | <b>4.0891</b> |
| 28             | -0.05%       | -0.12%       | 7.54%        | -0.0211              | 0.8225        | -0.4478        | 0.2870        | 1.2423        | <b>4.0236</b> |
| 29             | -0.05%       | -0.15%       | 7.49%        | 0.0035               | 0.9561        | 0.0630         | 0.2846        | 1.2325        | <b>4.0215</b> |
| 30             | 0.03%        | 0.01%        | 7.52%        | 0.0180               | 0.8012        | 0.3913         | 0.2843        | 1.2256        | <b>4.0402</b> |
| <b>-1 to 1</b> |              |              | <b>5.40%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06467</b> | 0.8061        | 1.7362        | <b>8.0867</b> |

Table-A 5.15 Market returns to Targets; EWI-Firms; (OLS, 226); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.05%       | -0.08%       | -0.05%       | 0.0092               | 1.0514        | 0.1302         | 0.0092        | 1.0514        | 0.1302        |
| -19            | 0.36%        | 0.03%        | 0.31%        | 0.1234               | 0.8852        | <b>2.0729</b>  | 0.0938        | 0.9629        | 1.4480        |
| -18            | 0.25%        | -0.28%       | 0.56%        | 0.0161               | 0.9272        | 0.2581         | 0.0859        | 0.9115        | 1.4005        |
| -17            | -0.01%       | -0.04%       | 0.55%        | 0.0694               | 1.0282        | 1.0034         | 0.1090        | 1.0110        | 1.6038        |
| -16            | -0.03%       | -0.10%       | 0.52%        | -0.0323              | 0.9822        | -0.4893        | 0.0831        | 1.0338        | 1.1950        |
| -15            | 0.40%        | 0.14%        | 0.92%        | 0.0837               | 0.9841        | 1.2650         | 0.1100        | 1.0639        | 1.5377        |
| -14            | 0.46%        | 0.18%        | 1.38%        | 0.1001               | 1.0946        | 1.3603         | 0.1397        | 1.0532        | <b>1.9725</b> |
| -13            | 0.01%        | -0.24%       | 1.39%        | 0.0019               | 0.9716        | 0.0291         | 0.1314        | 1.0571        | <b>1.8477</b> |
| -12            | 0.20%        | -0.04%       | 1.59%        | 0.0712               | 0.9686        | 1.0930         | 0.1476        | 1.0928        | <b>2.0080</b> |
| -11            | 0.16%        | 0.23%        | 1.75%        | 0.0696               | 1.0687        | 0.9683         | 0.1620        | 1.0989        | <b>2.1923</b> |
| -10            | 0.17%        | -0.08%       | 1.92%        | 0.0619               | 1.0726        | 0.8583         | 0.1731        | 1.1255        | <b>2.2874</b> |
| -9             | 0.83%        | 0.19%        | 2.75%        | 0.1932               | 1.1767        | <b>2.4420</b>  | 0.2215        | 1.1311        | <b>2.9125</b> |
| -8             | -0.25%       | -0.28%       | 2.50%        | -0.0177              | 0.9675        | -0.2715        | 0.2080        | 1.1384        | <b>2.7163</b> |
| -7             | 0.33%        | -0.02%       | 2.83%        | 0.0771               | 1.0793        | 1.0628         | 0.2210        | 1.1388        | <b>2.8860</b> |
| -6             | 0.44%        | 0.00%        | 3.27%        | 0.1340               | 1.0611        | <b>1.8782</b>  | 0.2481        | 1.1546        | <b>3.1956</b> |
| -5             | 0.68%        | 0.18%        | 3.95%        | 0.1549               | 1.1323        | <b>2.0347</b>  | 0.2790        | 1.1303        | <b>3.6703</b> |
| -4             | 0.22%        | -0.28%       | 4.17%        | 0.0534               | 1.0287        | 0.7723         | 0.2836        | 1.1413        | <b>3.6950</b> |
| -3             | 0.56%        | -0.01%       | 4.73%        | 0.1447               | 1.1321        | <b>1.9012</b>  | 0.3097        | 1.1284        | <b>4.0817</b> |
| -2             | 0.65%        | 0.05%        | 5.38%        | 0.2014               | 1.0642        | <b>2.8148</b>  | 0.3477        | 1.1186        | <b>4.6221</b> |
| -1             | 1.64%        | 0.71%        | 7.03%        | 0.4786               | 1.3985        | <b>5.0889</b>  | 0.4459        | 1.1487        | <b>5.7723</b> |
| <b>0</b>       | <b>2.67%</b> | <b>1.84%</b> | <b>9.70%</b> | <b>0.7885</b>        | <b>1.9914</b> | <b>5.8881</b>  | <b>0.6072</b> | <b>1.2068</b> | <b>7.4819</b> |
| 1              | 1.03%        | 0.22%        | 10.73%       | 0.2112               | 1.6744        | <b>1.8756</b>  | 0.6383        | 1.2580        | <b>7.5447</b> |
| 2              | 0.46%        | -0.19%       | 11.19%       | 0.0999               | 1.3368        | 1.1107         | 0.6451        | 1.3150        | <b>7.2949</b> |
| 3              | -0.14%       | -0.31%       | 11.04%       | -0.0655              | 1.0139        | -0.9613        | 0.6181        | 1.3214        | <b>6.9561</b> |
| 4              | -0.33%       | -0.29%       | 10.71%       | -0.0864              | 1.0428        | -1.2324        | 0.5884        | 1.3225        | <b>6.6155</b> |
| 5              | -0.39%       | -0.38%       | 10.32%       | -0.0687              | 0.8948        | -1.1415        | 0.5635        | 1.3083        | <b>6.4043</b> |
| 6              | -0.17%       | -0.33%       | 10.15%       | -0.0279              | 0.9105        | -0.4556        | 0.5476        | 1.3080        | <b>6.2249</b> |
| 7              | -0.31%       | -0.07%       | 9.83%        | -0.0498              | 0.9783        | -0.7569        | 0.5283        | 1.3076        | <b>6.0074</b> |
| 8              | -0.07%       | -0.11%       | 9.77%        | -0.0100              | 1.0200        | -0.1451        | 0.5172        | 1.3137        | <b>5.8546</b> |
| 9              | 0.19%        | -0.15%       | 9.95%        | 0.0927               | 0.9776        | 1.4099         | 0.5255        | 1.3365        | <b>5.8464</b> |
| 10             | 0.35%        | 0.05%        | 10.30%       | 0.0873               | 1.0395        | 1.2484         | 0.5326        | 1.3379        | <b>5.9196</b> |
| 11             | 0.28%        | -0.09%       | 10.58%       | 0.0420               | 0.9836        | 0.6345         | 0.5316        | 1.3565        | <b>5.8275</b> |
| 12             | 0.01%        | -0.15%       | 10.60%       | -0.0007              | 0.7643        | -0.0145        | 0.5234        | 1.3780        | <b>5.6478</b> |
| 13             | -0.14%       | -0.06%       | 10.46%       | -0.0253              | 0.9219        | -0.4088        | 0.5113        | 1.3641        | <b>5.5734</b> |
| 14             | -0.21%       | -0.11%       | 10.25%       | -0.0399              | 0.7741        | -0.7667        | 0.4972        | 1.3456        | <b>5.4941</b> |
| 15             | -0.16%       | -0.17%       | 10.09%       | -0.0639              | 0.8220        | -1.1565        | 0.4796        | 1.3490        | <b>5.2864</b> |
| 16             | -0.20%       | -0.22%       | 9.88%        | -0.1165              | 0.8949        | <b>-1.9358</b> | 0.4539        | 1.3611        | <b>4.9588</b> |
| 17             | -0.26%       | -0.35%       | 9.62%        | -0.0695              | 0.9607        | -1.0758        | 0.4366        | 1.3796        | <b>4.7060</b> |
| 18             | 0.00%        | -0.16%       | 9.62%        | 0.0094               | 1.0352        | 0.1354         | 0.4325        | 1.3705        | <b>4.6923</b> |
| 19             | -0.07%       | -0.10%       | 9.55%        | -0.0189              | 0.8725        | -0.3221        | 0.4241        | 1.3605        | <b>4.6347</b> |
| 20             | 0.43%        | -0.01%       | 9.98%        | 0.1033               | 0.7824        | <b>1.9630</b>  | 0.4350        | 1.3565        | <b>4.7684</b> |
| 21             | -0.43%       | -0.33%       | 9.55%        | -0.1129              | 0.9247        | <b>-1.8149</b> | 0.4124        | 1.3454        | <b>4.5577</b> |
| 22             | -0.51%       | -0.43%       | 9.04%        | -0.1581              | 0.8693        | <b>-2.7038</b> | 0.3834        | 1.3466        | <b>4.2342</b> |
| 23             | -0.41%       | -0.21%       | 8.62%        | -0.0913              | 1.0974        | -1.2373        | 0.3653        | 1.3705        | <b>3.9632</b> |
| 24             | 0.37%        | 0.18%        | 8.99%        | 0.1035               | 0.7846        | <b>1.9623</b>  | 0.3766        | 1.3449        | <b>4.1643</b> |
| 25             | -0.34%       | -0.30%       | 8.65%        | -0.0873              | 0.8715        | -1.4901        | 0.3596        | 1.3439        | <b>3.9794</b> |
| 26             | 0.00%        | -0.12%       | 8.65%        | -0.0132              | 0.9871        | -0.1996        | 0.3539        | 1.3267        | <b>3.9662</b> |
| 27             | -0.19%       | 0.06%        | 8.46%        | 0.0186               | 1.1168        | 0.2482         | 0.3528        | 1.3101        | <b>4.0049</b> |
| 28             | -0.19%       | -0.09%       | 8.27%        | -0.0577              | 0.8452        | -1.0148        | 0.3410        | 1.3072        | <b>3.8788</b> |
| 29             | -0.07%       | -0.14%       | 8.20%        | -0.0009              | 0.9329        | -0.0136        | 0.3374        | 1.3036        | <b>3.8490</b> |
| 30             | 0.16%        | 0.16%        | 8.36%        | 0.0491               | 0.7809        | 0.9353         | 0.3410        | 1.2955        | <b>3.9139</b> |
| <b>-1 to 1</b> |              |              | <b>5.34%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06211</b> | 0.8535        | 1.8021        | <b>7.0428</b> |



Table-A 5.16 Market returns to Targets; EWI-Firms; (OLS, 226); EWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.08%       | -0.15%       | -0.08%       | 0.0048               | 1.0378        | 0.0690         | 0.0048        | 1.0378        | 0.0690        |
| -19            | 0.34%        | -0.01%       | 0.26%        | 0.1165               | 0.8787        | <b>1.9675</b>  | 0.0858        | 0.9561        | 1.3316        |
| -18            | 0.31%        | -0.32%       | 0.57%        | 0.0196               | 0.9485        | 0.3064         | 0.0814        | 0.9006        | 1.3406        |
| -17            | -0.02%       | -0.10%       | 0.54%        | 0.0681               | 1.0136        | 0.9977         | 0.1045        | 1.0038        | 1.5453        |
| -16            | -0.03%       | -0.16%       | 0.52%        | -0.0278              | 0.9656        | -0.4270        | 0.0811        | 1.0300        | 1.1679        |
| -15            | 0.33%        | -0.12%       | 0.85%        | 0.0651               | 0.9854        | 0.9805         | 0.1006        | 1.0665        | 1.3995        |
| -14            | 0.43%        | 0.09%        | 1.28%        | 0.0885               | 1.1052        | 1.1878         | 0.1266        | 1.0545        | <b>1.7811</b> |
| -13            | 0.03%        | -0.19%       | 1.31%        | -0.0024              | 0.9789        | -0.0368        | 0.1175        | 1.0555        | <b>1.6524</b> |
| -12            | 0.22%        | -0.04%       | 1.52%        | 0.0807               | 0.9817        | 1.2198         | 0.1377        | 1.0894        | <b>1.8758</b> |
| -11            | 0.22%        | 0.12%        | 1.74%        | 0.0878               | 1.0405        | 1.2519         | 0.1584        | 1.0902        | <b>2.1561</b> |
| -10            | 0.19%        | -0.04%       | 1.93%        | 0.0682               | 1.0557        | 0.9581         | 0.1716        | 1.1039        | <b>2.3064</b> |
| -9             | 0.82%        | 0.10%        | 2.75%        | 0.1996               | 1.1686        | <b>2.5343</b>  | 0.2219        | 1.1231        | <b>2.9318</b> |
| -8             | -0.15%       | -0.25%       | 2.60%        | 0.0075               | 0.9762        | 0.1142         | 0.2152        | 1.1269        | <b>2.8347</b> |
| -7             | 0.31%        | -0.09%       | 2.91%        | 0.0740               | 1.0849        | 1.0116         | 0.2272        | 1.1299        | <b>2.9840</b> |
| -6             | 0.46%        | 0.10%        | 3.37%        | 0.1383               | 1.0632        | <b>1.9302</b>  | 0.2552        | 1.1407        | <b>3.3198</b> |
| -5             | 0.64%        | 0.05%        | 4.01%        | 0.1521               | 1.1286        | <b>2.0005</b>  | 0.2851        | 1.1176        | <b>3.7860</b> |
| -4             | 0.20%        | -0.28%       | 4.21%        | 0.0529               | 1.0207        | 0.7691         | 0.2894        | 1.1298        | <b>3.8017</b> |
| -3             | 0.58%        | -0.02%       | 4.79%        | 0.1546               | 1.1257        | <b>2.0380</b>  | 0.3177        | 1.1190        | <b>4.2136</b> |
| -2             | 0.63%        | 0.02%        | 5.41%        | 0.1988               | 1.0858        | <b>2.7167</b>  | 0.3548        | 1.1127        | <b>4.7326</b> |
| -1             | 1.65%        | 0.75%        | 7.06%        | 0.4946               | 1.4095        | <b>5.2075</b>  | 0.4564        | 1.1417        | <b>5.9332</b> |
| <b>0</b>       | <b>2.71%</b> | <b>1.76%</b> | <b>9.77%</b> | <b>0.8157</b>        | <b>1.9919</b> | <b>6.0773</b>  | <b>0.6234</b> | <b>1.2009</b> | <b>7.7042</b> |
| 1              | 1.02%        | 0.36%        | 10.79%       | 0.2120               | 1.6937        | <b>1.8578</b>  | 0.6543        | 1.2531        | <b>7.7487</b> |
| 2              | 0.42%        | -0.14%       | 11.21%       | 0.1026               | 1.3650        | 1.1152         | 0.6613        | 1.3172        | <b>7.4510</b> |
| 3              | -0.25%       | -0.49%       | 10.96%       | -0.0932              | 1.0346        | -1.3374        | 0.6284        | 1.3247        | <b>7.0394</b> |
| 4              | -0.36%       | -0.32%       | 10.61%       | -0.0985              | 1.0353        | -1.4119        | 0.5960        | 1.3279        | <b>6.6606</b> |
| 5              | -0.40%       | -0.32%       | 10.21%       | -0.0652              | 0.8948        | -1.0812        | 0.5716        | 1.3160        | <b>6.4462</b> |
| 6              | -0.17%       | -0.37%       | 10.04%       | -0.0295              | 0.9092        | -0.4808        | 0.5553        | 1.3132        | <b>6.2748</b> |
| 7              | -0.28%       | -0.11%       | 9.76%        | -0.0386              | 0.9749        | -0.5876        | 0.5380        | 1.3154        | <b>6.0694</b> |
| 8              | -0.14%       | -0.20%       | 9.62%        | -0.0329              | 1.0367        | -0.4715        | 0.5225        | 1.3242        | <b>5.8553</b> |
| 9              | 0.16%        | -0.16%       | 9.78%        | 0.0907               | 0.9748        | 1.3811         | 0.5303        | 1.3430        | <b>5.8596</b> |
| 10             | 0.33%        | -0.06%       | 10.11%       | 0.0868               | 1.0593        | 1.2165         | 0.5372        | 1.3470        | <b>5.9190</b> |
| 11             | 0.29%        | -0.11%       | 10.40%       | 0.0373               | 0.9803        | 0.5639         | 0.5354        | 1.3690        | <b>5.8034</b> |
| 12             | -0.02%       | -0.12%       | 10.39%       | -0.0172              | 0.7789        | -0.3281        | 0.5242        | 1.3887        | <b>5.6016</b> |
| 13             | -0.19%       | -0.09%       | 10.20%       | -0.0325              | 0.9082        | -0.5312        | 0.5108        | 1.3779        | <b>5.5020</b> |
| 14             | -0.22%       | -0.14%       | 9.98%        | -0.0440              | 0.7501        | -0.8699        | 0.4961        | 1.3570        | <b>5.4249</b> |
| 15             | -0.18%       | -0.19%       | 9.80%        | -0.0688              | 0.8107        | -1.2595        | 0.4777        | 1.3599        | <b>5.2127</b> |
| 16             | -0.15%       | -0.18%       | 9.65%        | -0.1000              | 0.8837        | <b>-1.6793</b> | 0.4547        | 1.3708        | <b>4.9229</b> |
| 17             | -0.24%       | -0.21%       | 9.40%        | -0.0622              | 0.9287        | -0.9947        | 0.4386        | 1.3873        | <b>4.6919</b> |
| 18             | 0.01%        | -0.24%       | 9.41%        | 0.0103               | 1.0493        | 0.1461         | 0.4346        | 1.3808        | <b>4.6708</b> |
| 19             | -0.13%       | -0.19%       | 9.28%        | -0.0303              | 0.8493        | -0.5289        | 0.4243        | 1.3726        | <b>4.5879</b> |
| 20             | 0.42%        | 0.04%        | 9.70%        | 0.1004               | 0.7830        | <b>1.9034</b>  | 0.4348        | 1.3711        | <b>4.7065</b> |
| 21             | -0.48%       | -0.50%       | 9.22%        | -0.1204              | 0.9289        | <b>-1.9231</b> | 0.4110        | 1.3613        | <b>4.4809</b> |
| 22             | -0.52%       | -0.47%       | 8.70%        | -0.1584              | 0.8450        | <b>-2.7811</b> | 0.3821        | 1.3639        | <b>4.1574</b> |
| 23             | -0.41%       | -0.15%       | 8.29%        | -0.0933              | 1.1044        | -1.2540        | 0.3636        | 1.3864        | <b>3.8927</b> |
| 24             | 0.37%        | 0.08%        | 8.66%        | 0.1035               | 0.7951        | <b>1.9324</b>  | 0.3750        | 1.3606        | <b>4.0905</b> |
| 25             | -0.30%       | -0.43%       | 8.36%        | -0.0735              | 0.8828        | -1.2363        | 0.3601        | 1.3607        | <b>3.9272</b> |
| 26             | 0.02%        | -0.16%       | 8.38%        | -0.0140              | 0.9950        | -0.2090        | 0.3542        | 1.3472        | <b>3.9015</b> |
| 27             | -0.22%       | -0.04%       | 8.16%        | 0.0117               | 1.1265        | 0.1540         | 0.3522        | 1.3304        | <b>3.9283</b> |
| 28             | -0.16%       | -0.17%       | 8.00%        | -0.0497              | 0.8432        | -0.8756        | 0.3414        | 1.3237        | <b>3.8279</b> |
| 29             | -0.04%       | -0.17%       | 7.96%        | 0.0000               | 0.9134        | -0.0003        | 0.3380        | 1.3197        | <b>3.8009</b> |
| 30             | 0.19%        | 0.00%        | 8.15%        | 0.0537               | 0.7893        | 1.0100         | 0.3422        | 1.3146        | <b>3.8631</b> |
| <b>-1 to 1</b> |              |              | <b>5.38%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06083</b> | 0.8789        | 1.8007        | <b>7.2435</b> |

Table-A 5.17 Market returns to Targets; EWI-Firms; (MM, 220); VWI

| Days           | AAR          | Median       | CAAR          | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|---------------|----------------------|----------------|---------------|---------------|----------------|
| -20            | 0.38%        | 0.16%        | 0.38%         | 0.1344        | 1.2408               | 1.5712         | 0.1344        | 1.2408        | 1.5712         |
| -19            | 0.62%        | 0.17%        | 0.99%         | 0.2340        | 1.0119               | <b>3.3551</b>  | 0.2605        | 1.1701        | <b>3.2298</b>  |
| -18            | 0.37%        | -0.11%       | 1.37%         | 0.0697        | 1.0678               | 0.9472         | 0.2530        | 1.0576        | <b>3.4696</b>  |
| -17            | 0.29%        | 0.08%        | 1.66%         | 0.1533        | 1.2137               | <b>1.8318</b>  | 0.2957        | 1.2335        | <b>3.4776</b>  |
| -16            | 0.20%        | -0.01%       | 1.86%         | 0.0325        | 1.1174               | 0.4221         | 0.2790        | 1.2569        | <b>3.2203</b>  |
| -15            | 0.47%        | 0.30%        | 2.33%         | 0.1233        | 1.0996               | 1.6266         | 0.3051        | 1.2478        | <b>3.5465</b>  |
| -14            | 0.58%        | 0.23%        | 2.91%         | 0.1972        | 1.3227               | <b>2.1629</b>  | 0.3570        | 1.2392        | <b>4.1788</b>  |
| -13            | 0.18%        | -0.12%       | 3.09%         | 0.0706        | 1.1695               | 0.8762         | 0.3589        | 1.2452        | <b>4.1808</b>  |
| -12            | 0.43%        | 0.15%        | 3.52%         | 0.1546        | 1.1317               | <b>1.9819</b>  | 0.3899        | 1.3005        | <b>4.3491</b>  |
| -11            | 0.35%        | 0.35%        | 3.86%         | 0.1393        | 1.2734               | 1.5866         | 0.4139        | 1.3043        | <b>4.6036</b>  |
| -10            | 0.42%        | 0.24%        | 4.28%         | 0.1335        | 1.2645               | 1.5319         | 0.4349        | 1.3361        | <b>4.7223</b>  |
| -9             | 1.12%        | 0.30%        | 5.39%         | 0.3226        | 1.3883               | <b>3.3712</b>  | 0.5096        | 1.3479        | <b>5.4838</b>  |
| -8             | -0.03%       | -0.10%       | 5.36%         | 0.0263        | 1.1173               | 0.3417         | 0.4969        | 1.3477        | <b>5.3483</b>  |
| -7             | 0.58%        | 0.20%        | 5.94%         | 0.1722        | 1.2609               | <b>1.9811</b>  | 0.5248        | 1.3347        | <b>5.7041</b>  |
| -6             | 0.63%        | 0.14%        | 6.57%         | 0.2053        | 1.2395               | <b>2.4028</b>  | 0.5600        | 1.3508        | <b>6.0142</b>  |
| -5             | 0.95%        | 0.33%        | 7.52%         | 0.2472        | 1.2913               | <b>2.7774</b>  | 0.6041        | 1.3168        | <b>6.6543</b>  |
| -4             | 0.43%        | -0.12%       | 7.95%         | 0.1195        | 1.1692               | 1.4832         | 0.6150        | 1.3238        | <b>6.7392</b>  |
| -3             | 0.67%        | 0.18%        | 8.62%         | 0.2287        | 1.3326               | <b>2.4900</b>  | 0.6516        | 1.3250        | <b>7.1338</b>  |
| -2             | 0.92%        | 0.34%        | 9.54%         | 0.3066        | 1.2561               | <b>3.5404</b>  | 0.7046        | 1.3125        | <b>7.7867</b>  |
| -1             | 1.94%        | 1.15%        | 11.48%        | 0.6548        | 1.6895               | <b>5.6221</b>  | 0.8331        | 1.3837        | <b>8.7340</b>  |
| <b>0</b>       | <b>2.87%</b> | <b>2.30%</b> | <b>14.34%</b> | <b>0.9906</b> | <b>2.3310</b>        | <b>6.1644</b>  | <b>1.0292</b> | <b>1.4640</b> | <b>10.1982</b> |
| 1              | 1.32%        | 0.54%        | 15.66%        | 0.2998        | 2.1137               | <b>2.0575</b>  | 1.0695        | 1.5276        | <b>10.1559</b> |
| 2              | 0.68%        | 0.08%        | 16.34%        | 0.1797        | 1.5670               | <b>1.6637</b>  | 1.0834        | 1.5908        | <b>9.8797</b>  |
| 3              | 0.11%        | -0.13%       | 16.45%        | 0.0055        | 1.1047               | 0.0729         | 1.0618        | 1.5979        | <b>9.6387</b>  |
| 4              | -0.09%       | -0.02%       | 16.37%        | -0.0126       | 1.1293               | -0.1616        | 1.0378        | 1.5815        | <b>9.5189</b>  |
| 5              | -0.19%       | -0.15%       | 16.18%        | -0.0350       | 0.9666               | -0.5246        | 1.0108        | 1.5603        | <b>9.3969</b>  |
| 6              | 0.07%        | -0.06%       | 16.25%        | 0.0354        | 1.0642               | 0.4827         | 0.9987        | 1.5541        | <b>9.3219</b>  |
| 7              | 0.25%        | 0.12%        | 16.50%        | 0.1036        | 0.9142               | 1.6440         | 1.0003        | 1.5386        | <b>9.4304</b>  |
| 8              | 0.27%        | -0.01%       | 16.77%        | 0.1026        | 1.1456               | 1.2989         | 1.0019        | 1.5406        | <b>9.4337</b>  |
| 9              | 0.45%        | 0.08%        | 17.22%        | 0.1771        | 1.1567               | <b>2.2204</b>  | 1.0174        | 1.5723        | <b>9.3869</b>  |
| 10             | 0.35%        | 0.28%        | 17.57%        | 0.1161        | 0.9662               | <b>1.7429</b>  | 1.0217        | 1.5848        | <b>9.3519</b>  |
| 11             | 0.59%        | 0.23%        | 18.16%        | 0.1579        | 1.1401               | <b>2.0084</b>  | 1.0336        | 1.6004        | <b>9.3682</b>  |
| 12             | 0.29%        | 0.08%        | 18.45%        | 0.0844        | 0.9247               | 1.3242         | 1.0325        | 1.6352        | <b>9.1590</b>  |
| 13             | 0.05%        | 0.07%        | 18.49%        | 0.0163        | 1.0545               | 0.2248         | 1.0200        | 1.6237        | <b>9.1122</b>  |
| 14             | -0.01%       | 0.05%        | 18.48%        | 0.0044        | 0.8490               | 0.0749         | 1.0060        | 1.6091        | <b>9.0695</b>  |
| 15             | 0.09%        | -0.06%       | 18.58%        | 0.0174        | 0.9801               | 0.2582         | 0.9949        | 1.6130        | <b>8.9472</b>  |
| 16             | 0.09%        | 0.02%        | 18.67%        | -0.0115       | 1.1060               | -0.1512        | 0.9794        | 1.6193        | <b>8.7740</b>  |
| 17             | 0.06%        | 0.02%        | 18.73%        | 0.0488        | 1.0494               | 0.6748         | 0.9744        | 1.6394        | <b>8.6215</b>  |
| 18             | 0.24%        | -0.05%       | 18.97%        | 0.0322        | 1.2137               | 0.3843         | 0.9670        | 1.6294        | <b>8.6082</b>  |
| 19             | 0.14%        | 0.21%        | 19.11%        | 0.0587        | 1.0501               | 0.8111         | 0.9641        | 1.6158        | <b>8.6551</b>  |
| 20             | 0.66%        | 0.18%        | 19.76%        | 0.2248        | 0.9784               | <b>3.3324</b>  | 0.9874        | 1.6024        | <b>8.9381</b>  |
| 21             | -0.22%       | -0.19%       | 19.55%        | -0.0536       | 0.9789               | -0.7945        | 0.9673        | 1.5957        | <b>8.7928</b>  |
| 22             | -0.26%       | -0.23%       | 19.29%        | -0.0777       | 0.9047               | -1.2462        | 0.9441        | 1.5915        | <b>8.6050</b>  |
| 23             | 0.21%        | 0.03%        | 19.50%        | 0.0515        | 0.9658               | 0.7728         | 0.9411        | 1.6034        | <b>8.5136</b>  |
| 24             | 0.59%        | 0.31%        | 20.08%        | 0.1821        | 0.8843               | <b>2.9874</b>  | 0.9577        | 1.5737        | <b>8.8277</b>  |
| 25             | -0.08%       | -0.05%       | 20.00%        | -0.0168       | 0.9691               | -0.2513        | 0.9447        | 1.5760        | <b>8.6958</b>  |
| 26             | -0.06%       | 0.04%        | 19.94%        | 0.0153        | 0.8350               | 0.2662         | 0.9369        | 1.5642        | <b>8.6883</b>  |
| 27             | 0.30%        | 0.31%        | 20.25%        | 0.1003        | 0.9697               | 1.5006         | 0.9415        | 1.5562        | <b>8.7766</b>  |
| 28             | 0.05%        | 0.03%        | 20.30%        | 0.0008        | 0.9856               | 0.0116         | 0.9320        | 1.5540        | <b>8.6999</b>  |
| 29             | 0.15%        | -0.04%       | 20.44%        | 0.0534        | 1.0862               | 0.7126         | 0.9302        | 1.5537        | <b>8.6847</b>  |
| 30             | 0.35%        | 0.28%        | 20.80%        | 0.1153        | 0.8823               | <b>1.8954</b>  | 0.9372        | 1.5520        | <b>8.7594</b>  |
| <b>-1 to 1</b> |              |              | <b>6.12%</b>  |               | <b>StdDev(AAR-0)</b> | <b>0.06218</b> | 1.1230        | 2.1878        | <b>7.4460</b>  |

Table-A 5.18 Market returns to Targets; EWI-Firms; (MM, 220); EWI

| Days           | AAR          | Median       | CAAR          | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|---------------|----------------------|----------------|---------------|---------------|----------------|
| -20            | 0.33%        | 0.09%        | 0.33%         | 0.1298        | 1.2323               | 1.5193         | 0.1298        | 1.2323        | 1.5193         |
| -19            | 0.60%        | 0.16%        | 0.93%         | 0.2303        | 1.0044               | <b>3.3082</b>  | 0.2546        | 1.1662        | <b>3.1499</b>  |
| -18            | 0.42%        | -0.07%       | 1.36%         | 0.0804        | 1.0901               | 1.0649         | 0.2543        | 1.0481        | <b>3.5012</b>  |
| -17            | 0.28%        | 0.14%        | 1.64%         | 0.1553        | 1.2029               | <b>1.8625</b>  | 0.2979        | 1.2259        | <b>3.5062</b>  |
| -16            | 0.22%        | -0.04%       | 1.85%         | 0.0420        | 1.1004               | 0.5513         | 0.2852        | 1.2518        | <b>3.2879</b>  |
| -15            | 0.42%        | 0.08%        | 2.27%         | 0.1073        | 1.1022               | 1.4048         | 0.3042        | 1.2510        | <b>3.5086</b>  |
| -14            | 0.54%        | 0.13%        | 2.80%         | 0.1895        | 1.3567               | <b>2.0154</b>  | 0.3532        | 1.2428        | <b>4.1013</b>  |
| -13            | 0.16%        | -0.05%       | 2.97%         | 0.0663        | 1.1825               | 0.8089         | 0.3539        | 1.2470        | <b>4.0946</b>  |
| -12            | 0.47%        | 0.19%        | 3.43%         | 0.1707        | 1.1476               | <b>2.1461</b>  | 0.3905        | 1.3048        | <b>4.3187</b>  |
| -11            | 0.41%        | 0.31%        | 3.84%         | 0.1639        | 1.2530               | <b>1.8875</b>  | 0.4223        | 1.3066        | <b>4.6639</b>  |
| -10            | 0.45%        | 0.25%        | 4.29%         | 0.1491        | 1.2546               | <b>1.7151</b>  | 0.4476        | 1.3248        | <b>4.8755</b>  |
| -9             | 1.12%        | 0.31%        | 5.40%         | 0.3364        | 1.3866               | <b>3.5007</b>  | 0.5257        | 1.3502        | <b>5.6178</b>  |
| -8             | 0.09%        | -0.09%       | 5.49%         | 0.0653        | 1.1275               | 0.8362         | 0.5232        | 1.3472        | <b>5.6036</b>  |
| -7             | 0.56%        | 0.23%        | 6.05%         | 0.1719        | 1.2695               | <b>1.9535</b>  | 0.5501        | 1.3378        | <b>5.9330</b>  |
| -6             | 0.64%        | 0.10%        | 6.69%         | 0.2186        | 1.2406               | <b>2.5430</b>  | 0.5879        | 1.3495        | <b>6.2859</b>  |
| -5             | 0.94%        | 0.28%        | 7.63%         | 0.2554        | 1.2883               | <b>2.8601</b>  | 0.6330        | 1.3183        | <b>6.9294</b>  |
| -4             | 0.41%        | -0.07%       | 8.04%         | 0.1244        | 1.1615               | 1.5458         | 0.6443        | 1.3244        | <b>7.0202</b>  |
| -3             | 0.67%        | 0.14%        | 8.71%         | 0.2450        | 1.3313               | <b>2.6553</b>  | 0.6839        | 1.3263        | <b>7.4406</b>  |
| -2             | 0.88%        | 0.36%        | 9.59%         | 0.3110        | 1.2829               | <b>3.4977</b>  | 0.7370        | 1.3142        | <b>8.0924</b>  |
| -1             | 1.97%        | 1.20%        | 11.57%        | 0.6812        | 1.7065               | <b>5.7597</b>  | 0.8707        | 1.3815        | <b>9.0941</b>  |
| <b>0</b>       | <b>2.94%</b> | <b>2.33%</b> | <b>14.51%</b> | <b>1.0258</b> | <b>2.3285</b>        | <b>6.3572</b>  | <b>1.0735</b> | <b>1.4636</b> | <b>10.5839</b> |
| 1              | 1.32%        | 0.62%        | 15.83%        | 0.3034        | 2.1734               | <b>2.0144</b>  | 1.1135        | 1.5302        | <b>10.5008</b> |
| 2              | 0.67%        | 0.11%        | 16.49%        | 0.1874        | 1.6064               | <b>1.6832</b>  | 1.1281        | 1.6030        | <b>10.1553</b> |
| 3              | 0.02%        | -0.22%       | 16.51%        | -0.0216       | 1.1388               | -0.2732        | 1.1000        | 1.6130        | <b>9.8401</b>  |
| 4              | -0.11%       | -0.01%       | 16.40%        | -0.0217       | 1.1211               | -0.2793        | 1.0734        | 1.5997        | <b>9.6823</b>  |
| 5              | -0.17%       | -0.08%       | 16.23%        | -0.0219       | 0.9736               | -0.3250        | 1.0483        | 1.5811        | <b>9.5672</b>  |
| 6              | 0.06%        | -0.25%       | 16.30%        | 0.0379        | 1.0638               | 0.5137         | 1.0360        | 1.5738        | <b>9.4983</b>  |
| 7              | 0.30%        | 0.16%        | 16.59%        | 0.1160        | 0.9150               | <b>1.8294</b>  | 1.0392        | 1.5643        | <b>9.5862</b>  |
| 8              | 0.20%        | -0.04%       | 16.80%        | 0.0811        | 1.1756               | 0.9959         | 1.0362        | 1.5706        | <b>9.5203</b>  |
| 9              | 0.44%        | 0.09%        | 17.24%        | 0.1808        | 1.1569               | <b>2.2554</b>  | 1.0518        | 1.5991        | <b>9.4914</b>  |
| 10             | 0.35%        | 0.20%        | 17.59%        | 0.1209        | 0.9917               | <b>1.7594</b>  | 1.0564        | 1.6117        | <b>9.4582</b>  |
| 11             | 0.59%        | 0.19%        | 18.18%        | 0.1574        | 1.1408               | <b>1.9909</b>  | 1.0676        | 1.6334        | <b>9.4313</b>  |
| 12             | 0.26%        | 0.05%        | 18.44%        | 0.0703        | 0.9401               | 1.0786         | 1.0635        | 1.6676        | <b>9.2026</b>  |
| 13             | 0.01%        | 0.04%        | 18.45%        | 0.0077        | 1.0350               | 0.1068         | 1.0491        | 1.6572        | <b>9.1348</b>  |
| 14             | -0.02%       | -0.02%       | 18.43%        | -0.0001       | 0.8275               | -0.0025        | 1.0340        | 1.6403        | <b>9.0961</b>  |
| 15             | 0.08%        | -0.05%       | 18.51%        | 0.0194        | 0.9645               | 0.2899         | 1.0228        | 1.6436        | <b>8.9790</b>  |
| 16             | 0.14%        | 0.02%        | 18.65%        | 0.0020        | 1.0974               | 0.0269         | 1.0092        | 1.6489        | <b>8.8314</b>  |
| 17             | 0.08%        | 0.08%        | 18.73%        | 0.0597        | 1.0199               | 0.8439         | 1.0055        | 1.6693        | <b>8.6915</b>  |
| 18             | 0.24%        | 0.07%        | 18.97%        | 0.0374        | 1.2332               | 0.4375         | 0.9985        | 1.6621        | <b>8.6686</b>  |
| 19             | 0.10%        | 0.06%        | 19.07%        | 0.0540        | 1.0330               | 0.7543         | 0.9945        | 1.6501        | <b>8.6961</b>  |
| 20             | 0.67%        | 0.27%        | 19.74%        | 0.2264        | 0.9746               | <b>3.3521</b>  | 1.0176        | 1.6398        | <b>8.9548</b>  |
| 21             | -0.23%       | -0.28%       | 19.51%        | -0.0537       | 0.9832               | -0.7887        | 0.9972        | 1.6338        | <b>8.8070</b>  |
| 22             | -0.25%       | -0.25%       | 19.26%        | -0.0729       | 0.8820               | -1.1928        | 0.9744        | 1.6327        | <b>8.6112</b>  |
| 23             | 0.22%        | 0.07%        | 19.47%        | 0.0603        | 0.9683               | 0.8980         | 0.9723        | 1.6451        | <b>8.5284</b>  |
| 24             | 0.59%        | 0.25%        | 20.07%        | 0.1850        | 0.8982               | <b>2.9726</b>  | 0.9890        | 1.6148        | <b>8.8381</b>  |
| 25             | -0.02%       | -0.17%       | 20.05%        | 0.0037        | 0.9817               | 0.0543         | 0.9788        | 1.6208        | <b>8.7138</b>  |
| 26             | -0.02%       | 0.05%        | 20.03%        | 0.0190        | 0.8454               | 0.3246         | 0.9711        | 1.6132        | <b>8.6861</b>  |
| 27             | 0.30%        | 0.20%        | 20.33%        | 0.1022        | 0.9748               | 1.5130         | 0.9757        | 1.6067        | <b>8.7623</b>  |
| 28             | 0.07%        | -0.04%       | 20.40%        | 0.0106        | 0.9839               | 0.1555         | 0.9672        | 1.6014        | <b>8.7147</b>  |
| 29             | 0.16%        | 0.03%        | 20.56%        | 0.0598        | 1.0636               | 0.8106         | 0.9659        | 1.6015        | <b>8.7027</b>  |
| 30             | 0.40%        | 0.28%        | 20.96%        | 0.1252        | 0.8892               | <b>2.0324</b>  | 0.9739        | 1.6036        | <b>8.7636</b>  |
| <b>-1 to 1</b> |              |              | <b>6.23%</b>  |               | <b>StdDev(AAR-0)</b> | <b>0.06102</b> | 1.1607        | 2.2034        | <b>7.6013</b>  |



Table-A 5.19 SW-1 returns to Targets; EWI-Firms; (OLS, 226); EWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.07%       | -0.15%       | -0.07%       | 0.0075               | 1.0343        | 0.1075         | 0.0075        | 1.0343        | 0.1076        |
| -19            | 0.35%        | 0.11%        | 0.28%        | 0.1206               | 0.8854        | <b>2.0245</b>  | 0.0905        | 0.9510        | 1.4155        |
| -18            | 0.33%        | -0.31%       | 0.61%        | 0.0284               | 0.9599        | 0.4401         | 0.0903        | 0.9084        | 1.4786        |
| -17            | 0.00%        | -0.07%       | 0.61%        | 0.0692               | 1.0130        | 1.0154         | 0.1128        | 1.0125        | <b>1.6569</b> |
| -16            | -0.02%       | -0.18%       | 0.59%        | -0.0284              | 0.9477        | -0.4456        | 0.0882        | 1.0284        | 1.2753        |
| -15            | 0.30%        | -0.09%       | 0.88%        | 0.0582               | 0.9872        | 0.8757         | 0.1043        | 1.0596        | 1.4630        |
| -14            | 0.41%        | 0.04%        | 1.30%        | 0.0872               | 1.1077        | 1.1701         | 0.1295        | 1.0441        | <b>1.8438</b> |
| -13            | -0.04%       | -0.19%       | 1.26%        | -0.0155              | 0.9864        | -0.2340        | 0.1156        | 1.0427        | 1.6486        |
| -12            | 0.26%        | 0.02%        | 1.52%        | 0.0900               | 0.9937        | 1.3472         | 0.1390        | 1.0741        | <b>1.9243</b> |
| -11            | 0.19%        | 0.25%        | 1.71%        | 0.0770               | 1.0601        | 1.0804         | 0.1563        | 1.0793        | <b>2.1525</b> |
| -10            | 0.19%        | -0.03%       | 1.90%        | 0.0668               | 1.0538        | 0.9424         | 0.1691        | 1.0986        | <b>2.2889</b> |
| -9             | 0.85%        | 0.16%        | 2.75%        | 0.2053               | 1.1720        | <b>2.6049</b>  | 0.2212        | 1.1111        | <b>2.9600</b> |
| -8             | -0.15%       | -0.23%       | 2.60%        | 0.0084               | 0.9912        | 0.1256         | 0.2148        | 1.1191        | <b>2.8544</b> |
| -7             | 0.31%        | -0.04%       | 2.91%        | 0.0720               | 1.0904        | 0.9811         | 0.2263        | 1.1204        | <b>3.0027</b> |
| -6             | 0.45%        | 0.07%        | 3.37%        | 0.1375               | 1.0616        | <b>1.9257</b>  | 0.2541        | 1.1333        | <b>3.3335</b> |
| -5             | 0.62%        | 0.11%        | 3.99%        | 0.1474               | 1.1357        | <b>1.9301</b>  | 0.2829        | 1.1132        | <b>3.7784</b> |
| -4             | 0.17%        | -0.22%       | 4.16%        | 0.0495               | 1.0153        | 0.7249         | 0.2865        | 1.1283        | <b>3.7745</b> |
| -3             | 0.59%        | 0.10%        | 4.75%        | 0.1604               | 1.1168        | <b>2.1357</b>  | 0.3162        | 1.1173        | <b>4.2076</b> |
| -2             | 0.60%        | 0.00%        | 5.35%        | 0.1916               | 1.0955        | <b>2.5999</b>  | 0.3517        | 1.1103        | <b>4.7096</b> |
| -1             | 1.70%        | 0.82%        | 7.05%        | 0.5054               | 1.4024        | <b>5.3574</b>  | 0.4558        | 1.1426        | <b>5.9309</b> |
| <b>0</b>       | <b>2.74%</b> | <b>1.97%</b> | <b>9.80%</b> | <b>0.8174</b>        | <b>1.9741</b> | <b>6.1564</b>  | <b>0.6232</b> | <b>1.1998</b> | <b>7.7227</b> |
| 1              | 1.05%        | 0.36%        | 10.85%       | 0.2217               | 1.6812        | <b>1.9609</b>  | 0.6561        | 1.2482        | <b>7.8153</b> |
| 2              | 0.49%        | -0.04%       | 11.33%       | 0.1178               | 1.3576        | 1.2904         | 0.6663        | 1.3112        | <b>7.5547</b> |
| 3              | -0.26%       | -0.48%       | 11.08%       | -0.0965              | 1.0469        | -1.3711        | 0.6326        | 1.3200        | <b>7.1246</b> |
| 4              | -0.37%       | -0.37%       | 10.71%       | -0.0978              | 1.0304        | -1.4112        | 0.6002        | 1.3240        | <b>6.7401</b> |
| 5              | -0.39%       | -0.36%       | 10.32%       | -0.0659              | 0.8941        | -1.0952        | 0.5756        | 1.3114        | <b>6.5260</b> |
| 6              | -0.18%       | -0.49%       | 10.15%       | -0.0268              | 0.9084        | -0.4394        | 0.5597        | 1.3049        | <b>6.3771</b> |
| 7              | -0.26%       | -0.11%       | 9.89%        | -0.0364              | 0.9879        | -0.5472        | 0.5427        | 1.3080        | <b>6.1694</b> |
| 8              | -0.13%       | -0.23%       | 9.75%        | -0.0354              | 1.0428        | -0.5047        | 0.5267        | 1.3171        | <b>5.9460</b> |
| 9              | 0.18%        | -0.14%       | 9.94%        | 0.0949               | 0.9836        | 1.4340         | 0.5352        | 1.3346        | <b>5.9621</b> |
| 10             | 0.34%        | -0.03%       | 10.27%       | 0.0860               | 1.0572        | 1.2096         | 0.5419        | 1.3399        | <b>6.0134</b> |
| 11             | 0.32%        | -0.18%       | 10.59%       | 0.0490               | 0.9873        | 0.7372         | 0.5421        | 1.3622        | <b>5.9164</b> |
| 12             | -0.04%       | -0.17%       | 10.54%       | -0.0241              | 0.8015        | -0.4473        | 0.5296        | 1.3833        | <b>5.6917</b> |
| 13             | -0.18%       | -0.09%       | 10.37%       | -0.0322              | 0.9099        | -0.5269        | 0.5162        | 1.3768        | <b>5.5742</b> |
| 14             | -0.25%       | -0.24%       | 10.12%       | -0.0533              | 0.7401        | -1.0704        | 0.4997        | 1.3581        | <b>5.4709</b> |
| 15             | -0.23%       | -0.26%       | 9.89%        | -0.0828              | 0.8147        | -1.5111        | 0.4790        | 1.3577        | <b>5.2451</b> |
| 16             | -0.13%       | -0.17%       | 9.76%        | -0.1015              | 0.8750        | <b>-1.7252</b> | 0.4557        | 1.3680        | <b>4.9533</b> |
| 17             | -0.24%       | -0.14%       | 9.52%        | -0.0622              | 0.9460        | -0.9771        | 0.4396        | 1.3842        | <b>4.7218</b> |
| 18             | 0.04%        | -0.17%       | 9.56%        | 0.0152               | 1.0566        | 0.2139         | 0.4364        | 1.3776        | <b>4.7097</b> |
| 19             | -0.13%       | -0.22%       | 9.43%        | -0.0296              | 0.8442        | -0.5219        | 0.4262        | 1.3676        | <b>4.6336</b> |
| 20             | 0.45%        | 0.08%        | 9.88%        | 0.1073               | 0.7791        | <b>2.0482</b>  | 0.4377        | 1.3675        | <b>4.7593</b> |
| 21             | -0.45%       | -0.38%       | 9.43%        | -0.1164              | 0.9245        | <b>-1.8726</b> | 0.4145        | 1.3584        | <b>4.5370</b> |
| 22             | -0.55%       | -0.55%       | 8.88%        | -0.1715              | 0.8551        | <b>-2.9821</b> | 0.3835        | 1.3595        | <b>4.1942</b> |
| 23             | -0.39%       | -0.09%       | 8.48%        | -0.0874              | 1.1116        | -1.1695        | 0.3660        | 1.3807        | <b>3.9409</b> |
| 24             | 0.33%        | 0.10%        | 8.81%        | 0.0924               | 0.7938        | <b>1.7312</b>  | 0.3757        | 1.3530        | <b>4.1280</b> |
| 25             | -0.25%       | -0.38%       | 8.57%        | -0.0610              | 0.8783        | -1.0331        | 0.3626        | 1.3530        | <b>3.9841</b> |
| 26             | 0.02%        | -0.16%       | 8.59%        | -0.0105              | 0.9986        | -0.1567        | 0.3571        | 1.3389        | <b>3.9658</b> |
| 27             | -0.18%       | -0.10%       | 8.41%        | 0.0167               | 1.1245        | 0.2202         | 0.3558        | 1.3210        | <b>4.0046</b> |
| 28             | -0.15%       | -0.22%       | 8.26%        | -0.0477              | 0.8686        | -0.8170        | 0.3453        | 1.3132        | <b>3.9099</b> |
| 29             | -0.08%       | -0.06%       | 8.18%        | -0.0077              | 0.9284        | -0.1239        | 0.3408        | 1.3075        | <b>3.8751</b> |
| 30             | 0.21%        | -0.03%       | 8.39%        | 0.0550               | 0.7876        | 1.0386         | 0.3451        | 1.3028        | <b>3.9384</b> |
| <b>-1 to 1</b> |              |              | <b>5.50%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06104</b> | 0.8917        | 1.7902        | <b>7.4056</b> |

Table-A 5.20 SW-2 returns to Targets; EWI-Firms; (OLS, 226); EWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.10%       | -0.18%       | -0.10%       | 0.0042               | 1.0327        | 0.0605         | 0.0042        | 1.0327        | 0.0606        |
| -19            | 0.39%        | 0.07%        | 0.29%        | 0.1272               | 0.8933        | <b>2.1272</b>  | 0.0929        | 0.9536        | 1.4556        |
| -18            | 0.32%        | -0.30%       | 0.60%        | 0.0243               | 0.9597        | 0.3777         | 0.0899        | 0.9064        | 1.4814        |
| -17            | 0.01%        | -0.05%       | 0.61%        | 0.0722               | 1.0129        | 1.0657         | 0.1140        | 1.0113        | <b>1.6837</b> |
| -16            | 0.01%        | -0.17%       | 0.62%        | -0.0261              | 0.9482        | -0.4106        | 0.0903        | 1.0277        | 1.3124        |
| -15            | 0.32%        | 0.05%        | 0.94%        | 0.0656               | 0.9895        | 0.9905         | 0.1092        | 1.0545        | 1.5470        |
| -14            | 0.35%        | 0.05%        | 1.29%        | 0.0742               | 1.1001        | 1.0085         | 0.1291        | 1.0364        | <b>1.8619</b> |
| -13            | -0.12%       | -0.18%       | 1.17%        | -0.0284              | 0.9735        | -0.4352        | 0.1108        | 1.0310        | 1.6054        |
| -12            | 0.28%        | 0.07%        | 1.45%        | 0.0958               | 0.9984        | 1.4335         | 0.1364        | 1.0620        | <b>1.9185</b> |
| -11            | 0.14%        | 0.08%        | 1.59%        | 0.0703               | 1.0643        | 0.9873         | 0.1516        | 1.0650        | <b>2.1271</b> |
| -10            | 0.19%        | -0.18%       | 1.79%        | 0.0635               | 1.0497        | 0.9033         | 0.1637        | 1.0854        | <b>2.2533</b> |
| -9             | 0.84%        | 0.16%        | 2.62%        | 0.1982               | 1.1636        | <b>2.5459</b>  | 0.2139        | 1.0988        | <b>2.9094</b> |
| -8             | -0.20%       | -0.29%       | 2.43%        | 0.0012               | 0.9952        | 0.0184         | 0.2059        | 1.1077        | <b>2.7773</b> |
| -7             | 0.27%        | -0.09%       | 2.70%        | 0.0699               | 1.0924        | 0.9556         | 0.2171        | 1.1109        | <b>2.9198</b> |
| -6             | 0.41%        | 0.11%        | 3.11%        | 0.1274               | 1.0650        | <b>1.7877</b>  | 0.2426        | 1.1257        | <b>3.2204</b> |
| -5             | 0.62%        | 0.11%        | 3.73%        | 0.1430               | 1.1264        | <b>1.8965</b>  | 0.2707        | 1.1092        | <b>3.6462</b> |
| -4             | 0.16%        | -0.26%       | 3.89%        | 0.0506               | 1.0185        | 0.7424         | 0.2748        | 1.1258        | <b>3.6481</b> |
| -3             | 0.56%        | 0.08%        | 4.45%        | 0.1542               | 1.1051        | <b>2.0855</b>  | 0.3034        | 1.1165        | <b>4.0613</b> |
| -2             | 0.58%        | -0.07%       | 5.03%        | 0.1895               | 1.1007        | <b>2.5724</b>  | 0.3388        | 1.1074        | <b>4.5722</b> |
| -1             | 1.74%        | 0.88%        | 6.77%        | 0.5072               | 1.4000        | <b>5.4131</b>  | 0.4437        | 1.1390        | <b>5.8201</b> |
| <b>0</b>       | <b>2.76%</b> | <b>1.68%</b> | <b>9.53%</b> | <b>0.8179</b>        | <b>1.9767</b> | <b>6.1830</b>  | <b>0.6114</b> | <b>1.1950</b> | <b>7.6454</b> |
| 1              | 1.03%        | 0.37%        | 10.56%       | 0.2177               | 1.6755        | <b>1.9419</b>  | 0.6438        | 1.2412        | <b>7.7504</b> |
| 2              | 0.51%        | -0.01%       | 11.07%       | 0.1221               | 1.3631        | 1.3386         | 0.6551        | 1.3055        | <b>7.4981</b> |
| 3              | -0.25%       | -0.44%       | 10.82%       | -0.0947              | 1.0485        | -1.3496        | 0.6220        | 1.3148        | <b>7.0692</b> |
| 4              | -0.39%       | -0.40%       | 10.43%       | -0.1039              | 1.0276        | -1.5108        | 0.5886        | 1.3174        | <b>6.6768</b> |
| 5              | -0.37%       | -0.31%       | 10.06%       | -0.0626              | 0.8965        | -1.0439        | 0.5649        | 1.3043        | <b>6.4723</b> |
| 6              | -0.19%       | -0.39%       | 9.87%        | -0.0320              | 0.9018        | -0.5295        | 0.5482        | 1.2970        | <b>6.3162</b> |
| 7              | -0.25%       | -0.09%       | 9.62%        | -0.0350              | 0.9796        | -0.5342        | 0.5317        | 1.3011        | <b>6.1064</b> |
| 8              | -0.15%       | -0.27%       | 9.46%        | -0.0379              | 1.0481        | -0.5406        | 0.5154        | 1.3134        | <b>5.8642</b> |
| 9              | 0.21%        | -0.10%       | 9.68%        | 0.1024               | 0.9917        | 1.5436         | 0.5255        | 1.3324        | <b>5.8927</b> |
| 10             | 0.31%        | -0.01%       | 9.99%        | 0.0831               | 1.0524        | 1.1800         | 0.5318        | 1.3392        | <b>5.9342</b> |
| 11             | 0.30%        | -0.15%       | 10.29%       | 0.0469               | 0.9874        | 0.7104         | 0.5318        | 1.3620        | <b>5.8341</b> |
| 12             | -0.05%       | -0.17%       | 10.23%       | -0.0260              | 0.8052        | -0.4826        | 0.5191        | 1.3843        | <b>5.6034</b> |
| 13             | -0.17%       | -0.09%       | 10.07%       | -0.0299              | 0.9155        | -0.4877        | 0.5063        | 1.3802        | <b>5.4813</b> |
| 14             | -0.25%       | -0.15%       | 9.82%        | -0.0505              | 0.7321        | -1.0306        | 0.4904        | 1.3624        | <b>5.3793</b> |
| 15             | -0.25%       | -0.26%       | 9.57%        | -0.0859              | 0.8177        | -1.5700        | 0.4693        | 1.3590        | <b>5.1598</b> |
| 16             | -0.13%       | -0.19%       | 9.44%        | -0.0975              | 0.8705        | <b>-1.6743</b> | 0.4468        | 1.3680        | <b>4.8808</b> |
| 17             | -0.21%       | -0.10%       | 9.23%        | -0.0494              | 0.9436        | -0.7820        | 0.4329        | 1.3831        | <b>4.6771</b> |
| 18             | -0.04%       | -0.09%       | 9.19%        | -0.0020              | 1.0617        | -0.0280        | 0.4270        | 1.3784        | <b>4.6290</b> |
| 19             | -0.17%       | -0.14%       | 9.02%        | -0.0351              | 0.8525        | -0.6155        | 0.4161        | 1.3693        | <b>4.5407</b> |
| 20             | 0.44%        | 0.15%        | 9.46%        | 0.1063               | 0.7849        | <b>2.0234</b>  | 0.4276        | 1.3676        | <b>4.6716</b> |
| 21             | -0.38%       | -0.33%       | 9.08%        | -0.1060              | 0.9202        | <b>-1.7221</b> | 0.4061        | 1.3588        | <b>4.4658</b> |
| 22             | -0.52%       | -0.52%       | 8.55%        | -0.1680              | 0.8574        | <b>-2.9272</b> | 0.3757        | 1.3580        | <b>4.1343</b> |
| 23             | -0.38%       | -0.16%       | 8.18%        | -0.0879              | 1.1166        | -1.1758        | 0.3582        | 1.3788        | <b>3.8820</b> |
| 24             | 0.32%        | 0.11%        | 8.50%        | 0.0876               | 0.7952        | 1.6452         | 0.3673        | 1.3510        | <b>4.0620</b> |
| 25             | -0.26%       | -0.34%       | 8.24%        | -0.0688              | 0.8715        | -1.1789        | 0.3531        | 1.3484        | <b>3.9131</b> |
| 26             | 0.01%        | -0.18%       | 8.25%        | -0.0116              | 0.9947        | -0.1744        | 0.3476        | 1.3332        | <b>3.8964</b> |
| 27             | -0.18%       | -0.08%       | 8.08%        | 0.0146               | 1.1321        | 0.1922         | 0.3461        | 1.3168        | <b>3.9273</b> |
| 28             | -0.16%       | -0.17%       | 7.91%        | -0.0499              | 0.8796        | -0.8478        | 0.3354        | 1.3111        | <b>3.8228</b> |
| 29             | -0.14%       | -0.07%       | 7.77%        | -0.0177              | 0.9403        | -0.2817        | 0.3295        | 1.3041        | <b>3.7759</b> |
| 30             | 0.20%        | -0.09%       | 7.97%        | 0.0489               | 0.7873        | 0.9280         | 0.3331        | 1.3005        | <b>3.8276</b> |
| <b>-1 to 1</b> |              |              | <b>5.53%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06141</b> | 0.8907        | 1.7844        | <b>7.4589</b> |

Table-A 5.21 SW-3 returns to Targets; EWI-Firms; (OLS, 226); EWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.13%       | -0.18%       | -0.13%       | -0.0021              | 1.0204        | -0.0305        | -0.0021       | 1.0204        | -0.0304       |
| -19            | 0.39%        | 0.03%        | 0.26%        | 0.1279               | 0.8909        | <b>2.1410</b>  | 0.0890        | 0.9456        | 1.4033        |
| -18            | 0.33%        | -0.20%       | 0.59%        | 0.0239               | 0.9522        | 0.3744         | 0.0865        | 0.8935        | 1.4431        |
| -17            | 0.01%        | -0.05%       | 0.60%        | 0.0706               | 1.0076        | 1.0455         | 0.1102        | 0.9956        | 1.6507        |
| -16            | 0.01%        | -0.07%       | 0.61%        | -0.0263              | 0.9452        | -0.4152        | 0.0868        | 1.0180        | 1.2714        |
| -15            | 0.33%        | -0.02%       | 0.95%        | 0.0639               | 0.9897        | 0.9633         | 0.1053        | 1.0445        | 1.5038        |
| -14            | 0.36%        | 0.04%        | 1.31%        | 0.0802               | 1.0945        | 1.0932         | 0.1278        | 1.0284        | <b>1.8538</b> |
| -13            | -0.13%       | -0.25%       | 1.18%        | -0.0352              | 0.9806        | -0.5351        | 0.1071        | 1.0277        | 1.5547        |
| -12            | 0.30%        | 0.05%        | 1.48%        | 0.0987               | 1.0002        | 1.4714         | 0.1339        | 1.0569        | <b>1.8894</b> |
| -11            | 0.14%        | 0.01%        | 1.62%        | 0.0660               | 1.0730        | 0.9168         | 0.1479        | 1.0637        | <b>2.0734</b> |
| -10            | 0.16%        | -0.16%       | 1.78%        | 0.0555               | 1.0482        | 0.7892         | 0.1577        | 1.0875        | <b>2.1631</b> |
| -9             | 0.83%        | 0.06%        | 2.61%        | 0.1947               | 1.1693        | <b>2.4834</b>  | 0.2072        | 1.0996        | <b>2.8106</b> |
| -8             | -0.18%       | -0.28%       | 2.43%        | -0.0018              | 0.9974        | -0.0264        | 0.1986        | 1.1104        | <b>2.6675</b> |
| -7             | 0.27%        | -0.07%       | 2.70%        | 0.0645               | 1.0986        | 0.8756         | 0.2086        | 1.1152        | <b>2.7901</b> |
| -6             | 0.39%        | 0.08%        | 3.09%        | 0.1196               | 1.0712        | <b>1.6654</b>  | 0.2324        | 1.1332        | <b>3.0589</b> |
| -5             | 0.63%        | 0.07%        | 3.72%        | 0.1423               | 1.1379        | <b>1.8644</b>  | 0.2606        | 1.1125        | <b>3.4938</b> |
| -4             | 0.22%        | -0.20%       | 3.94%        | 0.0579               | 1.0110        | 0.8540         | 0.2669        | 1.1275        | <b>3.5301</b> |
| -3             | 0.58%        | 0.11%        | 4.52%        | 0.1551               | 1.1010        | <b>2.1007</b>  | 0.2959        | 1.1198        | <b>3.9410</b> |
| -2             | 0.60%        | -0.03%       | 5.12%        | 0.1842               | 1.1082        | <b>2.4782</b>  | 0.3303        | 1.1112        | <b>4.4328</b> |
| -1             | 1.73%        | 0.95%        | 6.85%        | 0.5075               | 1.3983        | <b>5.4125</b>  | 0.4354        | 1.1424        | <b>5.6836</b> |
| <b>0</b>       | <b>2.80%</b> | <b>1.84%</b> | <b>9.66%</b> | <b>0.8261</b>        | <b>1.9709</b> | <b>6.2509</b>  | <b>0.6052</b> | <b>1.1949</b> | <b>7.5531</b> |
| 1              | 1.06%        | 0.38%        | 10.72%       | 0.2211               | 1.6730        | <b>1.9706</b>  | 0.6384        | 1.2390        | <b>7.6837</b> |
| 2              | 0.51%        | 0.08%        | 11.23%       | 0.1182               | 1.3580        | 1.2980         | 0.6490        | 1.2990        | <b>7.4509</b> |
| 3              | -0.24%       | -0.41%       | 10.99%       | -0.0895              | 1.0414        | -1.2813        | 0.6171        | 1.3096        | <b>7.0269</b> |
| 4              | -0.42%       | -0.43%       | 10.58%       | -0.1050              | 1.0185        | -1.5374        | 0.5836        | 1.3117        | <b>6.6355</b> |
| 5              | -0.35%       | -0.34%       | 10.23%       | -0.0598              | 0.9028        | -0.9883        | 0.5605        | 1.2977        | <b>6.4419</b> |
| 6              | -0.18%       | -0.38%       | 10.05%       | -0.0297              | 0.9092        | -0.4876        | 0.5443        | 1.2912        | <b>6.2870</b> |
| 7              | -0.25%       | -0.10%       | 9.81%        | -0.0354              | 0.9608        | -0.5494        | 0.5278        | 1.2935        | <b>6.0858</b> |
| 8              | -0.17%       | -0.27%       | 9.64%        | -0.0392              | 1.0570        | -0.5537        | 0.5114        | 1.3067        | <b>5.8363</b> |
| 9              | 0.22%        | -0.13%       | 9.86%        | 0.1078               | 0.9836        | 1.6340         | 0.5224        | 1.3229        | <b>5.8895</b> |
| 10             | 0.33%        | 0.02%        | 10.19%       | 0.0841               | 1.0538        | 1.1902         | 0.5290        | 1.3316        | <b>5.9252</b> |
| 11             | 0.32%        | -0.07%       | 10.51%       | 0.0497               | 0.9978        | 0.7428         | 0.5295        | 1.3570        | <b>5.8191</b> |
| 12             | -0.07%       | -0.12%       | 10.44%       | -0.0309              | 0.8151        | -0.5661        | 0.5160        | 1.3774        | <b>5.5871</b> |
| 13             | -0.19%       | -0.15%       | 10.25%       | -0.0348              | 0.9078        | -0.5719        | 0.5024        | 1.3742        | <b>5.4520</b> |
| 14             | -0.27%       | -0.20%       | 9.98%        | -0.0561              | 0.7340        | -1.1397        | 0.4857        | 1.3580        | <b>5.3336</b> |
| 15             | -0.25%       | -0.27%       | 9.73%        | -0.0845              | 0.8100        | -1.5562        | 0.4648        | 1.3558        | <b>5.1124</b> |
| 16             | -0.13%       | -0.23%       | 9.60%        | -0.0948              | 0.8582        | -1.6481        | 0.4429        | 1.3622        | <b>4.8483</b> |
| 17             | -0.17%       | -0.13%       | 9.43%        | -0.0395              | 0.9295        | -0.6331        | 0.4306        | 1.3760        | <b>4.6668</b> |
| 18             | -0.04%       | -0.14%       | 9.39%        | -0.0108              | 1.0475        | -0.1542        | 0.4233        | 1.3707        | <b>4.6054</b> |
| 19             | -0.14%       | -0.10%       | 9.25%        | -0.0366              | 0.8494        | -0.6418        | 0.4122        | 1.3611        | <b>4.5165</b> |
| 20             | 0.43%        | 0.10%        | 9.68%        | 0.1059               | 0.7813        | <b>2.0214</b>  | 0.4237        | 1.3589        | <b>4.6498</b> |
| 21             | -0.39%       | -0.44%       | 9.29%        | -0.1060              | 0.9178        | <b>-1.7215</b> | 0.4023        | 1.3484        | <b>4.4488</b> |
| 22             | -0.55%       | -0.49%       | 8.73%        | -0.1732              | 0.8558        | <b>-3.0184</b> | 0.3711        | 1.3444        | <b>4.1171</b> |
| 23             | -0.33%       | -0.14%       | 8.41%        | -0.0727              | 1.1096        | -0.9775        | 0.3559        | 1.3627        | <b>3.8954</b> |
| 24             | 0.30%        | 0.08%        | 8.71%        | 0.0800               | 0.8083        | 1.4753         | 0.3639        | 1.3365        | <b>4.0605</b> |
| 25             | -0.26%       | -0.38%       | 8.46%        | -0.0667              | 0.8780        | -1.1321        | 0.3501        | 1.3311        | <b>3.9221</b> |
| 26             | 0.00%        | -0.18%       | 8.46%        | -0.0127              | 0.9868        | -0.1918        | 0.3445        | 1.3183        | <b>3.8970</b> |
| 27             | -0.14%       | -0.08%       | 8.32%        | 0.0227               | 1.1239        | 0.3010         | 0.3442        | 1.2997        | <b>3.9490</b> |
| 28             | -0.14%       | -0.12%       | 8.18%        | -0.0479              | 0.8506        | -0.8401        | 0.3338        | 1.2935        | <b>3.8485</b> |
| 29             | -0.12%       | -0.17%       | 8.06%        | -0.0190              | 0.9434        | -0.2999        | 0.3277        | 1.2874        | <b>3.7966</b> |
| 30             | 0.21%        | -0.06%       | 8.26%        | 0.0536               | 0.7891        | 1.0138         | 0.3320        | 1.2832        | <b>3.8588</b> |
| <b>-1 to 1</b> |              |              | <b>5.60%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06148</b> | 0.8975        | 1.7837        | <b>7.5044</b> |

Table-A 5.22 Market Returns to Acquirers; All-firms; (MM, 229); VWI

| Days           | AAR          | Median       | CAAR         | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|---------------|----------------------|----------------|---------------|---------------|---------------|
| -20            | 0.21%        | 0.00%        | 0.21%        | 0.2478        | 3.0306               | 1.3025         | 0.2478        | 3.0306        | 1.3025        |
| -19            | 0.07%        | -0.02%       | 0.28%        | -0.0173       | 1.1573               | -0.2387        | 0.1630        | 2.2540        | 1.1517        |
| -18            | -0.12%       | -0.22%       | 0.17%        | -0.1093       | 1.3706               | -1.2695        | 0.0700        | 1.7141        | 0.6505        |
| -17            | 0.49%        | 0.25%        | 0.65%        | 0.2136        | 1.4798               | <b>2.2984</b>  | 0.1674        | 1.6741        | 1.5926        |
| -16            | 0.00%        | -0.29%       | 0.65%        | 0.0469        | 1.3954               | 0.5349         | 0.1707        | 1.6275        | <b>1.6703</b> |
| -15            | -0.04%       | -0.08%       | 0.61%        | 0.0202        | 1.3338               | 0.2410         | 0.1641        | 1.6333        | 1.5998        |
| -14            | -0.15%       | -0.19%       | 0.46%        | -0.0592       | 1.3735               | -0.6869        | 0.1295        | 1.5028        | 1.3724        |
| -13            | 0.25%        | 0.12%        | 0.72%        | 0.1169        | 1.5037               | 1.2385         | 0.1625        | 1.5625        | <b>1.6562</b> |
| -12            | -0.11%       | -0.30%       | 0.61%        | -0.0266       | 1.2702               | -0.3332        | 0.1443        | 1.4451        | 1.5906        |
| -11            | -0.11%       | -0.18%       | 0.50%        | -0.0462       | 1.1181               | -0.6584        | 0.1223        | 1.3997        | 1.3916        |
| -10            | -0.06%       | -0.14%       | 0.44%        | 0.0167        | 1.4692               | 0.1806         | 0.1216        | 1.4830        | 1.3063        |
| -9             | 0.67%        | 0.17%        | 1.12%        | 0.1859        | 1.4703               | <b>2.0141</b>  | 0.1701        | 1.3693        | <b>1.9788</b> |
| -8             | -0.01%       | 0.02%        | 1.10%        | 0.0012        | 1.6484               | 0.0115         | 0.1638        | 1.4879        | <b>1.7532</b> |
| -7             | 0.41%        | 0.11%        | 1.51%        | 0.1200        | 1.6941               | 1.1278         | 0.1899        | 1.3779        | <b>2.1949</b> |
| -6             | 0.06%        | 0.02%        | 1.58%        | 0.0581        | 1.2156               | 0.7613         | 0.1985        | 1.3717        | <b>2.3042</b> |
| -5             | 0.19%        | 0.07%        | 1.77%        | 0.0694        | 1.2498               | 0.8847         | 0.2095        | 1.3152        | <b>2.5371</b> |
| -4             | 0.03%        | -0.05%       | 1.81%        | -0.1191       | 2.5437               | -0.7458        | 0.1744        | 1.2361        | <b>2.2466</b> |
| -3             | -0.04%       | -0.17%       | 1.77%        | 0.0438        | 1.5341               | 0.4545         | 0.1798        | 1.2496        | <b>2.2913</b> |
| -2             | 0.19%        | 0.00%        | 1.96%        | 0.0116        | 1.5387               | 0.1197         | 0.1776        | 1.2424        | <b>2.2771</b> |
| -1             | 0.78%        | 0.23%        | 2.74%        | 0.3668        | 2.1629               | <b>2.7012</b>  | 0.2552        | 1.3470        | <b>3.0169</b> |
| <b>0</b>       | <b>0.39%</b> | <b>0.12%</b> | <b>3.13%</b> | <b>0.1249</b> | <b>2.0050</b>        | <b>0.9921</b>  | <b>0.2763</b> | <b>1.3596</b> | <b>3.2362</b> |
| 1              | 0.33%        | 0.00%        | 3.45%        | 0.1510        | 2.1137               | 1.1376         | 0.3021        | 1.3289        | <b>3.6207</b> |
| 2              | 0.55%        | 0.10%        | 4.00%        | 0.2686        | 2.3569               | <b>1.8147</b>  | 0.3515        | 1.4542        | <b>3.8492</b> |
| 3              | 0.04%        | -0.07%       | 4.04%        | 0.0518        | 1.8660               | 0.4423         | 0.3546        | 1.3579        | <b>4.1596</b> |
| 4              | 0.27%        | -0.01%       | 4.31%        | 0.0536        | 1.1393               | 0.7490         | 0.3582        | 1.3433        | <b>4.2468</b> |
| 5              | -0.04%       | -0.19%       | 4.27%        | 0.0796        | 1.5891               | 0.7981         | 0.3669        | 1.3734        | <b>4.2541</b> |
| 6              | -0.22%       | -0.01%       | 4.05%        | -0.0224       | 1.5876               | -0.2251        | 0.3557        | 1.4229        | <b>3.9810</b> |
| 7              | 0.33%        | 0.03%        | 4.37%        | 0.1400        | 2.2605               | 0.9864         | 0.3757        | 1.4812        | <b>4.0399</b> |
| 8              | 0.19%        | -0.10%       | 4.56%        | 0.0869        | 1.4187               | 0.9753         | 0.3853        | 1.5485        | <b>3.9630</b> |
| 9              | -0.11%       | -0.18%       | 4.46%        | -0.0655       | 1.3545               | -0.7699        | 0.3669        | 1.4902        | <b>3.9212</b> |
| 10             | 0.19%        | 0.05%        | 4.64%        | 0.1416        | 1.6383               | 1.3761         | 0.3864        | 1.4718        | <b>4.1809</b> |
| 11             | -0.01%       | 0.00%        | 4.64%        | -0.0128       | 1.3051               | -0.1556        | 0.3780        | 1.4299        | <b>4.2102</b> |
| 12             | 0.21%        | -0.03%       | 4.85%        | 0.0851        | 1.2104               | 1.1200         | 0.3871        | 1.4607        | <b>4.2202</b> |
| 13             | 0.57%        | 0.11%        | 5.42%        | 0.1985        | 1.1905               | <b>2.6563</b>  | 0.4154        | 1.4524        | <b>4.5550</b> |
| 14             | 0.03%        | 0.04%        | 5.45%        | -0.0023       | 1.1141               | -0.0322        | 0.4090        | 1.4714        | <b>4.4272</b> |
| 15             | -0.14%       | -0.12%       | 5.31%        | -0.1704       | 1.6716               | -1.6232        | 0.3749        | 1.4447        | <b>4.1331</b> |
| 16             | 0.00%        | -0.15%       | 5.30%        | 0.0283        | 1.3853               | 0.3257         | 0.3745        | 1.4814        | <b>4.0258</b> |
| 17             | -0.22%       | -0.17%       | 5.09%        | -0.0420       | 1.2730               | -0.5261        | 0.3627        | 1.5139        | <b>3.8154</b> |
| 18             | -0.02%       | 0.20%        | 5.07%        | 0.0489        | 1.4466               | 0.5380         | 0.3658        | 1.5601        | <b>3.7345</b> |
| 19             | -0.05%       | 0.02%        | 5.02%        | -0.1005       | 1.7191               | -0.9307        | 0.3453        | 1.5057        | <b>3.6527</b> |
| 20             | -0.12%       | 0.00%        | 4.90%        | -0.0013       | 1.5809               | -0.0127        | 0.3409        | 1.5560        | <b>3.4892</b> |
| 21             | -0.03%       | -0.05%       | 4.86%        | 0.0150        | 1.9853               | 0.1200         | 0.3391        | 1.6056        | <b>3.3638</b> |
| 22             | -0.02%       | 0.10%        | 4.85%        | 0.1138        | 1.6423               | 1.1039         | 0.3525        | 1.6390        | <b>3.4254</b> |
| 23             | 0.39%        | 0.01%        | 5.23%        | 0.1321        | 1.3718               | 1.5333         | 0.3684        | 1.5711        | <b>3.7346</b> |
| 24             | -0.02%       | -0.06%       | 5.22%        | 0.0925        | 1.7952               | 0.8204         | 0.3781        | 1.6503        | <b>3.6485</b> |
| 25             | -0.05%       | -0.15%       | 5.17%        | -0.0306       | 1.3181               | -0.3696        | 0.3694        | 1.6113        | <b>3.6514</b> |
| 26             | 0.39%        | 0.03%        | 5.56%        | 0.1358        | 1.2362               | <b>1.7501</b>  | 0.3853        | 1.5780        | <b>3.8887</b> |
| 27             | 0.26%        | 0.00%        | 5.82%        | 0.1127        | 1.3242               | 1.3552         | 0.3975        | 1.5943        | <b>3.9710</b> |
| 28             | 0.05%        | -0.04%       | 5.86%        | 0.0844        | 1.2987               | 1.0347         | 0.4055        | 1.6491        | <b>3.9161</b> |
| 29             | 0.09%        | -0.14%       | 5.95%        | 0.0086        | 1.4553               | 0.0936         | 0.4026        | 1.6081        | <b>3.9876</b> |
| 30             | 0.38%        | 0.06%        | 6.33%        | 0.1784        | 1.2031               | <b>2.3615</b>  | 0.4236        | 1.6446        | <b>4.1025</b> |
| <b>-1 to 1</b> |              |              | <b>1.49%</b> |               | <b>StdDev(AAR-0)</b> | <b>0.04158</b> | 0.3711        | 1.8317        | <b>3.2264</b> |

Table-A 5.23 Market Returns to Acquirers; All-firms; (OLS, 233); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.00%        | -0.07%       | 0.00%        | 0.0198               | 0.9312        | 0.3470         | 0.0198        | 0.9312        | 0.3470        |
| -19            | -0.03%       | -0.17%       | -0.04%       | -0.0375              | 0.9513        | -0.6439        | -0.0125       | 0.9352        | -0.2188       |
| -18            | -0.23%       | -0.42%       | -0.27%       | -0.0846              | 1.0355        | -1.3336        | -0.0591       | 0.9777        | -0.9864       |
| -17            | 0.37%        | 0.15%        | 0.10%        | 0.1158               | 1.0881        | <b>1.7367</b>  | 0.0067        | 0.9697        | 0.1131        |
| -16            | -0.19%       | -0.44%       | -0.08%       | -0.0353              | 0.9893        | -0.5819        | -0.0098       | 1.0259        | -0.1554       |
| -15            | -0.21%       | -0.25%       | -0.29%       | -0.0575              | 1.0934        | -0.8578        | -0.0324       | 1.0304        | -0.5128       |
| -14            | -0.32%       | -0.23%       | -0.61%       | -0.0595              | 1.1184        | -0.8682        | -0.0525       | 0.9888        | -0.8659       |
| -13            | 0.20%        | 0.03%        | -0.41%       | 0.0701               | 1.2789        | 0.8948         | -0.0243       | 1.1062        | -0.3583       |
| -12            | -0.23%       | -0.47%       | -0.64%       | -0.0740              | 0.9469        | -1.2751        | -0.0476       | 1.0291        | -0.7542       |
| -11            | -0.22%       | -0.35%       | -0.86%       | -0.0639              | 0.9590        | -1.0867        | -0.0653       | 1.0234        | -1.0415       |
| -10            | -0.15%       | -0.31%       | -1.01%       | -0.0347              | 1.0217        | -0.5541        | -0.0728       | 1.0258        | -1.1570       |
| -9             | 0.46%        | 0.07%        | -0.55%       | 0.1212               | 1.0974        | <b>1.8015</b>  | -0.0347       | 1.0419        | -0.5429       |
| -8             | -0.16%       | -0.15%       | -0.71%       | -0.0598              | 1.0305        | -0.9465        | -0.0499       | 1.0553        | -0.7714       |
| -7             | 0.24%        | -0.15%       | -0.47%       | 0.0788               | 0.9605        | 1.3378         | -0.0270       | 1.0765        | -0.4096       |
| -6             | 0.02%        | -0.07%       | -0.45%       | 0.0083               | 1.0197        | 0.1325         | -0.0240       | 1.1003        | -0.3555       |
| -5             | -0.04%       | -0.11%       | -0.50%       | -0.0074              | 1.0345        | -0.1175        | -0.0251       | 1.0593        | -0.3862       |
| -4             | -0.14%       | -0.25%       | -0.64%       | -0.0548              | 1.0078        | -0.8868        | -0.0376       | 1.0075        | -0.6091       |
| -3             | -0.14%       | -0.34%       | -0.78%       | -0.0485              | 0.9715        | -0.8140        | -0.0480       | 1.0233        | -0.7649       |
| -2             | 0.07%        | -0.14%       | -0.71%       | 0.0125               | 0.9294        | 0.2186         | -0.0438       | 1.0025        | -0.7135       |
| -1             | 0.62%        | 0.18%        | -0.09%       | 0.1759               | 1.0958        | <b>2.6181</b>  | -0.0034       | 1.0381        | -0.0536       |
| <b>0</b>       | <b>0.26%</b> | <b>0.05%</b> | <b>0.17%</b> | <b>0.1249</b>        | <b>1.4430</b> | <b>1.4127</b>  | <b>0.0239</b> | <b>1.0702</b> | <b>0.3649</b> |
| 1              | 0.23%        | -0.16%       | 0.40%        | 0.0746               | 1.4991        | 0.8117         | 0.0393        | 1.0774        | 0.5950        |
| 2              | 0.43%        | -0.07%       | 0.83%        | 0.1416               | 1.3434        | <b>1.7198</b>  | 0.0680        | 1.0989        | 1.0089        |
| 3              | -0.09%       | -0.23%       | 0.74%        | -0.0216              | 1.1171        | -0.3160        | 0.0621        | 1.0996        | 0.9215        |
| 4              | 0.11%        | -0.10%       | 0.84%        | 0.0153               | 0.9412        | 0.2647         | 0.0639        | 1.1014        | 0.9466        |
| 5              | -0.19%       | -0.43%       | 0.65%        | -0.0409              | 0.9773        | -0.6820        | 0.0547        | 1.0958        | 0.8137        |
| 6              | -0.39%       | -0.17%       | 0.26%        | -0.1050              | 1.0725        | -1.5970        | 0.0334        | 1.1062        | 0.4930        |
| 7              | 0.29%        | -0.06%       | 0.56%        | 0.0867               | 0.9795        | 1.4442         | 0.0492        | 1.1214        | 0.7159        |
| 8              | 0.02%        | -0.16%       | 0.58%        | -0.0387              | 1.0179        | -0.6206        | 0.0412        | 1.1222        | 0.5985        |
| 9              | -0.24%       | -0.48%       | 0.34%        | -0.0539              | 0.9827        | -0.8944        | 0.0306        | 1.1278        | 0.4432        |
| 10             | 0.07%        | -0.05%       | 0.41%        | 0.0453               | 1.0045        | 0.7365         | 0.0383        | 1.1439        | 0.5460        |
| 11             | -0.13%       | -0.15%       | 0.28%        | -0.0194              | 0.9101        | -0.3486        | 0.0342        | 1.1712        | 0.4770        |
| 12             | 0.05%        | -0.22%       | 0.32%        | -0.0018              | 0.9555        | -0.0312        | 0.0334        | 1.1839        | 0.4603        |
| 13             | 0.38%        | -0.09%       | 0.70%        | 0.1021               | 0.9314        | <b>1.7879</b>  | 0.0504        | 1.1903        | 0.6910        |
| 14             | -0.11%       | -0.16%       | 0.59%        | -0.0598              | 0.8941        | -1.0904        | 0.0396        | 1.1819        | 0.5465        |
| 15             | -0.23%       | -0.25%       | 0.36%        | -0.1033              | 1.0653        | -1.5815        | 0.0218        | 1.1979        | 0.2972        |
| 16             | -0.17%       | -0.36%       | 0.19%        | -0.0784              | 1.0492        | -1.2183        | 0.0086        | 1.1733        | 0.1202        |
| 17             | -0.38%       | -0.27%       | -0.18%       | -0.1260              | 0.8962        | <b>-2.2934</b> | -0.0119       | 1.1618        | -0.1672       |
| 18             | -0.18%       | -0.01%       | -0.36%       | -0.0315              | 1.0895        | -0.4710        | -0.0168       | 1.1501        | -0.2382       |
| 19             | -0.21%       | -0.12%       | -0.57%       | -0.0594              | 1.0812        | -0.8956        | -0.0260       | 1.1154        | -0.3797       |
| 20             | -0.36%       | -0.33%       | -0.93%       | -0.1026              | 1.2111        | -1.3825        | -0.0417       | 1.1235        | -0.6051       |
| 21             | -0.21%       | -0.16%       | -1.14%       | -0.0549              | 1.0834        | -0.8264        | -0.0496       | 1.1200        | -0.7231       |
| 22             | -0.31%       | -0.11%       | -1.45%       | -0.0786              | 0.8761        | -1.4642        | -0.0611       | 1.0933        | -0.9110       |
| 23             | 0.27%        | -0.17%       | -1.18%       | 0.0650               | 0.9740        | 1.0894         | -0.0505       | 1.0860        | -0.7594       |
| 24             | -0.15%       | -0.15%       | -1.33%       | -0.0251              | 1.1138        | -0.3674        | -0.0537       | 1.1057        | -0.7927       |
| 25             | -0.29%       | -0.28%       | -1.62%       | -0.1037              | 1.0536        | -1.6060        | -0.0684       | 1.0949        | -1.0197       |
| 26             | 0.15%        | -0.09%       | -1.47%       | 0.0423               | 0.9941        | 0.6935         | -0.0615       | 1.0805        | -0.9291       |
| 27             | 0.10%        | -0.14%       | -1.37%       | 0.0422               | 1.0413        | 0.6614         | -0.0548       | 1.0814        | -0.8267       |
| 28             | -0.15%       | -0.16%       | -1.52%       | -0.0199              | 0.8532        | -0.3800        | -0.0571       | 1.0898        | -0.8544       |
| 29             | -0.13%       | -0.29%       | -1.65%       | -0.0196              | 0.9762        | -0.3272        | -0.0593       | 1.0773        | -0.8975       |
| 30             | 0.25%        | -0.01%       | -1.40%       | 0.0728               | 1.0217        | 1.1623         | -0.0485       | 1.0800        | -0.7325       |
| <b>-1 to 1</b> |              |              | <b>1.11%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04167</b> | 0.2167        | 1.4301        | <b>2.4724</b> |



Table-A 5.24 Market returns to Acquirers; MM firms; (OLS, 229); VWI

| Days           | AAR          | Median        | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|---------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.04%        | -0.07%        | 0.04%         | 0.0274               | 0.9309        | 0.4737         | 0.0274        | 0.9309        | 0.4737        |
| -19            | -0.09%       | -0.17%        | -0.05%        | -0.0529              | 0.9375        | -0.9061        | -0.0180       | 0.9367        | -0.3084       |
| -18            | -0.27%       | -0.42%        | -0.32%        | -0.0985              | 1.0221        | -1.5480        | -0.0715       | 0.9627        | -1.1939       |
| -17            | 0.34%        | 0.13%         | 0.02%         | 0.1109               | 1.0939        | 1.6283         | -0.0065       | 0.9592        | -0.1091       |
| -16            | -0.20%       | -0.44%        | -0.18%        | -0.0369              | 0.9969        | -0.5941        | -0.0223       | 1.0221        | -0.3507       |
| -15            | -0.21%       | -0.25%        | -0.38%        | -0.0497              | 1.0756        | -0.7423        | -0.0407       | 1.0269        | -0.6361       |
| -14            | -0.32%       | -0.19%        | -0.70%        | -0.0685              | 1.0959        | -1.0041        | -0.0635       | 0.9879        | -1.0331       |
| -13            | 0.10%        | 0.03%         | -0.60%        | 0.0394               | 1.2048        | 0.5252         | -0.0455       | 1.0784        | -0.6779       |
| -12            | -0.25%       | -0.47%        | -0.86%        | -0.0743              | 0.9442        | -1.2648        | -0.0677       | 1.0019        | -1.0852       |
| -11            | -0.27%       | -0.36%        | -1.12%        | -0.0766              | 0.9531        | -1.2906        | -0.0884       | 0.9847        | -1.4425       |
| -10            | -0.19%       | -0.35%        | -1.32%        | -0.0477              | 1.0134        | -0.7564        | -0.0987       | 0.9732        | -1.6291       |
| -9             | 0.50%        | 0.07%         | -0.81%        | 0.1283               | 1.0981        | <b>1.8777</b>  | -0.0574       | 0.9922        | -0.9300       |
| -8             | -0.17%       | -0.16%        | -0.98%        | -0.0619              | 1.0390        | -0.9566        | -0.0723       | 1.0120        | -1.1484       |
| -7             | 0.25%        | -0.11%        | -0.73%        | 0.0823               | 0.9682        | 1.3658         | -0.0477       | 1.0407        | -0.7365       |
| -6             | -0.05%       | -0.08%        | -0.78%        | -0.0101              | 1.0041        | -0.1619        | -0.0487       | 1.0524        | -0.7435       |
| -5             | 0.04%        | -0.02%        | -0.74%        | 0.0215               | 0.9979        | 0.3459         | -0.0418       | 1.0271        | -0.6536       |
| -4             | -0.13%       | -0.25%        | -0.87%        | -0.0515              | 0.9869        | -0.8388        | -0.0530       | 0.9892        | -0.8614       |
| -3             | -0.17%       | -0.38%        | -1.04%        | -0.0578              | 0.9710        | -0.9559        | -0.0652       | 0.9997        | -1.0472       |
| -2             | 0.03%        | -0.18%        | -1.01%        | -0.0009              | 0.9186        | -0.0156        | -0.0636       | 0.9678        | -1.0562       |
| -1             | 0.59%        | 0.18%         | -0.42%        | 0.1662               | 1.0903        | <b>2.4492</b>  | -0.0248       | 0.9952        | -0.4011       |
| <b>0</b>       | <b>0.25%</b> | <b>-0.03%</b> | <b>-0.17%</b> | <b>0.1221</b>        | <b>1.4543</b> | <b>1.3487</b>  | <b>0.0024</b> | <b>1.0275</b> | <b>0.0374</b> |
| 1              | 0.20%        | -0.16%        | 0.03%         | 0.0699               | 1.5086        | 0.7443         | 0.0172        | 1.0382        | 0.2668        |
| 2              | 0.40%        | -0.10%        | 0.43%         | 0.1320               | 1.3423        | 1.5795         | 0.0444        | 1.0510        | 0.6784        |
| 3              | -0.14%       | -0.25%        | 0.30%         | -0.0351              | 1.1051        | -0.5106        | 0.0363        | 1.0386        | 0.5611        |
| 4              | 0.09%        | -0.13%        | 0.39%         | 0.0102               | 0.9344        | 0.1759         | 0.0376        | 1.0378        | 0.5819        |
| 5              | -0.19%       | -0.45%        | 0.20%         | -0.0446              | 0.9697        | -0.7394        | 0.0281        | 1.0236        | 0.4411        |
| 6              | -0.34%       | -0.17%        | -0.14%        | -0.0998              | 1.0468        | -1.5316        | 0.0084        | 1.0258        | 0.1311        |
| 7              | 0.18%        | -0.06%        | 0.04%         | 0.0533               | 0.9398        | 0.9112         | 0.0183        | 1.0337        | 0.2843        |
| 8              | 0.02%        | -0.23%        | 0.06%         | -0.0393              | 1.0264        | -0.6159        | 0.0107        | 1.0398        | 0.1649        |
| 9              | -0.25%       | -0.47%        | -0.19%        | -0.0607              | 0.9837        | -0.9905        | -0.0006       | 1.0486        | -0.0089       |
| 10             | 0.02%        | -0.05%        | -0.16%        | 0.0293               | 0.9932        | 0.4745         | 0.0047        | 1.0552        | 0.0715        |
| 11             | -0.18%       | -0.21%        | -0.35%        | -0.0342              | 0.8945        | -0.6151        | -0.0014       | 1.0725        | -0.0214       |
| 12             | 0.00%        | -0.24%        | -0.35%        | -0.0236              | 0.9137        | -0.4151        | -0.0055       | 1.0823        | -0.0819       |
| 13             | 0.42%        | -0.09%        | 0.07%         | 0.1109               | 0.9311        | <b>1.9126</b>  | 0.0136        | 1.0921        | 0.1997        |
| 14             | -0.11%       | -0.16%        | -0.04%        | -0.0603              | 0.9018        | -1.0748        | 0.0032        | 1.0860        | 0.0470        |
| 15             | -0.29%       | -0.26%        | -0.33%        | -0.1256              | 1.0459        | <b>-1.9298</b> | -0.0178       | 1.0881        | -0.2629       |
| 16             | -0.09%       | -0.26%        | -0.42%        | -0.0482              | 1.0014        | -0.7736        | -0.0255       | 1.0843        | -0.3777       |
| 17             | -0.37%       | -0.27%        | -0.79%        | -0.1227              | 0.8996        | <b>-2.1907</b> | -0.0451       | 1.0755        | -0.6730       |
| 18             | -0.17%       | 0.00%         | -0.96%        | -0.0398              | 1.0474        | -0.6100        | -0.0508       | 1.0628        | -0.7685       |
| 19             | -0.21%       | -0.15%        | -1.17%        | -0.0566              | 1.0670        | -0.8516        | -0.0591       | 1.0395        | -0.9141       |
| 20             | -0.29%       | -0.26%        | -1.46%        | -0.0786              | 1.1944        | -1.0574        | -0.0707       | 1.0641        | -1.0673       |
| 21             | -0.23%       | -0.20%        | -1.69%        | -0.0578              | 1.0618        | -0.8740        | -0.0788       | 1.0704        | -1.1821       |
| 22             | -0.21%       | -0.05%        | -1.89%        | -0.0472              | 0.8396        | -0.9031        | -0.0850       | 1.0543        | -1.2959       |
| 23             | 0.25%        | -0.17%        | -1.64%        | 0.0610               | 0.9770        | 1.0028         | -0.0749       | 1.0481        | -1.1476       |
| 24             | -0.12%       | -0.15%        | -1.76%        | -0.0106              | 1.1049        | -0.1537        | -0.0756       | 1.0726        | -1.1325       |
| 25             | -0.22%       | -0.28%        | -1.98%        | -0.0781              | 1.0251        | -1.2245        | -0.0863       | 1.0706        | -1.2950       |
| 26             | 0.21%        | -0.09%        | -1.77%        | 0.0582               | 0.9755        | 0.9581         | -0.0769       | 1.0643        | -1.1608       |
| 27             | 0.11%        | -0.04%        | -1.66%        | 0.0516               | 1.0335        | 0.8014         | -0.0687       | 1.0692        | -1.0315       |
| 28             | -0.09%       | -0.16%        | -1.76%        | -0.0037              | 0.8416        | -0.0701        | -0.0685       | 1.0776        | -1.0208       |
| 29             | -0.11%       | -0.29%        | -1.87%        | -0.0122              | 0.9768        | -0.2015        | -0.0695       | 1.0654        | -1.0483       |
| 30             | 0.28%        | -0.01%        | -1.60%        | 0.0743               | 0.9574        | 1.2465         | -0.0584       | 1.0753        | -0.8729       |
| <b>-1 to 1</b> |              |               | <b>1.04%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.04198</b> | 0.2068        | 1.4357        | <b>2.3142</b> |

**Table-A 5.25 Market Returns to Acquirers; All-firms; (M, 214); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.12%        | -0.04%       | 0.12%        | 0.0376               | 1.1438        | 0.5114         | 0.0376        | 1.1438        | 0.5114        |
| -19            | 0.07%        | -0.07%       | 0.19%        | 0.0138               | 1.2719        | 0.1691         | 0.0364        | 1.1954        | 0.4732        |
| -18            | -0.10%       | -0.31%       | 0.09%        | -0.0966              | 1.3605        | -1.1038        | -0.0261       | 1.3070        | -0.3100       |
| -17            | 0.36%        | 0.24%        | 0.45%        | 0.0673               | 1.7796        | 0.5882         | 0.0111        | 1.3006        | 0.1326        |
| -16            | -0.05%       | -0.27%       | 0.40%        | 0.1335               | 2.2870        | 0.9082         | 0.0696        | 1.3544        | 0.7997        |
| -15            | 0.02%        | -0.06%       | 0.42%        | -0.0596              | 1.9724        | -0.4696        | 0.0393        | 1.2761        | 0.4785        |
| -14            | -0.08%       | -0.05%       | 0.34%        | 0.1008               | 2.0195        | 0.7762         | 0.0744        | 1.3395        | 0.8644        |
| -13            | 0.23%        | 0.09%        | 0.57%        | 0.1167               | 1.6253        | 1.1166         | 0.1109        | 1.4916        | 1.1563        |
| -12            | -0.10%       | -0.34%       | 0.47%        | -0.0315              | 1.3745        | -0.3570        | 0.0940        | 1.3797        | 1.0600        |
| -11            | -0.09%       | -0.27%       | 0.38%        | -0.0065              | 1.2525        | -0.0804        | 0.0872        | 1.3740        | 0.9866        |
| -10            | -0.17%       | -0.27%       | 0.21%        | -0.0524              | 1.3235        | -0.6154        | 0.0673        | 1.3488        | 0.7762        |
| -9             | 0.60%        | 0.15%        | 0.82%        | 0.2086               | 1.7103        | <b>1.8971</b>  | 0.1247        | 1.3537        | 1.4323        |
| -8             | -0.01%       | 0.07%        | 0.81%        | -0.0190              | 1.2150        | -0.2433        | 0.1145        | 1.3495        | 1.3196        |
| -7             | 0.39%        | 0.07%        | 1.20%        | 0.1859               | 1.3302        | <b>2.1741</b>  | 0.1600        | 1.3867        | <b>1.7950</b> |
| -6             | 0.08%        | -0.03%       | 1.28%        | -0.0199              | 1.7521        | -0.1768        | 0.1495        | 1.4139        | 1.6442        |
| -5             | 0.11%        | 0.04%        | 1.39%        | 0.1171               | 1.7529        | 1.0388         | 0.1740        | 1.3495        | <b>2.0052</b> |
| -4             | 0.01%        | -0.10%       | 1.40%        | 0.0158               | 1.2193        | 0.2020         | 0.1726        | 1.3048        | <b>2.0577</b> |
| -3             | 0.03%        | -0.25%       | 1.43%        | -0.0724              | 1.6087        | -0.6996        | 0.1507        | 1.3260        | <b>1.7678</b> |
| -2             | 0.10%        | 0.00%        | 1.53%        | 0.0530               | 1.0954        | 0.7519         | 0.1588        | 1.2922        | <b>1.9118</b> |
| -1             | 0.72%        | 0.24%        | 2.25%        | 0.3069               | 1.3556        | <b>3.5214</b>  | 0.2234        | 1.3191        | <b>2.6347</b> |
| <b>0</b>       | <b>0.47%</b> | <b>0.13%</b> | <b>2.72%</b> | <b>0.2094</b>        | <b>1.9490</b> | <b>1.6708</b>  | <b>0.2637</b> | <b>1.3857</b> | <b>2.9604</b> |
| 1              | 0.39%        | -0.01%       | 3.11%        | 0.1603               | 2.1597        | 1.1546         | 0.2919        | 1.4309        | <b>3.1726</b> |
| 2              | 0.25%        | -0.03%       | 3.35%        | 0.1687               | 1.8280        | 1.4357         | 0.3206        | 1.4428        | <b>3.4564</b> |
| 3              | 0.04%        | -0.20%       | 3.39%        | 0.0123               | 1.4146        | 0.1354         | 0.3164        | 1.4355        | <b>3.4281</b> |
| 4              | 0.16%        | -0.08%       | 3.55%        | 0.0756               | 1.2066        | 0.9745         | 0.3251        | 1.4251        | <b>3.5484</b> |
| 5              | -0.08%       | -0.25%       | 3.47%        | 0.0525               | 1.4581        | 0.5600         | 0.3291        | 1.3960        | <b>3.6667</b> |
| 6              | -0.21%       | -0.06%       | 3.26%        | -0.1239              | 1.2913        | -1.4927        | 0.2991        | 1.3886        | <b>3.3501</b> |
| 7              | 0.12%        | -0.01%       | 3.38%        | 0.0847               | 1.1059        | 1.1913         | 0.3097        | 1.3998        | <b>3.4413</b> |
| 8              | 0.18%        | -0.11%       | 3.56%        | -0.0272              | 1.7304        | -0.2447        | 0.2993        | 1.4303        | <b>3.2544</b> |
| 9              | -0.19%       | -0.28%       | 3.37%        | -0.0113              | 1.4953        | -0.1177        | 0.2922        | 1.4097        | <b>3.2236</b> |
| 10             | 0.26%        | 0.17%        | 3.63%        | 0.1300               | 1.3055        | 1.5485         | 0.3108        | 1.4134        | <b>3.4198</b> |
| 11             | 0.02%        | 0.04%        | 3.65%        | 0.0599               | 1.1844        | 0.7871         | 0.3165        | 1.4271        | <b>3.4491</b> |
| 12             | 0.18%        | -0.04%       | 3.83%        | 0.0501               | 1.1945        | 0.6528         | 0.3204        | 1.4339        | <b>3.4751</b> |
| 13             | 0.46%        | 0.07%        | 4.29%        | 0.2060               | 1.2245        | <b>2.6166</b>  | 0.3510        | 1.4346        | <b>3.8050</b> |
| 14             | 0.07%        | -0.03%       | 4.36%        | -0.0380              | 1.1934        | -0.4952        | 0.3395        | 1.4315        | <b>3.6884</b> |
| 15             | -0.19%       | -0.19%       | 4.17%        | -0.1205              | 1.4322        | -1.3082        | 0.3147        | 1.4499        | <b>3.3753</b> |
| 16             | -0.24%       | -0.26%       | 3.93%        | -0.1010              | 1.2001        | -1.3094        | 0.2938        | 1.4507        | <b>3.1497</b> |
| 17             | -0.33%       | -0.21%       | 3.60%        | -0.1353              | 1.1951        | <b>-1.7615</b> | 0.2679        | 1.4224        | <b>2.9297</b> |
| 18             | 0.02%        | 0.19%        | 3.62%        | 0.0272               | 1.2805        | 0.3304         | 0.2688        | 1.3793        | <b>3.0312</b> |
| 19             | -0.02%       | 0.05%        | 3.60%        | 0.0362               | 1.4180        | 0.3971         | 0.2712        | 1.3476        | <b>3.1297</b> |
| 20             | -0.21%       | -0.09%       | 3.39%        | -0.0768              | 1.6495        | -0.7245        | 0.2558        | 1.3884        | <b>2.8660</b> |
| 21             | -0.06%       | -0.06%       | 3.32%        | -0.0356              | 1.4217        | -0.3897        | 0.2473        | 1.3959        | <b>2.7553</b> |
| 22             | -0.05%       | 0.09%        | 3.27%        | 0.0188               | 1.1280        | 0.2589         | 0.2472        | 1.3608        | <b>2.8260</b> |
| 23             | 0.24%        | -0.12%       | 3.51%        | 0.1015               | 1.2233        | 1.2901         | 0.2597        | 1.3537        | <b>2.9840</b> |
| 24             | 0.15%        | -0.10%       | 3.65%        | 0.1275               | 1.4641        | 1.3546         | 0.2758        | 1.3718        | <b>3.1272</b> |
| 25             | -0.23%       | -0.21%       | 3.42%        | -0.1292              | 1.3034        | -1.5415        | 0.2538        | 1.3866        | <b>2.8465</b> |
| 26             | 0.42%        | 0.10%        | 3.84%        | 0.1612               | 1.2913        | <b>1.9414</b>  | 0.2746        | 1.3874        | <b>3.0780</b> |
| 27             | 0.27%        | -0.03%       | 4.11%        | 0.1362               | 1.4295        | 1.4815         | 0.2913        | 1.3963        | <b>3.2453</b> |
| 28             | 0.10%        | -0.01%       | 4.21%        | 0.0527               | 1.1313        | 0.7244         | 0.2959        | 1.4142        | <b>3.2541</b> |
| 29             | 0.09%        | -0.21%       | 4.30%        | 0.0821               | 1.3323        | 0.9585         | 0.3045        | 1.4100        | <b>3.3591</b> |
| 30             | 0.33%        | 0.08%        | 4.64%        | 0.1474               | 1.2652        | <b>1.8126</b>  | 0.3222        | 1.4195        | <b>3.5298</b> |
| <b>-1 to 1</b> |              |              | <b>1.58%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04049</b> | 0.3906        | 1.9344        | <b>3.1409</b> |

Table-A 5.26 Market Returns to Acquirers; M-firms; (OLS, 214); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats        |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|----------------|
| -20            | -0.01%       | -0.15%       | -0.01%       | -0.0017              | 0.8754        | -0.0295        | -0.0017       | 0.8754        | -0.0295        |
| -19            | -0.08%       | -0.18%       | -0.09%       | -0.0537              | 0.9300        | -0.9012        | -0.0391       | 0.9067        | -0.6737        |
| -18            | -0.23%       | -0.39%       | -0.32%       | -0.0897              | 1.0490        | -1.3352        | -0.0837       | 0.9653        | -1.3545        |
| -17            | 0.26%        | 0.14%        | -0.06%       | 0.0750               | 1.0073        | 1.1625         | -0.0350       | 0.9360        | -0.5841        |
| -16            | -0.20%       | -0.41%       | -0.26%       | -0.0535              | 0.8814        | -0.9483        | -0.0553       | 0.9456        | -0.9124        |
| -15            | -0.11%       | -0.17%       | -0.38%       | -0.0357              | 1.0983        | -0.5072        | -0.0650       | 0.9664        | -1.0504        |
| -14            | -0.22%       | -0.16%       | -0.60%       | -0.0437              | 1.1029        | -0.6187        | -0.0767       | 0.9468        | -1.2649        |
| -13            | 0.10%        | 0.01%        | -0.50%       | 0.0359               | 1.2304        | 0.4550         | -0.0591       | 1.0579        | -0.8719        |
| -12            | -0.22%       | -0.50%       | -0.72%       | -0.0734              | 0.9584        | -1.1957        | -0.0802       | 0.9678        | -1.2932        |
| -11            | -0.22%       | -0.37%       | -0.94%       | -0.0644              | 0.9534        | -1.0540        | -0.0964       | 0.9603        | -1.5673        |
| -10            | -0.28%       | -0.45%       | -1.22%       | -0.0730              | 1.0292        | -1.1071        | -0.1139       | 0.9474        | <b>-1.8774</b> |
| -9             | 0.46%        | 0.07%        | -0.76%       | 0.1309               | 1.1098        | <b>1.8419</b>  | -0.0713       | 0.9894        | -1.1248        |
| -8             | -0.13%       | -0.12%       | -0.89%       | -0.0448              | 0.9678        | -0.7224        | -0.0809       | 0.9979        | -1.2657        |
| -7             | 0.26%        | -0.15%       | -0.63%       | 0.0821               | 0.9523        | 1.3468         | -0.0560       | 1.0274        | -0.8510        |
| -6             | -0.04%       | -0.09%       | -0.67%       | -0.0067              | 0.9926        | -0.1059        | -0.0558       | 1.0418        | -0.8369        |
| -5             | -0.02%       | -0.12%       | -0.68%       | 0.0195               | 1.0256        | 0.2968         | -0.0492       | 1.0179        | -0.7546        |
| -4             | -0.12%       | -0.26%       | -0.81%       | -0.0478              | 0.9721        | -0.7677        | -0.0593       | 0.9832        | -0.9419        |
| -3             | -0.09%       | -0.34%       | -0.90%       | -0.0317              | 0.9325        | -0.5300        | -0.0651       | 0.9871        | -1.0298        |
| -2             | -0.03%       | -0.17%       | -0.93%       | -0.0113              | 0.8411        | -0.2089        | -0.0660       | 0.9673        | -1.0645        |
| -1             | 0.58%        | 0.18%        | -0.35%       | 0.1590               | 1.0577        | <b>2.3467</b>  | -0.0287       | 0.9825        | -0.4566        |
| <b>0</b>       | <b>0.35%</b> | <b>0.01%</b> | <b>0.00%</b> | <b>0.1524</b>        | <b>1.4726</b> | <b>1.6156</b>  | <b>0.0052</b> | <b>1.0185</b> | <b>0.0799</b>  |
| 1              | 0.28%        | -0.13%       | 0.28%        | 0.0808               | 1.5332        | 0.8226         | 0.0223        | 1.0311        | 0.3379         |
| 2              | 0.14%        | -0.12%       | 0.42%        | 0.0737               | 1.2834        | 0.8969         | 0.0372        | 1.0428        | 0.5569         |
| 3              | -0.10%       | -0.26%       | 0.32%        | -0.0347              | 1.1000        | -0.4922        | 0.0293        | 1.0347        | 0.4426         |
| 4              | 0.02%        | -0.20%       | 0.34%        | 0.0089               | 0.9494        | 0.1468         | 0.0305        | 1.0375        | 0.4594         |
| 5              | -0.21%       | -0.46%       | 0.13%        | -0.0568              | 0.9829        | -0.9017        | 0.0188        | 1.0203        | 0.2877         |
| 6              | -0.31%       | -0.19%       | -0.19%       | -0.1098              | 0.9986        | <b>-1.7173</b> | -0.0027       | 1.0138        | -0.0414        |
| 7              | 0.00%        | -0.07%       | -0.19%       | 0.0205               | 0.8724        | 0.3666         | 0.0012        | 1.0267        | 0.0187         |
| 8              | 0.05%        | -0.16%       | -0.14%       | -0.0439              | 1.0439        | -0.6566        | -0.0069       | 1.0298        | -0.1052        |
| 9              | -0.28%       | -0.48%       | -0.42%       | -0.0744              | 0.9811        | -1.1835        | -0.0204       | 1.0396        | -0.3064        |
| 10             | 0.13%        | 0.04%        | -0.29%       | 0.0365               | 0.9850        | 0.5781         | -0.0135       | 1.0405        | -0.2029        |
| 11             | -0.11%       | -0.16%       | -0.41%       | -0.0193              | 0.8987        | -0.3346        | -0.0167       | 1.0577        | -0.2466        |
| 12             | 0.01%        | -0.24%       | -0.40%       | -0.0261              | 0.9201        | -0.4427        | -0.0210       | 1.0704        | -0.3063        |
| 13             | 0.34%        | -0.09%       | -0.06%       | 0.0991               | 0.8805        | <b>1.7579</b>  | -0.0037       | 1.0856        | -0.0530        |
| 14             | -0.05%       | -0.22%       | -0.10%       | -0.0535              | 0.8504        | -0.9827        | -0.0127       | 1.0718        | -0.1847        |
| 15             | -0.32%       | -0.27%       | -0.42%       | -0.1276              | 1.0722        | <b>-1.8574</b> | -0.0338       | 1.0789        | -0.4886        |
| 16             | -0.31%       | -0.40%       | -0.73%       | -0.0920              | 0.9385        | -1.5308        | -0.0484       | 1.0769        | -0.7021        |
| 17             | -0.45%       | -0.27%       | -1.18%       | -0.1468              | 0.9011        | <b>-2.5429</b> | -0.0716       | 1.0640        | -1.0506        |
| 18             | -0.12%       | 0.01%        | -1.30%       | -0.0320              | 1.0066        | -0.4958        | -0.0758       | 1.0420        | -1.1356        |
| 19             | -0.14%       | -0.09%       | -1.44%       | -0.0301              | 1.0427        | -0.4505        | -0.0796       | 1.0204        | -1.2179        |
| 20             | -0.35%       | -0.32%       | -1.79%       | -0.0951              | 1.2230        | -1.2141        | -0.0935       | 1.0458        | -1.3954        |
| 21             | -0.21%       | -0.22%       | -2.00%       | -0.0564              | 1.0577        | -0.8329        | -0.1011       | 1.0484        | -1.5049        |
| 22             | -0.21%       | -0.11%       | -2.21%       | -0.0645              | 0.8413        | -1.1962        | -0.1097       | 1.0276        | <b>-1.6667</b> |
| 23             | 0.12%        | -0.23%       | -2.09%       | 0.0374               | 0.9739        | 0.5998         | -0.1028       | 1.0253        | -1.5655        |
| 24             | 0.04%        | -0.15%       | -2.05%       | 0.0216               | 0.9715        | 0.3466         | -0.0984       | 1.0390        | -1.4794        |
| 25             | -0.38%       | -0.29%       | -2.42%       | -0.1092              | 0.9040        | <b>-1.8852</b> | -0.1135       | 1.0459        | <b>-1.6937</b> |
| 26             | 0.26%        | -0.08%       | -2.17%       | 0.0753               | 1.0006        | 1.1747         | -0.1013       | 1.0440        | -1.5144        |
| 27             | 0.16%        | -0.02%       | -2.01%       | 0.0674               | 1.0513        | 1.0013         | -0.0905       | 1.0492        | -1.3463        |
| 28             | -0.01%       | -0.15%       | -2.02%       | 0.0057               | 0.8557        | 0.1032         | -0.0887       | 1.0578        | -1.3098        |
| 29             | -0.05%       | -0.28%       | -2.07%       | -0.0044              | 0.9955        | -0.0692        | -0.0885       | 1.0487        | -1.3172        |
| 30             | 0.24%        | -0.01%       | -1.83%       | 0.0694               | 0.9789        | 1.1072         | -0.0779       | 1.0573        | -1.1501        |
| <b>-1 to 1</b> |              |              | <b>1.21%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04082</b> | 0.2264        | 1.4494        | <b>2.4387</b>  |



Table-A 5.27 Market Returns to Acquirers; M-firms; (MM, 214); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.16%        | -0.05%       | 0.16%        | 0.0532               | 1.0118        | 0.8161         | 0.0532        | 1.0118        | 0.8161        |
| -19            | 0.10%        | -0.02%       | 0.26%        | 0.0037               | 1.0621        | 0.0543         | 0.0402        | 1.0346        | 0.6038        |
| -18            | -0.07%       | -0.30%       | 0.19%        | -0.0591              | 1.2163        | -0.7547        | -0.0013       | 1.1390        | -0.0175       |
| -17            | 0.39%        | 0.26%        | 0.58%        | 0.1217               | 1.1585        | 1.6319         | 0.0597        | 1.1077        | 0.8378        |
| -16            | -0.02%       | -0.25%       | 0.56%        | 0.0282               | 1.0537        | 0.4154         | 0.0660        | 1.1029        | 0.9301        |
| -15            | 0.05%        | -0.03%       | 0.61%        | 0.0210               | 1.2740        | 0.2559         | 0.0689        | 1.1334        | 0.9436        |
| -14            | -0.06%       | -0.08%       | 0.56%        | 0.0280               | 1.2802        | 0.3402         | 0.0743        | 1.1102        | 1.0401        |
| -13            | 0.26%        | 0.11%        | 0.81%        | 0.1113               | 1.4381        | 1.2025         | 0.1089        | 1.2444        | 1.3593        |
| -12            | -0.06%       | -0.34%       | 0.76%        | -0.0106              | 1.1300        | -0.1451        | 0.0992        | 1.1569        | 1.3313        |
| -11            | -0.06%       | -0.22%       | 0.70%        | -0.0059              | 1.0755        | -0.0849        | 0.0922        | 1.1457        | 1.2501        |
| -10            | -0.14%       | -0.25%       | 0.56%        | -0.0358              | 1.1659        | -0.4764        | 0.0771        | 1.1262        | 1.0639        |
| -9             | 0.64%        | 0.15%        | 1.20%        | 0.2292               | 1.2958        | <b>2.7469</b>  | 0.1400        | 1.1806        | <b>1.8420</b> |
| -8             | 0.02%        | 0.09%        | 1.22%        | 0.0053               | 1.0862        | 0.0763         | 0.1360        | 1.1840        | <b>1.7840</b> |
| -7             | 0.42%        | 0.13%        | 1.65%        | 0.1622               | 1.1079        | <b>2.2739</b>  | 0.1744        | 1.2126        | <b>2.2340</b> |
| -6             | 0.11%        | 0.02%        | 1.75%        | 0.0419               | 1.1448        | 0.5684         | 0.1793        | 1.2179        | <b>2.2867</b> |
| -5             | 0.14%        | 0.07%        | 1.90%        | 0.0762               | 1.1728        | 1.0090         | 0.1927        | 1.1862        | <b>2.5228</b> |
| -4             | 0.04%        | -0.09%       | 1.94%        | 0.0175               | 1.0915        | 0.2497         | 0.1912        | 1.1476        | <b>2.5873</b> |
| -3             | 0.06%        | -0.19%       | 1.99%        | 0.0063               | 1.0523        | 0.0934         | 0.1873        | 1.1505        | <b>2.5283</b> |
| -2             | 0.14%        | 0.01%        | 2.13%        | 0.0530               | 0.9379        | 0.8779         | 0.1944        | 1.1240        | <b>2.6868</b> |
| -1             | 0.75%        | 0.24%        | 2.88%        | 0.2551               | 1.1936        | <b>3.3200</b>  | 0.2466        | 1.1433        | <b>3.3495</b> |
| <b>0</b>       | <b>0.51%</b> | <b>0.16%</b> | <b>3.39%</b> | <b>0.2284</b>        | <b>1.6987</b> | <b>2.0880</b>  | <b>0.2904</b> | <b>1.1868</b> | <b>3.8011</b> |
| 1              | 0.42%        | 0.00%        | 3.81%        | 0.1709               | 1.8717        | 1.4179         | 0.3202        | 1.2126        | <b>4.1014</b> |
| 2              | 0.28%        | 0.04%        | 4.10%        | 0.1452               | 1.4935        | 1.5102         | 0.3434        | 1.2351        | <b>4.3189</b> |
| 3              | 0.06%        | -0.14%       | 4.16%        | 0.0251               | 1.2622        | 0.3086         | 0.3413        | 1.2246        | <b>4.3293</b> |
| 4              | 0.20%        | -0.05%       | 4.36%        | 0.0733               | 1.0691        | 1.0645         | 0.3491        | 1.2230        | <b>4.4335</b> |
| 5              | -0.05%       | -0.21%       | 4.31%        | 0.0108               | 1.1432        | 0.1472         | 0.3444        | 1.2163        | <b>4.3985</b> |
| 6              | -0.19%       | -0.05%       | 4.13%        | -0.0849              | 1.1395        | -1.1569        | 0.3216        | 1.2151        | <b>4.1118</b> |
| 7              | 0.16%        | 0.00%        | 4.28%        | 0.0899               | 1.0001        | 1.3959         | 0.3328        | 1.2247        | <b>4.2214</b> |
| 8              | 0.21%        | -0.10%       | 4.50%        | 0.0234               | 1.1966        | 0.3037         | 0.3314        | 1.2252        | <b>4.2012</b> |
| 9              | -0.17%       | -0.21%       | 4.33%        | -0.0372              | 1.1238        | -0.5135        | 0.3190        | 1.2313        | <b>4.0248</b> |
| 10             | 0.29%        | 0.15%        | 4.62%        | 0.1217               | 1.1444        | 1.6514         | 0.3357        | 1.2303        | <b>4.2384</b> |
| 11             | 0.05%        | 0.07%        | 4.68%        | 0.0509               | 1.0269        | 0.7702         | 0.3394        | 1.2468        | <b>4.2283</b> |
| 12             | 0.21%        | -0.02%       | 4.89%        | 0.0520               | 1.0562        | 0.7640         | 0.3433        | 1.2567        | <b>4.2430</b> |
| 13             | 0.49%        | 0.12%        | 5.38%        | 0.1735               | 1.0135        | <b>2.6583</b>  | 0.3679        | 1.2640        | <b>4.5213</b> |
| 14             | 0.11%        | 0.03%        | 5.48%        | -0.0049              | 0.9841        | -0.0771        | 0.3618        | 1.2576        | <b>4.4689</b> |
| 15             | -0.16%       | -0.15%       | 5.33%        | -0.0917              | 1.2768        | -1.1160        | 0.3415        | 1.2718        | <b>4.1704</b> |
| 16             | -0.21%       | -0.22%       | 5.12%        | -0.0760              | 1.0719        | -1.1015        | 0.3243        | 1.2765        | <b>3.9465</b> |
| 17             | -0.31%       | -0.20%       | 4.81%        | -0.1142              | 1.0373        | <b>-1.7099</b> | 0.3015        | 1.2528        | <b>3.7382</b> |
| 18             | 0.05%        | 0.21%        | 4.86%        | 0.0253               | 1.1370        | 0.3461         | 0.3017        | 1.2203        | <b>3.8398</b> |
| 19             | 0.02%        | 0.04%        | 4.88%        | 0.0369               | 1.2129        | 0.4732         | 0.3037        | 1.1905        | <b>3.9627</b> |
| 20             | -0.18%       | -0.08%       | 4.70%        | -0.0602              | 1.4378        | -0.6508        | 0.2906        | 1.2294        | <b>3.6715</b> |
| 21             | -0.03%       | -0.03%       | 4.67%        | 0.0041               | 1.2124        | 0.0520         | 0.2877        | 1.2324        | <b>3.6265</b> |
| 22             | -0.02%       | 0.10%        | 4.65%        | 0.0105               | 0.9711        | 0.1672         | 0.2860        | 1.2051        | <b>3.6858</b> |
| 23             | 0.26%        | -0.08%       | 4.91%        | 0.0957               | 1.0868        | 1.3684         | 0.2971        | 1.1994        | <b>3.8479</b> |
| 24             | 0.17%        | -0.06%       | 5.08%        | 0.0815               | 1.1589        | 1.0928         | 0.3060        | 1.2182        | <b>3.9012</b> |
| 25             | -0.20%       | -0.18%       | 4.88%        | -0.0663              | 1.0355        | -0.9944        | 0.2928        | 1.2316        | <b>3.6932</b> |
| 26             | 0.45%        | 0.11%        | 5.34%        | 0.1616               | 1.1545        | <b>2.1746</b>  | 0.3133        | 1.2279        | <b>3.9630</b> |
| 27             | 0.30%        | 0.01%        | 5.64%        | 0.1338               | 1.2307        | <b>1.6886</b>  | 0.3293        | 1.2376        | <b>4.1331</b> |
| 28             | 0.13%        | 0.01%        | 5.77%        | 0.0654               | 0.9871        | 1.0287         | 0.3353        | 1.2483        | <b>4.1719</b> |
| 29             | 0.13%        | -0.15%       | 5.90%        | 0.0735               | 1.1632        | 0.9812         | 0.3423        | 1.2436        | <b>4.2755</b> |
| 30             | 0.36%        | 0.09%        | 6.26%        | 0.1370               | 1.1221        | <b>1.8957</b>  | 0.3581        | 1.2540        | <b>4.4356</b> |
| <b>-1 to 1</b> |              |              | <b>1.69%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04046</b> | 0.3778        | 1.6991        | <b>3.4535</b> |

**Table-A 5.28 FF Returns to Acquirers; All-firms; (MM, 205); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.11%        | 0.05%        | 0.11%        | 0.1961               | 3.0320        | 0.9867         | 0.1961        | 3.0320        | 0.9867        |
| -19            | 0.14%        | -0.11%       | 0.24%        | 0.0005               | 1.1809        | 0.0060         | 0.1390        | 2.2592        | 0.9385        |
| -18            | 0.04%        | -0.16%       | 0.28%        | -0.0479              | 1.3758        | -0.5313        | 0.0858        | 1.7306        | 0.7565        |
| -17            | 0.50%        | 0.26%        | 0.78%        | 0.2176               | 1.5287        | <b>2.1718</b>  | 0.1831        | 1.6986        | 1.6448        |
| -16            | 0.05%        | -0.12%       | 0.83%        | 0.0553               | 1.3851        | 0.6095         | 0.1886        | 1.6320        | <b>1.7625</b> |
| -15            | -0.05%       | -0.18%       | 0.77%        | 0.0263               | 1.3460        | 0.2983         | 0.1829        | 1.6235        | <b>1.7183</b> |
| -14            | -0.09%       | -0.10%       | 0.69%        | -0.0457              | 1.3765        | -0.5063        | 0.1520        | 1.5196        | 1.5263        |
| -13            | 0.24%        | 0.17%        | 0.92%        | 0.1008               | 1.4717        | 1.0449         | 0.1779        | 1.5663        | <b>1.7323</b> |
| -12            | -0.10%       | -0.38%       | 0.82%        | -0.0476              | 1.2239        | -0.5936        | 0.1518        | 1.4467        | 1.6008        |
| -11            | -0.07%       | -0.16%       | 0.75%        | -0.0427              | 1.1384        | -0.5716        | 0.1305        | 1.3776        | 1.4454        |
| -10            | -0.10%       | -0.23%       | 0.65%        | -0.0083              | 1.4310        | -0.0883        | 0.1220        | 1.4479        | 1.2850        |
| -9             | 0.61%        | 0.22%        | 1.26%        | 0.1551               | 1.4907        | 1.5826         | 0.1616        | 1.3289        | <b>1.8551</b> |
| -8             | 0.06%        | -0.04%       | 1.32%        | 0.0228               | 1.6864        | 0.2058         | 0.1616        | 1.4549        | <b>1.6948</b> |
| -7             | 0.51%        | 0.03%        | 1.83%        | 0.1312               | 1.7240        | 1.1612         | 0.1908        | 1.3354        | <b>2.1798</b> |
| -6             | 0.10%        | -0.04%       | 1.93%        | 0.0528               | 1.1979        | 0.6727         | 0.1980        | 1.3223        | <b>2.2839</b> |
| -5             | 0.20%        | 0.08%        | 2.13%        | 0.0960               | 1.2836        | 1.1409         | 0.2156        | 1.2947        | <b>2.5408</b> |
| -4             | 0.19%        | -0.01%       | 2.31%        | -0.0784              | 2.5457        | -0.4699        | 0.1903        | 1.2159        | <b>2.3873</b> |
| -3             | 0.05%        | -0.11%       | 2.37%        | 0.0869               | 1.5229        | 0.8709         | 0.2054        | 1.2416        | <b>2.5237</b> |
| -2             | 0.11%        | 0.00%        | 2.48%        | -0.0236              | 1.5676        | -0.2299        | 0.1945        | 1.2340        | <b>2.4044</b> |
| -1             | 0.75%        | 0.35%        | 3.23%        | 0.3710               | 2.2088        | <b>2.5626</b>  | 0.2725        | 1.3383        | <b>3.1061</b> |
| <b>0</b>       | <b>0.56%</b> | <b>0.16%</b> | <b>3.78%</b> | <b>0.1837</b>        | <b>1.8984</b> | <b>1.4759</b>  | <b>0.3060</b> | <b>1.3316</b> | <b>3.5051</b> |
| 1              | 0.22%        | 0.01%        | 4.01%        | 0.0825               | 1.8288        | 0.6884         | 0.3165        | 1.3066        | <b>3.6945</b> |
| 2              | 0.60%        | 0.10%        | 4.60%        | 0.2760               | 2.3895        | <b>1.7618</b>  | 0.3670        | 1.4259        | <b>3.9267</b> |
| 3              | 0.07%        | -0.05%       | 4.67%        | 0.0471               | 1.8388        | 0.3908         | 0.3689        | 1.3234        | <b>4.2527</b> |
| 4              | 0.31%        | 0.07%        | 4.98%        | 0.0470               | 1.0949        | 0.6550         | 0.3708        | 1.3078        | <b>4.3255</b> |
| 5              | 0.00%        | -0.13%       | 4.98%        | 0.0971               | 1.5926        | 0.9302         | 0.3827        | 1.3539        | <b>4.3121</b> |
| 6              | -0.24%       | -0.05%       | 4.74%        | -0.0397              | 1.6086        | -0.3764        | 0.3679        | 1.4059        | <b>3.9919</b> |
| 7              | 0.30%        | 0.05%        | 5.04%        | 0.1212               | 2.2779        | 0.8116         | 0.3842        | 1.4617        | <b>4.0094</b> |
| 8              | 0.24%        | 0.06%        | 5.28%        | 0.1302               | 1.4406        | 1.3790         | 0.4017        | 1.5289        | <b>4.0075</b> |
| 9              | -0.25%       | -0.47%       | 5.03%        | -0.1346              | 1.3600        | -1.5096        | 0.3703        | 1.4709        | <b>3.8407</b> |
| 10             | 0.21%        | 0.13%        | 5.24%        | 0.1481               | 1.6822        | 1.3434         | 0.3909        | 1.4564        | <b>4.0945</b> |
| 11             | -0.12%       | -0.11%       | 5.12%        | -0.0483              | 1.3089        | -0.5626        | 0.3762        | 1.4077        | <b>4.0771</b> |
| 12             | 0.23%        | 0.15%        | 5.36%        | 0.0930               | 1.1990        | 1.1838         | 0.3867        | 1.4376        | <b>4.1031</b> |
| 13             | 0.54%        | 0.07%        | 5.89%        | 0.1839               | 1.2245        | <b>2.2908</b>  | 0.4125        | 1.4435        | <b>4.3591</b> |
| 14             | 0.05%        | 0.08%        | 5.94%        | 0.0129               | 1.1643        | 0.1695         | 0.4087        | 1.4693        | <b>4.2437</b> |
| 15             | -0.21%       | -0.19%       | 5.73%        | -0.2039              | 1.6763        | <b>-1.8507</b> | 0.3692        | 1.4377        | <b>3.9171</b> |
| 16             | -0.16%       | -0.35%       | 5.57%        | -0.0321              | 1.3465        | -0.3628        | 0.3589        | 1.4704        | <b>3.7230</b> |
| 17             | -0.28%       | -0.18%       | 5.30%        | -0.0636              | 1.2256        | -0.7896        | 0.3438        | 1.5052        | <b>3.4846</b> |
| 18             | -0.04%       | 0.02%        | 5.25%        | 0.0636               | 1.4196        | 0.6817         | 0.3495        | 1.5642        | <b>3.4083</b> |
| 19             | -0.03%       | 0.04%        | 5.22%        | -0.0898              | 1.7450        | -0.7830        | 0.3309        | 1.5036        | <b>3.3577</b> |
| 20             | -0.14%       | -0.14%       | 5.08%        | -0.0026              | 1.5071        | -0.0258        | 0.3265        | 1.5496        | <b>3.2138</b> |
| 21             | -0.21%       | -0.21%       | 4.87%        | -0.0648              | 1.8828        | -0.5234        | 0.3126        | 1.5931        | <b>2.9931</b> |
| 22             | 0.05%        | 0.11%        | 4.92%        | 0.1532               | 1.6552        | 1.4078         | 0.3321        | 1.6291        | <b>3.1101</b> |
| 23             | 0.51%        | 0.02%        | 5.43%        | 0.1591               | 1.4075        | <b>1.7149</b>  | 0.3522        | 1.5703        | <b>3.4210</b> |
| 24             | -0.09%       | -0.21%       | 5.34%        | 0.0520               | 1.8276        | 0.4320         | 0.3560        | 1.6571        | <b>3.2769</b> |
| 25             | -0.17%       | -0.32%       | 5.17%        | -0.0967              | 1.3518        | -1.0854        | 0.3380        | 1.6086        | <b>3.2053</b> |
| 26             | 0.40%        | 0.16%        | 5.57%        | 0.1482               | 1.2468        | <b>1.8035</b>  | 0.3558        | 1.5737        | <b>3.4492</b> |
| 27             | 0.26%        | 0.06%        | 5.83%        | 0.1314               | 1.2649        | 1.5758         | 0.3709        | 1.5940        | <b>3.5498</b> |
| 28             | -0.04%       | -0.08%       | 5.79%        | 0.0368               | 1.3065        | 0.4275         | 0.3724        | 1.6465        | <b>3.4501</b> |
| 29             | 0.06%        | -0.20%       | 5.86%        | -0.0227              | 1.4604        | -0.2362        | 0.3655        | 1.6051        | <b>3.4737</b> |
| 30             | 0.51%        | 0.16%        | 6.37%        | 0.2431               | 1.2179        | <b>3.0279</b>  | 0.3956        | 1.6442        | <b>3.6707</b> |
| <b>-1 to 1</b> |              |              | <b>1.53%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.03794</b> | 0.3679        | 1.8554        | <b>3.0249</b> |

**Table-A 5.29 FF Returns to Acquirers; All-firms; (OLS, 209); VWI**

| Days           | AAR          | Median       | CAAR         | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|---------------|----------------------|----------------|---------------|---------------|---------------|
| -20            | -0.05%       | -0.13%       | -0.05%       | -0.0149       | 0.9270               | -0.2517        | -0.0149       | 0.9270        | -0.2517       |
| -19            | 0.07%        | -0.19%       | 0.02%        | -0.0148       | 0.9603               | -0.2412        | -0.0211       | 0.9391        | -0.3501       |
| -18            | -0.07%       | -0.24%       | -0.05%       | -0.0282       | 1.0453               | -0.4206        | -0.0335       | 1.0040        | -0.5202       |
| -17            | 0.36%        | 0.05%        | 0.31%        | 0.1181        | 1.1606               | 1.5889         | 0.0301        | 1.0157        | 0.4624        |
| -16            | -0.12%       | -0.17%       | 0.20%        | -0.0125       | 0.9835               | -0.1986        | 0.0213        | 1.0550        | 0.3154        |
| -15            | -0.19%       | -0.28%       | 0.01%        | -0.0454       | 1.1232               | -0.6316        | 0.0009        | 1.0683        | 0.0133        |
| -14            | -0.24%       | -0.15%       | -0.24%       | -0.0360       | 1.1432               | -0.4922        | -0.0128       | 1.0561        | -0.1889       |
| -13            | 0.16%        | -0.01%       | -0.08%       | 0.0308        | 1.2492               | 0.3855         | -0.0010       | 1.1376        | -0.0144       |
| -12            | -0.24%       | -0.51%       | -0.32%       | -0.1006       | 0.9197               | <b>-1.7075</b> | -0.0345       | 1.0635        | -0.5067       |
| -11            | -0.18%       | -0.20%       | -0.50%       | -0.0558       | 0.9712               | -0.8967        | -0.0504       | 1.0276        | -0.7655       |
| -10            | -0.19%       | -0.51%       | -0.69%       | -0.0606       | 0.9923               | -0.9531        | -0.0663       | 1.0127        | -1.0222       |
| -9             | 0.37%        | 0.11%        | -0.32%       | 0.0924        | 1.1317               | 1.2713         | -0.0367       | 1.0228        | -0.5600       |
| -8             | -0.05%       | -0.10%       | -0.38%       | -0.0281       | 1.0660               | -0.4121        | -0.0430       | 1.0350        | -0.6488       |
| -7             | 0.31%        | -0.13%       | -0.07%       | 0.0890        | 1.0046               | 1.3830         | -0.0177       | 1.0537        | -0.2619       |
| -6             | 0.01%        | -0.15%       | -0.05%       | -0.0128       | 0.9976               | -0.2001        | -0.0204       | 1.0684        | -0.2980       |
| -5             | -0.03%       | 0.01%        | -0.09%       | 0.0109        | 1.0866               | 0.1560         | -0.0171       | 1.0583        | -0.2517       |
| -4             | 0.00%        | -0.06%       | -0.09%       | -0.0227       | 0.9972               | -0.3553        | -0.0220       | 1.0118        | -0.3393       |
| -3             | -0.05%       | -0.36%       | -0.14%       | -0.0239       | 0.9060               | -0.4123        | -0.0270       | 1.0320        | -0.4085       |
| -2             | 0.00%        | -0.21%       | -0.14%       | -0.0119       | 0.9735               | -0.1903        | -0.0290       | 1.0160        | -0.4458       |
| -1             | 0.61%        | 0.18%        | 0.47%        | 0.1835        | 1.1684               | <b>2.4520</b>  | 0.0127        | 1.0547        | 0.1883        |
| <b>0</b>       | <b>0.39%</b> | <b>0.07%</b> | <b>0.86%</b> | <b>0.1707</b> | <b>1.3535</b>        | <b>1.9690</b>  | <b>0.0496</b> | <b>1.0722</b> | <b>0.7229</b> |
| 1              | 0.12%        | -0.10%       | 0.98%        | 0.0256        | 1.2618               | 0.3165         | 0.0539        | 1.0858        | 0.7750        |
| 2              | 0.51%        | 0.07%        | 1.49%        | 0.1583        | 1.4162               | <b>1.7447</b>  | 0.0857        | 1.1032        | 1.2129        |
| 3              | -0.06%       | -0.16%       | 1.43%        | -0.0212       | 1.1008               | -0.3004        | 0.0796        | 1.1033        | 1.1261        |
| 4              | 0.14%        | -0.20%       | 1.57%        | 0.0074        | 0.9266               | 0.1244         | 0.0794        | 1.1017        | 1.1256        |
| 5              | -0.20%       | -0.32%       | 1.38%        | -0.0362       | 0.9984               | -0.5663        | 0.0708        | 1.1116        | 0.9943        |
| 6              | -0.38%       | -0.21%       | 0.99%        | -0.1164       | 1.0980               | <b>-1.6553</b> | 0.0471        | 1.1258        | 0.6527        |
| 7              | 0.23%        | -0.12%       | 1.22%        | 0.0634        | 0.9983               | 0.9920         | 0.0582        | 1.1356        | 0.8004        |
| 8              | 0.08%        | -0.13%       | 1.30%        | -0.0061       | 1.0550               | -0.0908        | 0.0560        | 1.1331        | 0.7722        |
| 9              | -0.41%       | -0.67%       | 0.89%        | -0.1222       | 0.9944               | <b>-1.9181</b> | 0.0328        | 1.1399        | 0.4491        |
| 10             | 0.09%        | -0.03%       | 0.98%        | 0.0515        | 1.0621               | 0.7564         | 0.0415        | 1.1636        | 0.5568        |
| 11             | -0.22%       | -0.23%       | 0.76%        | -0.0425       | 0.9106               | -0.7283        | 0.0333        | 1.1815        | 0.4404        |
| 12             | 0.05%        | -0.05%       | 0.81%        | 0.0119        | 0.9311               | 0.1998         | 0.0349        | 1.1904        | 0.4577        |
| 13             | 0.29%        | -0.11%       | 1.10%        | 0.0746        | 0.9830               | 1.1854         | 0.0472        | 1.2078        | 0.6098        |
| 14             | -0.08%       | -0.05%       | 1.02%        | -0.0476       | 0.9403               | -0.7900        | 0.0385        | 1.1995        | 0.5005        |
| 15             | -0.28%       | -0.29%       | 0.74%        | -0.1326       | 1.0926               | <b>-1.8888</b> | 0.0159        | 1.2073        | 0.2057        |
| 16             | -0.32%       | -0.55%       | 0.42%        | -0.1426       | 1.0322               | <b>-2.1505</b> | -0.0077       | 1.1804        | -0.1012       |
| 17             | -0.39%       | -0.30%       | 0.03%        | -0.1416       | 0.8732               | <b>-2.5242</b> | -0.0304       | 1.1702        | -0.4059       |
| 18             | -0.23%       | -0.28%       | -0.20%       | -0.0350       | 1.0988               | -0.4957        | -0.0356       | 1.1640        | -0.4780       |
| 19             | -0.21%       | -0.21%       | -0.41%       | -0.0495       | 1.1314               | -0.6817        | -0.0430       | 1.1273        | -0.5956       |
| 20             | -0.35%       | -0.32%       | -0.76%       | -0.1063       | 1.1489               | -1.4406        | -0.0590       | 1.1300        | -0.8155       |
| 21             | -0.39%       | -0.20%       | -1.15%       | -0.1399       | 1.0531               | <b>-2.0687</b> | -0.0798       | 1.1272        | -1.1056       |
| 22             | -0.25%       | -0.16%       | -1.40%       | -0.0485       | 0.9026               | -0.8371        | -0.0863       | 1.1046        | -1.2195       |
| 23             | 0.41%        | -0.18%       | -0.99%       | 0.1018        | 1.0006               | 1.5799         | -0.0701       | 1.1115        | -0.9844       |
| 24             | -0.28%       | -0.14%       | -1.27%       | -0.0809       | 1.1620               | -1.0803        | -0.0812       | 1.1356        | -1.1168       |
| 25             | -0.43%       | -0.52%       | -1.71%       | -0.1681       | 1.1236               | <b>-2.3223</b> | -0.1049       | 1.1190        | -1.4634       |
| 26             | 0.17%        | 0.05%        | -1.53%       | 0.0479        | 0.9994               | 0.7448         | -0.0969       | 1.1005        | -1.3739       |
| 27             | 0.09%        | -0.10%       | -1.44%       | 0.0578        | 1.0222               | 0.8781         | -0.0876       | 1.0999        | -1.2429       |
| 28             | -0.22%       | -0.10%       | -1.66%       | -0.0596       | 0.8822               | -1.0480        | -0.0951       | 1.1047        | -1.3440       |
| 29             | -0.10%       | -0.21%       | -1.76%       | -0.0431       | 0.9919               | -0.6748        | -0.1002       | 1.0969        | -1.4258       |
| 30             | 0.36%        | 0.15%        | -1.40%       | 0.1249        | 1.0487               | <b>1.8493</b>  | -0.0819       | 1.1061        | -1.1555       |
| <b>-1 to 1</b> |              |              | <b>1.12%</b> |               | <b>StdDev(AAR-0)</b> | <b>0.0378</b>  | 0.2193        | 1.4708        | <b>2.3274</b> |

Table-A 5.30 FF Returns to Acquirers; MM firms; (OLS, 205); VWI

| Days     | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats        |
|----------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|----------------|
| -20      | 0.00%        | -0.13%       | 0.00%        | -0.0056              | 0.9256        | -0.0929        | -0.0056       | 0.9256        | -0.0929        |
| -19      | 0.01%        | -0.21%       | 0.01%        | -0.0313              | 0.9477        | -0.5097        | -0.0260       | 0.9419        | -0.4272        |
| -18      | -0.11%       | -0.24%       | -0.10%       | -0.0423              | 1.0321        | -0.6336        | -0.0457       | 0.9906        | -0.7128        |
| -17      | 0.34%        | 0.04%        | 0.24%        | 0.1139               | 1.1676        | 1.5067         | 0.0174        | 1.0057        | 0.2667         |
| -16      | -0.12%       | -0.17%       | 0.12%        | -0.0122              | 0.9918        | -0.1907        | 0.0101        | 1.0525        | 0.1476         |
| -15      | -0.19%       | -0.28%       | -0.07%       | -0.0352              | 1.1056        | -0.4920        | -0.0052       | 1.0678        | -0.0752        |
| -14      | -0.23%       | -0.12%       | -0.30%       | -0.0430              | 1.1188        | -0.5935        | -0.0211       | 1.0597        | -0.3070        |
| -13      | 0.04%        | -0.04%       | -0.25%       | 0.0015               | 1.1999        | 0.0197         | -0.0192       | 1.1220        | -0.2638        |
| -12      | -0.25%       | -0.43%       | -0.50%       | -0.0986              | 0.9157        | <b>-1.6636</b> | -0.0509       | 1.0495        | -0.7497        |
| -11      | -0.21%       | -0.20%       | -0.71%       | -0.0633              | 0.9770        | -1.0009        | -0.0683       | 1.0089        | -1.0463        |
| -10      | -0.25%       | -0.54%       | -0.96%       | -0.0777              | 0.9822        | -1.2219        | -0.0886       | 0.9806        | -1.3955        |
| -9       | 0.41%        | 0.08%        | -0.55%       | 0.0984               | 1.1308        | 1.3411         | -0.0563       | 0.9896        | -0.8785        |
| -8       | -0.05%       | -0.10%       | -0.61%       | -0.0277              | 1.0754        | -0.3980        | -0.0617       | 1.0079        | -0.9458        |
| -7       | 0.33%        | -0.13%       | -0.27%       | 0.0936               | 1.0135        | 1.4272         | -0.0344       | 1.0320        | -0.5158        |
| -6       | -0.06%       | -0.20%       | -0.33%       | -0.0319              | 0.9806        | -0.5030        | -0.0415       | 1.0341        | -0.6206        |
| -5       | 0.04%        | 0.01%        | -0.29%       | 0.0401               | 1.0525        | 0.5888         | -0.0302       | 1.0380        | -0.4499        |
| -4       | 0.01%        | -0.06%       | -0.28%       | -0.0216              | 0.9821        | -0.3396        | -0.0345       | 1.0019        | -0.5319        |
| -3       | -0.08%       | -0.39%       | -0.35%       | -0.0329              | 0.9050        | -0.5624        | -0.0413       | 1.0174        | -0.6269        |
| -2       | -0.06%       | -0.22%       | -0.41%       | -0.0277              | 0.9612        | -0.4453        | -0.0465       | 0.9907        | -0.7258        |
| -1       | 0.58%        | 0.18%        | 0.17%        | 0.1728               | 1.1640        | <b>2.2933</b>  | -0.0068       | 1.0212        | -0.1023        |
| <b>0</b> | <b>0.37%</b> | <b>0.03%</b> | <b>0.54%</b> | <b>0.1674</b>        | <b>1.3659</b> | <b>1.8932</b>  | <b>0.0299</b> | <b>1.0390</b> | <b>0.4447</b>  |
| 1        | 0.09%        | -0.10%       | 0.63%        | 0.0204               | 1.2696        | 0.2486         | 0.0335        | 1.0569        | 0.4900         |
| 2        | 0.47%        | 0.05%        | 1.10%        | 0.1465               | 1.4155        | 1.5996         | 0.0633        | 1.0648        | 0.9190         |
| 3        | -0.11%       | -0.17%       | 0.99%        | -0.0378              | 1.0842        | -0.5392        | 0.0543        | 1.0509        | 0.7980         |
| 4        | 0.11%        | -0.22%       | 1.10%        | -0.0013              | 0.9201        | -0.0225        | 0.0529        | 1.0453        | 0.7817         |
| 5        | -0.20%       | -0.36%       | 0.90%        | -0.0422              | 0.9873        | -0.6608        | 0.0436        | 1.0472        | 0.6432         |
| 6        | -0.33%       | -0.24%       | 0.57%        | -0.1106              | 1.0743        | -1.5915        | 0.0215        | 1.0544        | 0.3147         |
| 7        | 0.11%        | -0.16%       | 0.67%        | 0.0264               | 0.9554        | 0.4272         | 0.0261        | 1.0561        | 0.3818         |
| 8        | 0.09%        | -0.13%       | 0.76%        | -0.0041              | 1.0644        | -0.0598        | 0.0249        | 1.0598        | 0.3623         |
| 9        | -0.42%       | -0.64%       | 0.34%        | -0.1303              | 0.9952        | <b>-2.0223</b> | 0.0006        | 1.0695        | 0.0093         |
| 10       | 0.06%        | -0.03%       | 0.39%        | 0.0368               | 1.0546        | 0.5392         | 0.0072        | 1.0857        | 0.1031         |
| 11       | -0.28%       | -0.26%       | 0.11%        | -0.0592              | 0.8929        | -1.0246        | -0.0033       | 1.0920        | -0.0473        |
| 12       | -0.01%       | -0.09%       | 0.10%        | -0.0135              | 0.8830        | -0.2370        | -0.0056       | 1.0970        | -0.0795        |
| 13       | 0.35%        | -0.09%       | 0.45%        | 0.0861               | 0.9838        | 1.3519         | 0.0092        | 1.1207        | 0.1268         |
| 14       | -0.08%       | -0.05%       | 0.37%        | -0.0470              | 0.9491        | -0.7652        | 0.0011        | 1.1158        | 0.0155         |
| 15       | -0.36%       | -0.30%       | 0.02%        | -0.1582              | 1.0720        | <b>-2.2743</b> | -0.0252       | 1.1085        | -0.3507        |
| 16       | -0.23%       | -0.55%       | -0.22%       | -0.1108              | 0.9780        | <b>-1.7455</b> | -0.0430       | 1.1026        | -0.6021        |
| 17       | -0.40%       | -0.33%       | -0.61%       | -0.1399              | 0.8764        | <b>-2.4602</b> | -0.0650       | 1.0944        | -0.9178        |
| 18       | -0.21%       | -0.27%       | -0.83%       | -0.0416              | 1.0493        | -0.6111        | -0.0708       | 1.0891        | -1.0048        |
| 19       | -0.22%       | -0.23%       | -1.05%       | -0.0495              | 1.1238        | -0.6792        | -0.0777       | 1.0608        | -1.1324        |
| 20       | -0.28%       | -0.29%       | -1.33%       | -0.0808              | 1.1317        | -1.0999        | -0.0894       | 1.0784        | -1.2805        |
| 21       | -0.41%       | -0.26%       | -1.73%       | -0.1438              | 1.0292        | <b>-2.1526</b> | -0.1104       | 1.0847        | -1.5727        |
| 22       | -0.14%       | -0.14%       | -1.87%       | -0.0160              | 0.8703        | -0.2838        | -0.1116       | 1.0713        | -1.6090        |
| 23       | 0.37%        | -0.20%       | -1.50%       | 0.0952               | 1.0049        | 1.4550         | -0.0961       | 1.0787        | -1.3762        |
| 24       | -0.24%       | -0.12%       | -1.74%       | -0.0645              | 1.1539        | -0.8591        | -0.1045       | 1.1083        | -1.4572        |
| 25       | -0.35%       | -0.52%       | -2.10%       | -0.1407              | 1.0974        | <b>-1.9698</b> | -0.1239       | 1.1000        | <b>-1.7407</b> |
| 26       | 0.24%        | 0.05%        | -1.86%       | 0.0660               | 0.9801        | 1.0344         | -0.1131       | 1.0890        | -1.6044        |
| 27       | 0.10%        | -0.08%       | -1.76%       | 0.0674               | 1.0136        | 1.0222         | -0.1022       | 1.0922        | -1.4466        |
| 28       | -0.15%       | -0.10%       | -1.91%       | -0.0419              | 0.8704        | -0.7393        | -0.1071       | 1.0969        | -1.5090        |
| 29       | -0.09%       | -0.21%       | -2.00%       | -0.0366              | 0.9929        | -0.5664        | -0.1112       | 1.0887        | -1.5779        |
| 30       | 0.39%        | 0.16%        | -1.61%       | 0.1279               | 0.9777        | <b>2.0104</b>  | -0.0923       | 1.1052        | -1.2910        |
| -1 to 1  |              |              | <b>1.04%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.03812</b> | 0.2082        | 1.4789        | <b>2.1748</b>  |

Table-A 5.31 Market Returns to Acquirers; FF-firms; (OLS, 209); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.07%       | -0.22%       | -0.07%       | -0.0113              | 0.9534        | -0.1828        | -0.0113       | 0.9534        | -0.1828       |
| -19            | -0.04%       | -0.17%       | -0.11%       | -0.0540              | 0.9392        | -0.8850        | -0.0462       | 0.9247        | -0.7688       |
| -18            | -0.19%       | -0.36%       | -0.30%       | -0.0749              | 1.0622        | -1.0852        | -0.0810       | 0.9799        | -1.2715       |
| -17            | 0.34%        | 0.12%        | 0.04%        | 0.0987               | 1.1046        | 1.3747         | -0.0208       | 0.9712        | -0.3293       |
| -16            | -0.24%       | -0.44%       | -0.20%       | -0.0562              | 0.9856        | -0.8781        | -0.0437       | 1.0209        | -0.6592       |
| -15            | -0.19%       | -0.25%       | -0.40%       | -0.0523              | 1.0996        | -0.7326        | -0.0613       | 1.0111        | -0.9329       |
| -14            | -0.32%       | -0.25%       | -0.71%       | -0.0615              | 1.1420        | -0.8282        | -0.0800       | 0.9788        | -1.2574       |
| -13            | 0.30%        | 0.05%        | -0.41%       | 0.0871               | 1.3169        | 1.0176         | -0.0440       | 1.1031        | -0.6141       |
| -12            | -0.21%       | -0.49%       | -0.62%       | -0.0678              | 0.9469        | -1.1024        | -0.0641       | 1.0318        | -0.9563       |
| -11            | -0.20%       | -0.35%       | -0.82%       | -0.0508              | 0.9840        | -0.7940        | -0.0769       | 1.0328        | -1.1456       |
| -10            | -0.16%       | -0.31%       | -0.97%       | -0.0494              | 1.0000        | -0.7610        | -0.0882       | 1.0288        | -1.3195       |
| -9             | 0.47%        | 0.07%        | -0.51%       | 0.1160               | 1.1123        | 1.6049         | -0.0510       | 1.0403        | -0.7540       |
| -8             | -0.12%       | -0.16%       | -0.62%       | -0.0456              | 1.0697        | -0.6561        | -0.0616       | 1.0541        | -0.8997       |
| -7             | 0.27%        | -0.15%       | -0.35%       | 0.0700               | 0.9770        | 1.1032         | -0.0407       | 1.0667        | -0.5866       |
| -6             | 0.00%        | -0.08%       | -0.36%       | -0.0013              | 1.0211        | -0.0190        | -0.0396       | 1.0893        | -0.5595       |
| -5             | -0.03%       | -0.01%       | -0.38%       | 0.0079               | 1.0723        | 0.1137         | -0.0364       | 1.0454        | -0.5354       |
| -4             | -0.10%       | -0.16%       | -0.48%       | -0.0409              | 0.9962        | -0.6316        | -0.0452       | 0.9933        | -0.7003       |
| -3             | -0.05%       | -0.33%       | -0.53%       | -0.0287              | 0.9117        | -0.4837        | -0.0507       | 1.0168        | -0.7670       |
| -2             | 0.03%        | -0.21%       | -0.50%       | -0.0086              | 0.9226        | -0.1440        | -0.0513       | 1.0033        | -0.7870       |
| -1             | 0.62%        | 0.03%        | 0.12%        | 0.1821               | 1.1216        | <b>2.4986</b>  | -0.0093       | 1.0470        | -0.1366       |
| <b>0</b>       | <b>0.37%</b> | <b>0.05%</b> | <b>0.49%</b> | <b>0.1527</b>        | <b>1.3151</b> | <b>1.7866</b>  | <b>0.0242</b> | <b>1.0537</b> | <b>0.3542</b> |
| 1              | 0.07%        | -0.09%       | 0.56%        | 0.0148               | 1.2289        | 0.1854         | 0.0268        | 1.0723        | 0.3853        |
| 2              | 0.48%        | -0.10%       | 1.04%        | 0.1489               | 1.3839        | <b>1.6559</b>  | 0.0573        | 1.0954        | 0.8051        |
| 3              | -0.15%       | -0.23%       | 0.90%        | -0.0427              | 1.0669        | -0.6159        | 0.0474        | 1.0965        | 0.6651        |
| 4              | 0.15%        | -0.08%       | 1.05%        | 0.0174               | 0.9401        | 0.2855         | 0.0499        | 1.1004        | 0.6981        |
| 5              | -0.21%       | -0.42%       | 0.84%        | -0.0436              | 0.9780        | -0.6862        | 0.0404        | 1.0979        | 0.5662        |
| 6              | -0.43%       | -0.15%       | 0.40%        | -0.1217              | 1.0824        | <b>-1.7305</b> | 0.0162        | 1.1120        | 0.2244        |
| 7              | 0.27%        | -0.06%       | 0.67%        | 0.0740               | 1.0026        | 1.1364         | 0.0299        | 1.1269        | 0.4086        |
| 8              | 0.08%        | -0.15%       | 0.75%        | -0.0130              | 1.0579        | -0.1896        | 0.0270        | 1.1299        | 0.3674        |
| 9              | -0.34%       | -0.54%       | 0.42%        | -0.0800              | 0.9811        | -1.2555        | 0.0119        | 1.1394        | 0.1609        |
| 10             | 0.11%        | -0.01%       | 0.53%        | 0.0627               | 1.0044        | 0.9601         | 0.0230        | 1.1573        | 0.3055        |
| 11             | -0.17%       | -0.15%       | 0.35%        | -0.0188              | 0.9130        | -0.3171        | 0.0193        | 1.1881        | 0.2498        |
| 12             | 0.09%        | -0.16%       | 0.44%        | 0.0194               | 0.9685        | 0.3090         | 0.0224        | 1.2042        | 0.2859        |
| 13             | 0.43%        | -0.05%       | 0.87%        | 0.1221               | 0.9483        | <b>1.9811</b>  | 0.0430        | 1.2150        | 0.5444        |
| 14             | -0.13%       | -0.13%       | 0.74%        | -0.0680              | 0.9107        | -1.1490        | 0.0309        | 1.2080        | 0.3932        |
| 15             | -0.13%       | -0.17%       | 0.61%        | -0.0723              | 1.0730        | -1.0368        | 0.0184        | 1.2226        | 0.2314        |
| 16             | -0.30%       | -0.45%       | 0.30%        | -0.1267              | 1.0089        | <b>-1.9321</b> | -0.0027       | 1.1916        | -0.0347       |
| 17             | -0.41%       | -0.31%       | -0.10%       | -0.1394              | 0.9156        | <b>-2.3438</b> | -0.0253       | 1.1784        | -0.3301       |
| 18             | -0.07%       | 0.00%        | -0.17%       | 0.0223               | 1.0866        | 0.3161         | -0.0214       | 1.1729        | -0.2805       |
| 19             | -0.21%       | -0.07%       | -0.39%       | -0.0578              | 1.1183        | -0.7953        | -0.0302       | 1.1366        | -0.4095       |
| 20             | -0.35%       | -0.36%       | -0.73%       | -0.1091              | 1.2240        | -1.3714        | -0.0469       | 1.1427        | -0.6317       |
| 21             | -0.35%       | -0.25%       | -1.08%       | -0.1100              | 1.0711        | -1.5808        | -0.0633       | 1.1353        | -0.8584       |
| 22             | -0.23%       | 0.00%        | -1.31%       | -0.0460              | 0.8917        | -0.7932        | -0.0696       | 1.1064        | -0.9680       |
| 23             | 0.33%        | -0.17%       | -0.98%       | 0.0869               | 1.0127        | 1.3213         | -0.0557       | 1.1008        | -0.7785       |
| 24             | -0.15%       | -0.15%       | -1.12%       | -0.0344              | 1.1495        | -0.4607        | -0.0602       | 1.1220        | -0.8256       |
| 25             | -0.36%       | -0.32%       | -1.49%       | -0.1447              | 1.0327        | <b>-2.1558</b> | -0.0809       | 1.1064        | -1.1248       |
| 26             | 0.17%        | -0.09%       | -1.32%       | 0.0432               | 1.0004        | 0.6644         | -0.0737       | 1.0925        | -1.0382       |
| 27             | 0.10%        | -0.24%       | -1.22%       | 0.0500               | 1.0138        | 0.7591         | -0.0657       | 1.0946        | -0.9239       |
| 28             | -0.21%       | -0.17%       | -1.43%       | -0.0477              | 0.8376        | -0.8761        | -0.0718       | 1.1035        | -1.0020       |
| 29             | -0.20%       | -0.29%       | -1.64%       | -0.0548              | 0.9624        | -0.8771        | -0.0789       | 1.0904        | -1.1133       |
| 30             | 0.35%        | 0.03%        | -1.28%       | 0.1209               | 1.0156        | <b>1.8321</b>  | -0.0612       | 1.0931        | -0.8613       |
| <b>-1 to 1</b> |              |              | <b>1.06%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.03771</b> | 0.2018        | 1.4560        | <b>2.1333</b> |



Table-A 5.32 Market Returns to Acquirers; FF-firms; (MM, 205); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.14%        | -0.07%       | 0.14%        | 0.2323               | 3.1934        | 1.0965         | 0.2323        | 3.1934        | 1.0965        |
| -19            | 0.06%        | -0.02%       | 0.20%        | -0.0419              | 1.1533        | -0.5477        | 0.1346        | 2.3503        | 0.8635        |
| -18            | -0.08%       | -0.18%       | 0.12%        | -0.1059              | 1.4174        | -1.1260        | 0.0488        | 1.7715        | 0.4152        |
| -17            | 0.48%        | 0.21%        | 0.60%        | 0.2037               | 1.5115        | <b>2.0319</b>  | 0.1441        | 1.7289        | 1.2566        |
| -16            | -0.05%       | -0.30%       | 0.55%        | 0.0234               | 1.4215        | 0.2477         | 0.1393        | 1.6699        | 1.2580        |
| -15            | -0.03%       | -0.08%       | 0.52%        | 0.0305               | 1.3508        | 0.3406         | 0.1397        | 1.6646        | 1.2649        |
| -14            | -0.14%       | -0.21%       | 0.38%        | -0.0694              | 1.4080        | -0.7428        | 0.1031        | 1.5322        | 1.0142        |
| -13            | 0.34%        | 0.12%        | 0.72%        | 0.1396               | 1.5513        | 1.3562         | 0.1458        | 1.5907        | 1.3815        |
| -12            | -0.07%       | -0.29%       | 0.65%        | -0.0155              | 1.2877        | -0.1809        | 0.1323        | 1.4720        | 1.3547        |
| -11            | -0.09%       | -0.18%       | 0.56%        | -0.0359              | 1.1541        | -0.4685        | 0.1141        | 1.4302        | 1.2033        |
| -10            | -0.07%       | -0.14%       | 0.48%        | 0.0013               | 1.4885        | 0.0131         | 0.1092        | 1.5173        | 1.0852        |
| -9             | 0.68%        | 0.17%        | 1.17%        | 0.1738               | 1.5000        | <b>1.7467</b>  | 0.1547        | 1.3861        | <b>1.6831</b> |
| -8             | 0.02%        | -0.01%       | 1.19%        | 0.0150               | 1.7279        | 0.1307         | 0.1528        | 1.5160        | 1.5198        |
| -7             | 0.44%        | 0.08%        | 1.63%        | 0.1087               | 1.7657        | 0.9284         | 0.1763        | 1.3849        | <b>1.9196</b> |
| -6             | 0.04%        | 0.02%        | 1.67%        | 0.0472               | 1.2239        | 0.5819         | 0.1825        | 1.3713        | <b>2.0068</b> |
| -5             | 0.22%        | 0.11%        | 1.89%        | 0.0872               | 1.2977        | 1.0134         | 0.1986        | 1.3102        | <b>2.2847</b> |
| -4             | 0.09%        | -0.02%       | 1.98%        | -0.1154              | 2.6579        | -0.6543        | 0.1646        | 1.2286        | <b>2.0205</b> |
| -3             | 0.05%        | -0.17%       | 2.02%        | 0.0763               | 1.5372        | 0.7484         | 0.1780        | 1.2485        | <b>2.1493</b> |
| -2             | 0.14%        | -0.14%       | 2.17%        | -0.0252              | 1.5779        | -0.2409        | 0.1675        | 1.2501        | <b>2.0196</b> |
| -1             | 0.77%        | 0.18%        | 2.93%        | 0.3794               | 2.2616        | <b>2.5288</b>  | 0.2481        | 1.3702        | <b>2.7293</b> |
| <b>0</b>       | <b>0.50%</b> | <b>0.12%</b> | <b>3.43%</b> | <b>0.1520</b>        | <b>1.9131</b> | <b>1.1982</b>  | <b>0.2753</b> | <b>1.3545</b> | <b>3.0637</b> |
| 1              | 0.17%        | 0.00%        | 3.60%        | 0.0729               | 1.8375        | 0.5982         | 0.2845        | 1.3270        | <b>3.2318</b> |
| 2              | 0.60%        | 0.09%        | 4.19%        | 0.2829               | 2.4632        | <b>1.7313</b>  | 0.3372        | 1.4633        | <b>3.4741</b> |
| 3              | -0.01%       | -0.07%       | 4.18%        | 0.0246               | 1.8800        | 0.1970         | 0.3351        | 1.3555        | <b>3.7273</b> |
| 4              | 0.32%        | 0.03%        | 4.50%        | 0.0515               | 1.1432        | 0.6794         | 0.3386        | 1.3398        | <b>3.8106</b> |
| 5              | -0.06%       | -0.14%       | 4.45%        | 0.0817               | 1.6406        | 0.7509         | 0.3481        | 1.3778        | <b>3.8090</b> |
| 6              | -0.26%       | 0.00%        | 4.19%        | -0.0342              | 1.6339        | -0.3155        | 0.3350        | 1.4339        | <b>3.5223</b> |
| 7              | 0.29%        | 0.01%        | 4.47%        | 0.1201               | 2.3676        | 0.7650         | 0.3517        | 1.4941        | <b>3.5485</b> |
| 8              | 0.25%        | -0.09%       | 4.73%        | 0.1247               | 1.4791        | 1.2711         | 0.3687        | 1.5716        | <b>3.5370</b> |
| 9              | -0.20%       | -0.24%       | 4.52%        | -0.1052              | 1.3710        | -1.1566        | 0.3433        | 1.5125        | <b>3.4221</b> |
| 10             | 0.23%        | 0.11%        | 4.75%        | 0.1623               | 1.6864        | 1.4511         | 0.3669        | 1.4917        | <b>3.7081</b> |
| 11             | -0.06%       | 0.05%        | 4.69%        | -0.0221              | 1.3334        | -0.2496        | 0.3572        | 1.4461        | <b>3.7241</b> |
| 12             | 0.25%        | -0.03%       | 4.94%        | 0.1088               | 1.2372        | 1.3259         | 0.3707        | 1.4843        | <b>3.7652</b> |
| 13             | 0.64%        | 0.14%        | 5.58%        | 0.2259               | 1.2210        | <b>2.7891</b>  | 0.4039        | 1.4806        | <b>4.1131</b> |
| 14             | 0.00%        | 0.04%        | 5.58%        | -0.0131              | 1.1436        | -0.1733        | 0.3959        | 1.5056        | <b>3.9643</b> |
| 15             | -0.05%       | -0.03%       | 5.53%        | -0.1433              | 1.7238        | -1.2537        | 0.3665        | 1.4736        | <b>3.7494</b> |
| 16             | -0.13%       | -0.20%       | 5.40%        | -0.0189              | 1.3680        | -0.2081        | 0.3584        | 1.5088        | <b>3.5811</b> |
| 17             | -0.24%       | -0.22%       | 5.16%        | -0.0507              | 1.3119        | -0.5827        | 0.3454        | 1.5456        | <b>3.3694</b> |
| 18             | 0.10%        | 0.21%        | 5.25%        | 0.1166               | 1.4575        | 1.2061         | 0.3596        | 1.6052        | <b>3.3776</b> |
| 19             | -0.05%       | 0.07%        | 5.21%        | -0.1088              | 1.7964        | -0.9135        | 0.3379        | 1.5468        | <b>3.2933</b> |
| 20             | -0.10%       | 0.00%        | 5.11%        | -0.0023              | 1.6028        | -0.0220        | 0.3334        | 1.5977        | <b>3.1459</b> |
| 21             | -0.17%       | -0.06%       | 4.94%        | -0.0491              | 2.0463        | -0.3620        | 0.3218        | 1.6478        | <b>2.9444</b> |
| 22             | 0.09%        | 0.20%        | 5.03%        | 0.1707               | 1.7067        | 1.5075         | 0.3441        | 1.6842        | <b>3.0800</b> |
| 23             | 0.44%        | 0.06%        | 5.47%        | 0.1558               | 1.4324        | 1.6395         | 0.3636        | 1.6118        | <b>3.4011</b> |
| 24             | -0.01%       | -0.09%       | 5.46%        | 0.0918               | 1.8747        | 0.7385         | 0.3733        | 1.6970        | <b>3.3159</b> |
| 25             | -0.11%       | -0.19%       | 5.36%        | -0.0761              | 1.3036        | -0.8802        | 0.3580        | 1.6496        | <b>3.2713</b> |
| 26             | 0.41%        | 0.03%        | 5.76%        | 0.1390               | 1.2512        | <b>1.6754</b>  | 0.3744        | 1.6162        | <b>3.4925</b> |
| 27             | 0.27%        | -0.01%       | 6.04%        | 0.1318               | 1.2929        | 1.5366         | 0.3895        | 1.6389        | <b>3.5829</b> |
| 28             | -0.01%       | -0.08%       | 6.03%        | 0.0546               | 1.3093        | 0.6286         | 0.3933        | 1.6985        | <b>3.4909</b> |
| 29             | 0.02%        | -0.14%       | 6.05%        | -0.0321              | 1.4789        | -0.3277        | 0.3848        | 1.6543        | <b>3.5069</b> |
| 30             | 0.50%        | 0.17%        | 6.55%        | 0.2388               | 1.2035        | <b>2.9916</b>  | 0.4145        | 1.6934        | <b>3.6899</b> |
| <b>-1 to 1</b> |              |              | <b>1.43%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.03804</b> | 0.3489        | 1.8727        | <b>2.8089</b> |

**Table-A 5.33 SW-1 Returns to Acquirers; All-firms; (OLS, 233); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.02%        | -0.01%       | 0.02%        | 0.0287               | 0.9269        | 0.5102         | 0.0287        | 0.9269        | 0.5102        |
| -19            | -0.03%       | -0.16%       | -0.01%       | -0.0374              | 0.9471        | -0.6521        | -0.0062       | 0.9219        | -0.1110       |
| -18            | -0.30%       | -0.50%       | -0.31%       | -0.1002              | 1.0191        | -1.6230        | -0.0629       | 0.9625        | -1.0790       |
| -17            | 0.36%        | 0.09%        | 0.05%        | 0.1120               | 1.0966        | <b>1.6863</b>  | 0.0015        | 0.9640        | 0.0262        |
| -16            | -0.19%       | -0.42%       | -0.14%       | -0.0373              | 1.0022        | -0.6141        | -0.0153       | 1.0271        | -0.2460       |
| -15            | -0.20%       | -0.35%       | -0.33%       | -0.0556              | 1.0953        | -0.8375        | -0.0367       | 1.0321        | -0.5863       |
| -14            | -0.29%       | -0.27%       | -0.62%       | -0.0511              | 1.1382        | -0.7416        | -0.0533       | 0.9998        | -0.8795       |
| -13            | 0.24%        | 0.04%        | -0.39%       | 0.0774               | 1.2875        | 0.9923         | -0.0225       | 1.1212        | -0.3307       |
| -12            | -0.21%       | -0.43%       | -0.60%       | -0.0655              | 0.9498        | -1.1378        | -0.0430       | 1.0345        | -0.6862       |
| -11            | -0.26%       | -0.38%       | -0.86%       | -0.0755              | 0.9484        | -1.3143        | -0.0647       | 1.0309        | -1.0356       |
| -10            | -0.16%       | -0.25%       | -1.02%       | -0.0359              | 1.0126        | -0.5849        | -0.0725       | 1.0256        | -1.1666       |
| -9             | 0.43%        | 0.09%        | -0.59%       | 0.1120               | 1.0895        | <b>1.6973</b>  | -0.0371       | 1.0410        | -0.5876       |
| -8             | -0.19%       | -0.16%       | -0.79%       | -0.0715              | 1.0267        | -1.1495        | -0.0554       | 1.0570        | -0.8657       |
| -7             | 0.27%        | -0.09%       | -0.52%       | 0.0832               | 0.9694        | 1.4172         | -0.0312       | 1.0777        | -0.4775       |
| -6             | 0.02%        | -0.02%       | -0.49%       | 0.0090               | 1.0043        | 0.1485         | -0.0278       | 1.1006        | -0.4167       |
| -5             | -0.03%       | -0.06%       | -0.53%       | -0.0045              | 1.0469        | -0.0714        | -0.0280       | 1.0551        | -0.4386       |
| -4             | -0.13%       | -0.26%       | -0.65%       | -0.0503              | 1.0143        | -0.8189        | -0.0394       | 1.0030        | -0.6484       |
| -3             | -0.12%       | -0.38%       | -0.77%       | -0.0449              | 0.9586        | -0.7737        | -0.0489       | 1.0142        | -0.7956       |
| -2             | 0.05%        | -0.07%       | -0.72%       | 0.0080               | 0.9204        | 0.1442         | -0.0457       | 0.9949        | -0.7588       |
| -1             | 0.58%        | 0.13%        | -0.15%       | 0.1627               | 1.0916        | <b>2.4597</b>  | -0.0082       | 1.0351        | -0.1308       |
| <b>0</b>       | <b>0.29%</b> | <b>0.02%</b> | <b>0.15%</b> | <b>0.1288</b>        | <b>1.4499</b> | <b>1.4668</b>  | <b>0.0201</b> | <b>1.0680</b> | <b>0.3108</b> |
| 1              | 0.27%        | -0.05%       | 0.42%        | 0.0853               | 1.4979        | 0.9400         | 0.0378        | 1.0756        | 0.5806        |
| 2              | 0.44%        | -0.09%       | 0.86%        | 0.1364               | 1.3470        | <b>1.6718</b>  | 0.0655        | 1.0930        | 0.9885        |
| 3              | -0.12%       | -0.24%       | 0.74%        | -0.0295              | 1.1210        | -0.4343        | 0.0581        | 1.0922        | 0.8773        |
| 4              | 0.08%        | -0.15%       | 0.82%        | 0.0063               | 0.9346        | 0.1111         | 0.0581        | 1.0920        | 0.8788        |
| 5              | -0.22%       | -0.50%       | 0.60%        | -0.0521              | 0.9798        | -0.8785        | 0.0468        | 1.0871        | 0.7103        |
| 6              | -0.37%       | -0.18%       | 0.23%        | -0.0961              | 1.0615        | -1.4942        | 0.0274        | 1.0977        | 0.4122        |
| 7              | 0.33%        | -0.10%       | 0.56%        | 0.0985               | 0.9963        | 1.6322         | 0.0455        | 1.1132        | 0.6753        |
| 8              | 0.05%        | -0.23%       | 0.61%        | -0.0348              | 1.0219        | -0.5616        | 0.0383        | 1.1147        | 0.5670        |
| 9              | -0.24%       | -0.45%       | 0.37%        | -0.0531              | 0.9920        | -0.8839        | 0.0279        | 1.1209        | 0.4116        |
| 10             | 0.06%        | -0.10%       | 0.43%        | 0.0450               | 0.9980        | 0.7441         | 0.0356        | 1.1391        | 0.5155        |
| 11             | -0.15%       | -0.20%       | 0.28%        | -0.0270              | 0.9193        | -0.4840        | 0.0302        | 1.1638        | 0.4290        |
| 12             | -0.01%       | -0.26%       | 0.27%        | -0.0170              | 0.9675        | -0.2904        | 0.0268        | 1.1800        | 0.3752        |
| 13             | 0.36%        | -0.07%       | 0.63%        | 0.0980               | 0.9181        | <b>1.7618</b>  | 0.0432        | 1.1884        | 0.6005        |
| 14             | -0.13%       | -0.07%       | 0.50%        | -0.0628              | 0.8688        | -1.1939        | 0.0320        | 1.1782        | 0.4481        |
| 15             | -0.24%       | -0.30%       | 0.26%        | -0.1076              | 1.0721        | <b>-1.6569</b> | 0.0136        | 1.1947        | 0.1880        |
| 16             | -0.22%       | -0.29%       | 0.04%        | -0.0959              | 1.0352        | -1.5290        | -0.0023       | 1.1727        | -0.0330       |
| 17             | -0.40%       | -0.30%       | -0.36%       | -0.1358              | 0.8970        | <b>-2.4985</b> | -0.0243       | 1.1606        | -0.3462       |
| 18             | -0.14%       | -0.01%       | -0.50%       | -0.0235              | 1.0894        | -0.3562        | -0.0278       | 1.1472        | -0.3998       |
| 19             | -0.20%       | -0.15%       | -0.71%       | -0.0604              | 1.0912        | -0.9132        | -0.0370       | 1.1120        | -0.5490       |
| 20             | -0.36%       | -0.26%       | -1.06%       | -0.1058              | 1.2108        | -1.4421        | -0.0531       | 1.1206        | -0.7815       |
| 21             | -0.17%       | -0.26%       | -1.24%       | -0.0439              | 1.0974        | -0.6607        | -0.0592       | 1.1144        | -0.8768       |
| 22             | -0.32%       | -0.14%       | -1.56%       | -0.0801              | 0.8840        | -1.4953        | -0.0707       | 1.0869        | -1.0739       |
| 23             | 0.25%        | -0.17%       | -1.31%       | 0.0606               | 0.9893        | 1.0107         | -0.0608       | 1.0798        | -0.9290       |
| 24             | -0.17%       | -0.17%       | -1.48%       | -0.0279              | 1.1199        | -0.4107        | -0.0642       | 1.0953        | -0.9682       |
| 25             | -0.29%       | -0.31%       | -1.77%       | -0.1047              | 1.0426        | <b>-1.6575</b> | -0.0790       | 1.0876        | -1.1987       |
| 26             | 0.18%        | -0.10%       | -1.59%       | 0.0500               | 1.0027        | 0.8237         | -0.0708       | 1.0708        | -1.0920       |
| 27             | 0.11%        | -0.21%       | -1.48%       | 0.0449               | 1.0459        | 0.7092         | -0.0636       | 1.0708        | -0.9806       |
| 28             | -0.17%       | -0.23%       | -1.65%       | -0.0232              | 0.8606        | -0.4448        | -0.0663       | 1.0808        | -1.0121       |
| 29             | -0.15%       | -0.35%       | -1.80%       | -0.0225              | 0.9864        | -0.3770        | -0.0688       | 1.0673        | -1.0640       |
| 30             | 0.25%        | -0.01%       | -1.54%       | 0.0739               | 1.0338        | 1.1796         | -0.0578       | 1.0734        | -0.8884       |
| <b>-1 to 1</b> |              |              | <b>1.14%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04221</b> | 0.2175        | 1.4235        | <b>2.5227</b> |

Table-A 5.34 SW-2 Returns to Acquirers; All-firms; (OLS, 233); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.01%        | 0.07%        | 0.01%        | 0.0287               | 0.9196        | 0.5091         | 0.0287        | 0.9196        | 0.5091        |
| -19            | -0.06%       | -0.22%       | -0.05%       | -0.0433              | 0.9505        | -0.7420        | -0.0103       | 0.9165        | -0.1829       |
| -18            | -0.27%       | -0.48%       | -0.32%       | -0.0937              | 1.0278        | -1.4849        | -0.0625       | 0.9630        | -1.0572       |
| -17            | 0.38%        | 0.20%        | 0.06%        | 0.1190               | 1.0928        | <b>1.7746</b>  | 0.0054        | 0.9599        | 0.0917        |
| -16            | -0.22%       | -0.44%       | -0.16%       | -0.0479              | 0.9976        | -0.7818        | -0.0166       | 1.0204        | -0.2646       |
| -15            | -0.20%       | -0.25%       | -0.36%       | -0.0560              | 1.1059        | -0.8244        | -0.0380       | 1.0235        | -0.6045       |
| -14            | -0.34%       | -0.28%       | -0.70%       | -0.0649              | 1.1550        | -0.9160        | -0.0597       | 1.0022        | -0.9705       |
| -13            | 0.19%        | -0.07%       | -0.51%       | 0.0636               | 1.2929        | 0.8013         | -0.0334       | 1.1275        | -0.4821       |
| -12            | -0.21%       | -0.37%       | -0.73%       | -0.0656              | 0.9559        | -1.1180        | -0.0533       | 1.0328        | -0.8411       |
| -11            | -0.28%       | -0.36%       | -1.00%       | -0.0777              | 0.9481        | -1.3357        | -0.0752       | 1.0258        | -1.1939       |
| -10            | -0.19%       | -0.37%       | -1.19%       | -0.0444              | 1.0189        | -0.7101        | -0.0851       | 1.0174        | -1.3621       |
| -9             | 0.41%        | 0.11%        | -0.77%       | 0.1093               | 1.0911        | 1.6325         | -0.0499       | 1.0324        | -0.7871       |
| -8             | -0.21%       | -0.11%       | -0.98%       | -0.0733              | 1.0253        | -1.1651        | -0.0683       | 1.0502        | -1.0589       |
| -7             | 0.27%        | -0.12%       | -0.71%       | 0.0856               | 0.9724        | 1.4344         | -0.0429       | 1.0715        | -0.6522       |
| -6             | 0.02%        | -0.05%       | -0.68%       | 0.0100               | 1.0129        | 0.1613         | -0.0388       | 1.0984        | -0.5762       |
| -5             | -0.01%       | -0.01%       | -0.69%       | 0.0015               | 1.0427        | 0.0236         | -0.0372       | 1.0559        | -0.5746       |
| -4             | -0.12%       | -0.28%       | -0.82%       | -0.0504              | 1.0184        | -0.8070        | -0.0484       | 1.0066        | -0.7827       |
| -3             | -0.13%       | -0.38%       | -0.94%       | -0.0471              | 0.9616        | -0.7974        | -0.0581       | 1.0190        | -0.9288       |
| -2             | 0.08%        | -0.03%       | -0.87%       | 0.0172               | 0.9284        | 0.3015         | -0.0526       | 0.9978        | -0.8589       |
| -1             | 0.58%        | 0.13%        | -0.29%       | 0.1601               | 1.0867        | <b>2.4006</b>  | -0.0155       | 1.0381        | -0.2427       |
| <b>0</b>       | <b>0.32%</b> | <b>0.08%</b> | <b>0.02%</b> | <b>0.1389</b>        | <b>1.4455</b> | <b>1.5657</b>  | <b>0.0152</b> | <b>1.0712</b> | <b>0.2315</b> |
| 1              | 0.27%        | -0.16%       | 0.30%        | 0.0833               | 1.5004        | 0.9051         | 0.0326        | 1.0773        | 0.4937        |
| 2              | 0.47%        | 0.02%        | 0.77%        | 0.1447               | 1.3474        | <b>1.7492</b>  | 0.0621        | 1.0947        | 0.9241        |
| 3              | -0.06%       | -0.25%       | 0.71%        | -0.0178              | 1.1260        | -0.2573        | 0.0572        | 1.0942        | 0.8510        |
| 4              | 0.09%        | -0.12%       | 0.80%        | 0.0086               | 0.9392        | 0.1493         | 0.0577        | 1.0951        | 0.8587        |
| 5              | -0.21%       | -0.50%       | 0.59%        | -0.0453              | 0.9893        | -0.7455        | 0.0477        | 1.0922        | 0.7119        |
| 6              | -0.34%       | -0.17%       | 0.24%        | -0.0907              | 1.0675        | -1.3838        | 0.0294        | 1.1015        | 0.4346        |
| 7              | 0.31%        | -0.12%       | 0.55%        | 0.0939               | 0.9867        | 1.5509         | 0.0466        | 1.1183        | 0.6789        |
| 8              | 0.02%        | -0.21%       | 0.57%        | -0.0446              | 1.0278        | -0.7076        | 0.0375        | 1.1194        | 0.5458        |
| 9              | -0.23%       | -0.38%       | 0.34%        | -0.0490              | 0.9943        | -0.8025        | 0.0279        | 1.1239        | 0.4049        |
| 10             | 0.03%        | -0.19%       | 0.37%        | 0.0407               | 1.0135        | 0.6540         | 0.0348        | 1.1426        | 0.4960        |
| 11             | -0.11%       | -0.21%       | 0.26%        | -0.0150              | 0.9161        | -0.2670        | 0.0316        | 1.1643        | 0.4420        |
| 12             | 0.01%        | -0.24%       | 0.27%        | -0.0129              | 0.9631        | -0.2183        | 0.0289        | 1.1803        | 0.3983        |
| 13             | 0.37%        | -0.07%       | 0.64%        | 0.1004               | 0.9329        | <b>1.7540</b>  | 0.0456        | 1.1896        | 0.6252        |
| 14             | -0.13%       | -0.02%       | 0.51%        | -0.0627              | 0.8703        | -1.1737        | 0.0344        | 1.1825        | 0.4739        |
| 15             | -0.25%       | -0.28%       | 0.26%        | -0.1098              | 1.0785        | <b>-1.6580</b> | 0.0156        | 1.1958        | 0.2129        |
| 16             | -0.19%       | -0.29%       | 0.07%        | -0.0861              | 1.0333        | -1.3569        | 0.0013        | 1.1724        | 0.0175        |
| 17             | -0.43%       | -0.30%       | -0.36%       | -0.1401              | 0.8960        | <b>-2.5467</b> | -0.0215       | 1.1607        | -0.3015       |
| 18             | -0.16%       | -0.05%       | -0.52%       | -0.0302              | 1.0997        | -0.4479        | -0.0260       | 1.1496        | -0.3691       |
| 19             | -0.21%       | -0.21%       | -0.74%       | -0.0620              | 1.0972        | -0.9202        | -0.0355       | 1.1178        | -0.5176       |
| 20             | -0.38%       | -0.22%       | -1.11%       | -0.1107              | 1.2324        | -1.4631        | -0.0524       | 1.1251        | -0.7582       |
| 21             | -0.17%       | -0.25%       | -1.29%       | -0.0436              | 1.0985        | -0.6471        | -0.0585       | 1.1183        | -0.8518       |
| 22             | -0.35%       | -0.16%       | -1.63%       | -0.0832              | 0.8937        | -1.5170        | -0.0705       | 1.0917        | -1.0517       |
| 23             | 0.24%        | -0.16%       | -1.39%       | 0.0578               | 0.9915        | 0.9502         | -0.0609       | 1.0862        | -0.9142       |
| 24             | -0.16%       | -0.12%       | -1.56%       | -0.0275              | 1.1266        | -0.3971        | -0.0644       | 1.1007        | -0.9527       |
| 25             | -0.34%       | -0.32%       | -1.90%       | -0.1189              | 1.0577        | <b>-1.8322</b> | -0.0812       | 1.0930        | -1.2103       |
| 26             | 0.17%        | -0.19%       | -1.73%       | 0.0454               | 1.0051        | 0.7363         | -0.0737       | 1.0727        | -1.1194       |
| 27             | 0.11%        | -0.11%       | -1.63%       | 0.0415               | 1.0464        | 0.6467         | -0.0669       | 1.0691        | -1.0201       |
| 28             | -0.15%       | -0.13%       | -1.77%       | -0.0185              | 0.8584        | -0.3507        | -0.0689       | 1.0785        | -1.0407       |
| 29             | -0.14%       | -0.36%       | -1.91%       | -0.0209              | 0.9912        | -0.3437        | -0.0712       | 1.0628        | -1.0908       |
| 30             | 0.25%        | 0.02%        | -1.66%       | 0.0742               | 1.0467        | 1.1555         | -0.0601       | 1.0665        | -0.9175       |
| <b>-1 to 1</b> |              |              | <b>1.16%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04223</b> | 0.2208        | 1.4130        | <b>2.5456</b> |



**Table-A 5.35 SW-3 Returns to Acquirers; All-firms; (OLS, 233); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.03%        | -0.05%       | 0.03%        | 0.0322               | 0.9071        | 0.5795         | 0.0322        | 0.9071        | 0.5795        |
| -19            | -0.04%       | -0.18%       | -0.01%       | -0.0358              | 0.9467        | -0.6182        | -0.0026       | 0.9067        | -0.0464       |
| -18            | -0.23%       | -0.43%       | -0.24%       | -0.0834              | 1.0259        | -1.3273        | -0.0503       | 0.9512        | -0.8626       |
| -17            | 0.36%        | 0.13%        | 0.12%        | 0.1099               | 1.0873        | 1.6502         | 0.0114        | 0.9470        | 0.1970        |
| -16            | -0.23%       | -0.41%       | -0.12%       | -0.0527              | 0.9793        | -0.8785        | -0.0133       | 0.9971        | -0.2185       |
| -15            | -0.19%       | -0.22%       | -0.31%       | -0.0542              | 1.1070        | -0.7998        | -0.0343       | 1.0056        | -0.5572       |
| -14            | -0.32%       | -0.24%       | -0.63%       | -0.0571              | 1.1452        | -0.8138        | -0.0534       | 0.9888        | -0.8809       |
| -13            | 0.19%        | 0.03%        | -0.44%       | 0.0645               | 1.2999        | 0.8095         | -0.0271       | 1.1145        | -0.3972       |
| -12            | -0.22%       | -0.38%       | -0.66%       | -0.0659              | 0.9627        | -1.1169        | -0.0475       | 1.0283        | -0.7545       |
| -11            | -0.28%       | -0.32%       | -0.94%       | -0.0800              | 0.9476        | -1.3777        | -0.0704       | 1.0220        | -1.1241       |
| -10            | -0.19%       | -0.42%       | -1.13%       | -0.0499              | 1.0061        | -0.8094        | -0.0821       | 1.0125        | -1.3244       |
| -9             | 0.40%        | 0.05%        | -0.74%       | 0.0981               | 1.0967        | 1.4608         | -0.0503       | 1.0247        | -0.8016       |
| -8             | -0.19%       | -0.15%       | -0.92%       | -0.0702              | 1.0217        | -1.1211        | -0.0678       | 1.0419        | -1.0624       |
| -7             | 0.28%        | -0.07%       | -0.64%       | 0.0862               | 0.9806        | 1.4359         | -0.0423       | 1.0625        | -0.6496       |
| -6             | 0.04%        | -0.06%       | -0.60%       | 0.0134               | 1.0176        | 0.2157         | -0.0374       | 1.0902        | -0.5597       |
| -5             | 0.04%        | 0.01%        | -0.57%       | 0.0138               | 1.0526        | 0.2136         | -0.0327       | 1.0507        | -0.5088       |
| -4             | -0.11%       | -0.35%       | -0.68%       | -0.0477              | 1.0200        | -0.7633        | -0.0433       | 1.0017        | -0.7063       |
| -3             | -0.11%       | -0.36%       | -0.79%       | -0.0411              | 0.9541        | -0.7038        | -0.0518       | 1.0131        | -0.8349       |
| -2             | 0.08%        | -0.07%       | -0.71%       | 0.0151               | 0.9193        | 0.2689         | -0.0470       | 0.9893        | -0.7749       |
| -1             | 0.61%        | 0.13%        | -0.10%       | 0.1681               | 1.0879        | <b>2.5222</b>  | -0.0082       | 1.0303        | -0.1296       |
| <b>0</b>       | <b>0.29%</b> | <b>0.05%</b> | <b>0.19%</b> | <b>0.1309</b>        | <b>1.4631</b> | <b>1.4604</b>  | <b>0.0206</b> | <b>1.0709</b> | <b>0.3137</b> |
| 1              | 0.25%        | -0.11%       | 0.43%        | 0.0731               | 1.4948        | 0.7981         | 0.0357        | 1.0778        | 0.5405        |
| 2              | 0.49%        | 0.04%        | 0.93%        | 0.1488               | 1.3369        | <b>1.8175</b>  | 0.0659        | 1.0917        | 0.9860        |
| 3              | -0.07%       | -0.24%       | 0.86%        | -0.0241              | 1.1333        | -0.3474        | 0.0596        | 1.0871        | 0.8953        |
| 4              | 0.11%        | -0.10%       | 0.97%        | 0.0132               | 0.9377        | 0.2295         | 0.0611        | 1.0856        | 0.9181        |
| 5              | -0.22%       | -0.50%       | 0.76%        | -0.0489              | 0.9936        | -0.8031        | 0.0503        | 1.0802        | 0.7599        |
| 6              | -0.34%       | -0.15%       | 0.42%        | -0.0899              | 1.0528        | -1.3943        | 0.0320        | 1.0883        | 0.4806        |
| 7              | 0.32%        | -0.13%       | 0.74%        | 0.0966               | 0.9806        | 1.6076         | 0.0497        | 1.1044        | 0.7348        |
| 8              | 0.01%        | -0.22%       | 0.74%        | -0.0498              | 1.0346        | -0.7855        | 0.0396        | 1.1061        | 0.5845        |
| 9              | -0.23%       | -0.34%       | 0.51%        | -0.0468              | 1.0019        | -0.7630        | 0.0304        | 1.1100        | 0.4469        |
| 10             | 0.02%        | -0.09%       | 0.53%        | 0.0384               | 1.0245        | 0.6121         | 0.0368        | 1.1283        | 0.5323        |
| 11             | -0.10%       | -0.21%       | 0.43%        | -0.0132              | 0.9251        | -0.2336        | 0.0339        | 1.1483        | 0.4816        |
| 12             | 0.02%        | -0.26%       | 0.45%        | -0.0146              | 0.9724        | -0.2447        | 0.0308        | 1.1653        | 0.4318        |
| 13             | 0.37%        | -0.04%       | 0.82%        | 0.0925               | 0.9264        | 1.6303         | 0.0462        | 1.1785        | 0.6403        |
| 14             | -0.10%       | -0.05%       | 0.71%        | -0.0573              | 0.8748        | -1.0695        | 0.0359        | 1.1718        | 0.4998        |
| 15             | -0.25%       | -0.21%       | 0.46%        | -0.1083              | 1.0767        | -1.6420        | 0.0173        | 1.1817        | 0.2393        |
| 16             | -0.17%       | -0.26%       | 0.29%        | -0.0818              | 1.0174        | -1.3129        | 0.0036        | 1.1564        | 0.0513        |
| 17             | -0.44%       | -0.29%       | -0.15%       | -0.1417              | 0.8929        | <b>-2.5899</b> | -0.0194       | 1.1424        | -0.2771       |
| 18             | -0.17%       | -0.12%       | -0.32%       | -0.0375              | 1.1019        | -0.5559        | -0.0251       | 1.1339        | -0.3621       |
| 19             | -0.21%       | -0.16%       | -0.54%       | -0.0597              | 1.0970        | -0.8884        | -0.0343       | 1.1040        | -0.5068       |
| 20             | -0.36%       | -0.19%       | -0.89%       | -0.1079              | 1.2330        | -1.4287        | -0.0507       | 1.1096        | -0.7460       |
| 21             | -0.16%       | -0.26%       | -1.05%       | -0.0414              | 1.1009        | -0.6135        | -0.0565       | 1.1056        | -0.8340       |
| 22             | -0.34%       | -0.20%       | -1.39%       | -0.0842              | 0.8916        | -1.5421        | -0.0687       | 1.0762        | -1.0416       |
| 23             | 0.24%        | -0.11%       | -1.16%       | 0.0554               | 1.0103        | 0.8952         | -0.0595       | 1.0702        | -0.9081       |
| 24             | -0.18%       | -0.09%       | -1.34%       | -0.0344              | 1.1288        | -0.4970        | -0.0640       | 1.0837        | -0.9639       |
| 25             | -0.33%       | -0.33%       | -1.67%       | -0.1136              | 1.0569        | <b>-1.7541</b> | -0.0800       | 1.0749        | -1.2154       |
| 26             | 0.15%        | -0.21%       | -1.52%       | 0.0401               | 1.0056        | 0.6504         | -0.0733       | 1.0547        | -1.1351       |
| 27             | 0.17%        | -0.09%       | -1.35%       | 0.0515               | 1.0431        | 0.8060         | -0.0651       | 1.0500        | -1.0126       |
| 28             | -0.14%       | -0.17%       | -1.49%       | -0.0162              | 0.8631        | -0.3073        | -0.0668       | 1.0593        | -1.0292       |
| 29             | -0.16%       | -0.29%       | -1.65%       | -0.0235              | 0.9895        | -0.3870        | -0.0694       | 1.0446        | -1.0850       |
| 30             | 0.30%        | 0.07%        | -1.35%       | 0.0888               | 1.0560        | 1.3731         | -0.0563       | 1.0470        | -0.8780       |
| <b>-1 to 1</b> |              |              | <b>1.14%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04359</b> | 0.2148        | 1.4187        | <b>2.4717</b> |

Table-A 5.36 Market Returns to Acquirers; All-firms; (OLS, 194); EWI

| Days           | AAR          | Median        | CAAR          | SARa                 | SD            | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|---------------|---------------|----------------------|---------------|----------------|----------------|---------------|----------------|
| -20            | -0.07%       | -0.13%        | -0.07%        | -0.0047              | 0.9785        | -0.0740        | -0.0047        | 0.9785        | -0.0740        |
| -19            | -0.05%       | -0.28%        | -0.12%        | -0.0613              | 0.8924        | -1.0485        | -0.0467        | 0.9200        | -0.7748        |
| -18            | -0.22%       | -0.52%        | -0.34%        | -0.0988              | 1.0232        | -1.4739        | -0.0952        | 0.9436        | -1.5396        |
| -17            | 0.37%        | -0.06%        | 0.03%         | 0.1076               | 1.0944        | 1.5006         | -0.0286        | 0.9440        | -0.4629        |
| -16            | -0.29%       | -0.37%        | -0.26%        | -0.0608              | 0.9647        | -0.9627        | -0.0528        | 1.0133        | -0.7956        |
| -15            | -0.10%       | -0.22%        | -0.36%        | -0.0079              | 1.0683        | -0.1135        | -0.0514        | 1.0310        | -0.7618        |
| -14            | -0.43%       | -0.35%        | -0.79%        | -0.0838              | 1.1068        | -1.1561        | -0.0793        | 1.0043        | -1.2056        |
| -13            | -0.06%       | -0.07%        | -0.86%        | -0.0342              | 1.2025        | -0.4344        | -0.0863        | 1.0832        | -1.2161        |
| -12            | -0.45%       | -0.43%        | -1.31%        | -0.1159              | 0.8949        | <b>-1.9773</b> | -0.1200        | 1.0135        | <b>-1.8074</b> |
| -11            | -0.37%       | -0.28%        | -1.68%        | -0.1018              | 0.9663        | -1.6086        | -0.1460        | 0.9979        | <b>-2.2339</b> |
| -10            | -0.24%       | -0.46%        | -1.91%        | -0.0569              | 1.0112        | -0.8589        | -0.1564        | 0.9849        | <b>-2.4241</b> |
| -9             | 0.52%        | 0.00%         | -1.39%        | 0.1266               | 1.1330        | <b>1.7056</b>  | -0.1132        | 1.0165        | <b>-1.6999</b> |
| -8             | -0.07%       | -0.26%        | -1.46%        | -0.0367              | 0.9282        | -0.6036        | -0.1189        | 1.0172        | <b>-1.7849</b> |
| -7             | 0.23%        | -0.26%        | -1.24%        | 0.0505               | 0.9887        | 0.7796         | -0.1011        | 1.0443        | -1.4781        |
| -6             | -0.12%       | -0.19%        | -1.36%        | -0.0492              | 0.9044        | -0.8303        | -0.1104        | 1.0639        | -1.5838        |
| -5             | 0.05%        | -0.19%        | -1.31%        | 0.0185               | 0.9603        | 0.2943         | -0.1022        | 1.0358        | -1.5070        |
| -4             | -0.16%       | -0.44%        | -1.47%        | -0.0492              | 0.9835        | -0.7632        | -0.1111        | 1.0032        | <b>-1.6909</b> |
| -3             | -0.12%       | -0.32%        | -1.59%        | -0.0460              | 0.9229        | -0.7612        | -0.1188        | 1.0082        | <b>-1.7995</b> |
| -2             | 0.05%        | -0.21%        | -1.54%        | 0.0000               | 0.9071        | 0.0006         | -0.1157        | 0.9820        | <b>-1.7980</b> |
| -1             | 0.56%        | 0.10%         | -0.98%        | 0.1715               | 1.0661        | <b>2.4561</b>  | -0.0744        | 1.0047        | -1.1301        |
| <b>0</b>       | <b>0.54%</b> | <b>-0.05%</b> | <b>-0.44%</b> | <b>0.2072</b>        | <b>1.3827</b> | <b>2.2878</b>  | <b>-0.0274</b> | <b>1.0113</b> | <b>-0.4131</b> |
| 1              | 0.24%        | -0.18%        | -0.20%        | 0.0509               | 1.3099        | 0.5933         | -0.0159        | 1.0358        | -0.2341        |
| 2              | 0.17%        | -0.24%        | -0.03%        | 0.0707               | 1.3815        | 0.7814         | -0.0008        | 1.0692        | -0.0113        |
| 3              | -0.17%       | -0.27%        | -0.20%        | -0.0544              | 1.0659        | -0.7798        | -0.0119        | 1.0509        | -0.1727        |
| 4              | 0.13%        | -0.10%        | -0.06%        | 0.0178               | 0.9512        | 0.2862         | -0.0081        | 1.0599        | -0.1164        |
| 5              | -0.23%       | -0.36%        | -0.30%        | -0.0456              | 0.9881        | -0.7049        | -0.0169        | 1.0500        | -0.2453        |
| 6              | -0.50%       | -0.36%        | -0.80%        | -0.1318              | 1.0839        | <b>-1.8562</b> | -0.0419        | 1.0590        | -0.6043        |
| 7              | 0.22%        | -0.12%        | -0.57%        | 0.0625               | 0.9742        | 0.9796         | -0.0293        | 1.0645        | -0.4209        |
| 8              | 0.09%        | -0.23%        | -0.48%        | -0.0182              | 1.0345        | -0.2686        | -0.0322        | 1.0682        | -0.4605        |
| 9              | -0.42%       | -0.55%        | -0.90%        | -0.1235              | 0.9478        | <b>-1.9886</b> | -0.0542        | 1.0734        | -0.7711        |
| 10             | 0.01%        | -0.02%        | -0.89%        | 0.0217               | 1.0340        | 0.3210         | -0.0494        | 1.0822        | -0.6973        |
| 11             | -0.30%       | -0.11%        | -1.19%        | -0.0634              | 0.8634        | -1.1202        | -0.0599        | 1.0871        | -0.8405        |
| 12             | 0.05%        | -0.11%        | -1.14%        | -0.0003              | 0.8932        | -0.0052        | -0.0590        | 1.0939        | -0.8233        |
| 13             | 0.35%        | 0.00%         | -0.78%        | 0.0957               | 0.9093        | 1.6062         | -0.0417        | 1.0988        | -0.5795        |
| 14             | -0.20%       | -0.21%        | -0.99%        | -0.0779              | 0.8730        | -1.3620        | -0.0543        | 1.0961        | -0.7560        |
| 15             | -0.17%       | -0.24%        | -1.16%        | -0.0921              | 1.0604        | -1.3259        | -0.0689        | 1.0956        | -0.9596        |
| 16             | 0.00%        | -0.33%        | -1.16%        | -0.0300              | 1.0186        | -0.4492        | -0.0729        | 1.0884        | -1.0219        |
| 17             | -0.34%       | -0.44%        | -1.51%        | -0.1316              | 0.8984        | <b>-2.2364</b> | -0.0932        | 1.0872        | -1.3092        |
| 18             | -0.13%       | -0.07%        | -1.64%        | 0.0019               | 1.0706        | 0.0264         | -0.0917        | 1.0825        | -1.2939        |
| 19             | -0.05%       | -0.12%        | -1.70%        | 0.0089               | 1.1135        | 0.1214         | -0.0892        | 1.0519        | -1.2943        |
| 20             | -0.22%       | -0.30%        | -1.92%        | -0.0725              | 1.1912        | -0.9291        | -0.0994        | 1.0665        | -1.4230        |
| 21             | -0.20%       | -0.32%        | -2.12%        | -0.0739              | 1.0244        | -1.1008        | -0.1096        | 1.0603        | -1.5783        |
| 22             | -0.20%       | -0.14%        | -2.32%        | -0.0348              | 0.8676        | -0.6124        | -0.1136        | 1.0534        | -1.6470        |
| 23             | 0.25%        | -0.09%        | -2.07%        | 0.0615               | 1.0137        | 0.9257         | -0.1031        | 1.0525        | -1.4952        |
| 24             | -0.12%       | -0.27%        | -2.19%        | -0.0154              | 1.1306        | -0.2073        | -0.1042        | 1.0814        | -1.4712        |
| 25             | -0.21%       | -0.35%        | -2.40%        | -0.0940              | 1.0211        | -1.4059        | -0.1169        | 1.0766        | <b>-1.6583</b> |
| 26             | 0.38%        | -0.15%        | -2.01%        | 0.1075               | 1.0185        | 1.6120         | -0.1000        | 1.0729        | -1.4230        |
| 27             | 0.06%        | -0.18%        | -1.95%        | 0.0502               | 1.0017        | 0.7655         | -0.0917        | 1.0793        | -1.2971        |
| 28             | -0.20%       | -0.14%        | -2.15%        | -0.0407              | 0.8459        | -0.7345        | -0.0966        | 1.0840        | -1.3602        |
| 29             | -0.13%       | -0.32%        | -2.28%        | -0.0227              | 0.9571        | -0.3621        | -0.0988        | 1.0703        | -1.4096        |
| 30             | 0.44%        | 0.08%         | -1.83%        | 0.1341               | 0.9521        | <b>2.1499</b>  | -0.0791        | 1.0768        | -1.1210        |
| <b>-1 to 1</b> |              |               | <b>1.34%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.03659</b> | 0.2480         | 1.4658        | <b>2.5835</b>  |

Table-A 5.37 Market Returns to Acquirers; EWI-firms; (OLS, 194); VWI

| Days           | AAR          | Median        | CAAR          | SARa                 | SD            | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|---------------|---------------|----------------------|---------------|----------------|----------------|---------------|----------------|
| -20            | 0.01%        | -0.17%        | 0.01%         | 0.0234               | 0.9726        | 0.3665         | 0.0234         | 0.9726        | 0.3665         |
| -19            | -0.07%       | -0.18%        | -0.06%        | -0.0569              | 0.8821        | -0.9823        | -0.0237        | 0.9052        | -0.3984        |
| -18            | -0.30%       | -0.48%        | -0.36%        | -0.1191              | 1.0631        | <b>-1.7057</b> | -0.0881        | 0.9677        | -1.3862        |
| -17            | 0.38%        | 0.13%         | 0.01%         | 0.1074               | 1.0739        | 1.5220         | -0.0226        | 0.9523        | -0.3617        |
| -16            | -0.30%       | -0.43%        | -0.29%        | -0.0710              | 0.9464        | -1.1421        | -0.0520        | 1.0118        | -0.7822        |
| -15            | -0.07%       | -0.17%        | -0.36%        | -0.0033              | 1.0688        | -0.0470        | -0.0488        | 1.0038        | -0.7402        |
| -14            | -0.40%       | -0.34%        | -0.76%        | -0.0824              | 1.1212        | -1.1193        | -0.0763        | 0.9659        | -1.2032        |
| -13            | 0.06%        | 0.01%         | -0.70%        | 0.0013               | 1.2276        | 0.0165         | -0.0709        | 1.0800        | -1.0000        |
| -12            | -0.41%       | -0.48%        | -1.11%        | -0.0901              | 0.9170        | -1.4960        | -0.0969        | 0.9932        | -1.4855        |
| -11            | -0.39%       | -0.38%        | -1.50%        | -0.1016              | 0.9724        | -1.5910        | -0.1241        | 0.9783        | <b>-1.9310</b> |
| -10            | -0.21%       | -0.43%        | -1.71%        | -0.0553              | 1.0371        | -0.8121        | -0.1350        | 0.9633        | <b>-2.1333</b> |
| -9             | 0.57%        | 0.07%         | -1.14%        | 0.1405               | 1.1098        | <b>1.9271</b>  | -0.0887        | 0.9890        | -1.3651        |
| -8             | -0.16%       | -0.24%        | -1.30%        | -0.0731              | 0.9429        | -1.1802        | -0.1055        | 0.9914        | -1.6197        |
| -7             | 0.28%        | -0.17%        | -1.02%        | 0.0634               | 0.9734        | 0.9915         | -0.0847        | 1.0114        | -1.2750        |
| -6             | -0.10%       | -0.12%        | -1.11%        | -0.0353              | 0.9028        | -0.5950        | -0.0909        | 1.0331        | -1.3401        |
| -5             | 0.07%        | -0.05%        | -1.04%        | 0.0186               | 0.9762        | 0.2901         | -0.0834        | 1.0061        | -1.2620        |
| -4             | -0.13%       | -0.26%        | -1.18%        | -0.0372              | 0.9927        | -0.5709        | -0.0899        | 0.9686        | -1.4136        |
| -3             | -0.15%       | -0.34%        | -1.32%        | -0.0619              | 0.9338        | -1.0088        | -0.1020        | 0.9875        | -1.5724        |
| -2             | 0.04%        | -0.19%        | -1.29%        | -0.0060              | 0.9054        | -0.1004        | -0.1006        | 0.9557        | -1.6032        |
| -1             | 0.57%        | -0.04%        | -0.72%        | 0.1693               | 1.0898        | <b>2.3646</b>  | -0.0602        | 0.9837        | -0.9323        |
| <b>0</b>       | <b>0.45%</b> | <b>-0.07%</b> | <b>-0.27%</b> | <b>0.1744</b>        | <b>1.3362</b> | <b>1.9876</b>  | <b>-0.0207</b> | <b>0.9914</b> | <b>-0.3182</b> |
| 1              | 0.21%        | -0.13%        | -0.06%        | 0.0433               | 1.3015        | 0.5065         | -0.0110        | 1.0232        | -0.1639        |
| 2              | 0.19%        | -0.18%        | 0.13%         | 0.0732               | 1.3659        | 0.8157         | 0.0045         | 1.0454        | 0.0653         |
| 3              | -0.15%       | -0.24%        | -0.02%        | -0.0411              | 1.0573        | -0.5922        | -0.0040        | 1.0268        | -0.0593        |
| 4              | 0.19%        | -0.06%        | 0.17%         | 0.0388               | 0.9527        | 0.6207         | 0.0038         | 1.0334        | 0.0567         |
| 5              | -0.28%       | -0.46%        | -0.11%        | -0.0600              | 0.9512        | -0.9607        | -0.0080        | 1.0231        | -0.1190        |
| 6              | -0.52%       | -0.32%        | -0.64%        | -0.1359              | 1.0769        | <b>-1.9214</b> | -0.0340        | 1.0402        | -0.4977        |
| 7              | 0.19%        | -0.10%        | -0.45%        | 0.0546               | 0.9610        | 0.8643         | -0.0231        | 1.0535        | -0.3335        |
| 8              | 0.13%        | -0.12%        | -0.32%        | -0.0072              | 1.0529        | -0.1048        | -0.0240        | 1.0611        | -0.3447        |
| 9              | -0.37%       | -0.53%        | -0.69%        | -0.1010              | 0.9708        | -1.5845        | -0.0421        | 1.0709        | -0.5981        |
| 10             | 0.09%        | 0.01%         | -0.60%        | 0.0451               | 0.9779        | 0.7020         | -0.0333        | 1.0750        | -0.4714        |
| 11             | -0.33%       | -0.20%        | -0.93%        | -0.0743              | 0.8515        | -1.3293        | -0.0459        | 1.0823        | -0.6457        |
| 12             | 0.08%        | -0.17%        | -0.85%        | 0.0097               | 0.8978        | 0.1641         | -0.0435        | 1.0922        | -0.6066        |
| 13             | 0.40%        | -0.09%        | -0.45%        | 0.1120               | 0.9190        | <b>1.8551</b>  | -0.0237        | 1.0990        | -0.3279        |
| 14             | -0.20%       | -0.20%        | -0.65%        | -0.0753              | 0.8592        | -1.3348        | -0.0361        | 1.0950        | -0.5014        |
| 15             | -0.13%       | -0.19%        | -0.78%        | -0.0738              | 1.0477        | -1.0730        | -0.0479        | 1.0963        | -0.6647        |
| 16             | -0.06%       | -0.37%        | -0.84%        | -0.0414              | 1.0180        | -0.6184        | -0.0540        | 1.0886        | -0.7554        |
| 17             | -0.33%       | -0.31%        | -1.16%        | -0.1176              | 0.9148        | <b>-1.9572</b> | -0.0724        | 1.0861        | -1.0145        |
| 18             | -0.12%       | 0.09%         | -1.28%        | 0.0038               | 1.0678        | 0.0543         | -0.0708        | 1.0827        | -0.9960        |
| 19             | -0.06%       | -0.02%        | -1.33%        | 0.0000               | 1.1001        | -0.0004        | -0.0699        | 1.0505        | -1.0137        |
| 20             | -0.26%       | -0.24%        | -1.60%        | -0.0807              | 1.2162        | -1.0097        | -0.0817        | 1.0698        | -1.1624        |
| 21             | -0.24%       | -0.39%        | -1.84%        | -0.0870              | 1.0464        | -1.2657        | -0.0941        | 1.0667        | -1.3435        |
| 22             | -0.18%       | -0.08%        | -2.02%        | -0.0258              | 0.8598        | -0.4564        | -0.0970        | 1.0552        | -1.3989        |
| 23             | 0.26%        | -0.16%        | -1.76%        | 0.0697               | 1.0181        | 1.0419         | -0.0853        | 1.0528        | -1.2342        |
| 24             | -0.10%       | -0.15%        | -1.86%        | -0.0126              | 1.1374        | -0.1692        | -0.0863        | 1.0830        | -1.2128        |
| 25             | -0.22%       | -0.30%        | -2.08%        | -0.1016              | 1.0125        | -1.5282        | -0.1003        | 1.0799        | -1.4143        |
| 26             | 0.33%        | -0.04%        | -1.75%        | 0.0908               | 1.0047        | 1.3753         | -0.0860        | 1.0770        | -1.2158        |
| 27             | 0.07%        | -0.26%        | -1.68%        | 0.0533               | 0.9898        | 0.8196         | -0.0774        | 1.0847        | -1.0865        |
| 28             | -0.19%       | -0.22%        | -1.88%        | -0.0432              | 0.8414        | -0.7817        | -0.0828        | 1.0944        | -1.1517        |
| 29             | -0.13%       | -0.37%        | -2.00%        | -0.0252              | 0.9634        | -0.3989        | -0.0855        | 1.0786        | -1.2073        |
| 30             | 0.41%        | -0.01%        | -1.59%        | 0.1153               | 0.9472        | <b>1.8526</b>  | -0.0685        | 1.0864        | -0.9606        |
| <b>-1 to 1</b> |              |               | <b>1.23%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.03678</b> | 0.2234         | 1.4696        | <b>2.3147</b>  |

Table-A 5.38 Market Returns to Acquirers; All-firms; (MM, 193); EWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.17%        | 0.05%        | 0.17%        | 0.2550               | 3.2889        | 0.9775         | 0.2550        | 3.2889        | 0.9775        |
| -19            | 0.07%        | -0.10%       | 0.24%        | -0.0261              | 1.0487        | -0.3139        | 0.1618        | 2.3892        | 0.8540        |
| -18            | -0.06%       | -0.32%       | 0.18%        | -0.1129              | 1.4107        | -1.0088        | 0.0670        | 1.7859        | 0.4728        |
| -17            | 0.54%        | 0.19%        | 0.72%        | 0.2247               | 1.4813        | <b>1.9123</b>  | 0.1703        | 1.7433        | 1.2319        |
| -16            | -0.10%       | -0.19%       | 0.62%        | 0.0042               | 1.3550        | 0.0387         | 0.1542        | 1.6823        | 1.1558        |
| -15            | 0.05%        | -0.14%       | 0.67%        | 0.0749               | 1.2918        | 0.7307         | 0.1713        | 1.6819        | 1.2844        |
| -14            | -0.24%       | -0.21%       | 0.43%        | -0.0805              | 1.3503        | -0.7516        | 0.1282        | 1.5251        | 1.0598        |
| -13            | 0.13%        | 0.11%        | 0.56%        | 0.0337               | 1.5132        | 0.2812         | 0.1319        | 1.5899        | 1.0456        |
| -12            | -0.28%       | -0.29%       | 0.28%        | -0.0710              | 1.2188        | -0.7342        | 0.1007        | 1.4491        | 0.8758        |
| -11            | -0.18%       | -0.12%       | 0.11%        | -0.0608              | 1.1211        | -0.6834        | 0.0763        | 1.4108        | 0.6816        |
| -10            | -0.07%       | -0.21%       | 0.04%        | 0.0267               | 1.5196        | 0.2215         | 0.0808        | 1.5142        | 0.6726        |
| -9             | 0.71%        | 0.09%        | 0.75%        | 0.1787               | 1.4953        | 1.5064         | 0.1289        | 1.4053        | 1.1565        |
| -8             | 0.11%        | -0.11%       | 0.86%        | 0.0654               | 1.4133        | 0.5837         | 0.1420        | 1.4864        | 1.2044        |
| -7             | 0.42%        | 0.04%        | 1.28%        | 0.0898               | 1.7941        | 0.6312         | 0.1608        | 1.3489        | 1.5033        |
| -6             | 0.02%        | -0.05%       | 1.31%        | 0.0250               | 1.0772        | 0.2929         | 0.1618        | 1.3639        | 1.4961        |
| -5             | 0.24%        | -0.04%       | 1.54%        | 0.0645               | 1.2063        | 0.6743         | 0.1728        | 1.3033        | <b>1.6719</b> |
| -4             | 0.02%        | -0.20%       | 1.56%        | -0.1285              | 2.7268        | -0.5942        | 0.1365        | 1.2258        | 1.4041        |
| -3             | 0.02%        | -0.25%       | 1.59%        | 0.0845               | 1.5613        | 0.6825         | 0.1526        | 1.2378        | 1.5542        |
| -2             | 0.23%        | -0.06%       | 1.81%        | 0.0099               | 1.6004        | 0.0782         | 0.1508        | 1.2332        | 1.5416        |
| -1             | 0.80%        | 0.28%        | 2.61%        | 0.4221               | 2.2492        | <b>2.3662</b>  | 0.2414        | 1.3294        | <b>2.2889</b> |
| <b>0</b>       | <b>0.69%</b> | <b>0.14%</b> | <b>3.30%</b> | <b>0.2257</b>        | <b>1.9787</b> | <b>1.4384</b>  | <b>0.2848</b> | <b>1.3121</b> | <b>2.7367</b> |
| 1              | 0.34%        | -0.03%       | 3.64%        | 0.1213               | 1.9202        | 0.7963         | 0.3041        | 1.2863        | <b>2.9809</b> |
| 2              | 0.33%        | 0.04%        | 3.97%        | 0.2001               | 2.4767        | 1.0187         | 0.3391        | 1.4708        | <b>2.9072</b> |
| 3              | 0.03%        | -0.11%       | 3.99%        | 0.0471               | 1.9171        | 0.3095         | 0.3416        | 1.3529        | <b>3.1836</b> |
| 4              | 0.36%        | 0.01%        | 4.36%        | 0.0726               | 1.1523        | 0.7943         | 0.3492        | 1.3434        | <b>3.2776</b> |
| 5              | -0.06%       | -0.20%       | 4.29%        | 0.0920               | 1.6745        | 0.6927         | 0.3605        | 1.3811        | <b>3.2908</b> |
| 6              | -0.28%       | -0.18%       | 4.02%        | -0.0303              | 1.6447        | -0.2320        | 0.3479        | 1.4514        | <b>3.0225</b> |
| 7              | 0.34%        | 0.10%        | 4.35%        | 0.1305               | 2.3936        | 0.6872         | 0.3663        | 1.5274        | <b>3.0237</b> |
| 8              | 0.28%        | 0.00%        | 4.63%        | 0.1383               | 1.4484        | 1.2039         | 0.3856        | 1.6017        | <b>3.0356</b> |
| 9              | -0.25%       | -0.32%       | 4.38%        | -0.1388              | 1.3447        | -1.3015        | 0.3538        | 1.5374        | <b>2.9014</b> |
| 10             | 0.18%        | 0.09%        | 4.56%        | 0.1513               | 1.7463        | 1.0926         | 0.3752        | 1.5155        | <b>3.1216</b> |
| 11             | -0.12%       | -0.03%       | 4.44%        | -0.0487              | 1.3130        | -0.4678        | 0.3607        | 1.4488        | <b>3.1389</b> |
| 12             | 0.30%        | 0.02%        | 4.74%        | 0.1327               | 1.2150        | 1.3767         | 0.3783        | 1.4815        | <b>3.2195</b> |
| 13             | 0.53%        | 0.11%        | 5.27%        | 0.2005               | 1.1771        | <b>2.1471</b>  | 0.4071        | 1.4652        | <b>3.5029</b> |
| 14             | -0.04%       | 0.00%        | 5.23%        | -0.0121              | 1.0747        | -0.1416        | 0.3992        | 1.4900        | <b>3.3776</b> |
| 15             | -0.01%       | -0.03%       | 5.23%        | -0.1313              | 1.7464        | -0.9482        | 0.3717        | 1.4528        | <b>3.2258</b> |
| 16             | 0.09%        | -0.16%       | 5.31%        | 0.0725               | 1.4323        | 0.6386         | 0.3786        | 1.4901        | <b>3.2032</b> |
| 17             | -0.18%       | -0.38%       | 5.14%        | -0.0352              | 1.2996        | -0.3419        | 0.3678        | 1.5393        | <b>3.0127</b> |
| 18             | 0.08%        | 0.19%        | 5.22%        | 0.1287               | 1.4870        | 1.0909         | 0.3837        | 1.6058        | <b>3.0125</b> |
| 19             | 0.09%        | 0.04%        | 5.31%        | -0.0212              | 1.7420        | -0.1536        | 0.3755        | 1.5237        | <b>3.1072</b> |
| 20             | -0.06%       | -0.06%       | 5.26%        | 0.0225               | 1.5884        | 0.1788         | 0.3744        | 1.5674        | <b>3.0119</b> |
| 21             | -0.04%       | -0.19%       | 5.22%        | -0.0027              | 2.0618        | -0.0165        | 0.3695        | 1.6097        | <b>2.8943</b> |
| 22             | 0.07%        | 0.17%        | 5.29%        | 0.1602               | 1.7468        | 1.1560         | 0.3896        | 1.6600        | <b>2.9592</b> |
| 23             | 0.36%        | -0.01%       | 5.65%        | 0.1224               | 1.4193        | 1.0872         | 0.4036        | 1.5891        | <b>3.2023</b> |
| 24             | -0.01%       | -0.22%       | 5.63%        | 0.1047               | 1.8875        | 0.6995         | 0.4147        | 1.6826        | <b>3.1075</b> |
| 25             | 0.00%        | -0.16%       | 5.63%        | -0.0370              | 1.3263        | -0.3516        | 0.4047        | 1.6327        | <b>3.1255</b> |
| 26             | 0.58%        | 0.10%        | 6.21%        | 0.2012               | 1.3006        | <b>1.9501</b>  | 0.4297        | 1.5972        | <b>3.3924</b> |
| 27             | 0.23%        | 0.00%        | 6.44%        | 0.1326               | 1.2402        | 1.3483         | 0.4444        | 1.6123        | <b>3.4750</b> |
| 28             | -0.05%       | -0.01%       | 6.39%        | 0.0541               | 1.3498        | 0.5050         | 0.4475        | 1.6743        | <b>3.3703</b> |
| 29             | 0.10%        | -0.10%       | 6.49%        | 0.0026               | 1.4925        | 0.0219         | 0.4434        | 1.6302        | <b>3.4294</b> |
| 30             | 0.56%        | 0.21%        | 7.05%        | 0.2607               | 1.2122        | <b>2.7118</b>  | 0.4756        | 1.6637        | <b>3.6039</b> |
| <b>-1 to 1</b> |              |              | <b>1.83%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.03707</b> | 0.4440        | 1.8669        | <b>2.9988</b> |

**Table-A 5.39 Market Returns to Acquirers; EWI-firms; (MM, 193); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.26%        | -0.05%       | 0.26%        | 0.2862               | 3.2819        | 1.3096         | 0.2862        | 3.2819        | 1.3096        |
| -19            | 0.05%        | -0.01%       | 0.31%        | -0.0254              | 1.0387        | -0.3674        | 0.1844        | 2.3805        | 1.1633        |
| -18            | -0.14%       | -0.30%       | 0.17%        | -0.1388              | 1.4443        | -1.4428        | 0.0705        | 1.7986        | 0.5882        |
| -17            | 0.54%        | 0.29%        | 0.71%        | 0.2242               | 1.4691        | <b>2.2915</b>  | 0.1731        | 1.7457        | 1.4890        |
| -16            | -0.12%       | -0.29%       | 0.59%        | -0.0115              | 1.3411        | -0.1289        | 0.1497        | 1.6813        | 1.3369        |
| -15            | 0.05%        | -0.01%       | 0.65%        | 0.0731               | 1.2921        | 0.8498         | 0.1665        | 1.6643        | 1.5021        |
| -14            | -0.23%       | -0.22%       | 0.42%        | -0.0825              | 1.3655        | -0.9074        | 0.1230        | 1.4955        | 1.2345        |
| -13            | 0.23%        | 0.11%        | 0.65%        | 0.0627               | 1.5206        | 0.6191         | 0.1372        | 1.5796        | 1.3040        |
| -12            | -0.25%       | -0.29%       | 0.40%        | -0.0493              | 1.2391        | -0.5975        | 0.1129        | 1.4255        | 1.1893        |
| -11            | -0.21%       | -0.25%       | 0.19%        | -0.0681              | 1.1353        | -0.9013        | 0.0856        | 1.3874        | 0.9260        |
| -10            | -0.06%       | -0.24%       | 0.13%        | 0.0210               | 1.5416        | 0.2046         | 0.0879        | 1.4934        | 0.8839        |
| -9             | 0.76%        | 0.17%        | 0.88%        | 0.1906               | 1.4801        | <b>1.9333</b>  | 0.1392        | 1.3791        | 1.5154        |
| -8             | 0.02%        | -0.09%       | 0.90%        | 0.0220               | 1.4231        | 0.2322         | 0.1398        | 1.4594        | 1.4386        |
| -7             | 0.46%        | 0.02%        | 1.36%        | 0.0970               | 1.7846        | 0.8161         | 0.1607        | 1.3110        | <b>1.8402</b> |
| -6             | 0.05%        | 0.01%        | 1.41%        | 0.0368               | 1.0767        | 0.5131         | 0.1647        | 1.3294        | <b>1.8604</b> |
| -5             | 0.24%        | 0.07%        | 1.65%        | 0.0588               | 1.2243        | 0.7210         | 0.1742        | 1.2685        | <b>2.0618</b> |
| -4             | 0.04%        | -0.05%       | 1.69%        | -0.1244              | 2.7280        | -0.6850        | 0.1388        | 1.1815        | <b>1.7640</b> |
| -3             | -0.01%       | -0.17%       | 1.68%        | 0.0623               | 1.5710        | 0.5950         | 0.1496        | 1.2047        | <b>1.8641</b> |
| -2             | 0.22%        | -0.12%       | 1.91%        | 0.0030               | 1.5969        | 0.0284         | 0.1463        | 1.1968        | <b>1.8352</b> |
| -1             | 0.79%        | 0.16%        | 2.70%        | 0.4144               | 2.2634        | <b>2.7489</b>  | 0.2352        | 1.2997        | <b>2.7175</b> |
| <b>0</b>       | <b>0.58%</b> | <b>0.11%</b> | <b>3.28%</b> | <b>0.1835</b>        | <b>1.9362</b> | <b>1.4234</b>  | <b>0.2696</b> | <b>1.2810</b> | <b>3.1601</b> |
| 1              | 0.31%        | 0.01%        | 3.59%        | 0.1087               | 1.9083        | 0.8552         | 0.2866        | 1.2579        | <b>3.4208</b> |
| 2              | 0.34%        | 0.03%        | 3.92%        | 0.1979               | 2.4694        | 1.2032         | 0.3215        | 1.4385        | <b>3.3563</b> |
| 3              | 0.04%        | -0.09%       | 3.96%        | 0.0569               | 1.9140        | 0.4461         | 0.3264        | 1.3214        | <b>3.7087</b> |
| 4              | 0.42%        | 0.10%        | 4.38%        | 0.0923               | 1.1608        | 1.1944         | 0.3382        | 1.3108        | <b>3.8745</b> |
| 5              | -0.13%       | -0.20%       | 4.25%        | 0.0700               | 1.6523        | 0.6365         | 0.3454        | 1.3511        | <b>3.8388</b> |
| 6              | -0.30%       | -0.09%       | 3.95%        | -0.0370              | 1.6448        | -0.3380        | 0.3318        | 1.4318        | <b>3.4799</b> |
| 7              | 0.30%        | 0.00%        | 4.25%        | 0.1171               | 2.3876        | 0.7367         | 0.3480        | 1.5153        | <b>3.4482</b> |
| 8              | 0.31%        | 0.03%        | 4.56%        | 0.1485               | 1.4664        | 1.5204         | 0.3695        | 1.5910        | <b>3.4873</b> |
| 9              | -0.22%       | -0.24%       | 4.33%        | -0.1238              | 1.3681        | -1.3588        | 0.3407        | 1.5291        | <b>3.3456</b> |
| 10             | 0.26%        | 0.13%        | 4.59%        | 0.1735               | 1.7059        | 1.5271         | 0.3663        | 1.5019        | <b>3.6622</b> |
| 11             | -0.15%       | 0.00%        | 4.44%        | -0.0638              | 1.3067        | -0.7326        | 0.3493        | 1.4371        | <b>3.6494</b> |
| 12             | 0.31%        | -0.01%       | 4.75%        | 0.1386               | 1.2148        | <b>1.7134</b>  | 0.3681        | 1.4730        | <b>3.7520</b> |
| 13             | 0.57%        | 0.05%        | 5.31%        | 0.2107               | 1.1876        | <b>2.6647</b>  | 0.3988        | 1.4553        | <b>4.1144</b> |
| 14             | -0.05%       | 0.00%        | 5.26%        | -0.0124              | 1.0672        | -0.1750        | 0.3909        | 1.4794        | <b>3.9676</b> |
| 15             | 0.04%        | -0.01%       | 5.30%        | -0.1173              | 1.7428        | -1.0103        | 0.3659        | 1.4440        | <b>3.8049</b> |
| 16             | 0.04%        | -0.15%       | 5.34%        | 0.0531               | 1.4338        | 0.5562         | 0.3697        | 1.4813        | <b>3.7471</b> |
| 17             | -0.16%       | -0.24%       | 5.18%        | -0.0251              | 1.3183        | -0.2858        | 0.3607        | 1.5301        | <b>3.5396</b> |
| 18             | 0.10%        | 0.26%        | 5.28%        | 0.1251               | 1.4929        | 1.2582         | 0.3761        | 1.5968        | <b>3.5364</b> |
| 19             | 0.07%        | 0.10%        | 5.35%        | -0.0393              | 1.7374        | -0.3398        | 0.3651        | 1.5139        | <b>3.6214</b> |
| 20             | -0.09%       | 0.02%        | 5.26%        | 0.0104               | 1.6239        | 0.0961         | 0.3623        | 1.5618        | <b>3.4828</b> |
| 21             | -0.08%       | -0.18%       | 5.18%        | -0.0215              | 2.0806        | -0.1548        | 0.3546        | 1.6074        | <b>3.3126</b> |
| 22             | 0.07%        | 0.20%        | 5.25%        | 0.1673               | 1.7453        | 1.4393         | 0.3760        | 1.6552        | <b>3.4108</b> |
| 23             | 0.36%        | 0.01%        | 5.61%        | 0.1313               | 1.4326        | 1.3762         | 0.3915        | 1.5845        | <b>3.7098</b> |
| 24             | 0.01%        | -0.06%       | 5.62%        | 0.1074               | 1.8969        | 0.8502         | 0.4031        | 1.6779        | <b>3.6075</b> |
| 25             | -0.03%       | -0.16%       | 5.59%        | -0.0535              | 1.3215        | -0.6081        | 0.3908        | 1.6288        | <b>3.6028</b> |
| 26             | 0.52%        | 0.12%        | 6.11%        | 0.1788               | 1.2858        | <b>2.0880</b>  | 0.4127        | 1.5934        | <b>3.8892</b> |
| 27             | 0.20%        | -0.06%       | 6.32%        | 0.1286               | 1.2338        | 1.5654         | 0.4270        | 1.6097        | <b>3.9827</b> |
| 28             | -0.05%       | -0.08%       | 6.27%        | 0.0437               | 1.3455        | 0.4880         | 0.4288        | 1.6765        | <b>3.8409</b> |
| 29             | 0.10%        | -0.22%       | 6.36%        | -0.0051              | 1.5001        | -0.0512        | 0.4238        | 1.6308        | <b>3.9021</b> |
| 30             | 0.53%        | 0.17%        | 6.89%        | 0.2376               | 1.2127        | <b>2.9420</b>  | 0.4529        | 1.6677        | <b>4.0777</b> |
| <b>-1 to 1</b> |              |              | <b>1.68%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.03711</b> | 0.4080        | 1.8643        | <b>3.2857</b> |

Table-A 5.40 SW-1 Returns to Acquirers; All-firms; (OLS, 194); EWI

| Days           | AAR          | Median        | CAAR          | SARa                 | SD            | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|---------------|---------------|----------------------|---------------|----------------|----------------|---------------|----------------|
| -20            | -0.06%       | -0.13%        | -0.06%        | 0.0032               | 0.9813        | 0.0496         | 0.0032         | 0.9813        | 0.0496         |
| -19            | -0.01%       | -0.24%        | -0.06%        | -0.0498              | 0.8918        | -0.8563        | -0.0329        | 0.9080        | -0.5568        |
| -18            | -0.22%       | -0.55%        | -0.29%        | -0.0974              | 1.0134        | -1.4748        | -0.0831        | 0.9330        | -1.3673        |
| -17            | 0.39%        | -0.08%        | 0.10%         | 0.1109               | 1.1024        | 1.5438         | -0.0165        | 0.9398        | -0.2701        |
| -16            | -0.28%       | -0.41%        | -0.18%        | -0.0588              | 0.9743        | -0.9261        | -0.0411        | 1.0160        | -0.6207        |
| -15            | -0.08%       | -0.22%        | -0.26%        | -0.0054              | 1.0693        | -0.0773        | -0.0397        | 1.0359        | -0.5883        |
| -14            | -0.43%       | -0.42%        | -0.69%        | -0.0804              | 1.1284        | -1.0935        | -0.0672        | 1.0156        | -1.0147        |
| -13            | -0.04%       | 0.03%         | -0.73%        | -0.0295              | 1.2217        | -0.3701        | -0.0732        | 1.1040        | -1.0180        |
| -12            | -0.41%       | -0.44%        | -1.14%        | -0.1034              | 0.9079        | <b>-1.7483</b> | -0.1035        | 1.0250        | -1.5499        |
| -11            | -0.41%       | -0.33%        | -1.55%        | -0.1133              | 0.9571        | <b>-1.8173</b> | -0.1340        | 1.0121        | <b>-2.0325</b> |
| -10            | -0.26%       | -0.47%        | -1.81%        | -0.0587              | 1.0111        | -0.8913        | -0.1455        | 0.9945        | <b>-2.2454</b> |
| -9             | 0.50%        | -0.09%        | -1.31%        | 0.1193               | 1.1274        | 1.6240         | -0.1049        | 1.0237        | -1.5723        |
| -8             | -0.09%       | -0.30%        | -1.40%        | -0.0434              | 0.9279        | -0.7174        | -0.1128        | 1.0292        | <b>-1.6820</b> |
| -7             | 0.23%        | -0.32%        | -1.17%        | 0.0466               | 0.9961        | 0.7180         | -0.0962        | 1.0576        | -1.3964        |
| -6             | -0.08%       | -0.15%        | -1.25%        | -0.0381              | 0.8895        | -0.6576        | -0.1028        | 1.0784        | -1.4631        |
| -5             | 0.05%        | -0.11%        | -1.20%        | 0.0160               | 0.9728        | 0.2531         | -0.0955        | 1.0485        | -1.3984        |
| -4             | -0.14%       | -0.38%        | -1.34%        | -0.0444              | 0.9918        | -0.6868        | -0.1035        | 1.0131        | -1.5671        |
| -3             | -0.10%       | -0.27%        | -1.44%        | -0.0411              | 0.9046        | -0.6979        | -0.1102        | 1.0116        | <b>-1.6723</b> |
| -2             | 0.03%        | -0.22%        | -1.41%        | -0.0034              | 0.8997        | -0.0576        | -0.1081        | 0.9859        | <b>-1.6823</b> |
| -1             | 0.52%        | 0.17%         | -0.90%        | 0.1615               | 1.0653        | <b>2.3270</b>  | -0.0692        | 1.0108        | -1.0508        |
| <b>0</b>       | <b>0.58%</b> | <b>-0.04%</b> | <b>-0.31%</b> | <b>0.2112</b>        | <b>1.3758</b> | <b>2.3560</b>  | <b>-0.0215</b> | <b>1.0133</b> | <b>-0.3249</b> |
| 1              | 0.29%        | -0.17%        | -0.03%        | 0.0622               | 1.3141        | 0.7259         | -0.0077        | 1.0441        | -0.1133        |
| 2              | 0.18%        | -0.26%        | 0.15%         | 0.0654               | 1.3867        | 0.7238         | 0.0061         | 1.0724        | 0.0873         |
| 3              | -0.21%       | -0.35%        | -0.07%        | -0.0652              | 1.0577        | -0.9466        | -0.0073        | 1.0518        | -0.1072        |
| 4              | 0.14%        | -0.09%        | 0.07%         | 0.0192               | 0.9532        | 0.3096         | -0.0034        | 1.0577        | -0.0486        |
| 5              | -0.24%       | -0.40%        | -0.17%        | -0.0546              | 0.9923        | -0.8437        | -0.0140        | 1.0483        | -0.2048        |
| 6              | -0.47%       | -0.33%        | -0.64%        | -0.1207              | 1.0697        | <b>-1.7324</b> | -0.0370        | 1.0566        | -0.5369        |
| 7              | 0.26%        | -0.18%        | -0.38%        | 0.0761               | 0.9926        | 1.1769         | -0.0219        | 1.0619        | -0.3167        |
| 8              | 0.14%        | -0.28%        | -0.23%        | -0.0060              | 1.0312        | -0.0887        | -0.0226        | 1.0652        | -0.3261        |
| 9              | -0.42%       | -0.48%        | -0.65%        | -0.1191              | 0.9590        | <b>-1.9058</b> | -0.0440        | 1.0733        | -0.6291        |
| 10             | 0.00%        | -0.07%        | -0.66%        | 0.0182               | 1.0214        | 0.2728         | -0.0400        | 1.0817        | -0.5678        |
| 11             | -0.29%       | -0.14%        | -0.94%        | -0.0616              | 0.8757        | -1.0800        | -0.0503        | 1.0846        | -0.7116        |
| 12             | -0.01%       | -0.09%        | -0.95%        | -0.0152              | 0.9053        | -0.2583        | -0.0522        | 1.0927        | -0.7327        |
| 13             | 0.34%        | -0.05%        | -0.61%        | 0.0918               | 0.8860        | 1.5909         | -0.0356        | 1.0964        | -0.4990        |
| 14             | -0.21%       | -0.20%        | -0.82%        | -0.0771              | 0.8529        | -1.3870        | -0.0482        | 1.0928        | -0.6764        |
| 15             | -0.18%       | -0.32%        | -1.00%        | -0.0961              | 1.0743        | -1.3723        | -0.0635        | 1.0937        | -0.8910        |
| 16             | -0.03%       | -0.22%        | -1.03%        | -0.0420              | 0.9925        | -0.6496        | -0.0695        | 1.0902        | -0.9790        |
| 17             | -0.37%       | -0.48%        | -1.40%        | -0.1429              | 0.9009        | <b>-2.4336</b> | -0.0918        | 1.0886        | -1.2941        |
| 18             | -0.09%       | 0.02%         | -1.49%        | 0.0108               | 1.0645        | 0.1561         | -0.0889        | 1.0803        | -1.2626        |
| 19             | -0.07%       | -0.20%        | -1.55%        | 0.0063               | 1.1284        | 0.0863         | -0.0868        | 1.0484        | -1.2700        |
| 20             | -0.21%       | -0.25%        | -1.77%        | -0.0717              | 1.1936        | -0.9213        | -0.0969        | 1.0638        | -1.3977        |
| 21             | -0.17%       | -0.31%        | -1.93%        | -0.0610              | 1.0359        | -0.9040        | -0.1051        | 1.0545        | -1.5302        |
| 22             | -0.21%       | -0.20%        | -2.14%        | -0.0316              | 0.8767        | -0.5523        | -0.1087        | 1.0461        | -1.5950        |
| 23             | 0.28%        | -0.13%        | -1.86%        | 0.0659               | 1.0269        | 0.9854         | -0.0975        | 1.0449        | -1.4326        |
| 24             | -0.12%       | -0.31%        | -1.98%        | -0.0176              | 1.1348        | -0.2387        | -0.0991        | 1.0682        | -1.4235        |
| 25             | -0.20%       | -0.28%        | -2.18%        | -0.0978              | 1.0109        | -1.4844        | -0.1124        | 1.0694        | -1.6131        |
| 26             | 0.43%        | 0.00%         | -1.75%        | 0.1218               | 1.0172        | <b>1.8372</b>  | -0.0934        | 1.0653        | -1.3462        |
| 27             | 0.08%        | -0.19%        | -1.67%        | 0.0547               | 1.0040        | 0.8355         | -0.0846        | 1.0707        | -1.2123        |
| 28             | -0.23%       | -0.23%        | -1.91%        | -0.0480              | 0.8457        | -0.8717        | -0.0906        | 1.0761        | -1.2917        |
| 29             | -0.16%       | -0.30%        | -2.07%        | -0.0259              | 0.9695        | -0.4097        | -0.0933        | 1.0633        | -1.3469        |
| 30             | 0.43%        | 0.02%         | -1.64%        | 0.1272               | 0.9693        | <b>2.0139</b>  | -0.0746        | 1.0724        | -1.0674        |
| <b>-1 to 1</b> |              |               | <b>1.39%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.03671</b> | 0.2511         | 1.4631        | <b>2.6338</b>  |



Table-A 5.41 SW-2 Returns to Acquirers; All-firms; (OLS, 194); EWI

| Days           | AAR          | Median        | CAAR          | SARa                 | SD            | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|---------------|---------------|----------------------|---------------|----------------|----------------|---------------|----------------|
| -20            | -0.08%       | -0.09%        | -0.08%        | 0.0004               | 0.9758        | 0.0057         | 0.0004         | 0.9758        | 0.0057         |
| -19            | -0.05%       | -0.26%        | -0.13%        | -0.0547              | 0.8989        | -0.9243        | -0.0384        | 0.9062        | -0.6440        |
| -18            | -0.18%       | -0.49%        | -0.31%        | -0.0879              | 1.0232        | -1.3045        | -0.0822        | 0.9393        | -1.3277        |
| -17            | 0.38%        | -0.05%        | 0.07%         | 0.1112               | 1.1020        | 1.5321         | -0.0155        | 0.9411        | -0.2506        |
| -16            | -0.29%       | -0.43%        | -0.22%        | -0.0619              | 0.9692        | -0.9695        | -0.0416        | 1.0067        | -0.6270        |
| -15            | -0.08%       | -0.17%        | -0.31%        | -0.0074              | 1.0804        | -0.1033        | -0.0410        | 1.0247        | -0.6067        |
| -14            | -0.45%       | -0.46%        | -0.76%        | -0.0897              | 1.1535        | -1.1798        | -0.0718        | 1.0094        | -1.0798        |
| -13            | -0.07%       | -0.08%        | -0.82%        | -0.0372              | 1.2279        | -0.4603        | -0.0803        | 1.1081        | -1.1005        |
| -12            | -0.42%       | -0.46%        | -1.24%        | -0.1056              | 0.9142        | <b>-1.7541</b> | -0.1110        | 1.0204        | -1.6505        |
| -11            | -0.40%       | -0.42%        | -1.64%        | -0.1104              | 0.9651        | <b>-1.7366</b> | -0.1402        | 1.0068        | <b>-2.1135</b> |
| -10            | -0.28%       | -0.49%        | -1.92%        | -0.0650              | 1.0165        | -0.9702        | -0.1532        | 0.9872        | <b>-2.3563</b> |
| -9             | 0.49%        | -0.10%        | -1.43%        | 0.1190               | 1.1323        | 1.5958         | -0.1124        | 1.0121        | <b>-1.6851</b> |
| -8             | -0.09%       | -0.14%        | -1.52%        | -0.0419              | 0.9339        | -0.6805        | -0.1196        | 1.0195        | <b>-1.7801</b> |
| -7             | 0.22%        | -0.25%        | -1.30%        | 0.0467               | 1.0029        | 0.7065         | -0.1027        | 1.0517        | -1.4829        |
| -6             | -0.10%       | -0.12%        | -1.40%        | -0.0447              | 0.8886        | -0.7632        | -0.1108        | 1.0732        | -1.5670        |
| -5             | 0.06%        | -0.06%        | -1.34%        | 0.0192               | 0.9798        | 0.2973         | -0.1025        | 1.0421        | -1.4926        |
| -4             | -0.13%       | -0.41%        | -1.47%        | -0.0405              | 0.9956        | -0.6179        | -0.1092        | 1.0087        | -1.6439        |
| -3             | -0.12%       | -0.30%        | -1.59%        | -0.0438              | 0.9120        | -0.7292        | -0.1165        | 1.0085        | <b>-1.7533</b> |
| -2             | 0.05%        | -0.13%        | -1.54%        | 0.0026               | 0.8995        | 0.0441         | -0.1128        | 0.9805        | <b>-1.7461</b> |
| -1             | 0.53%        | 0.13%         | -1.01%        | 0.1590               | 1.0622        | <b>2.2717</b>  | -0.0744        | 1.0077        | -1.1205        |
| <b>0</b>       | <b>0.61%</b> | <b>-0.15%</b> | <b>-0.40%</b> | <b>0.2231</b>        | <b>1.3625</b> | <b>2.4850</b>  | <b>-0.0239</b> | <b>1.0096</b> | <b>-0.3596</b> |
| 1              | 0.28%        | -0.18%        | -0.13%        | 0.0593               | 1.3219        | 0.6810         | -0.0107        | 1.0428        | -0.1561        |
| 2              | 0.20%        | -0.16%        | 0.07%         | 0.0733               | 1.3825        | 0.8053         | 0.0048         | 1.0705        | 0.0681         |
| 3              | -0.19%       | -0.27%        | -0.12%        | -0.0592              | 1.0570        | -0.8505        | -0.0074        | 1.0526        | -0.1065        |
| 4              | 0.12%        | -0.13%        | 0.00%         | 0.0151               | 0.9517        | 0.2404         | -0.0042        | 1.0583        | -0.0606        |
| 5              | -0.22%       | -0.27%        | -0.22%        | -0.0455              | 0.9928        | -0.6956        | -0.0131        | 1.0497        | -0.1889        |
| 6              | -0.44%       | -0.28%        | -0.66%        | -0.1126              | 1.0751        | -1.5893        | -0.0345        | 1.0592        | -0.4941        |
| 7              | 0.23%        | -0.21%        | -0.43%        | 0.0686               | 0.9790        | 1.0631         | -0.0209        | 1.0645        | -0.2981        |
| 8              | 0.14%        | -0.29%        | -0.29%        | -0.0092              | 1.0306        | -0.1359        | -0.0223        | 1.0683        | -0.3162        |
| 9              | -0.39%       | -0.44%        | -0.68%        | -0.1114              | 0.9634        | <b>-1.7546</b> | -0.0422        | 1.0761        | -0.5954        |
| 10             | -0.04%       | -0.04%        | -0.72%        | 0.0154               | 1.0287        | 0.2279         | -0.0387        | 1.0826        | -0.5433        |
| 11             | -0.26%       | -0.07%        | -0.97%        | -0.0505              | 0.8779        | -0.8740        | -0.0471        | 1.0831        | -0.6597        |
| 12             | 0.02%        | -0.13%        | -0.96%        | -0.0063              | 0.9059        | -0.1050        | -0.0474        | 1.0923        | -0.6594        |
| 13             | 0.37%        | -0.07%        | -0.59%        | 0.0986               | 0.9027        | <b>1.6578</b>  | -0.0298        | 1.0951        | -0.4136        |
| 14             | -0.17%       | -0.21%        | -0.76%        | -0.0640              | 0.8564        | -1.1350        | -0.0402        | 1.0938        | -0.5583        |
| 15             | -0.17%       | -0.23%        | -0.94%        | -0.0943              | 1.0821        | -1.3228        | -0.0554        | 1.0905        | -0.7710        |
| 16             | -0.01%       | -0.24%        | -0.95%        | -0.0324              | 0.9882        | -0.4983        | -0.0600        | 1.0855        | -0.8385        |
| 17             | -0.40%       | -0.43%        | -1.34%        | -0.1466              | 0.8984        | <b>-2.4764</b> | -0.0829        | 1.0828        | -1.1628        |
| 18             | -0.13%       | 0.01%         | -1.47%        | 0.0009               | 1.0682        | 0.0131         | -0.0817        | 1.0775        | -1.1513        |
| 19             | -0.07%       | -0.22%        | -1.55%        | 0.0053               | 1.1353        | 0.0709         | -0.0799        | 1.0481        | -1.1566        |
| 20             | -0.24%       | -0.25%        | -1.79%        | -0.0790              | 1.2117        | -0.9902        | -0.0912        | 1.0638        | -1.3017        |
| 21             | -0.17%       | -0.31%        | -1.96%        | -0.0636              | 1.0444        | -0.9244        | -0.0999        | 1.0541        | -1.4393        |
| 22             | -0.21%       | -0.18%        | -2.17%        | -0.0304              | 0.8944        | -0.5157        | -0.1034        | 1.0455        | -1.5014        |
| 23             | 0.29%        | -0.08%        | -1.88%        | 0.0655               | 1.0331        | 0.9629         | -0.0924        | 1.0449        | -1.3416        |
| 24             | -0.12%       | -0.31%        | -2.01%        | -0.0158              | 1.1381        | -0.2111        | -0.0937        | 1.0683        | -1.3311        |
| 25             | -0.25%       | -0.36%        | -2.26%        | -0.1129              | 1.0178        | <b>-1.6834</b> | -0.1093        | 1.0692        | -1.5517        |
| 26             | 0.42%        | 0.00%         | -1.84%        | 0.1199               | 1.0146        | <b>1.7943</b>  | -0.0906        | 1.0619        | -1.2956        |
| 27             | 0.07%        | -0.18%        | -1.77%        | 0.0515               | 1.0089        | 0.7750         | -0.0823        | 1.0647        | -1.1727        |
| 28             | -0.25%       | -0.21%        | -2.02%        | -0.0526              | 0.8432        | -0.9462        | -0.0889        | 1.0685        | -1.2632        |
| 29             | -0.16%       | -0.38%        | -2.18%        | -0.0273              | 0.9672        | -0.4292        | -0.0919        | 1.0526        | -1.3251        |
| 30             | 0.41%        | 0.02%         | -1.77%        | 0.1251               | 0.9742        | <b>1.9486</b>  | -0.0735        | 1.0598        | -1.0524        |
| <b>-1 to 1</b> |              |               | <b>1.42%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.03651</b> | 0.2548         | 1.4572        | <b>2.6542</b>  |

Table-A 5.42 SW-3 Returns to Acquirers; All-firms; (OLS, 194); EWI

| Days           | AAR          | Median        | CAAR          | SARa                 | SD            | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|---------------|---------------|----------------------|---------------|----------------|----------------|---------------|----------------|
| -20            | -0.05%       | -0.12%        | -0.05%        | 0.0049               | 0.9765        | 0.0772         | 0.0049         | 0.9765        | 0.0772         |
| -19            | -0.04%       | -0.25%        | -0.09%        | -0.0519              | 0.8979        | -0.8798        | -0.0332        | 0.9033        | -0.5594        |
| -18            | -0.15%       | -0.46%        | -0.25%        | -0.0787              | 1.0161        | -1.1792        | -0.0725        | 0.9322        | -1.1847        |
| -17            | 0.39%        | -0.06%        | 0.14%         | 0.1095               | 1.1000        | 1.5152         | -0.0081        | 0.9326        | -0.1319        |
| -16            | -0.29%       | -0.38%        | -0.15%        | -0.0640              | 0.9536        | -1.0214        | -0.0358        | 0.9906        | -0.5508        |
| -15            | -0.08%       | -0.15%        | -0.23%        | -0.0086              | 1.0788        | -0.1210        | -0.0362        | 1.0126        | -0.5445        |
| -14            | -0.41%       | -0.38%        | -0.64%        | -0.0769              | 1.1373        | -1.0298        | -0.0626        | 0.9991        | -0.9540        |
| -13            | -0.09%       | 0.00%         | -0.72%        | -0.0385              | 1.2325        | -0.4753        | -0.0722        | 1.0965        | -1.0020        |
| -12            | -0.43%       | -0.46%        | -1.16%        | -0.1080              | 0.9140        | <b>-1.7992</b> | -0.1040        | 1.0154        | -1.5600        |
| -11            | -0.40%       | -0.30%        | -1.55%        | -0.1099              | 0.9591        | <b>-1.7448</b> | -0.1335        | 0.9985        | <b>-2.0350</b> |
| -10            | -0.28%       | -0.51%        | -1.83%        | -0.0711              | 1.0043        | -1.0782        | -0.1487        | 0.9777        | <b>-2.3155</b> |
| -9             | 0.47%        | -0.09%        | -1.36%        | 0.1078               | 1.1382        | 1.4425         | -0.1112        | 1.0038        | <b>-1.6871</b> |
| -8             | -0.08%       | -0.27%        | -1.44%        | -0.0416              | 0.9255        | -0.6847        | -0.1184        | 1.0096        | <b>-1.7856</b> |
| -7             | 0.23%        | -0.27%        | -1.21%        | 0.0486               | 1.0061        | 0.7357         | -0.1011        | 1.0371        | -1.4843        |
| -6             | -0.09%       | -0.18%        | -1.30%        | -0.0402              | 0.8969        | -0.6822        | -0.1081        | 1.0617        | -1.5496        |
| -5             | 0.10%        | -0.09%        | -1.20%        | 0.0294               | 0.9845        | 0.4547         | -0.0973        | 1.0348        | -1.4313        |
| -4             | -0.12%       | -0.46%        | -1.32%        | -0.0341              | 0.9934        | -0.5231        | -0.1027        | 1.0020        | -1.5597        |
| -3             | -0.10%       | -0.30%        | -1.41%        | -0.0378              | 0.9010        | -0.6385        | -0.1087        | 1.0007        | <b>-1.6533</b> |
| -2             | 0.06%        | -0.11%        | -1.36%        | 0.0043               | 0.8966        | 0.0738         | -0.1048        | 0.9731        | -1.6392        |
| -1             | 0.56%        | 0.11%         | -0.79%        | 0.1657               | 1.0606        | <b>2.3781</b>  | -0.0651        | 1.0000        | -0.9908        |
| <b>0</b>       | <b>0.60%</b> | <b>-0.06%</b> | <b>-0.20%</b> | <b>0.2190</b>        | <b>1.3707</b> | <b>2.4326</b>  | <b>-0.0157</b> | <b>1.0057</b> | <b>-0.2379</b> |
| 1              | 0.25%        | -0.15%        | 0.05%         | 0.0518               | 1.3318        | 0.5920         | -0.0043        | 1.0438        | -0.0629        |
| 2              | 0.24%        | -0.19%        | 0.28%         | 0.0818               | 1.3707        | 0.9086         | 0.0128         | 1.0657        | 0.1834         |
| 3              | -0.18%       | -0.27%        | 0.10%         | -0.0620              | 1.0576        | -0.8929        | -0.0001        | 1.0443        | -0.0014        |
| 4              | 0.13%        | -0.26%        | 0.23%         | 0.0188               | 0.9494        | 0.3011         | 0.0037         | 1.0487        | 0.0532         |
| 5              | -0.21%       | -0.35%        | 0.02%         | -0.0433              | 1.0001        | -0.6597        | -0.0049        | 1.0377        | -0.0720        |
| 6              | -0.44%       | -0.32%        | -0.42%        | -0.1128              | 1.0621        | -1.6176        | -0.0265        | 1.0451        | -0.3865        |
| 7              | 0.24%        | -0.18%        | -0.18%        | 0.0713               | 0.9711        | 1.1182         | -0.0126        | 1.0508        | -0.1822        |
| 8              | 0.13%        | -0.25%        | -0.05%        | -0.0137              | 1.0324        | -0.2017        | -0.0149        | 1.0558        | -0.2148        |
| 9              | -0.39%       | -0.44%        | -0.44%        | -0.1091              | 0.9738        | <b>-1.7059</b> | -0.0346        | 1.0641        | -0.4945        |
| 10             | -0.05%       | -0.02%        | -0.49%        | 0.0148               | 1.0466        | 0.2157         | -0.0313        | 1.0684        | -0.4466        |
| 11             | -0.26%       | -0.15%        | -0.75%        | -0.0487              | 0.8938        | -0.8301        | -0.0395        | 1.0668        | -0.5632        |
| 12             | 0.03%        | -0.13%        | -0.72%        | -0.0091              | 0.9197        | -0.1508        | -0.0404        | 1.0766        | -0.5719        |
| 13             | 0.35%        | -0.02%        | -0.37%        | 0.0876               | 0.8955        | 1.4893         | -0.0248        | 1.0847        | -0.3484        |
| 14             | -0.16%       | -0.20%        | -0.53%        | -0.0622              | 0.8581        | -1.1037        | -0.0350        | 1.0843        | -0.4911        |
| 15             | -0.18%       | -0.25%        | -0.72%        | -0.0929              | 1.0774        | -1.3135        | -0.0500        | 1.0782        | -0.7057        |
| 16             | -0.01%       | -0.24%        | -0.72%        | -0.0293              | 0.9744        | -0.4574        | -0.0541        | 1.0708        | -0.7694        |
| 17             | -0.42%       | -0.46%        | -1.14%        | -0.1488              | 0.8959        | <b>-2.5288</b> | -0.0775        | 1.0652        | -1.1082        |
| 18             | -0.14%       | -0.06%        | -1.28%        | -0.0049              | 1.0691        | -0.0702        | -0.0773        | 1.0638        | -1.1066        |
| 19             | -0.06%       | -0.21%        | -1.34%        | 0.0084               | 1.1390        | 0.1120         | -0.0750        | 1.0360        | -1.1026        |
| 20             | -0.24%       | -0.25%        | -1.58%        | -0.0785              | 1.2288        | -0.9720        | -0.0864        | 1.0500        | -1.2521        |
| 21             | -0.17%       | -0.29%        | -1.75%        | -0.0665              | 1.0487        | -0.9651        | -0.0956        | 1.0443        | -1.3934        |
| 22             | -0.18%       | -0.19%        | -1.93%        | -0.0293              | 0.8962        | -0.4977        | -0.0989        | 1.0339        | -1.4568        |
| 23             | 0.26%        | -0.10%        | -1.67%        | 0.0618               | 1.0480        | 0.8974         | -0.0885        | 1.0333        | -1.3038        |
| 24             | -0.18%       | -0.28%        | -1.85%        | -0.0302              | 1.1418        | -0.4022        | -0.0920        | 1.0546        | -1.3281        |
| 25             | -0.27%       | -0.47%        | -2.12%        | -0.1132              | 1.0111        | <b>-1.7045</b> | -0.1077        | 1.0555        | -1.5532        |
| 26             | 0.40%        | -0.18%        | -1.72%        | 0.1149               | 1.0239        | <b>1.7080</b>  | -0.0898        | 1.0493        | -1.3026        |
| 27             | 0.13%        | -0.18%        | -1.59%        | 0.0630               | 1.0024        | 0.9568         | -0.0797        | 1.0507        | -1.1554        |
| 28             | -0.23%       | -0.17%        | -1.81%        | -0.0448              | 0.8413        | -0.8107        | -0.0853        | 1.0541        | -1.2324        |
| 29             | -0.16%       | -0.29%        | -1.98%        | -0.0319              | 0.9585        | -0.5066        | -0.0890        | 1.0402        | -1.3023        |
| 30             | 0.42%        | 0.04%         | -1.56%        | 0.1318               | 0.9917        | <b>2.0229</b>  | -0.0696        | 1.0470        | -1.0128        |
| <b>-1 to 1</b> |              |               | <b>1.40%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.03715</b> | 0.2520         | 1.4707        | <b>2.6086</b>  |



**Table-A 5.43 Univariate Regression Analysis - OLS CAARs [-1,+1] - Targets**

| <b>CAAR Window:</b> | (1)<br>[-1,+1]        | (2)<br>[-1,+1]        | (3)<br>[-1,+1]        | (4)<br>[-1,+1]              | (5)<br>[-1,+1]        | (6)<br>[-1,+1]        |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------------|-----------------------|-----------------------|
| Cash                | 0.0174<br>(1.2590)    |                       |                       |                             |                       | 0.0066<br>(0.4261)    |
| Pct50               |                       | 0.0202<br>(1.2756)    |                       |                             |                       | 0.0188<br>(1.1266)    |
| PctToe              |                       |                       | 0.0416<br>(1.4001)    |                             |                       | 0.0310<br>(1.0397)    |
| <b>CB</b>           |                       |                       |                       | <b>0.0286**</b><br>(2.0545) |                       | 0.0228<br>(1.5065)    |
| Conglomerate        |                       |                       |                       |                             | -0.0226<br>(-1.6121)  | -0.0123<br>(-0.8398)  |
| Intercept           | 0.0474***<br>(5.8694) | 0.0470***<br>(6.3534) | 0.0460***<br>(5.4494) | 0.0415***<br>(5.2556)       | 0.0609***<br>(7.7171) | 0.0368***<br>(2.9283) |
| Observations        | 274                   | 274                   | 268                   | 274                         | 274                   | 268                   |
| F-Statistics        | 1.5850                | 1.6271                | 1.9601                | 4.2211                      | 2.5990                | 1.7434                |
| p-value             | 0.2091                | 0.2032                | 0.1627                | <b>0.0409**</b>             | 0.1081                | 0.1250                |
| Adj. R-Squared      | 0.0016                | 0.0031                | 0.0044                | 0.0126                      | 0.0064                | 0.0153                |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.44 Univariate Regression Analysis - OLS CAARs [-5,+5] - Targets**

| <b>CAAR Window:</b> | (1)<br>[-5,+5]              | (2)<br>[-5,+5]               | (3)<br>[-5,+5]        | (4)<br>[-5,+5]        | (5)<br>[-5,+5]        | (6)<br>[-5,+5]               |
|---------------------|-----------------------------|------------------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| <b>Cash</b>         | <b>0.0590**</b><br>(2.5143) |                              |                       |                       |                       | <b>0.0529**</b><br>(2.2559)  |
| <b>Pct50</b>        |                             | <b>0.0689***</b><br>(2.7235) |                       |                       |                       | <b>0.0690***</b><br>(2.6660) |
| PctToe              |                             |                              | 0.0630<br>(1.3456)    |                       |                       | 0.0382<br>(0.8276)           |
| CB                  |                             |                              |                       | 0.0377*<br>(1.6657)   |                       | 0.0127<br>(0.5692)           |
| Conglomerate        |                             |                              |                       |                       | -0.0408*<br>(-1.7487) | -0.0146<br>(-0.6492)         |
| Intercept           | 0.0485***<br>(3.6282)       | 0.0471***<br>(3.7162)        | 0.0562***<br>(3.9062) | 0.0512***<br>(3.5849) | 0.0808***<br>(5.9547) | 0.0276<br>(1.3367)           |
| Observations        | 274                         | 274                          | 268                   | 274                   | 274                   | 268                          |
| F-Statistics        | 6.3219                      | 7.4172                       | 1.8107                | 2.7745                | 3.0580                | 3.3407                       |
| p-value             | <b>0.0125**</b>             | <b>0.0069***</b>             | 0.1796                | 0.0969*               | 0.0815*               | <b>0.0061***</b>             |
| Adj. R-Squared      | 0.0176                      | 0.0240                       | 0.0031                | 0.0063                | 0.0079                | 0.0462                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.45 Univariate Regression Analysis - OLS CAARs [-10,+10] - Targets**

| CAAR Window:   | (1)<br>[-10,+10]             | (2)<br>[-10,+10]      | (3)<br>[-10,+10]      | (4)<br>[-10,+10]      | (5)<br>[-10,+10]      | (6)<br>[-10,+10]             |
|----------------|------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| Cash           | <b>0.0826***</b><br>(2.6321) |                       |                       |                       |                       | <b>0.0986***</b><br>(2.9638) |
| Pct50          |                              | 0.0626*<br>(1.9532)   |                       |                       |                       | 0.0597*<br>(1.8261)          |
| PctToe         |                              |                       | -0.0615<br>(-1.0140)  |                       |                       | -0.0999<br>(-1.6208)         |
| CB             |                              |                       |                       | 0.0081<br>(0.2798)    |                       | -0.0242<br>(-0.8131)         |
| Conglomerate   |                              |                       |                       |                       | -0.0439<br>(-1.4388)  | -0.0276<br>(-0.8732)         |
| Intercept      | 0.0581***<br>(3.2028)        | 0.0653***<br>(3.6330) | 0.0928***<br>(4.5883) | 0.0789***<br>(3.7389) | 0.0985***<br>(5.0814) | 0.0750**<br>(2.1882)         |
| Observations   | 274                          | 274                   | 268                   | 274                   | 274                   | 268                          |
| F-Statistics   | 6.9279                       | 3.8149                | 1.0281                | 0.0783                | 2.0701                | 2.8614                       |
| p-value        | <b>0.0090***</b>             | 0.0518*               | 0.3115                | 0.7798                | 0.1514                | <b>0.0155**</b>              |
| Adj. R-Squared | 0.0191                       | 0.0088                | -0.0002               | -0.0034               | 0.0037                | 0.0335                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.46 Univariate Regression Analysis - OLS CAARs [-15,+15] - Targets**

| CAAR Window:   | (1)<br>[-15,+15]            | (2)<br>[-15,+15]            | (3)<br>[-15,+15]      | (4)<br>[-15,+15]      | (5)<br>[-15,+15]      | (6)<br>[-15,+15]            |
|----------------|-----------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------------|
| Cash           | <b>0.0770**</b><br>(2.0238) |                             |                       |                       |                       | <b>0.0972**</b><br>(2.4890) |
| Pct50          |                             | <b>0.1047**</b><br>(2.5398) |                       |                       |                       | <b>0.0997**</b><br>(2.3613) |
| PctToe         |                             |                             | -0.0886<br>(-1.1699)  |                       |                       | -0.1322*<br>(-1.7392)       |
| CB             |                             |                             |                       | -0.0015<br>(-0.0425)  |                       | -0.0432<br>(-1.2053)        |
| Conglomerate   |                             |                             |                       |                       | -0.0708*<br>(-1.8137) | -0.0513<br>(-1.3137)        |
| Intercept      | 0.0765***<br>(3.3610)       | 0.0708***<br>(3.2963)       | 0.1175***<br>(4.7146) | 0.0992***<br>(3.8295) | 0.1253***<br>(5.5936) | 0.1066***<br>(2.7923)       |
| Observations   | 274                         | 274                         | 268                   | 274                   | 274                   | 268                         |
| F-Statistics   | 4.0959                      | 6.4508                      | 1.3687                | 0.0018                | 3.2897                | 3.2942                      |
| p-value        | <b>0.0440**</b>             | <b>0.0116**</b>             | 0.2431                | 0.9661                | 0.0708*               | <b>0.0067***</b>            |
| Adj. R-Squared | 0.0094                      | 0.0193                      | 0.0011                | -0.0037               | 0.0089                | 0.0406                      |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.47 Univariate Regression Analysis – OLS CAARs [-20,+20] - Targets**

| <b>CAAR Window:</b> | (1)<br>[-20,+20]            | (2)<br>[-20,+20]            | (3)<br>[-20,+20]      | (4)<br>[-20,+20]      | (5)<br>[-20,+20]              | (6)<br>[-20,+20]            |
|---------------------|-----------------------------|-----------------------------|-----------------------|-----------------------|-------------------------------|-----------------------------|
| <b>Cash</b>         | <b>0.0902**</b><br>(2.0276) |                             |                       |                       |                               | <b>0.1173**</b><br>(2.5686) |
| <b>Pct50</b>        |                             | <b>0.1121**</b><br>(2.5318) |                       |                       |                               | <b>0.1067**</b><br>(2.4173) |
| PctToe              |                             |                             | -0.1106<br>(-1.2889)  |                       |                               | -0.1679*<br>(-1.9422)       |
| CB                  |                             |                             |                       | -0.0178<br>(-0.4550)  |                               | -0.0681*<br>(-1.7269)       |
| <b>Conglomerate</b> |                             |                             |                       |                       | <b>-0.0976**</b><br>(-2.2629) | -0.0813*<br>(-1.8867)       |
| Intercept           | 0.0730***<br>(2.9939)       | 0.0691***<br>(2.8536)       | 0.1216***<br>(4.4192) | 0.1057***<br>(3.6665) | 0.1356***<br>(5.4922)         | 0.1263***<br>(3.0172)       |
| Observations        | 274                         | 274                         | 268                   | 274                   | 274                           | 268                         |
| F-Statistics        | 4.1111                      | 6.4099                      | 1.6611                | 0.2071                | 5.1205                        | 3.8333                      |
| p-value             | <b>0.0436**</b>             | <b>0.0119**</b>             | 0.1986                | 0.6495                | <b>0.0244**</b>               | <b>0.0023***</b>            |
| Adj. R-Squared      | 0.0109                      | 0.0178                      | 0.0024                | -0.0030               | 0.0158                        | 0.0547                      |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.48 Univariate Regression Analysis - MM CAARs [-1,+1] - Targets**

| <b>CAAR Window:</b> | (1)<br>[-1,+1]        | (2)<br>[-1,+1]        | (3)<br>[-1,+1]        | (4)<br>[-1,+1]              | (5)<br>[-1,+1]        | (6)<br>[-1,+1]        |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------------|-----------------------|-----------------------|
| Cash                | 0.0160<br>(1.1399)    |                       |                       |                             |                       | 0.0040<br>(0.2503)    |
| Pct50               |                       | 0.0184<br>(1.1638)    |                       |                             |                       | 0.0162<br>(0.9781)    |
| PctToe              |                       |                       | 0.0349<br>(1.1588)    |                             |                       | 0.0228<br>(0.7500)    |
| <b>CB</b>           |                       |                       |                       | <b>0.0310**</b><br>(2.2016) |                       | 0.0261*<br>(1.6925)   |
| Conglomerate        |                       |                       |                       |                             | -0.0247*<br>(-1.7650) | -0.0152<br>(-1.0575)  |
| Intercept           | 0.0546***<br>(6.6903) | 0.0544***<br>(7.1887) | 0.0539***<br>(6.3545) | 0.0477***<br>(5.9682)       | 0.0688***<br>(8.4916) | 0.0466***<br>(3.7258) |
| Observations        | 264                   | 264                   | 258                   | 264                         | 264                   | 258                   |
| F-Statistics        | 1.2994                | 1.3545                | 1.3428                | 4.8469                      | 3.1152                | 1.7091                |
| p-value             | 0.2554                | 0.2456                | 0.2476                | <b>0.0286**</b>             | 0.0787*               | 0.1329                |
| Adj. R-Squared      | 0.0007                | 0.0018                | 0.0020                | 0.0155                      | 0.0086                | 0.0155                |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.49 Univariate Regression Analysis - MM CAARs [-5,+5] - Targets**

| CAAR Window:   | (1)<br>[-5,+5]              | (2)<br>[-5,+5]              | (3)<br>[-5,+5]        | (4)<br>[-5,+5]        | (5)<br>[-5,+5]        | (6)<br>[-5,+5]              |
|----------------|-----------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------------|
| Cash           | <b>0.0571**</b><br>(2.4325) |                             |                       |                       |                       | <b>0.0507**</b><br>(2.1514) |
| Pct50          |                             | <b>0.0548**</b><br>(2.2134) |                       |                       |                       | <b>0.0543**</b><br>(2.1346) |
| PctToe         |                             |                             | 0.0544<br>(1.1909)    |                       |                       | 0.0305<br>(0.6728)          |
| CB             |                             |                             |                       | 0.0381*<br>(1.7021)   |                       | 0.0153<br>(0.6892)          |
| Conglomerate   |                             |                             |                       |                       | -0.0359<br>(-1.5474)  | -0.0119<br>(-0.5316)        |
| Intercept      | 0.0704***<br>(5.3070)       | 0.0725***<br>(5.6489)       | 0.0789***<br>(5.5169) | 0.0728***<br>(5.0944) | 0.1009***<br>(7.4952) | 0.0529**<br>(2.5474)        |
| Observations   | 264                         | 264                         | 258                   | 264                   | 264                   | 258                         |
| F-Statistics   | 5.9171                      | 4.8990                      | 1.4183                | 2.8973                | 2.3944                | 2.5121                      |
| p-value        | <b>0.0157**</b>             | <b>0.0277**</b>             | 0.2348                | 0.0899*               | 0.1230                | <b>0.0305**</b>             |
| Adj. R-Squared | 0.0172                      | 0.0145                      | 0.0016                | 0.0068                | 0.0057                | 0.0327                      |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.50 Univariate Regression Analysis - MM CAARs [-10,+10] - Targets**

| CAAR Window:   | (1)<br>[-10,+10]            | (2)<br>[-10,+10]      | (3)<br>[-10,+10]      | (4)<br>[-10,+10]      | (5)<br>[-10,+10]      | (6)<br>[-10,+10]             |
|----------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|------------------------------|
| Cash           | <b>0.0680**</b><br>(2.3539) |                       |                       |                       |                       | <b>0.0783***</b><br>(2.6124) |
| Pct50          |                             | 0.0613*<br>(1.9220)   |                       |                       |                       | 0.0574*<br>(1.7810)          |
| PctToe         |                             |                       | -0.0660<br>(-1.1570)  |                       |                       | -0.0965*<br>(-1.6791)        |
| CB             |                             |                       |                       | 0.0191<br>(0.6894)    |                       | -0.0060<br>(-0.2139)         |
| Conglomerate   |                             |                       |                       |                       | -0.0322<br>(-1.0876)  | -0.0152<br>(-0.5160)         |
| Intercept      | 0.1016***<br>(5.7321)       | 0.1052***<br>(6.2897) | 0.1330***<br>(6.9888) | 0.1143***<br>(5.7792) | 0.1338***<br>(7.4223) | 0.1087***<br>(3.5703)        |
| Observations   | 264                         | 264                   | 258                   | 264                   | 264                   | 258                          |
| F-Statistics   | 5.5407                      | 3.6943                | 1.3386                | 0.4753                | 1.1828                | 2.4113                       |
| p-value        | <b>0.0193**</b>             | 0.0557*               | 0.2484                | 0.4912                | 0.2778                | <b>0.0370**</b>              |
| Adj. R-Squared | 0.0140                      | 0.0098                | 0.0009                | -0.0022               | 0.0008                | 0.0251                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.51 Univariate Regression Analysis - MM CAARs [-15,+15] - Targets**

| CAAR Window:   | (1)<br>[-15,+15]       | (2)<br>[-15,+15]             | (3)<br>[-15,+15]       | (4)<br>[-15,+15]       | (5)<br>[-15,+15]       | (6)<br>[-15,+15]             |
|----------------|------------------------|------------------------------|------------------------|------------------------|------------------------|------------------------------|
| Cash           | 0.0615 *<br>(1.7437)   |                              |                        |                        |                        | <b>0.0743 **</b><br>(2.0908) |
| Pct50          |                        | <b>0.0998 **</b><br>(2.4369) |                        |                        |                        | <b>0.0937 **</b><br>(2.2255) |
| PctToe         |                        |                              | -0.0965<br>(-1.3559)   |                        |                        | -0.1292 *<br>(-1.8221)       |
| CB             |                        |                              |                        | 0.0158<br>(0.4584)     |                        | -0.0160<br>(-0.4645)         |
| Conglomerate   |                        |                              |                        |                        | -0.0490<br>(-1.2811)   | -0.0289<br>(-0.7714)         |
| Intercept      | 0.1386 ***<br>(6.1296) | 0.1300 ***<br>(6.3572)       | 0.1767 ***<br>(7.2974) | 0.1506 ***<br>(6.0627) | 0.1755 ***<br>(8.3242) | 0.1534 ***<br>(4.3439)       |
| Observations   | 264                    | 264                          | 258                    | 264                    | 264                    | 258                          |
| F-Statistics   | 3.0406                 | 5.9387                       | 1.8385                 | 0.2101                 | 1.6411                 | 2.4828                       |
| p-value        | 0.0824 *               | <b>0.0155 **</b>             | 0.1763                 | 0.6471                 | 0.2013                 | <b>0.0323 **</b>             |
| Adj. R-Squared | 0.0055                 | 0.0193                       | 0.0028                 | -0.0031                | 0.0030                 | 0.0281                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.52 Univariate Regression Analysis - MM CAARs [-20,+20] - Targets**

| CAAR Window:   | (1)<br>[-20,+20]       | (2)<br>[-20,+20]             | (3)<br>[-20,+20]       | (4)<br>[-20,+20]       | (5)<br>[-20,+20]       | (6)<br>[-20,+20]               |
|----------------|------------------------|------------------------------|------------------------|------------------------|------------------------|--------------------------------|
| Cash           | 0.0657<br>(1.5941)     |                              |                        |                        |                        | <b>0.0851 **</b><br>(2.0446)   |
| Pct50          |                        | <b>0.0989 **</b><br>(2.2038) |                        |                        |                        | <b>0.0912 **</b><br>(2.0121)   |
| PctToe         |                        |                              | -0.1225<br>(-1.5177)   |                        |                        | <b>-0.1662 **</b><br>(-2.0675) |
| CB             |                        |                              |                        | -0.0051<br>(-0.1318)   |                        | -0.0423<br>(-1.1015)           |
| Conglomerate   |                        |                              |                        |                        | -0.0738 *<br>(-1.7102) | -0.0597<br>(-1.4102)           |
| Intercept      | 0.1592 ***<br>(6.4334) | 0.1522 ***<br>(6.5383)       | 0.2030 ***<br>(7.5004) | 0.1803 ***<br>(6.4690) | 0.2069 ***<br>(8.9937) | 0.2011 ***<br>(5.1691)         |
| Observations   | 264                    | 264                          | 258                    | 264                    | 264                    | 258                            |
| F-Statistics   | 2.5410                 | 4.8569                       | 2.3033                 | 0.0174                 | 2.9247                 | 2.6307                         |
| p-value        | 0.1121                 | <b>0.0284 **</b>             | 0.1303                 | 0.8952                 | 0.0884 *               | <b>0.0244 **</b>               |
| Adj. R-Squared | 0.0047                 | 0.0143                       | 0.0046                 | -0.0038                | 0.0085                 | 0.0325                         |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.53 Univariate Regression Analysis - OLS CAARs [-1,+1] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-1,+1]        | (2)<br>[-1,+1]        | (3)<br>[-1,+1]       | (4)<br>[-1,+1]        | (5)<br>[-1,+1]     | (6)<br>[-1,+1]       |
|---------------------|-----------------------|-----------------------|----------------------|-----------------------|--------------------|----------------------|
| Cash                | 0.0039<br>(0.3427)    |                       |                      |                       |                    | 0.0032<br>(0.2716)   |
| Pct50               |                       | 0.0002<br>(0.0217)    |                      |                       |                    | 0.0038<br>(0.3274)   |
| PctToe              |                       |                       | 0.0113<br>(0.5849)   |                       |                    | 0.0125<br>(0.6450)   |
| CB                  |                       |                       |                      | -0.0033<br>(-0.3660)  |                    | -0.0040<br>(-0.3944) |
| Conglomerate        |                       |                       |                      |                       | 0.0067<br>(0.6943) | 0.0079<br>(0.7988)   |
| Intercept           | 0.0103 **<br>(2.0282) | 0.0110 **<br>(2.1527) | 0.0094 *<br>(1.8518) | 0.0116 **<br>(2.2142) | 0.0090<br>(1.6131) | 0.0058<br>(0.7154)   |
| Observations        | 233                   | 233                   | 227                  | 233                   | 233                | 227                  |
| F-Statistics        | 0.1174                | 0.0005                | 0.3421               | 0.1339                | 0.4821             | 0.3047               |
| p-value             | 0.7322                | 0.9827                | 0.5592               | 0.7147                | 0.4882             | 0.9098               |
| Adj. R-Squared      | -0.0039               | -0.0043               | -0.0031              | -0.0040               | -0.0023            | -0.0172              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.54 Univariate Regression Analysis - OLS CAARs [-5,+5] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-5,+5]     | (2)<br>[-5,+5]     | (3)<br>[-5,+5]     | (4)<br>[-5,+5]                 | (5)<br>[-5,+5]     | (6)<br>[-5,+5]       |
|---------------------|--------------------|--------------------|--------------------|--------------------------------|--------------------|----------------------|
| Cash                | 0.0079<br>(0.3728) |                    |                    |                                |                    | 0.0122<br>(0.5155)   |
| Pct50               |                    | 0.0021<br>(0.1170) |                    |                                |                    | 0.0073<br>(0.3872)   |
| PctToe              |                    |                    | 0.0099<br>(0.2522) |                                |                    | 0.0111<br>(0.2841)   |
| <b>CB</b>           |                    |                    |                    | <b>-0.0253 **</b><br>(-2.0465) |                    | -0.0227<br>(-1.5299) |
| Conglomerate        |                    |                    |                    |                                | 0.0217<br>(1.3059) | 0.0210<br>(1.2105)   |
| Intercept           | 0.0096<br>(1.1890) | 0.0105<br>(1.2251) | 0.0101<br>(1.1661) | 0.0152 *<br>(1.7284)           | 0.0043<br>(0.4935) | 0.0028<br>(0.2186)   |
| Observations        | 233                | 233                | 227                | 233                            | 233                | 227                  |
| F-Statistics        | 0.1390             | 0.0137             | 0.0636             | 4.1880                         | 1.7053             | 1.1019               |
| p-value             | 0.7096             | 0.9069             | 0.8012             | <b>0.0418 **</b>               | 0.1929             | 0.3603               |
| Adj. R-Squared      | -0.0036            | -0.0043            | -0.0041            | 0.0024                         | 0.0034             | -0.0077              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.55 Univariate Regression Analysis - OLS CAARs [-10,+10] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-10,+10]     | (2)<br>[-10,+10]   | (3)<br>[-10,+10]   | (4)<br>[-10,+10]              | (5)<br>[-10,+10]   | (6)<br>[-10,+10]              |
|---------------------|----------------------|--------------------|--------------------|-------------------------------|--------------------|-------------------------------|
| Cash                | -0.0011<br>(-0.0442) |                    |                    |                               |                    | 0.0112<br>(0.4278)            |
| Pct50               |                      | 0.0426<br>(1.5339) |                    |                               |                    | 0.0417<br>(1.3933)            |
| PctToe              |                      |                    | 0.0033<br>(0.0709) |                               |                    | -0.0009<br>(-0.0194)          |
| <b>CB</b>           |                      |                    |                    | <b>-0.0493**</b><br>(-2.4425) |                    | <b>-0.0521**</b><br>(-2.2799) |
| Conglomerate        |                      |                    |                    |                               | 0.0225<br>(0.8761) | 0.0216<br>(0.7837)            |
| Intercept           | 0.0129<br>(0.9745)   | 0.0019<br>(0.1499) | 0.0126<br>(0.8890) | 0.0208<br>(1.5585)            | 0.0058<br>(0.4308) | 0.0020<br>(0.0885)            |
| Observations        | 233                  | 233                | 227                | 233                           | 233                | 227                           |
| F-Statistics        | 0.0020               | 2.3529             | 0.0050             | 5.9657                        | 0.7676             | 1.9443                        |
| p-value             | 0.9648               | 0.1264             | 0.9435             | <b>0.0153**</b>               | 0.3819             | 0.0881*                       |
| Adj. R-Squared      | -0.0043              | 0.0070             | -0.0044            | 0.0066                        | -0.0008            | 0.0038                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.56 Univariate Regression Analysis - OLS CAARs [-15,+15] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-15,+15]   | (2)<br>[-15,+15]            | (3)<br>[-15,+15]     | (4)<br>[-15,+15]              | (5)<br>[-15,+15]     | (6)<br>[-15,+15]              |
|---------------------|--------------------|-----------------------------|----------------------|-------------------------------|----------------------|-------------------------------|
| Cash                | 0.0120<br>(0.3986) |                             |                      |                               |                      | 0.0245<br>(0.7688)            |
| <b>Pct50</b>        |                    | <b>0.0790**</b><br>(2.2406) |                      |                               |                      | <b>0.0848**</b><br>(2.1855)   |
| PctToe              |                    |                             | 0.0664<br>(1.2737)   |                               |                      | 0.0631<br>(1.1990)            |
| <b>CB</b>           |                    |                             |                      | <b>-0.0696**</b><br>(-2.4871) |                      | <b>-0.0672**</b><br>(-2.2117) |
| Conglomerate        |                    |                             |                      |                               | 0.0312<br>(0.9186)   | 0.0374<br>(1.0422)            |
| Intercept           | 0.0022<br>(0.1360) | -0.0156<br>(-1.0078)        | -0.0033<br>(-0.1855) | 0.0158<br>(0.9705)            | -0.0052<br>(-0.3347) | -0.0299<br>(-1.1701)          |
| Observations        | 233                | 233                         | 227                  | 233                           | 233                  | 227                           |
| F-Statistics        | 0.1589             | 5.0201                      | 1.6222               | 6.1858                        | 0.8439               | 2.8403                        |
| p-value             | 0.6906             | <b>0.0260**</b>             | 0.2041               | <b>0.0136**</b>               | 0.3593               | <b>0.0165**</b>               |
| Adj. R-Squared      | -0.0039            | 0.0210                      | 0.0003               | 0.0099                        | 0.0001               | 0.0307                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.57 Univariate Regression Analysis - OLS CAARs [-20,+20] - Acquirers**

| CAAR Window:   | (1)<br>[-20,+20]     | (2)<br>[-20,+20]     | (3)<br>[-20,+20]     | (4)<br>[-20,+20]               | (5)<br>[-20,+20]     | (6)<br>[-20,+20]               |
|----------------|----------------------|----------------------|----------------------|--------------------------------|----------------------|--------------------------------|
| Cash           | 0.0186<br>(0.5500)   |                      |                      |                                |                      | 0.0376<br>(1.0731)             |
| Pct50          |                      | 0.0575<br>(1.5274)   |                      |                                |                      | 0.0629<br>(1.5664)             |
| PctToe         |                      |                      | 0.0841<br>(1.5158)   |                                |                      | 0.0812<br>(1.4289)             |
| <b>CB</b>      |                      |                      |                      | <b>-0.0795 **</b><br>(-2.3525) |                      | <b>-0.0804 **</b><br>(-2.1990) |
| Conglomerate   |                      |                      |                      |                                | 0.0429<br>(1.1701)   | 0.0457<br>(1.1699)             |
| Intercept      | -0.0127<br>(-0.6981) | -0.0238<br>(-1.3471) | -0.0185<br>(-0.9418) | 0.0037<br>(0.2083)             | -0.0225<br>(-1.2836) | -0.0425<br>(-1.4942)           |
| Observations   | 233                  | 233                  | 227                  | 233                            | 233                  | 227                            |
| F-Statistics   | 0.3025               | 2.3328               | 2.2978               | 5.5341                         | 1.3691               | 2.5992                         |
| p-value        | 0.5829               | 0.1280               | 0.1310               | <b>0.0195 **</b>               | 0.2432               | <b>0.0262 **</b>               |
| Adj. R-Squared | -0.0034              | 0.0066               | 0.0019               | 0.0108                         | 0.0026               | 0.0214                         |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.58 Univariate Regression Analysis - MM CAARs [-1,+1] - Acquirers**

| CAAR Window:   | (1)<br>[-1,+1]         | (2)<br>[-1,+1]         | (3)<br>[-1,+1]        | (4)<br>[-1,+1]         | (5)<br>[-1,+1]        | (6)<br>[-1,+1]       |
|----------------|------------------------|------------------------|-----------------------|------------------------|-----------------------|----------------------|
| Cash           | 0.0038<br>(0.3325)     |                        |                       |                        |                       | 0.0032<br>(0.2612)   |
| Pct50          |                        | -0.0017<br>(-0.1526)   |                       |                        |                       | 0.0029<br>(0.2496)   |
| PctToe         |                        |                        | 0.0147<br>(0.7547)    |                        |                       | 0.0158<br>(0.8043)   |
| <b>CB</b>      |                        |                        |                       | -0.0050<br>(-0.5347)   |                       | -0.0042<br>(-0.4028) |
| Conglomerate   |                        |                        |                       |                        | 0.0065<br>(0.6660)    | 0.0076<br>(0.7450)   |
| Intercept      | 0.0142 ***<br>(2.7161) | 0.0154 ***<br>(2.9146) | 0.0130 **<br>(2.4861) | 0.0158 ***<br>(2.9350) | 0.0129 **<br>(2.2524) | 0.0098<br>(1.1483)   |
| Observations   | 229                    | 229                    | 223                   | 229                    | 229                   | 223                  |
| F-Statistics   | 0.1106                 | 0.0233                 | 0.5695                | 0.2859                 | 0.4436                | 0.3295               |
| p-value        | 0.7398                 | 0.8788                 | 0.4513                | 0.5934                 | 0.5061                | 0.8948               |
| Adj. R-Squared | -0.0040                | -0.0043                | -0.0022               | -0.0037                | -0.0026               | -0.0172              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01



**Table-A 5.59 Univariate Regression Analysis - MM CAARs [-5,+5] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-5,+5]        | (2)<br>[-5,+5]        | (3)<br>[-5,+5]        | (4)<br>[-5,+5]                | (5)<br>[-5,+5]       | (6)<br>[-5,+5]       |
|---------------------|-----------------------|-----------------------|-----------------------|-------------------------------|----------------------|----------------------|
| Cash                | 0.0028<br>(0.1287)    |                       |                       |                               |                      | 0.0078<br>(0.3257)   |
| Pct50               |                       | -0.0043<br>(-0.2573)  |                       |                               |                      | 0.0024<br>(0.1337)   |
| PctToe              |                       |                       | 0.0146<br>(0.3656)    |                               |                      | 0.0144<br>(0.3614)   |
| <b>CB</b>           |                       |                       |                       | <b>-0.0308**</b><br>(-2.2773) |                      | -0.0261<br>(-1.6339) |
| Conglomerate        |                       |                       |                       |                               | 0.0208<br>(1.2789)   | 0.0184<br>(1.0848)   |
| Intercept           | 0.0264***<br>(3.2614) | 0.0280***<br>(3.1408) | 0.0256***<br>(2.9500) | 0.0320***<br>(3.6396)         | 0.0205**<br>(2.2469) | 0.0219<br>(1.6365)   |
| Observations        | 229                   | 229                   | 223                   | 229                           | 229                  | 223                  |
| F-Statistics        | 0.0166                | 0.0662                | 0.1336                | 5.1862                        | 1.6357               | 1.2336               |
| p-value             | 0.8977                | 0.7972                | 0.7150                | <b>0.0237**</b>               | 0.2022               | 0.2944               |
| Adj. R-Squared      | -0.0043               | -0.0041               | -0.0037               | 0.0057                        | 0.0027               | -0.0081              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.60 Univariate Regression Analysis - MM CAARs [-10,+10] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-10,+10]      | (2)<br>[-10,+10]     | (3)<br>[-10,+10]      | (4)<br>[-10,+10]               | (5)<br>[-10,+10]     | (6)<br>[-10,+10]              |
|---------------------|-----------------------|----------------------|-----------------------|--------------------------------|----------------------|-------------------------------|
| Cash                | -0.0071<br>(-0.2765)  |                      |                       |                                |                      | 0.0056<br>(0.2053)            |
| Pct50               |                       | 0.0298<br>(1.1827)   |                       |                                |                      | 0.0314<br>(1.1696)            |
| PctToe              |                       |                      | 0.0190<br>(0.3965)    |                                |                      | 0.0131<br>(0.2639)            |
| <b>CB</b>           |                       |                      |                       | <b>-0.0545***</b><br>(-2.6229) |                      | <b>-0.0532**</b><br>(-2.2231) |
| Conglomerate        |                       |                      |                       |                                | 0.0195<br>(0.8020)   | 0.0171<br>(0.6436)            |
| Intercept           | 0.0428***<br>(3.2162) | 0.0339**<br>(2.4773) | 0.0397***<br>(2.7984) | 0.0505***<br>(3.7638)          | 0.0354**<br>(2.4905) | 0.0347<br>(1.4510)            |
| Observations        | 229                   | 229                  | 223                   | 229                            | 229                  | 223                           |
| F-Statistics        | 0.0765                | 1.3988               | 0.1572                | 6.8795                         | 0.6431               | 1.9713                        |
| p-value             | 0.7824                | 0.2382               | 0.6921                | <b>0.0093***</b>               | 0.4234               | 0.0840*                       |
| Adj. R-Squared      | -0.0041               | 0.0012               | -0.0039               | 0.0092                         | -0.0017              | -0.0011                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.61 Univariate Regression Analysis - MM CAARs [-15,+15] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-15,+15]      | (2)<br>[-15,+15]            | (3)<br>[-15,+15]     | (4)<br>[-15,+15]               | (5)<br>[-15,+15]     | (6)<br>[-15,+15]              |
|---------------------|-----------------------|-----------------------------|----------------------|--------------------------------|----------------------|-------------------------------|
| Cash                | 0.0023<br>(0.0758)    |                             |                      |                                |                      | 0.0160<br>(0.5072)            |
| <b>Pct50</b>        |                       | <b>0.0602**</b><br>(2.0966) |                      |                                |                      | <b>0.0685**</b><br>(2.2487)   |
| PctToe              |                       |                             | 0.0876*<br>(1.6702)  |                                |                      | 0.0809<br>(1.4968)            |
| <b>CB</b>           |                       |                             |                      | <b>-0.0769***</b><br>(-2.6607) |                      | <b>-0.0709**</b><br>(-2.2215) |
| Conglomerate        |                       |                             |                      |                                | 0.0239<br>(0.8081)   | 0.0280<br>(0.8914)            |
| Intercept           | 0.0461***<br>(2.9160) | 0.0313*<br>(1.9159)         | 0.0364**<br>(2.1510) | 0.0593***<br>(3.8201)          | 0.0391**<br>(2.3759) | 0.0196<br>(0.7197)            |
| Observations        | 229                   | 229                         | 223                  | 229                            | 229                  | 223                           |
| F-Statistics        | 0.0057                | 4.3958                      | 2.7894               | 7.0794                         | 0.6530               | 3.4050                        |
| p-value             | 0.9396                | <b>0.0371**</b>             | 0.0963*              | <b>0.0084***</b>               | 0.4199               | <b>0.0055***</b>              |
| Adj. R-Squared      | -0.0044               | 0.0118                      | 0.0047               | 0.0149                         | -0.0015              | 0.0273                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 5.62 Univariate Regression Analysis - MM CAARs [-20,+20] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-20,+20]      | (2)<br>[-20,+20]     | (3)<br>[-20,+20]    | (4)<br>[-20,+20]               | (5)<br>[-20,+20]    | (6)<br>[-20,+20]              |
|---------------------|-----------------------|----------------------|---------------------|--------------------------------|---------------------|-------------------------------|
| Cash                | 0.0048<br>(0.1461)    |                      |                     |                                |                     | 0.0252<br>(0.7365)            |
| Pct50               |                       | 0.0390<br>(1.1862)   |                     |                                |                     | 0.0493<br>(1.4704)            |
| PctToe              |                       |                      | 0.1028*<br>(1.8589) |                                |                     | 0.0964*<br>(1.6654)           |
| <b>CB</b>           |                       |                      |                     | <b>-0.0912***</b><br>(-2.5992) |                     | <b>-0.0858**</b><br>(-2.2073) |
| Conglomerate        |                       |                      |                     |                                | 0.0389<br>(1.1403)  | 0.0382<br>(1.0506)            |
| Intercept           | 0.0481***<br>(2.6344) | 0.0391**<br>(2.0697) | 0.0381*<br>(1.9584) | 0.0641***<br>(3.6366)          | 0.0369*<br>(1.9694) | 0.0235<br>(0.7583)            |
| Observations        | 229                   | 229                  | 223                 | 229                            | 229                 | 223                           |
| F-Statistics        | 0.0214                | 1.4070               | 3.4553              | 6.7557                         | 1.3004              | 2.8006                        |
| p-value             | 0.8840                | 0.2368               | 0.0644*             | <b>0.0100***</b>               | 0.2554              | <b>0.0179**</b>               |
| Adj. R-Squared      | -0.0043               | 0.0007               | 0.0053              | 0.0163                         | 0.0014              | 0.0198                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

## Appendix Chapter 6

The secondary graphs and detailed statistical findings are tabulated in Appendix Chapter 6 . These tables are labelled to provide the name of the financial model; type of firm; the type of sample set; the regression technique and the number of observations (in parenthesis) and the index used. For each day in the entire event window - Days [-20, +30], these tables provide average abnormal returns - AAR, median AARs, cumulative average abnormal returns - CAARs, averaged Standardized Abnormal Returns (SARa) along with their standard deviations and t-statistics, and averaged Standardized CAARs (SCARa) along with the respective standard deviations and the t-statistics. Finally, the tables also earmark the t-statistics significant at the 5% and 10% level for SARa and SCARa. While, the t-statistics, significant at the 10% level, is provided in bold and italic numbers, that at 5% is further highlighted. Also, a 3-Day analysis of the days [-1, +1] is provided. Other relevant graphs and various cross-sectional results are also presented here.

# Returns to Domestic Targets

## Overall Analysis

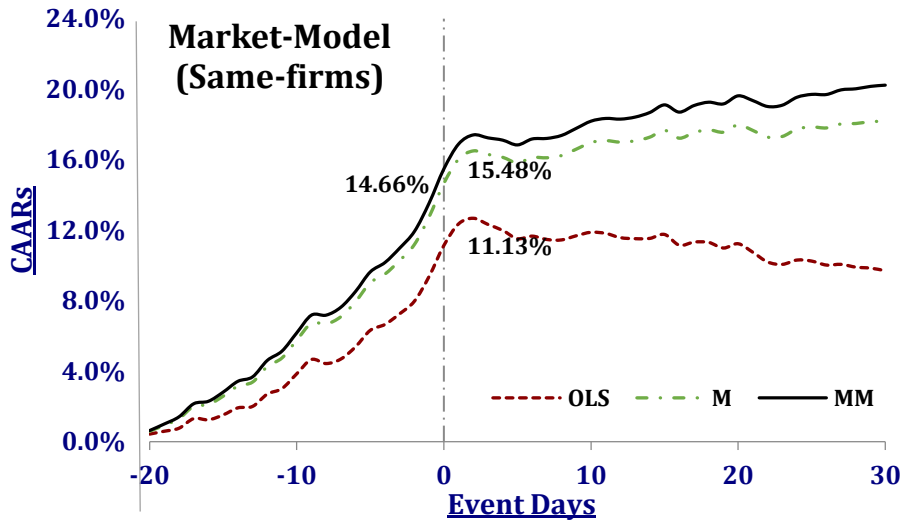


Figure A 6.1 Market returns to Domestic Targets – M-firms (All regressions)

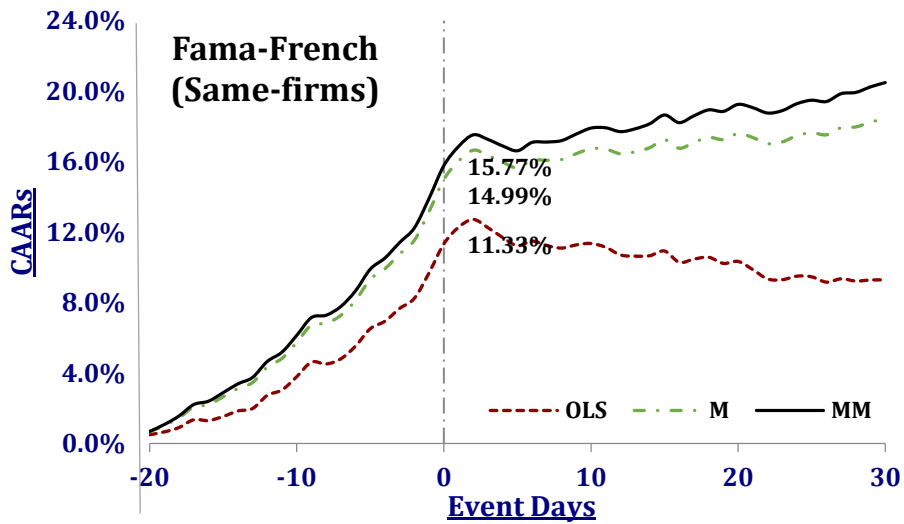


Figure A 6.2 Fama-French returns to Domestic Targets – M-firms (All-regressions)

## Business Group Analysis

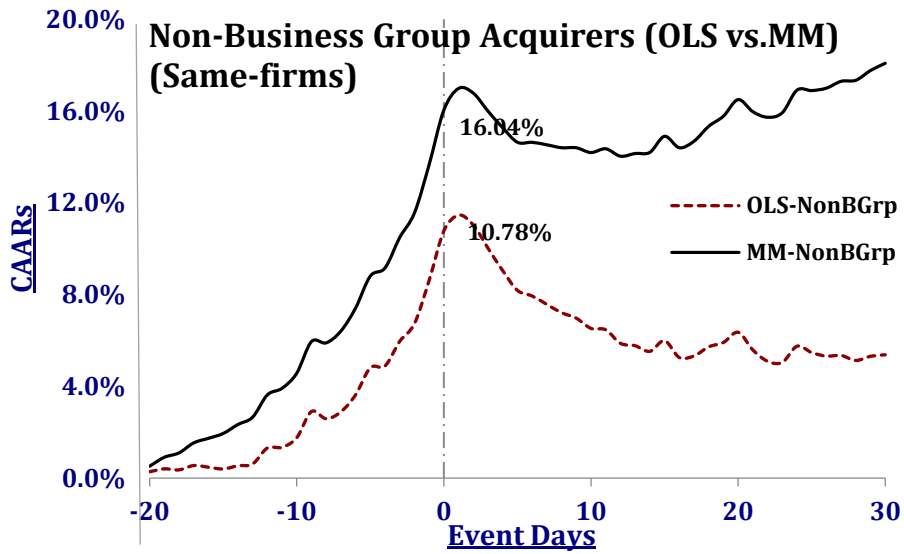


Figure A 6.3 Domestic Targets and Non-Business Group Analysis (Same-firms)

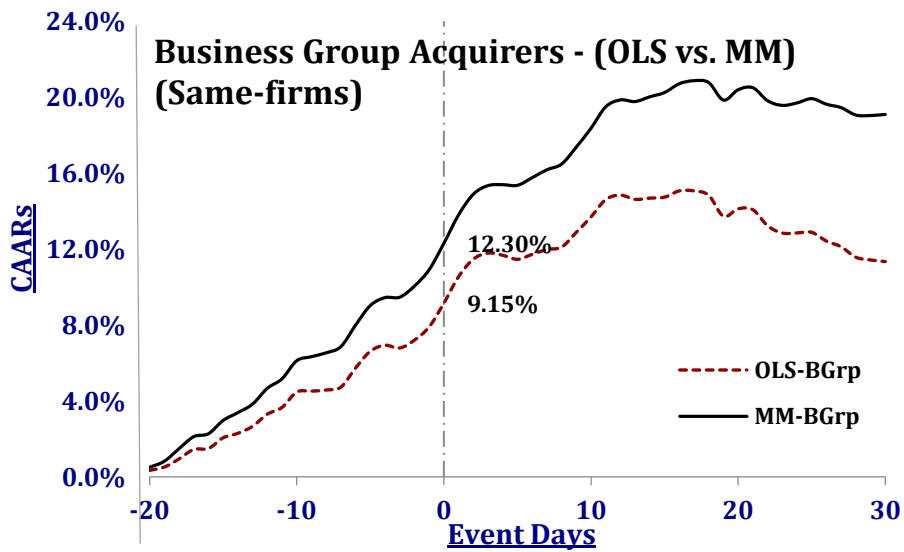


Figure A 6.4 Domestic Targets and Business Group Analysis (Same-firms)

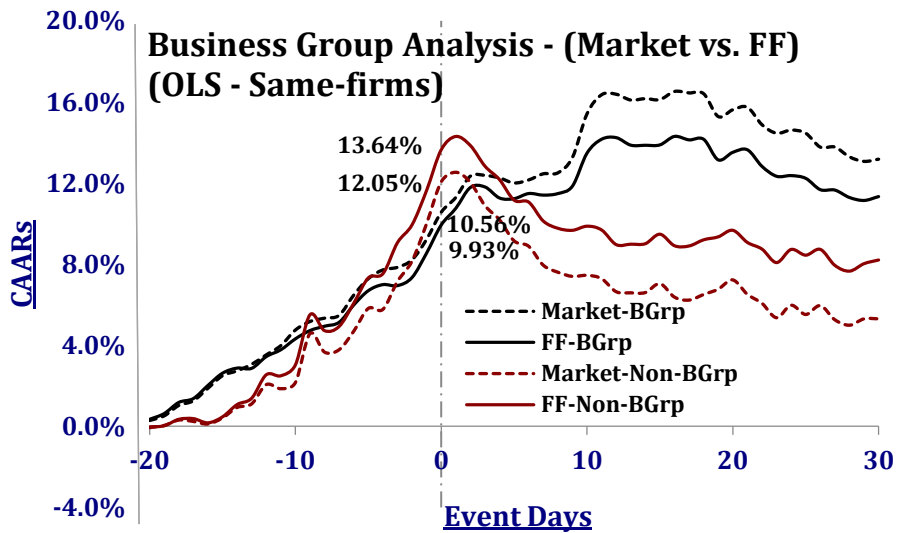


Figure A 6.5 Domestic Targets; Market vs. FF Business Groups Analysis; OLS

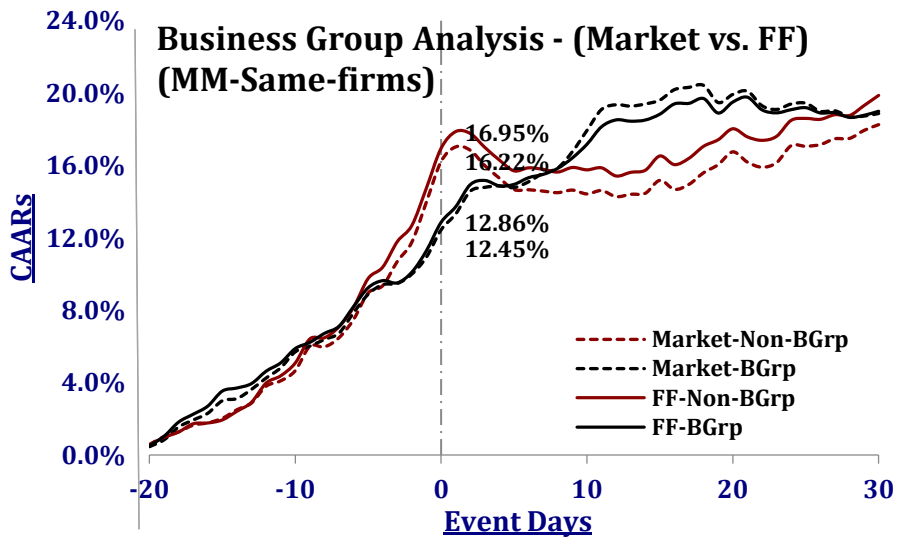


Figure A 6.6 Domestic Targets; Market vs. FF Business Groups Analysis; MM

## Relatedness Analysis

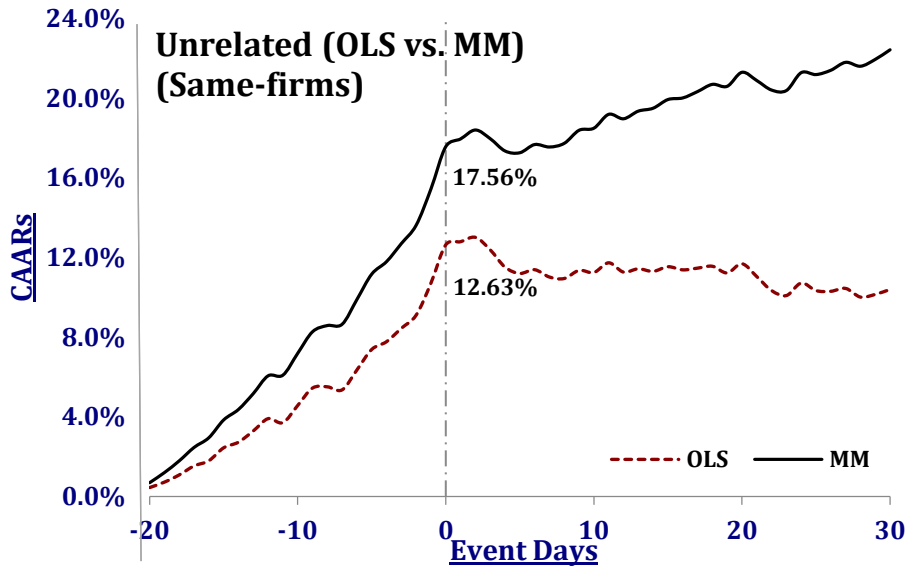


Figure A 6.7 Domestic Targets and Unrelated firms Analysis; OLS vs. MM (Same-firms)

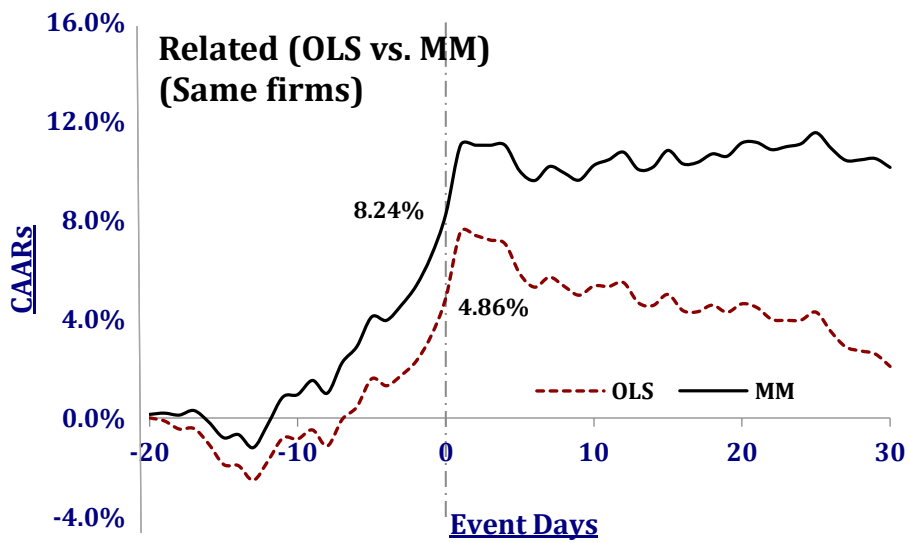


Figure A 6.8 Domestic Targets and Related firms Analysis; OLS vs. MM (Same-firms)

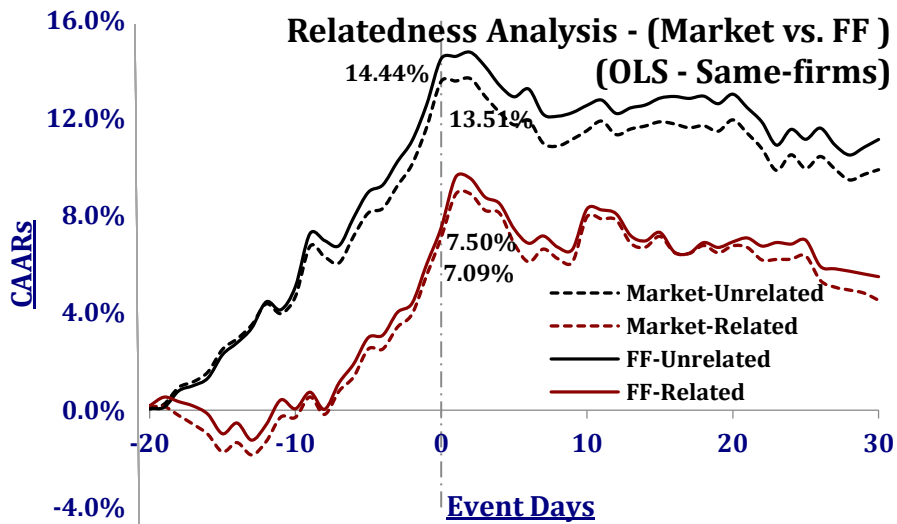


Figure A 6.9 Domestic Targets; Market vs. FF Relatedness Analysis; OLS

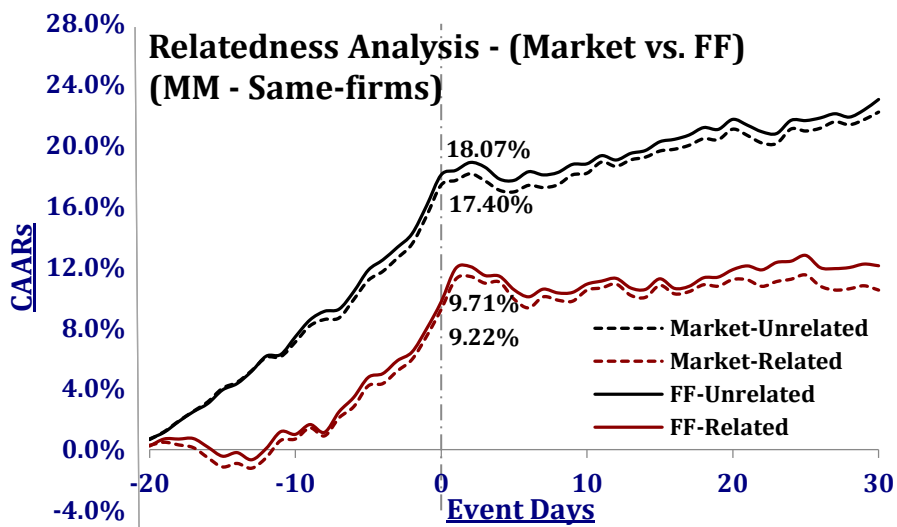


Figure A 6.10 Domestic Targets; Market vs. FF Relatedness Analysis; MM



# Returns to Acquirers

## Overall Returns

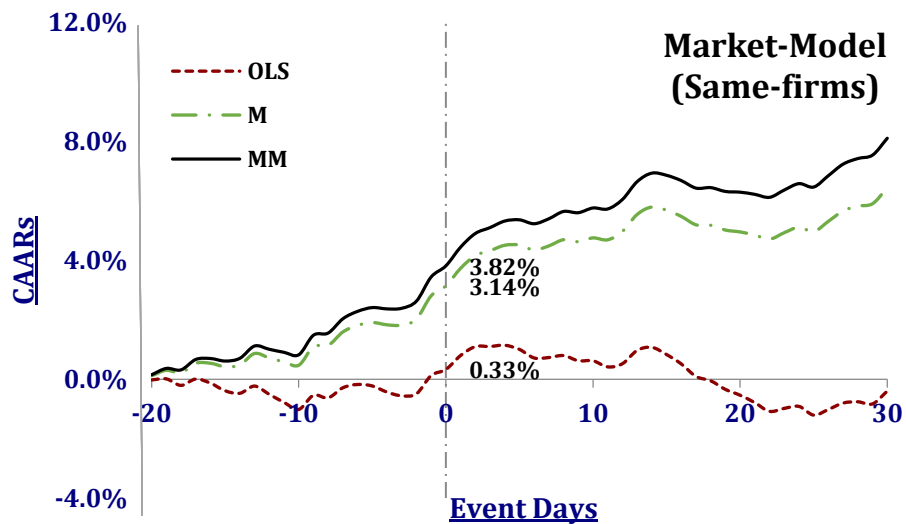


Figure A 6.11 Market returns to Domestic Acquirers – (All regressions)

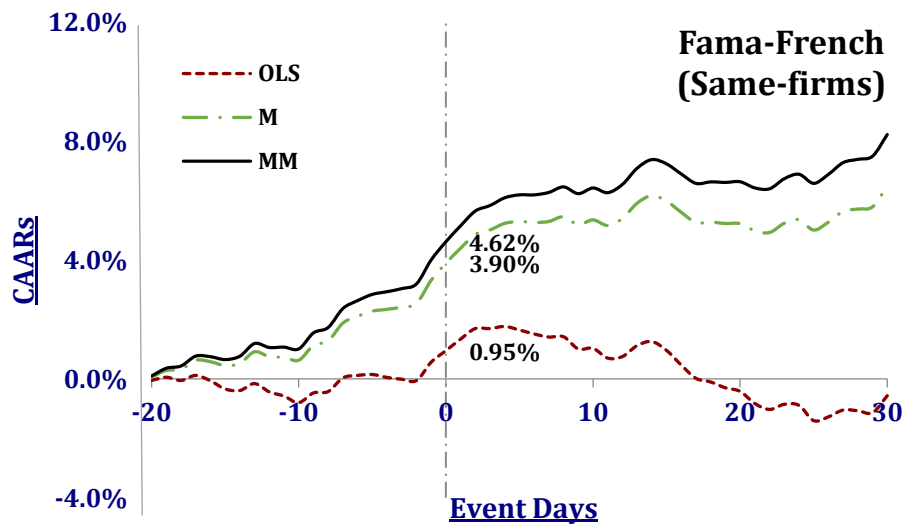


Figure A 6.12 Fama-French returns to Domestic Targets – (All-regressions)

## Business Group Analysis

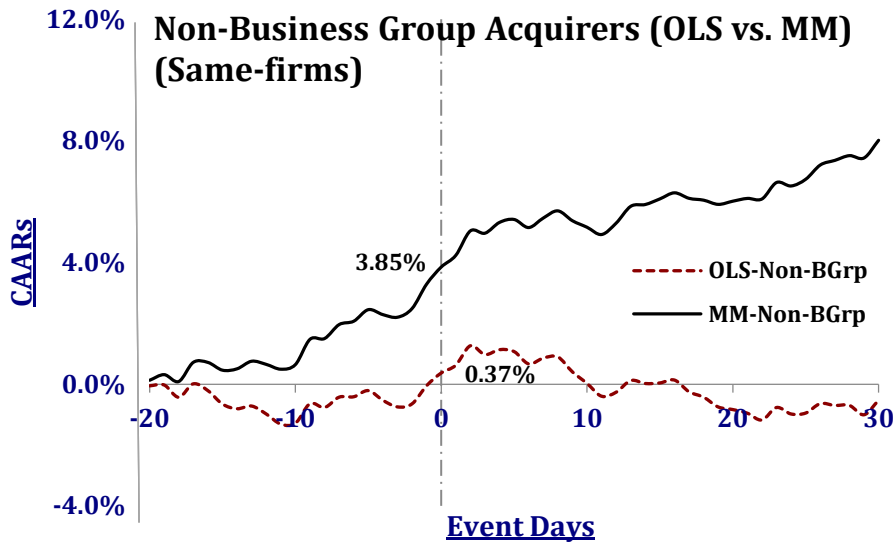


Figure A 6.13 Domestic Acquirers and Non-Business Group Analysis (Same-firms)

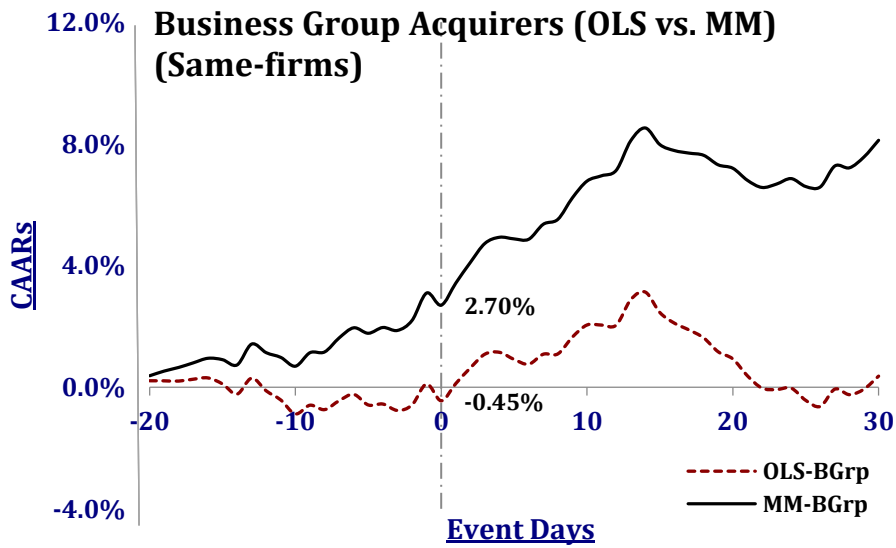


Figure A 6.14 Domestic Acquirers and Business Group Analysis (Same-firms)

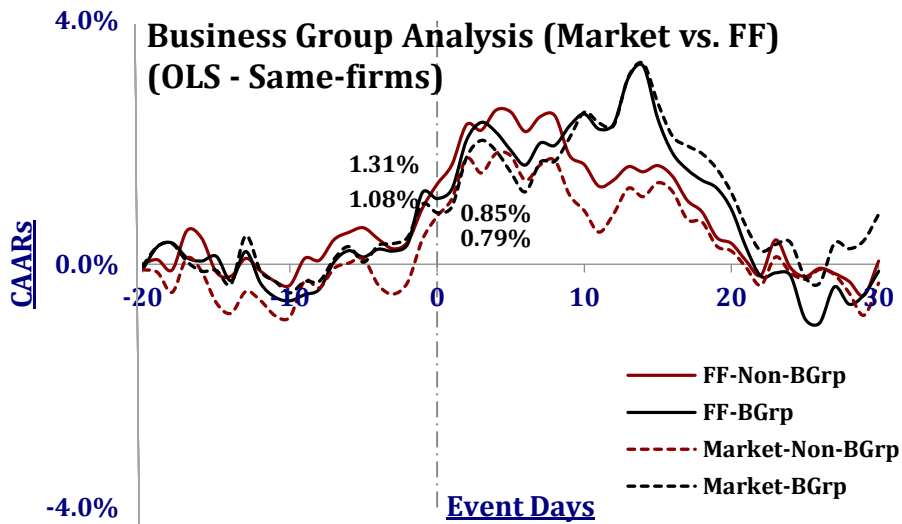


Figure A 6.15 Domestic Acquirers; Market vs. FF Business Groups Analysis; OLS

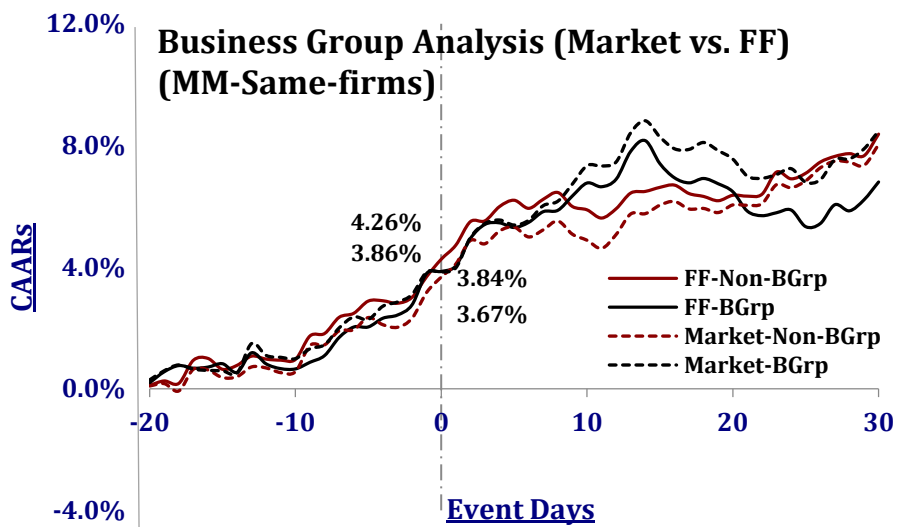


Figure A 6.16 Domestic Acquirers; Market vs. FF Business Groups Analysis; MM

## Relatedness Analysis

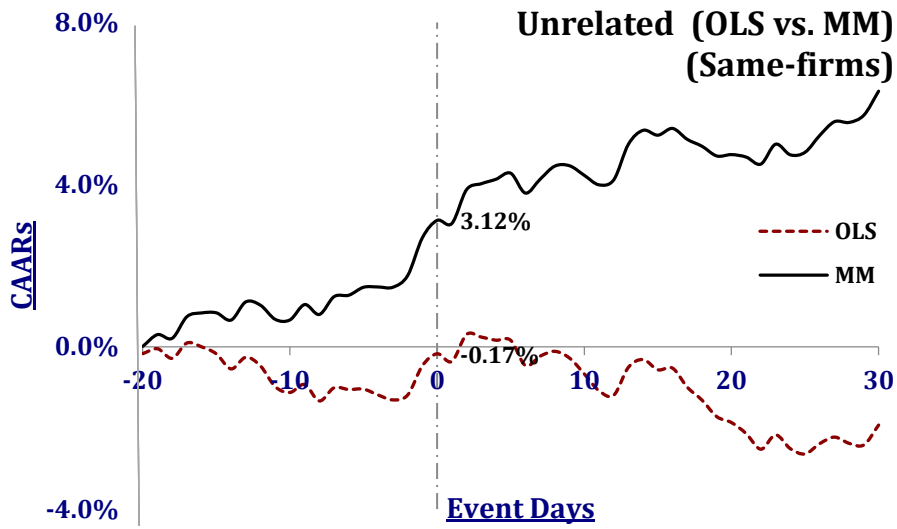


Figure A 6.17 Domestic Acquirers and Unrelated firms Analysis; OLS vs. MM (Same-firms)

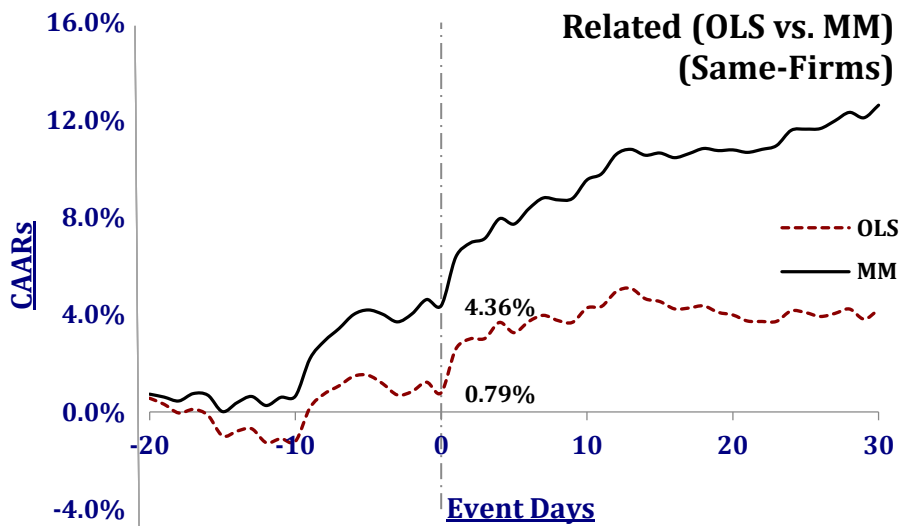


Figure A 6.18 Domestic Acquirers and Related firms Analysis; OLS vs. MM (Same-firms)

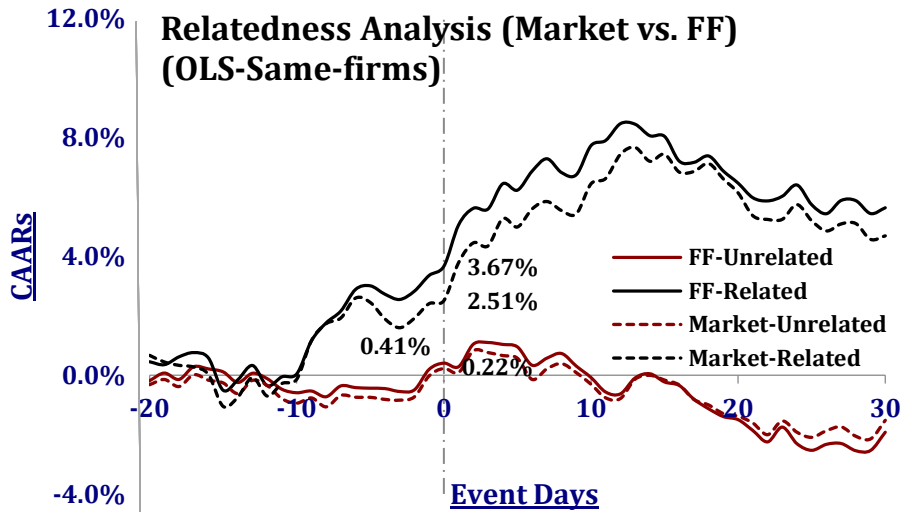


Figure A 6.19 Domestic Acquirers; Market vs. FF Relatedness Analysis; OLS

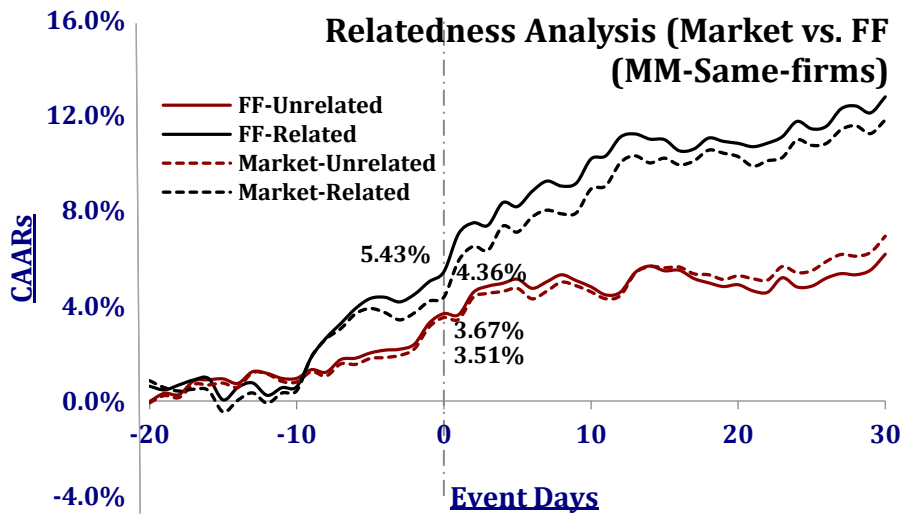


Figure A 6.20 Domestic Acquirers; Market vs. FF Relatedness Analysis; MM

**Table-A 6.1 Market returns to Domestic Targets; MM firms; (MM, 165); VWI**

| Days           | AAR          | Median       | CAAR          | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|---------------|----------------------|----------------|---------------|---------------|---------------|
| -20            | 0.51%        | 0.12%        | 0.51%         | 0.1961        | 1.3067               | <b>1.9377</b>  | 0.1961        | 1.3067        | <b>1.9377</b> |
| -19            | 0.36%        | 0.14%        | 0.87%         | 0.1688        | 1.0229               | <b>2.1310</b>  | 0.2581        | 1.2450        | <b>2.6761</b> |
| -18            | 0.38%        | -0.07%       | 1.25%         | 0.1221        | 1.2222               | 1.2898         | 0.2812        | 1.1537        | <b>3.1468</b> |
| -17            | 0.52%        | 0.13%        | 1.76%         | 0.1799        | 1.2214               | <b>1.9014</b>  | 0.3335        | 1.3190        | <b>3.2642</b> |
| -16            | 0.18%        | 0.08%        | 1.95%         | -0.0125       | 1.0455               | -0.1543        | 0.2927        | 1.2970        | <b>2.9135</b> |
| -15            | 0.40%        | 0.26%        | 2.35%         | 0.1264        | 1.1157               | 1.4626         | 0.3188        | 1.3340        | <b>3.0853</b> |
| -14            | 0.40%        | 0.21%        | 2.75%         | 0.1350        | 1.3779               | 1.2649         | 0.3462        | 1.3369        | <b>3.3430</b> |
| -13            | 0.37%        | -0.03%       | 3.12%         | 0.1056        | 1.3493               | 1.0100         | 0.3611        | 1.3467        | <b>3.4621</b> |
| -12            | 0.92%        | 0.20%        | 4.03%         | 0.2741        | 1.1675               | <b>3.0311</b>  | 0.4318        | 1.3926        | <b>4.0036</b> |
| -11            | 0.37%        | 0.11%        | 4.41%         | 0.1026        | 1.3252               | 0.9995         | 0.4421        | 1.4057        | <b>4.0606</b> |
| -10            | 0.77%        | 0.31%        | 5.18%         | 0.2116        | 1.3689               | <b>1.9958</b>  | 0.4854        | 1.4506        | <b>4.3197</b> |
| -9             | 0.92%        | 0.22%        | 6.10%         | 0.2446        | 1.3154               | <b>2.4006</b>  | 0.5353        | 1.4528        | <b>4.7570</b> |
| -8             | 0.05%        | -0.03%       | 6.15%         | 0.0154        | 1.1190               | 0.1778         | 0.5186        | 1.4559        | <b>4.5986</b> |
| -7             | 0.44%        | 0.35%        | 6.58%         | 0.1390        | 1.2181               | 1.4729         | 0.5369        | 1.4186        | <b>4.8859</b> |
| -6             | 1.06%        | 0.50%        | 7.64%         | 0.3875        | 1.4383               | <b>3.4785</b>  | 0.6187        | 1.4037        | <b>5.6904</b> |
| -5             | 1.25%        | 0.42%        | 8.89%         | 0.3420        | 1.3663               | <b>3.2317</b>  | 0.6846        | 1.3902        | <b>6.3573</b> |
| -4             | 0.38%        | -0.04%       | 9.27%         | 0.1265        | 1.1833               | 1.3802         | 0.6948        | 1.3997        | <b>6.4087</b> |
| -3             | 0.81%        | 0.18%        | 10.08%        | 0.2347        | 1.2958               | <b>2.3385</b>  | 0.7306        | 1.3889        | <b>6.7909</b> |
| -2             | 0.88%        | 0.39%        | 10.96%        | 0.2698        | 1.2426               | <b>2.8034</b>  | 0.7730        | 1.3762        | <b>7.2512</b> |
| -1             | 1.62%        | 1.14%        | 12.58%        | 0.5161        | 1.6416               | <b>4.0588</b>  | 0.8688        | 1.4512        | <b>7.7291</b> |
| <b>0</b>       | <b>1.99%</b> | <b>1.21%</b> | <b>14.57%</b> | <b>0.5345</b> | <b>1.9232</b>        | <b>3.5881</b>  | <b>0.9645</b> | <b>1.5025</b> | <b>8.2876</b> |
| 1              | 1.16%        | 0.44%        | 15.73%        | 0.2347        | 2.3466               | 1.2912         | 0.9924        | 1.5558        | <b>8.2346</b> |
| 2              | 0.30%        | -0.15%       | 16.03%        | 0.0489        | 1.5107               | 0.4179         | 0.9808        | 1.5877        | <b>7.9748</b> |
| 3              | -0.30%       | -0.05%       | 15.74%        | -0.0888       | 1.6775               | -0.6830        | 0.9420        | 1.6418        | <b>7.4074</b> |
| 4              | -0.42%       | -0.19%       | 15.32%        | -0.0998       | 1.3216               | -0.9753        | 0.9030        | 1.6082        | <b>7.2491</b> |
| 5              | -0.40%       | -0.23%       | 14.92%        | -0.0921       | 0.9656               | -1.2308        | 0.8674        | 1.5947        | <b>7.0222</b> |
| 6              | 0.16%        | -0.03%       | 15.08%        | 0.0704        | 1.0180               | 0.8924         | 0.8647        | 1.5954        | <b>6.9975</b> |
| 7              | 0.10%        | 0.04%        | 15.18%        | 0.0850        | 1.1961               | 0.9173         | 0.8652        | 1.6163        | <b>6.9110</b> |
| 8              | 0.04%        | -0.13%       | 15.22%        | 0.0530        | 1.2838               | 0.5332         | 0.8600        | 1.6249        | <b>6.8329</b> |
| 9              | 0.35%        | 0.03%        | 15.57%        | 0.1649        | 1.2433               | <b>1.7122</b>  | 0.8756        | 1.6534        | <b>6.8372</b> |
| 10             | 0.26%        | 0.27%        | 15.83%        | 0.0857        | 0.9727               | 1.1369         | 0.8768        | 1.6721        | <b>6.7697</b> |
| 11             | 0.55%        | 0.12%        | 16.38%        | 0.1623        | 1.1942               | <b>1.7541</b>  | 0.8917        | 1.7037        | <b>6.7570</b> |
| 12             | -0.05%       | 0.11%        | 16.32%        | 0.0068        | 1.7182               | 0.0513         | 0.8792        | 1.7972        | <b>6.3161</b> |
| 13             | 0.04%        | -0.02%       | 16.36%        | -0.0217       | 1.0559               | -0.2659        | 0.8625        | 1.7621        | <b>6.3192</b> |
| 14             | 0.13%        | 0.15%        | 16.49%        | 0.0575        | 0.9077               | 0.8179         | 0.8598        | 1.7584        | <b>6.3126</b> |
| 15             | 0.51%        | 0.07%        | 17.00%        | 0.1009        | 1.0625               | 1.2265         | 0.8646        | 1.7356        | <b>6.4312</b> |
| 16             | -0.12%       | 0.04%        | 16.88%        | -0.0288       | 1.1440               | -0.3248        | 0.8481        | 1.7515        | <b>6.2513</b> |
| 17             | 0.24%        | 0.16%        | 17.12%        | 0.1087        | 1.0687               | 1.3130         | 0.8545        | 1.7571        | <b>6.2783</b> |
| 18             | 0.36%        | 0.01%        | 17.47%        | 0.0473        | 1.0693               | 0.5712         | 0.8510        | 1.7382        | <b>6.3210</b> |
| 19             | -0.10%       | -0.05%       | 17.38%        | -0.0042       | 1.0532               | -0.0513        | 0.8397        | 1.7432        | <b>6.2187</b> |
| 20             | 0.65%        | 0.17%        | 18.03%        | 0.2204        | 0.9704               | <b>2.9322</b>  | 0.8638        | 1.7358        | <b>6.4245</b> |
| 21             | -0.28%       | -0.15%       | 17.75%        | -0.0073       | 0.9174               | -0.1027        | 0.8523        | 1.7310        | <b>6.3568</b> |
| 22             | -0.42%       | -0.31%       | 17.34%        | -0.1727       | 0.9143               | <b>-2.4390</b> | 0.8160        | 1.7381        | <b>6.0612</b> |
| 23             | 0.02%        | -0.04%       | 17.36%        | 0.0012        | 0.9759               | 0.0158         | 0.8069        | 1.7400        | <b>5.9868</b> |
| 24             | 0.65%        | 0.17%        | 18.01%        | 0.1831        | 1.0284               | <b>2.2983</b>  | 0.8251        | 1.7125        | <b>6.2207</b> |
| 25             | 0.08%        | -0.07%       | 18.08%        | 0.0075        | 0.9146               | 0.1052         | 0.8172        | 1.7128        | <b>6.1600</b> |
| 26             | -0.05%       | 0.04%        | 18.03%        | 0.0214        | 0.8118               | 0.3403         | 0.8116        | 1.6951        | <b>6.1814</b> |
| 27             | 0.11%        | -0.03%       | 18.14%        | 0.0278        | 1.0037               | 0.3572         | 0.8071        | 1.6783        | <b>6.2087</b> |
| 28             | -0.13%       | -0.05%       | 18.02%        | -0.0390       | 0.9298               | -0.5409        | 0.7933        | 1.6636        | <b>6.1560</b> |
| 29             | 0.25%        | 0.12%        | 18.27%        | 0.0833        | 1.0111               | 1.0641         | 0.7971        | 1.6492        | <b>6.2395</b> |
| 30             | 0.21%        | 0.28%        | 18.48%        | 0.0600        | 0.8001               | 0.9675         | 0.7976        | 1.6457        | <b>6.2574</b> |
| <b>-1 to 1</b> |              |              | <b>4.77%</b>  |               | <b>StdDev(AAR-0)</b> | <b>0.06139</b> | 0.7421        | 2.0223        | <b>4.7373</b> |

**Table-A 6.2 Market returns to Domestic Targets; All-firms; (OLS, 170); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.06%        | -0.07%       | 0.06%         | 0.0737               | 1.0850        | 0.9054         | 0.0737        | 1.0850        | 0.9054        |
| -19            | 0.09%        | 0.02%        | 0.15%         | 0.0460               | 0.8827        | 0.6951         | 0.0846        | 1.0155        | 1.1113        |
| -18            | 0.30%        | -0.28%       | 0.46%         | 0.0564               | 1.0355        | 0.7265         | 0.1017        | 0.9850        | 1.3764        |
| -17            | 0.19%        | -0.03%       | 0.64%         | 0.0907               | 1.0234        | 1.1818         | 0.1334        | 1.0731        | <b>1.6577</b> |
| -16            | 0.11%        | 0.02%        | 0.76%         | -0.0393              | 0.9410        | -0.5570        | 0.1017        | 1.0620        | 1.2774        |
| -15            | 0.40%        | 0.08%        | 1.16%         | 0.0832               | 0.9932        | 1.1166         | 0.1268        | 1.1244        | 1.5041        |
| -14            | 0.47%        | 0.19%        | 1.62%         | 0.0965               | 1.1473        | 1.1212         | 0.1539        | 1.1190        | <b>1.8337</b> |
| -13            | 0.19%        | -0.22%       | 1.82%         | 0.0405               | 1.1405        | 0.4736         | 0.1583        | 1.1397        | <b>1.8516</b> |
| -12            | 0.86%        | 0.08%        | 2.68%         | 0.1891               | 1.0224        | <b>2.4659</b>  | 0.2122        | 1.1661        | <b>2.4270</b> |
| -11            | 0.03%        | -0.01%       | 2.70%         | 0.0216               | 1.1123        | 0.2588         | 0.2082        | 1.1779        | <b>2.3566</b> |
| -10            | 0.56%        | 0.14%        | 3.27%         | 0.1485               | 1.1347        | <b>1.7458</b>  | 0.2433        | 1.2164        | <b>2.6668</b> |
| -9             | 1.60%        | 0.08%        | 4.87%         | 0.2150               | 1.4806        | <b>1.9365</b>  | 0.2950        | 1.2485        | <b>3.1506</b> |
| -8             | -0.56%       | -0.28%       | 4.31%         | -0.0679              | 1.0446        | -0.8669        | 0.2646        | 1.2355        | <b>2.8555</b> |
| -7             | 0.13%        | 0.00%        | 4.44%         | 0.0543               | 1.0752        | 0.6731         | 0.2694        | 1.2079        | <b>2.9748</b> |
| -6             | 0.94%        | 0.28%        | 5.38%         | 0.2408               | 1.0751        | <b>2.9872</b>  | 0.3225        | 1.2022        | <b>3.5772</b> |
| -5             | 0.99%        | 0.30%        | 6.37%         | 0.2442               | 1.1414        | <b>2.8527</b>  | 0.3733        | 1.1865        | <b>4.1953</b> |
| -4             | 0.07%        | -0.29%       | 6.44%         | 0.0581               | 1.0291        | 0.7522         | 0.3762        | 1.1905        | <b>4.2141</b> |
| -3             | 0.86%        | 0.03%        | 7.30%         | 0.1964               | 1.0992        | <b>2.3833</b>  | 0.4119        | 1.1741        | <b>4.6787</b> |
| -2             | 0.78%        | 0.16%        | 8.08%         | 0.1917               | 1.0322        | <b>2.4771</b>  | 0.4449        | 1.1595        | <b>5.1173</b> |
| -1             | 1.43%        | 0.73%        | 9.50%         | 0.3801               | 1.3810        | <b>3.6703</b>  | 0.5187        | 1.1936        | <b>5.7945</b> |
| <b>0</b>       | <b>1.82%</b> | <b>0.99%</b> | <b>11.33%</b> | <b>0.4318</b>        | <b>1.6250</b> | <b>3.5439</b>  | <b>0.6004</b> | <b>1.2207</b> | <b>6.5591</b> |
| 1              | 0.91%        | 0.10%        | 12.23%        | 0.1845               | 1.7881        | 1.3758         | 0.6259        | 1.2665        | <b>6.5902</b> |
| 2              | 0.03%        | -0.35%       | 12.26%        | 0.0070               | 1.2950        | 0.0719         | 0.6136        | 1.2968        | <b>6.3099</b> |
| 3              | -0.55%       | -0.25%       | 11.71%        | -0.1196              | 1.4183        | -1.1240        | 0.5763        | 1.3286        | <b>5.7845</b> |
| 4              | -0.51%       | -0.33%       | 11.20%        | -0.1412              | 1.0867        | <b>-1.7333</b> | 0.5364        | 1.3097        | <b>5.4615</b> |
| 5              | -0.71%       | -0.43%       | 10.49%        | -0.1388              | 0.8753        | <b>-2.1144</b> | 0.4988        | 1.2968        | <b>5.1290</b> |
| 6              | -0.06%       | -0.28%       | 10.43%        | 0.0046               | 0.8750        | 0.0699         | 0.4903        | 1.3049        | <b>5.0109</b> |
| 7              | -0.49%       | -0.11%       | 9.95%         | -0.0547              | 1.1660        | -0.6261        | 0.4711        | 1.3333        | <b>4.7122</b> |
| 8              | -0.20%       | -0.21%       | 9.75%         | -0.0247              | 1.1058        | -0.2982        | 0.4584        | 1.3341        | <b>4.5816</b> |
| 9              | 0.09%        | -0.20%       | 9.83%         | 0.0682               | 1.0483        | 0.8676         | 0.4631        | 1.3569        | <b>4.5512</b> |
| 10             | 0.76%        | 0.06%        | 10.60%        | 0.1221               | 1.2647        | 1.2872         | 0.4775        | 1.3713        | <b>4.6434</b> |
| 11             | 0.24%        | 0.01%        | 10.84%        | 0.0408               | 1.0116        | 0.5383         | 0.4772        | 1.4045        | <b>4.5307</b> |
| 12             | -0.33%       | -0.08%       | 10.51%        | -0.0676              | 1.4494        | -0.6222        | 0.4581        | 1.4716        | <b>4.1515</b> |
| 13             | -0.15%       | -0.11%       | 10.36%        | -0.0345              | 0.8797        | -0.5227        | 0.4454        | 1.4367        | <b>4.1346</b> |
| 14             | 0.07%        | 0.09%        | 10.43%        | 0.0288               | 0.7991        | 0.4809         | 0.4439        | 1.4279        | <b>4.1456</b> |
| 15             | 0.25%        | -0.09%       | 10.68%        | 0.0127               | 0.8825        | 0.1915         | 0.4398        | 1.4029        | <b>4.1806</b> |
| 16             | -0.30%       | -0.15%       | 10.38%        | -0.0954              | 0.8826        | -1.4411        | 0.4181        | 1.4185        | <b>3.9309</b> |
| 17             | -0.08%       | -0.17%       | 10.30%        | 0.0295               | 0.8702        | 0.4524         | 0.4174        | 1.4166        | <b>3.9291</b> |
| 18             | 0.10%        | -0.08%       | 10.40%        | 0.0186               | 0.8311        | 0.2987         | 0.4150        | 1.4085        | <b>3.9289</b> |
| 19             | -0.27%       | -0.24%       | 10.13%        | -0.0619              | 0.8410        | -0.9808        | 0.4000        | 1.4148        | <b>3.7700</b> |
| 20             | 0.44%        | -0.04%       | 10.57%        | 0.1090               | 0.7629        | <b>1.9048</b>  | 0.4121        | 1.4157        | <b>3.8819</b> |
| 21             | -0.39%       | -0.31%       | 10.18%        | -0.0727              | 0.7826        | -1.2394        | 0.3959        | 1.4005        | <b>3.7701</b> |
| 22             | -0.53%       | -0.45%       | 9.65%         | -0.1782              | 0.7623        | <b>-3.1167</b> | 0.3641        | 1.3982        | <b>3.4729</b> |
| 23             | -0.63%       | -0.29%       | 9.02%         | -0.1228              | 1.1198        | -1.4619        | 0.3415        | 1.4084        | <b>3.2330</b> |
| 24             | 0.41%        | 0.09%        | 9.43%         | 0.0848               | 0.9060        | 1.2478         | 0.3503        | 1.3885        | <b>3.3643</b> |
| 25             | -0.25%       | -0.29%       | 9.18%         | -0.0794              | 0.8087        | -1.3088        | 0.3348        | 1.3936        | <b>3.2033</b> |
| 26             | 0.07%        | -0.15%       | 9.25%         | -0.0033              | 1.0420        | -0.0418        | 0.3307        | 1.3772        | <b>3.2021</b> |
| 27             | -0.50%       | -0.17%       | 8.75%         | -0.0408              | 1.1146        | -0.4878        | 0.3214        | 1.3630        | <b>3.1441</b> |
| 28             | -0.36%       | -0.17%       | 8.38%         | -0.0822              | 0.7798        | -1.4050        | 0.3063        | 1.3520        | <b>3.0214</b> |
| 29             | 0.08%        | 0.07%        | 8.47%         | 0.0227               | 0.8557        | 0.3539         | 0.3065        | 1.3451        | <b>3.0382</b> |
| 30             | 0.01%        | 0.10%        | 8.48%         | 0.0052               | 0.7040        | 0.0978         | 0.3042        | 1.3408        | <b>3.0251</b> |
| <b>-1 to 1</b> |              |              | <b>4.15%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06226</b> | 0.5753        | 1.6276        | <b>4.7135</b> |

**Table-A 6.3 Market returns to Domestic Targets; MM firms; (OLS, 165); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.30%        | -0.06%       | 0.30%         | 0.1093               | 1.0180        | 1.3840         | 0.1093        | 1.0180        | 1.3840        |
| -19            | 0.15%        | 0.03%        | 0.45%         | 0.0627               | 0.8727        | 0.9260         | 0.1217        | 0.9775        | 1.6037        |
| -18            | 0.14%        | -0.34%       | 0.59%         | 0.0474               | 1.0346        | 0.5903         | 0.1267        | 0.9544        | <b>1.7106</b> |
| -17            | 0.31%        | -0.05%       | 0.90%         | 0.0907               | 1.0019        | 1.1660         | 0.1550        | 1.0685        | <b>1.8699</b> |
| -16            | -0.02%       | 0.00%        | 0.88%         | -0.0669              | 0.9109        | -0.9461        | 0.1088        | 1.0536        | 1.3303        |
| -15            | 0.18%        | 0.02%        | 1.05%         | 0.0571               | 0.9832        | 0.7483         | 0.1226        | 1.1160        | 1.4157        |
| -14            | 0.18%        | 0.10%        | 1.23%         | 0.0561               | 1.1241        | 0.6428         | 0.1347        | 1.0953        | 1.5847        |
| -13            | 0.19%        | -0.24%       | 1.42%         | 0.0309               | 1.1413        | 0.3489         | 0.1369        | 1.1119        | 1.5869        |
| -12            | 0.67%        | 0.03%        | 2.09%         | 0.1685               | 1.0153        | <b>2.1390</b>  | 0.1853        | 1.1366        | <b>2.1004</b> |
| -11            | 0.16%        | -0.03%       | 2.25%         | 0.0315               | 1.1104        | 0.3659         | 0.1857        | 1.1542        | <b>2.0736</b> |
| -10            | 0.57%        | 0.11%        | 2.83%         | 0.1600               | 1.1392        | <b>1.8098</b>  | 0.2253        | 1.2080        | <b>2.4038</b> |
| -9             | 0.71%        | 0.06%        | 3.54%         | 0.1478               | 1.0928        | <b>1.7433</b>  | 0.2584        | 1.2150        | <b>2.7408</b> |
| -8             | -0.17%       | -0.27%       | 3.37%         | -0.0304              | 0.9711        | -0.4034        | 0.2398        | 1.2268        | <b>2.5194</b> |
| -7             | 0.24%        | 0.11%        | 3.61%         | 0.0723               | 1.0771        | 0.8648         | 0.2504        | 1.2071        | <b>2.6736</b> |
| -6             | 0.84%        | 0.22%        | 4.46%         | 0.2343               | 1.0866        | <b>2.7787</b>  | 0.3024        | 1.2015        | <b>3.2437</b> |
| -5             | 1.06%        | 0.33%        | 5.52%         | 0.2612               | 1.1507        | <b>2.9254</b>  | 0.3581        | 1.1892        | <b>3.8807</b> |
| -4             | 0.17%        | -0.29%       | 5.69%         | 0.0742               | 1.0325        | 0.9263         | 0.3655        | 1.1973        | <b>3.9331</b> |
| -3             | 0.59%        | -0.03%       | 6.29%         | 0.1599               | 1.0807        | <b>1.9068</b>  | 0.3929        | 1.1776        | <b>4.2987</b> |
| -2             | 0.63%        | 0.14%        | 6.92%         | 0.1759               | 1.0235        | <b>2.2149</b>  | 0.4227        | 1.1573        | <b>4.7069</b> |
| -1             | 1.42%        | 0.77%        | 8.34%         | 0.3957               | 1.3803        | <b>3.6936</b>  | 0.5005        | 1.1933        | <b>5.4047</b> |
| <b>0</b>       | <b>1.80%</b> | <b>1.02%</b> | <b>10.14%</b> | <b>0.4479</b>        | <b>1.6331</b> | <b>3.5337</b>  | <b>0.5862</b> | <b>1.2236</b> | <b>6.1730</b> |
| 1              | 0.97%        | 0.15%        | 11.10%        | 0.2031               | 1.8040        | 1.4506         | 0.6160        | 1.2710        | <b>6.2451</b> |
| 2              | 0.10%        | -0.29%       | 11.20%        | 0.0142               | 1.3103        | 0.1398         | 0.6054        | 1.3045        | <b>5.9803</b> |
| 3              | -0.48%       | -0.23%       | 10.72%        | -0.1249              | 1.4262        | -1.1282        | 0.5672        | 1.3398        | <b>5.4550</b> |
| 4              | -0.64%       | -0.32%       | 10.08%        | -0.1442              | 1.0805        | <b>-1.7194</b> | 0.5269        | 1.3175        | <b>5.1534</b> |
| 5              | -0.60%       | -0.42%       | 9.47%         | -0.1194              | 0.8498        | <b>-1.8111</b> | 0.4932        | 1.3030        | <b>4.8779</b> |
| 6              | -0.05%       | -0.25%       | 9.43%         | 0.0121               | 0.8794        | 0.1767         | 0.4863        | 1.3103        | <b>4.7827</b> |
| 7              | -0.12%       | -0.06%       | 9.31%         | -0.0046              | 0.9938        | -0.0600        | 0.4767        | 1.3294        | <b>4.6205</b> |
| 8              | -0.17%       | -0.20%       | 9.14%         | -0.0103              | 1.0940        | -0.1216        | 0.4665        | 1.3272        | <b>4.5292</b> |
| 9              | 0.16%        | -0.20%       | 9.30%         | 0.0905               | 1.0382        | 1.1237         | 0.4752        | 1.3452        | <b>4.5518</b> |
| 10             | 0.05%        | 0.07%        | 9.35%         | 0.0315               | 0.8129        | 0.4996         | 0.4731        | 1.3572        | <b>4.4920</b> |
| 11             | 0.32%        | 0.04%        | 9.67%         | 0.0613               | 1.0059        | 0.7855         | 0.4765        | 1.3868        | <b>4.4276</b> |
| 12             | -0.27%       | 0.08%        | 9.40%         | -0.0593              | 1.4696        | -0.5201        | 0.4589        | 1.4582        | <b>4.0552</b> |
| 13             | -0.15%       | -0.14%       | 9.26%         | -0.0438              | 0.8742        | -0.6454        | 0.4446        | 1.4283        | <b>4.0109</b> |
| 14             | -0.12%       | 0.03%        | 9.13%         | -0.0020              | 0.7747        | -0.0332        | 0.4378        | 1.4227        | <b>3.9658</b> |
| 15             | 0.30%        | -0.12%       | 9.43%         | 0.0285               | 0.8713        | 0.4208         | 0.4365        | 1.3942        | <b>4.0340</b> |
| 16             | -0.31%       | -0.13%       | 9.12%         | -0.0869              | 0.8708        | -1.2860        | 0.4162        | 1.4056        | <b>3.8161</b> |
| 17             | 0.04%        | -0.10%       | 9.16%         | 0.0529               | 0.8616        | 0.7915         | 0.4193        | 1.4006        | <b>3.8578</b> |
| 18             | 0.15%        | -0.09%       | 9.31%         | 0.0166               | 0.8300        | 0.2583         | 0.4166        | 1.3961        | <b>3.8451</b> |
| 19             | -0.32%       | -0.30%       | 8.99%         | -0.0719              | 0.8503        | -1.0901        | 0.4000        | 1.4050        | <b>3.6682</b> |
| 20             | 0.42%        | -0.08%       | 9.41%         | 0.1101               | 0.7735        | <b>1.8346</b>  | 0.4122        | 1.4056        | <b>3.7793</b> |
| 21             | -0.48%       | -0.32%       | 8.93%         | -0.0953              | 0.7644        | -1.6066        | 0.3926        | 1.3943        | <b>3.6285</b> |
| 22             | -0.63%       | -0.51%       | 8.30%         | -0.1953              | 0.7660        | <b>-3.2855</b> | 0.3582        | 1.3925        | <b>3.3150</b> |
| 23             | -0.18%       | -0.26%       | 8.12%         | -0.0573              | 0.8618        | -0.8562        | 0.3455        | 1.3967        | <b>3.1877</b> |
| 24             | 0.43%        | 0.09%        | 8.55%         | 0.0936               | 0.9107        | 1.3238         | 0.3556        | 1.3743        | <b>3.3342</b> |
| 25             | -0.16%       | -0.28%       | 8.39%         | -0.0701              | 0.8154        | -1.1082        | 0.3414        | 1.3799        | <b>3.1878</b> |
| 26             | -0.28%       | -0.15%       | 8.11%         | -0.0432              | 0.6955        | -0.8000        | 0.3314        | 1.3655        | <b>3.1274</b> |
| 27             | -0.10%       | -0.17%       | 8.01%         | 0.0024               | 0.8143        | 0.0380         | 0.3283        | 1.3504        | <b>3.1326</b> |
| 28             | -0.35%       | -0.16%       | 7.67%         | -0.0790              | 0.7904        | -1.2883        | 0.3136        | 1.3386        | <b>3.0192</b> |
| 29             | 0.05%        | 0.02%        | 7.72%         | 0.0280               | 0.8521        | 0.4235         | 0.3144        | 1.3298        | <b>3.0469</b> |
| 30             | 0.01%        | 0.10%        | 7.72%         | -0.0080              | 0.6789        | -0.1512        | 0.3102        | 1.3299        | <b>3.0060</b> |
| <b>-1 to 1</b> |              |              | <b>4.18%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06175</b> | 0.6042        | 1.6116        | <b>4.8314</b> |



**Table-A 6.4 FF returns to Domestic Targets; All-firms; (OLS, 163); VWI**

| Days           | AAR          | Median       | CAAR          | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|---------------|----------------------|----------------|---------------|---------------|---------------|
| -20            | 0.11%        | -0.13%       | 0.11%         | 0.0887        | 1.0565               | 1.1140         | 0.0887        | 1.0565        | 1.1140        |
| -19            | 0.14%        | 0.02%        | 0.25%         | 0.0685        | 0.8537               | 1.0607         | 0.1111        | 0.9610        | 1.5331        |
| -18            | 0.40%        | -0.17%       | 0.65%         | 0.0757        | 1.0315               | 0.9737         | 0.1350        | 0.9512        | <b>1.8827</b> |
| -17            | 0.09%        | -0.04%       | 0.74%         | 0.0756        | 1.0084               | 0.9939         | 0.1546        | 1.0507        | <b>1.9511</b> |
| -16            | 0.11%        | -0.23%       | 0.85%         | -0.0280       | 0.9233               | -0.4020        | 0.1257        | 1.0141        | 1.6445        |
| -15            | 0.41%        | -0.09%       | 1.26%         | 0.0833        | 0.9968               | 1.1082         | 0.1488        | 1.0519        | <b>1.8760</b> |
| -14            | 0.48%        | 0.09%        | 1.74%         | 0.0849        | 1.1094               | 1.0157         | 0.1695        | 1.0551        | <b>2.1308</b> |
| -13            | 0.19%        | -0.24%       | 1.93%         | 0.0198        | 1.1896               | 0.2204         | 0.1656        | 1.0847        | <b>2.0249</b> |
| -12            | 0.94%        | 0.05%        | 2.87%         | 0.2089        | 1.0051               | <b>2.7567</b>  | 0.2258        | 1.0930        | <b>2.7396</b> |
| -11            | 0.09%        | 0.19%        | 2.97%         | 0.0510        | 1.0919               | 0.6201         | 0.2304        | 1.1146        | <b>2.7414</b> |
| -10            | 0.54%        | 0.24%        | 3.50%         | 0.1440        | 1.1141               | <b>1.7149</b>  | 0.2631        | 1.1415        | <b>3.0577</b> |
| -9             | 1.71%        | 0.16%        | 5.22%         | 0.2567        | 1.5060               | <b>2.2610</b>  | 0.3260        | 1.1879        | <b>3.6405</b> |
| -8             | -0.42%       | -0.11%       | 4.80%         | -0.0248       | 1.0315               | -0.3183        | 0.3064        | 1.1677        | <b>3.4800</b> |
| -7             | 0.20%        | 0.17%        | 5.00%         | 0.0716        | 1.0528               | 0.8988         | 0.3140        | 1.1354        | <b>3.6685</b> |
| -6             | 1.04%        | 0.43%        | 6.04%         | 0.2582        | 1.0929               | <b>3.1332</b>  | 0.3701        | 1.1379        | <b>4.3145</b> |
| -5             | 1.05%        | 0.09%        | 7.09%         | 0.2528        | 1.1796               | <b>2.8429</b>  | 0.4215        | 1.1627        | <b>4.8089</b> |
| -4             | 0.24%        | -0.25%       | 7.33%         | 0.1021        | 1.0258               | 1.3201         | 0.4337        | 1.1857        | <b>4.8515</b> |
| -3             | 0.95%        | 0.39%        | 8.28%         | 0.2218        | 1.1015               | <b>2.6704</b>  | 0.4737        | 1.1786        | <b>5.3317</b> |
| -2             | 0.70%        | 0.07%        | 8.98%         | 0.1737        | 1.0547               | <b>2.1840</b>  | 0.5009        | 1.1720        | <b>5.6689</b> |
| -1             | 1.52%        | 1.19%        | 10.50%        | 0.4009        | 1.4401               | <b>3.6928</b>  | 0.5777        | 1.2171        | <b>6.2953</b> |
| <b>0</b>       | <b>1.77%</b> | <b>1.12%</b> | <b>12.27%</b> | <b>0.4301</b> | <b>1.6174</b>        | <b>3.5273</b>  | <b>0.6576</b> | <b>1.2322</b> | <b>7.0786</b> |
| 1              | 0.72%        | 0.54%        | 12.99%        | 0.1421        | 1.7058               | 1.1053         | 0.6728        | 1.2707        | <b>7.0231</b> |
| 2              | 0.10%        | -0.37%       | 13.09%        | 0.0222        | 1.3053               | 0.2254         | 0.6627        | 1.3073        | <b>6.7235</b> |
| 3              | -0.63%       | -0.25%       | 12.46%        | -0.1407       | 1.4173               | -1.3164        | 0.6197        | 1.3467        | <b>6.1031</b> |
| 4              | -0.62%       | -0.81%       | 11.83%        | -0.1789       | 1.0728               | <b>-2.2119</b> | 0.5714        | 1.3126        | <b>5.7737</b> |
| 5              | -0.65%       | -0.53%       | 11.18%        | -0.1321       | 0.8781               | <b>-1.9959</b> | 0.5344        | 1.3039        | <b>5.4363</b> |
| 6              | 0.03%        | -0.17%       | 11.21%        | 0.0355        | 0.8644               | 0.5449         | 0.5313        | 1.3215        | <b>5.3323</b> |
| 7              | -0.62%       | -0.04%       | 10.60%        | -0.0896       | 1.1822               | -1.0055        | 0.5046        | 1.3416        | <b>4.9890</b> |
| 8              | -0.20%       | -0.26%       | 10.40%        | -0.0377       | 1.1761               | -0.4250        | 0.4889        | 1.3430        | <b>4.8284</b> |
| 9              | 0.07%        | -0.09%       | 10.47%        | 0.0520        | 1.0630               | 0.6492         | 0.4902        | 1.3517        | <b>4.8103</b> |
| 10             | 0.73%        | 0.20%        | 11.20%        | 0.1089        | 1.3374               | 1.0803         | 0.5018        | 1.3699        | <b>4.8586</b> |
| 11             | 0.14%        | -0.30%       | 11.33%        | 0.0088        | 1.0574               | 0.1110         | 0.4955        | 1.4025        | <b>4.6861</b> |
| 12             | -0.43%       | -0.28%       | 10.90%        | -0.1131       | 1.4935               | -1.0042        | 0.4680        | 1.4791        | <b>4.1968</b> |
| 13             | -0.12%       | -0.14%       | 10.78%        | -0.0297       | 0.9712               | -0.4051        | 0.4560        | 1.4455        | <b>4.1846</b> |
| 14             | 0.01%        | 0.17%        | 10.80%        | 0.0147        | 0.8321               | 0.2344         | 0.4519        | 1.4395        | <b>4.1642</b> |
| 15             | 0.30%        | 0.05%        | 11.10%        | 0.0179        | 0.8869               | 0.2667         | 0.4486        | 1.4129        | <b>4.2114</b> |
| 16             | -0.21%       | -0.24%       | 10.89%        | -0.0888       | 0.9544               | -1.2297        | 0.4280        | 1.4339        | <b>3.9587</b> |
| 17             | -0.07%       | 0.00%        | 10.82%        | 0.0364        | 0.8635               | 0.5570         | 0.4282        | 1.4312        | <b>3.9682</b> |
| 18             | 0.20%        | -0.05%       | 11.02%        | 0.0442        | 0.8163               | 0.7151         | 0.4296        | 1.4255        | <b>3.9977</b> |
| 19             | -0.28%       | -0.23%       | 10.75%        | -0.0548       | 0.8030               | -0.9018        | 0.4156        | 1.4335        | <b>3.8454</b> |
| 20             | 0.34%        | 0.00%        | 11.09%        | 0.0831        | 0.7987               | 1.3759         | 0.4234        | 1.4264        | <b>3.9369</b> |
| 21             | -0.34%       | -0.35%       | 10.75%        | -0.0449       | 0.8268               | -0.7182        | 0.4114        | 1.4121        | <b>3.8642</b> |
| 22             | -0.51%       | -0.35%       | 10.25%        | -0.1728       | 0.8026               | <b>-2.8464</b> | 0.3804        | 1.4098        | <b>3.5786</b> |
| 23             | -0.60%       | -0.14%       | 9.65%         | -0.1196       | 1.1225               | -1.4037        | 0.3583        | 1.4172        | <b>3.3531</b> |
| 24             | 0.42%        | 0.27%        | 10.07%        | 0.0846        | 0.9012               | 1.2367         | 0.3667        | 1.4032        | <b>3.4668</b> |
| 25             | -0.23%       | -0.52%       | 9.84%         | -0.0655       | 0.8213               | -1.0511        | 0.3532        | 1.4044        | <b>3.3361</b> |
| 26             | -0.02%       | -0.33%       | 9.82%         | -0.0273       | 1.1113               | -0.3234        | 0.3455        | 1.4008        | <b>3.2719</b> |
| 27             | -0.51%       | -0.21%       | 9.31%         | -0.0306       | 1.1439               | -0.3529        | 0.3376        | 1.3813        | <b>3.2419</b> |
| 28             | -0.31%       | -0.30%       | 9.00%         | -0.0773       | 0.8321               | -1.2240        | 0.3233        | 1.3709        | <b>3.1278</b> |
| 29             | 0.18%        | 0.06%        | 9.18%         | 0.0431        | 0.8886               | 0.6394         | 0.3261        | 1.3632        | <b>3.1728</b> |
| 30             | 0.19%        | 0.05%        | 9.36%         | 0.0467        | 0.7779               | 0.7916         | 0.3294        | 1.3607        | <b>3.2106</b> |
| <b>-1 to 1</b> |              |              | <b>4.01%</b>  |               | <b>StdDev(AAR-0)</b> | <b>0.05766</b> | 0.5619        | 1.6435        | <b>4.5346</b> |

**Table-A 6.5 FF returns to Domestic Targets; All-firms; (MM, 158); VWI**

| Days           | AAR          | Median       | CAAR          | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|---------------|----------------------|----------------|---------------|---------------|---------------|
| -20            | 0.55%        | 0.00%        | 0.55%         | 0.2175        | 1.2798               | <b>2.1723</b>  | 0.2175        | 1.2798        | <b>2.1723</b> |
| -19            | 0.45%        | 0.18%        | 1.00%         | 0.2041        | 0.9981               | <b>2.6061</b>  | 0.2972        | 1.2119        | <b>3.1353</b> |
| -18            | 0.48%        | 0.04%        | 1.48%         | 0.1558        | 1.1951               | <b>1.6667</b>  | 0.3332        | 1.1278        | <b>3.7765</b> |
| -17            | 0.45%        | 0.15%        | 1.93%         | 0.1594        | 1.1775               | <b>1.7306</b>  | 0.3682        | 1.3085        | <b>3.5972</b> |
| -16            | 0.19%        | -0.07%       | 2.12%         | 0.0144        | 1.0205               | 0.1799         | 0.3358        | 1.2711        | <b>3.3768</b> |
| -15            | 0.42%        | 0.05%        | 2.54%         | 0.1333        | 1.1261               | 1.5127         | 0.3609        | 1.2845        | <b>3.5916</b> |
| -14            | 0.36%        | 0.26%        | 2.90%         | 0.1210        | 1.3600               | 1.1378         | 0.3794        | 1.2996        | <b>3.7325</b> |
| -13            | 0.40%        | 0.17%        | 3.30%         | 0.1017        | 1.3829               | 0.9397         | 0.3910        | 1.3130        | <b>3.8065</b> |
| -12            | 0.92%        | 0.22%        | 4.22%         | 0.2860        | 1.1602               | <b>3.1512</b>  | 0.4640        | 1.3406        | <b>4.4244</b> |
| -11            | 0.43%        | 0.32%        | 4.65%         | 0.1439        | 1.3158               | 1.3980         | 0.4857        | 1.3654        | <b>4.5477</b> |
| -10            | 0.74%        | 0.26%        | 5.39%         | 0.2102        | 1.3518               | <b>1.9875</b>  | 0.5265        | 1.4036        | <b>4.7957</b> |
| -9             | 0.96%        | 0.28%        | 6.35%         | 0.2875        | 1.3220               | <b>2.7804</b>  | 0.5871        | 1.4161        | <b>5.3005</b> |
| -8             | 0.22%        | 0.09%        | 6.57%         | 0.0777        | 1.1064               | 0.8975         | 0.5856        | 1.4151        | <b>5.2904</b> |
| -7             | 0.53%        | 0.30%        | 7.10%         | 0.1694        | 1.2010               | <b>1.7970</b>  | 0.6089        | 1.3717        | <b>5.6749</b> |
| -6             | 1.08%        | 0.58%        | 8.18%         | 0.3955        | 1.4343               | <b>3.5250</b>  | 0.6909        | 1.3562        | <b>6.5126</b> |
| -5             | 1.38%        | 0.46%        | 9.57%         | 0.3741        | 1.3776               | <b>3.4714</b>  | 0.7624        | 1.3797        | <b>7.0644</b> |
| -4             | 0.54%        | -0.05%       | 10.11%        | 0.1802        | 1.1614               | <b>1.9832</b>  | 0.7833        | 1.4056        | <b>7.1236</b> |
| -3             | 0.84%        | 0.30%        | 10.95%        | 0.2571        | 1.2721               | <b>2.5837</b>  | 0.8217        | 1.4029        | <b>7.4878</b> |
| -2             | 0.79%        | 0.07%        | 11.73%        | 0.2431        | 1.2617               | <b>2.4634</b>  | 0.8554        | 1.3888        | <b>7.8742</b> |
| -1             | 1.74%        | 1.30%        | 13.48%        | 0.5529        | 1.6987               | <b>4.1611</b>  | 0.9571        | 1.4733        | <b>8.3051</b> |
| <b>0</b>       | <b>1.95%</b> | <b>1.31%</b> | <b>15.43%</b> | <b>0.5447</b> | <b>1.9133</b>        | <b>3.6391</b>  | <b>1.0529</b> | <b>1.5127</b> | <b>8.8978</b> |
| 1              | 0.90%        | 0.75%        | 16.32%        | 0.1605        | 2.2209               | 0.9239         | 1.0629        | 1.5676        | <b>8.6679</b> |
| 2              | 0.39%        | -0.22%       | 16.72%        | 0.0771        | 1.5305               | 0.6436         | 1.0557        | 1.6070        | <b>8.3979</b> |
| 3              | -0.40%       | -0.06%       | 16.32%        | -0.1274       | 1.6610               | -0.9806        | 1.0070        | 1.6678        | <b>7.7193</b> |
| 4              | -0.55%       | -0.51%       | 15.77%        | -0.1376       | 1.2933               | -1.3599        | 0.9593        | 1.6228        | <b>7.5572</b> |
| 5              | -0.34%       | -0.25%       | 15.43%        | -0.0729       | 0.9750               | -0.9556        | 0.9264        | 1.6155        | <b>7.3307</b> |
| 6              | 0.24%        | 0.07%        | 15.67%        | 0.1091        | 1.0126               | 1.3776         | 0.9301        | 1.6305        | <b>7.2924</b> |
| 7              | 0.02%        | 0.07%        | 15.69%        | 0.0532        | 1.1992               | 0.5669         | 0.9233        | 1.6486        | <b>7.1595</b> |
| 8              | 0.03%        | -0.04%       | 15.72%        | 0.0467        | 1.3747               | 0.4342         | 0.9159        | 1.6590        | <b>7.0580</b> |
| 9              | 0.37%        | 0.10%        | 16.09%        | 0.1680        | 1.2683               | <b>1.6935</b>  | 0.9313        | 1.6789        | <b>7.0911</b> |
| 10             | 0.20%        | 0.41%        | 16.29%        | 0.0757        | 1.0276               | 0.9416         | 0.9298        | 1.6986        | <b>6.9975</b> |
| 11             | 0.43%        | 0.09%        | 16.72%        | 0.1313        | 1.2557               | 1.3372         | 0.9384        | 1.7343        | <b>6.9169</b> |
| 12             | -0.14%       | -0.11%       | 16.58%        | -0.0372       | 1.7695               | -0.2689        | 0.9173        | 1.8390        | <b>6.3763</b> |
| 13             | 0.10%        | -0.07%       | 16.68%        | -0.0043       | 1.1467               | -0.0475        | 0.9030        | 1.8035        | <b>6.4010</b> |
| 14             | 0.10%        | 0.15%        | 16.78%        | 0.0480        | 0.9228               | 0.6653         | 0.8981        | 1.8032        | <b>6.3672</b> |
| 15             | 0.62%        | 0.18%        | 17.39%        | 0.1209        | 1.0625               | 1.4496         | 0.9056        | 1.7746        | <b>6.5237</b> |
| 16             | -0.09%       | 0.04%        | 17.30%        | -0.0155       | 1.2024               | -0.1640        | 0.8907        | 1.7955        | <b>6.3418</b> |
| 17             | 0.23%        | 0.20%        | 17.53%        | 0.1270        | 1.0473               | 1.5448         | 0.8994        | 1.7989        | <b>6.3917</b> |
| 18             | 0.51%        | 0.06%        | 18.05%        | 0.0892        | 1.0446               | 1.0885         | 0.9020        | 1.7792        | <b>6.4807</b> |
| 19             | -0.07%       | 0.02%        | 17.98%        | 0.0190        | 1.0117               | 0.2390         | 0.8936        | 1.7836        | <b>6.4046</b> |
| 20             | 0.61%        | 0.06%        | 18.59%        | 0.2026        | 0.9841               | <b>2.6237</b>  | 0.9140        | 1.7656        | <b>6.6182</b> |
| 21             | -0.18%       | -0.19%       | 18.40%        | 0.0348        | 0.9571               | 0.4632         | 0.9084        | 1.7621        | <b>6.5906</b> |
| 22             | -0.38%       | -0.35%       | 18.02%        | -0.1589       | 0.9454               | <b>-2.1415</b> | 0.8737        | 1.7710        | <b>6.3067</b> |
| 23             | 0.08%        | 0.01%        | 18.10%        | 0.0219        | 0.9408               | 0.2961         | 0.8671        | 1.7765        | <b>6.2395</b> |
| 24             | 0.62%        | 0.32%        | 18.72%        | 0.1903        | 0.9833               | <b>2.4582</b>  | 0.8855        | 1.7543        | <b>6.4523</b> |
| 25             | 0.11%        | -0.17%       | 18.83%        | 0.0258        | 0.9228               | 0.3548         | 0.8796        | 1.7510        | <b>6.4220</b> |
| 26             | -0.14%       | -0.20%       | 18.69%        | -0.0115       | 0.8555               | -0.1705        | 0.8686        | 1.7390        | <b>6.3857</b> |
| 27             | 0.17%        | -0.01%       | 18.86%        | 0.0662        | 0.9568               | 0.8787         | 0.8690        | 1.7265        | <b>6.4349</b> |
| 28             | -0.13%       | -0.02%       | 18.73%        | -0.0408       | 0.9792               | -0.5296        | 0.8544        | 1.7118        | <b>6.3810</b> |
| 29             | 0.39%        | 0.31%        | 19.12%        | 0.1204        | 1.0236               | 1.4939         | 0.8627        | 1.6939        | <b>6.5108</b> |
| 30             | 0.44%        | 0.32%        | 19.56%        | 0.1213        | 0.8525               | <b>1.8063</b>  | 0.8711        | 1.6907        | <b>6.5865</b> |
| <b>-1 to 1</b> |              |              | <b>4.59%</b>  |               | <b>StdDev(AAR-0)</b> | <b>0.0575</b>  | 0.7264        | 2.0645        | <b>4.4978</b> |

**Table-A 6.6 Market returns to Domestic Targets; FF-firms; (OLS, 163); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.06%        | -0.07%       | 0.06%         | 0.0713               | 1.0665        | 0.8664         | 0.0713        | 1.0665        | 0.8664        |
| -19            | 0.15%        | 0.04%        | 0.22%         | 0.0630               | 0.8597        | 0.9493         | 0.0950        | 0.9689        | 1.2700        |
| -18            | 0.36%        | -0.27%       | 0.57%         | 0.0650               | 0.9987        | 0.8430         | 0.1151        | 0.9664        | 1.5427        |
| -17            | 0.04%        | -0.06%       | 0.62%         | 0.0492               | 0.9819        | 0.6496         | 0.1243        | 1.0440        | 1.5422        |
| -16            | 0.15%        | 0.00%        | 0.76%         | -0.0137              | 0.9058        | -0.1956        | 0.1050        | 1.0332        | 1.3170        |
| -15            | 0.42%        | 0.09%        | 1.18%         | 0.0879               | 0.9762        | 1.1665         | 0.1318        | 1.0803        | 1.5803        |
| -14            | 0.41%        | 0.10%        | 1.59%         | 0.0694               | 1.1161        | 0.8051         | 0.1482        | 1.0546        | <b>1.8206</b> |
| -13            | 0.23%        | -0.20%       | 1.82%         | 0.0418               | 1.1469        | 0.4718         | 0.1534        | 1.1050        | <b>1.7986</b> |
| -12            | 0.77%        | 0.00%        | 2.60%         | 0.1650               | 1.0268        | <b>2.0824</b>  | 0.1996        | 1.1368        | <b>2.2752</b> |
| -11            | 0.04%        | 0.02%        | 2.64%         | 0.0318               | 1.0939        | 0.3772         | 0.1995        | 1.1698        | <b>2.2091</b> |
| -10            | 0.47%        | 0.14%        | 3.11%         | 0.1198               | 1.0862        | 1.4293         | 0.2263        | 1.2006        | <b>2.4422</b> |
| -9             | 1.68%        | 0.06%        | 4.79%         | 0.2288               | 1.4936        | <b>1.9850</b>  | 0.2827        | 1.2389        | <b>2.9568</b> |
| -8             | -0.52%       | -0.27%       | 4.28%         | -0.0499              | 1.0502        | -0.6153        | 0.2578        | 1.2342        | <b>2.7064</b> |
| -7             | 0.13%        | 0.00%        | 4.40%         | 0.0491               | 1.0562        | 0.6024         | 0.2616        | 1.2068        | <b>2.8080</b> |
| -6             | 0.94%        | 0.24%        | 5.35%         | 0.2341               | 1.0789        | <b>2.8116</b>  | 0.3131        | 1.2093        | <b>3.3549</b> |
| -5             | 1.01%        | 0.28%        | 6.35%         | 0.2422               | 1.1524        | <b>2.7227</b>  | 0.3637        | 1.1975        | <b>3.9353</b> |
| -4             | 0.13%        | -0.27%       | 6.49%         | 0.0786               | 1.0165        | 1.0021         | 0.3720        | 1.1995        | <b>4.0176</b> |
| -3             | 0.92%        | 0.03%        | 7.40%         | 0.2097               | 1.0952        | <b>2.4801</b>  | 0.4109        | 1.1816        | <b>4.5054</b> |
| -2             | 0.77%        | 0.14%        | 8.17%         | 0.1910               | 1.0433        | <b>2.3724</b>  | 0.4438        | 1.1688        | <b>4.9190</b> |
| -1             | 1.54%        | 0.96%        | 9.72%         | 0.4009               | 1.3918        | <b>3.7315</b>  | 0.5222        | 1.2022        | <b>5.6273</b> |
| <b>0</b>       | <b>1.79%</b> | <b>0.93%</b> | <b>11.50%</b> | <b>0.4106</b>        | <b>1.5953</b> | <b>3.3348</b>  | <b>0.5992</b> | <b>1.2261</b> | <b>6.3315</b> |
| 1              | 0.57%        | 0.03%        | 12.07%        | 0.1027               | 1.6957        | 0.7843         | 0.6073        | 1.2741        | <b>6.1753</b> |
| 2              | 0.07%        | -0.29%       | 12.14%        | 0.0198               | 1.3129        | 0.1954         | 0.5981        | 1.3036        | <b>5.9438</b> |
| 3              | -0.71%       | -0.32%       | 11.43%        | -0.1566              | 1.4062        | -1.4432        | 0.5535        | 1.3330        | <b>5.3797</b> |
| 4              | -0.49%       | -0.32%       | 10.94%        | -0.1431              | 1.0988        | <b>-1.6870</b> | 0.5137        | 1.3173        | <b>5.0522</b> |
| 5              | -0.75%       | -0.47%       | 10.20%        | -0.1475              | 0.8913        | <b>-2.1438</b> | 0.4748        | 1.3039        | <b>4.7177</b> |
| 6              | -0.11%       | -0.30%       | 10.08%        | -0.0083              | 0.8727        | -0.1232        | 0.4643        | 1.3109        | <b>4.5892</b> |
| 7              | -0.48%       | -0.07%       | 9.61%         | -0.0503              | 1.1837        | -0.5502        | 0.4465        | 1.3394        | <b>4.3187</b> |
| 8              | -0.20%       | -0.22%       | 9.40%         | -0.0277              | 1.1256        | -0.3183        | 0.4336        | 1.3398        | <b>4.1927</b> |
| 9              | 0.15%        | -0.20%       | 9.55%         | 0.0756               | 1.0473        | 0.9357         | 0.4401        | 1.3625        | <b>4.1848</b> |
| 10             | 0.83%        | 0.07%        | 10.38%        | 0.1376               | 1.2874        | 1.3850         | 0.4576        | 1.3791        | <b>4.2993</b> |
| 11             | 0.24%        | 0.04%        | 10.62%        | 0.0381               | 1.0231        | 0.4826         | 0.4572        | 1.4148        | <b>4.1866</b> |
| 12             | -0.40%       | -0.08%       | 10.22%        | -0.0863              | 1.4663        | -0.7625        | 0.4352        | 1.4801        | <b>3.8094</b> |
| 13             | -0.14%       | -0.09%       | 10.09%        | -0.0272              | 0.8918        | -0.3946        | 0.4241        | 1.4459        | <b>3.7997</b> |
| 14             | 0.03%        | 0.08%        | 10.12%        | 0.0227               | 0.7824        | 0.3757         | 0.4218        | 1.4380        | <b>3.8002</b> |
| 15             | 0.26%        | -0.13%       | 10.38%        | 0.0081               | 0.8734        | 0.1199         | 0.4173        | 1.4095        | <b>3.8353</b> |
| 16             | -0.27%       | -0.11%       | 10.11%        | -0.0892              | 0.8993        | -1.2854        | 0.3969        | 1.4273        | <b>3.6027</b> |
| 17             | -0.12%       | -0.18%       | 9.99%         | 0.0212               | 0.8773        | 0.3125         | 0.3951        | 1.4261        | <b>3.5892</b> |
| 18             | 0.16%        | -0.07%       | 10.15%        | 0.0373               | 0.8243        | 0.5867         | 0.3960        | 1.4229        | <b>3.6054</b> |
| 19             | -0.25%       | -0.22%       | 9.90%         | -0.0503              | 0.8514        | -0.7661        | 0.3830        | 1.4302        | <b>3.4696</b> |
| 20             | 0.41%        | -0.08%       | 10.31%        | 0.0999               | 0.7688        | <b>1.6830</b>  | 0.3939        | 1.4291        | <b>3.5711</b> |
| 21             | -0.40%       | -0.32%       | 9.91%         | -0.0683              | 0.7863        | -1.1259        | 0.3787        | 1.4140        | <b>3.4694</b> |
| 22             | -0.60%       | -0.51%       | 9.31%         | -0.1978              | 0.7672        | <b>-3.3398</b> | 0.3441        | 1.4115        | <b>3.1581</b> |
| 23             | -0.60%       | -0.26%       | 8.71%         | -0.1166              | 1.1274        | -1.3401        | 0.3226        | 1.4249        | <b>2.9328</b> |
| 24             | 0.45%        | 0.10%        | 9.15%         | 0.0984               | 0.9046        | 1.4086         | 0.3336        | 1.4060        | <b>3.0741</b> |
| 25             | -0.34%       | -0.37%       | 8.81%         | -0.1034              | 0.8052        | <b>-1.6644</b> | 0.3147        | 1.4095        | <b>2.8929</b> |
| 26             | 0.02%        | -0.17%       | 8.83%         | -0.0219              | 1.0548        | -0.2688        | 0.3082        | 1.3930        | <b>2.8662</b> |
| 27             | -0.44%       | -0.17%       | 8.39%         | -0.0244              | 1.1147        | -0.2833        | 0.3014        | 1.3816        | <b>2.8266</b> |
| 28             | -0.35%       | -0.18%       | 8.04%         | -0.0766              | 0.7893        | -1.2567        | 0.2874        | 1.3714        | <b>2.7149</b> |
| 29             | 0.12%        | 0.14%        | 8.16%         | 0.0333               | 0.8618        | 0.5007         | 0.2892        | 1.3636        | <b>2.7477</b> |
| 30             | 0.04%        | 0.13%        | 8.20%         | 0.0132               | 0.6999        | 0.2450         | 0.2882        | 1.3586        | <b>2.7485</b> |
| <b>-1 to 1</b> |              |              | <b>3.90%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.05981</b> | 0.5278        | 1.6293        | <b>4.1967</b> |

**Table-A 6.7 Market returns to Domestic Targets; FF-firms; (MM, 158); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.54%        | 0.16%        | 0.54%         | 0.2010               | 1.2948        | <b>1.9516</b>  | 0.2010        | 1.2948        | <b>1.9516</b> |
| -19            | 0.42%        | 0.14%        | 0.95%         | 0.1901               | 1.0003        | <b>2.3898</b>  | 0.2766        | 1.2072        | <b>2.8803</b> |
| -18            | 0.43%        | -0.07%       | 1.38%         | 0.1296               | 1.1806        | 1.3801         | 0.3007        | 1.1317        | <b>3.3397</b> |
| -17            | 0.38%        | 0.10%        | 1.76%         | 0.1263               | 1.1581        | 1.3713         | 0.3235        | 1.2860        | <b>3.1628</b> |
| -16            | 0.22%        | 0.08%        | 1.98%         | 0.0145               | 1.0101        | 0.1799         | 0.2958        | 1.2665        | <b>2.9367</b> |
| -15            | 0.42%        | 0.28%        | 2.39%         | 0.1299               | 1.0969        | 1.4892         | 0.3231        | 1.2837        | <b>3.1642</b> |
| -14            | 0.34%        | 0.16%        | 2.74%         | 0.1069               | 1.3524        | 0.9940         | 0.3396        | 1.2689        | <b>3.3643</b> |
| -13            | 0.42%        | -0.03%       | 3.16%         | 0.1128               | 1.3471        | 1.0532         | 0.3575        | 1.3125        | <b>3.4246</b> |
| -12            | 0.81%        | 0.12%        | 3.97%         | 0.2421               | 1.1695        | <b>2.6025</b>  | 0.4178        | 1.3661        | <b>3.8447</b> |
| -11            | 0.40%        | 0.24%        | 4.37%         | 0.1165               | 1.3067        | 1.1206         | 0.4332        | 1.4021        | <b>3.8839</b> |
| -10            | 0.68%        | 0.30%        | 5.05%         | 0.1797               | 1.3222        | <b>1.7090</b>  | 0.4672        | 1.4446        | <b>4.0660</b> |
| -9             | 0.96%        | 0.21%        | 6.01%         | 0.2600               | 1.3142        | <b>2.4875</b>  | 0.5224        | 1.4506        | <b>4.5271</b> |
| -8             | 0.12%        | -0.02%       | 6.13%         | 0.0368               | 1.1240        | 0.4121         | 0.5121        | 1.4620        | <b>4.4035</b> |
| -7             | 0.45%        | 0.43%        | 6.58%         | 0.1329               | 1.2008        | 1.3916         | 0.5290        | 1.4247        | <b>4.6680</b> |
| -6             | 1.05%        | 0.50%        | 7.63%         | 0.3822               | 1.4484        | <b>3.3171</b>  | 0.6097        | 1.4168        | <b>5.4104</b> |
| -5             | 1.30%        | 0.43%        | 8.93%         | 0.3457               | 1.3742        | <b>3.1630</b>  | 0.6768        | 1.4049        | <b>6.0563</b> |
| -4             | 0.45%        | 0.02%        | 9.38%         | 0.1560               | 1.1647        | <b>1.6841</b>  | 0.6944        | 1.4110        | <b>6.1872</b> |
| -3             | 0.86%        | 0.18%        | 10.25%        | 0.2520               | 1.2814        | <b>2.4722</b>  | 0.7343        | 1.3985        | <b>6.6006</b> |
| -2             | 0.87%        | 0.34%        | 11.11%        | 0.2662               | 1.2562        | <b>2.6638</b>  | 0.7758        | 1.3865        | <b>7.0340</b> |
| -1             | 1.75%        | 1.23%        | 12.86%        | 0.5469               | 1.6472        | <b>4.1740</b>  | 0.8784        | 1.4584        | <b>7.5721</b> |
| <b>0</b>       | <b>1.95%</b> | <b>1.14%</b> | <b>14.81%</b> | <b>0.5129</b>        | <b>1.8761</b> | <b>3.4369</b>  | <b>0.9691</b> | <b>1.5053</b> | <b>8.0938</b> |
| 1              | 0.83%        | 0.39%        | 15.64%        | 0.1204               | 2.1868        | 0.6924         | 0.9725        | 1.5642        | <b>7.8163</b> |
| 2              | 0.35%        | -0.14%       | 16.00%        | 0.0644               | 1.5312        | 0.5288         | 0.9646        | 1.5939        | <b>7.6080</b> |
| 3              | -0.45%       | -0.13%       | 15.54%        | -0.1400              | 1.6493        | -1.0674        | 0.9157        | 1.6465        | <b>6.9917</b> |
| 4              | -0.40%       | -0.16%       | 15.14%        | -0.1002              | 1.3389        | -0.9410        | 0.8772        | 1.6157        | <b>6.8250</b> |
| 5              | -0.43%       | -0.24%       | 14.71%        | -0.1013              | 0.9836        | -1.2948        | 0.8403        | 1.6016        | <b>6.5954</b> |
| 6              | 0.11%        | -0.03%       | 14.82%        | 0.0535               | 1.0097        | 0.6658         | 0.8348        | 1.5996        | <b>6.5614</b> |
| 7              | 0.13%        | 0.10%        | 14.96%        | 0.0975               | 1.2123        | 1.0112         | 0.8382        | 1.6211        | <b>6.5006</b> |
| 8              | 0.06%        | -0.13%       | 15.01%        | 0.0534               | 1.3061        | 0.5137         | 0.8336        | 1.6290        | <b>6.4328</b> |
| 9              | 0.42%        | 0.03%        | 15.43%        | 0.1791               | 1.2387        | <b>1.8177</b>  | 0.8522        | 1.6567        | <b>6.4673</b> |
| 10             | 0.31%        | 0.33%        | 15.74%        | 0.1015               | 0.9873        | 1.2927         | 0.8566        | 1.6781        | <b>6.4174</b> |
| 11             | 0.55%        | 0.17%        | 16.29%        | 0.1590               | 1.2057        | <b>1.6582</b>  | 0.8712        | 1.7119        | <b>6.3982</b> |
| 12             | -0.11%       | 0.10%        | 16.18%        | -0.0150              | 1.7379        | -0.1084        | 0.8553        | 1.8042        | <b>5.9599</b> |
| 13             | 0.05%        | -0.01%       | 16.23%        | -0.0139              | 1.0724        | -0.1630        | 0.8403        | 1.7696        | <b>5.9697</b> |
| 14             | 0.08%        | 0.15%        | 16.31%        | 0.0433               | 0.8826        | 0.6172         | 0.8355        | 1.7660        | <b>5.9478</b> |
| 15             | 0.53%        | 0.05%        | 16.84%        | 0.0986               | 1.0587        | 1.1714         | 0.8403        | 1.7391        | <b>6.0740</b> |
| 16             | -0.10%       | 0.07%        | 16.74%        | -0.0211              | 1.1669        | -0.2272        | 0.8254        | 1.7579        | <b>5.9025</b> |
| 17             | 0.22%        | 0.06%        | 16.96%        | 0.1056               | 1.0758        | 1.2339         | 0.8316        | 1.7658        | <b>5.9202</b> |
| 18             | 0.44%        | 0.02%        | 17.40%        | 0.0743               | 1.0548        | 0.8850         | 0.8327        | 1.7528        | <b>5.9725</b> |
| 19             | -0.07%       | -0.02%       | 17.33%        | 0.0099               | 1.0689        | 0.1164         | 0.8238        | 1.7589        | <b>5.8882</b> |
| 20             | 0.61%        | 0.14%        | 17.94%        | 0.2077               | 0.9767        | <b>2.6732</b>  | 0.8461        | 1.7490        | <b>6.0818</b> |
| 21             | -0.29%       | -0.17%       | 17.65%        | -0.0020              | 0.9232        | -0.0272        | 0.8357        | 1.7443        | <b>6.0230</b> |
| 22             | -0.48%       | -0.35%       | 17.17%        | -0.1952              | 0.9241        | <b>-2.6551</b> | 0.7962        | 1.7523        | <b>5.7119</b> |
| 23             | 0.08%        | -0.04%       | 17.26%        | 0.0166               | 0.9612        | 0.2166         | 0.7896        | 1.7576        | <b>5.6474</b> |
| 24             | 0.70%        | 0.18%        | 17.95%        | 0.2063               | 1.0130        | <b>2.5605</b>  | 0.8115        | 1.7324        | <b>5.8887</b> |
| 25             | 0.00%        | -0.15%       | 17.95%        | -0.0203              | 0.9121        | -0.2800        | 0.7996        | 1.7314        | <b>5.8061</b> |
| 26             | -0.11%       | -0.11%       | 17.85%        | -0.0014              | 0.8144        | -0.0209        | 0.7909        | 1.7138        | <b>5.8017</b> |
| 27             | 0.21%        | -0.01%       | 18.05%        | 0.0586               | 0.9522        | 0.7736         | 0.7910        | 1.7000        | <b>5.8499</b> |
| 28             | -0.11%       | -0.05%       | 17.95%        | -0.0308              | 0.9369        | -0.4127        | 0.7785        | 1.6864        | <b>5.8039</b> |
| 29             | 0.29%        | 0.26%        | 18.24%        | 0.0998               | 1.0153        | 1.2359         | 0.7848        | 1.6698        | <b>5.9091</b> |
| 30             | 0.25%        | 0.29%        | 18.49%        | 0.0727               | 0.7893        | 1.1582         | 0.7873        | 1.6645        | <b>5.9461</b> |
| <b>-1 to 1</b> |              |              | <b>4.53%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.05943</b> | 0.6814        | 2.0221        | <b>4.2364</b> |

**Table-A 6.8 SW-1 returns to Domestic Targets; All-firms; (OLS, 170); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.08%        | -0.04%       | 0.08%         | 0.0811               | 1.0715        | 1.0109         | 0.0811        | 1.0715        | 1.0109        |
| -19            | 0.07%        | 0.09%        | 0.15%         | 0.0398               | 0.8822        | 0.6023         | 0.0855        | 1.0054        | 1.1355        |
| -18            | 0.29%        | -0.18%       | 0.45%         | 0.0517               | 1.0459        | 0.6600         | 0.0996        | 0.9862        | 1.3492        |
| -17            | 0.17%        | 0.03%        | 0.62%         | 0.0794               | 1.0108        | 1.0497         | 0.1260        | 1.0720        | 1.5699        |
| -16            | 0.14%        | 0.07%        | 0.76%         | -0.0354              | 0.9236        | -0.5121        | 0.0968        | 1.0485        | 1.2338        |
| -15            | 0.39%        | 0.08%        | 1.15%         | 0.0801               | 0.9984        | 1.0723         | 0.1211        | 1.1100        | 1.4577        |
| -14            | 0.42%        | 0.16%        | 1.57%         | 0.0829               | 1.1469        | 0.9660         | 0.1435        | 1.0980        | <b>1.7457</b> |
| -13            | 0.14%        | -0.21%       | 1.72%         | 0.0288               | 1.1350        | 0.3396         | 0.1444        | 1.1174        | <b>1.7265</b> |
| -12            | 0.92%        | 0.14%        | 2.63%         | 0.1990               | 1.0223        | <b>2.6003</b>  | 0.2025        | 1.1377        | <b>2.3776</b> |
| -11            | 0.00%        | 0.05%        | 2.63%         | 0.0110               | 1.1212        | 0.1311         | 0.1956        | 1.1536        | <b>2.2648</b> |
| -10            | 0.54%        | 0.17%        | 3.17%         | 0.1404               | 1.1241        | <b>1.6690</b>  | 0.2288        | 1.1979        | <b>2.5517</b> |
| -9             | 1.57%        | 0.11%        | 4.74%         | 0.2041               | 1.4733        | <b>1.8509</b>  | 0.2780        | 1.2231        | <b>3.0364</b> |
| -8             | -0.59%       | -0.34%       | 4.16%         | -0.0783              | 1.0598        | -0.9873        | 0.2454        | 1.2088        | <b>2.7118</b> |
| -7             | 0.14%        | 0.02%        | 4.29%         | 0.0557               | 1.0737        | 0.6926         | 0.2513        | 1.1820        | <b>2.8405</b> |
| -6             | 0.95%        | 0.34%        | 5.24%         | 0.2414               | 1.0731        | <b>3.0054</b>  | 0.3051        | 1.1786        | <b>3.4586</b> |
| -5             | 1.00%        | 0.25%        | 6.24%         | 0.2396               | 1.1405        | <b>2.8069</b>  | 0.3553        | 1.1617        | <b>4.0865</b> |
| -4             | 0.08%        | -0.24%       | 6.33%         | 0.0561               | 1.0220        | 0.7326         | 0.3583        | 1.1651        | <b>4.1087</b> |
| -3             | 0.88%        | 0.06%        | 7.20%         | 0.2006               | 1.1003        | <b>2.4359</b>  | 0.3955        | 1.1512        | <b>4.5900</b> |
| -2             | 0.73%        | 0.09%        | 7.93%         | 0.1763               | 1.0381        | <b>2.2682</b>  | 0.4254        | 1.1327        | <b>5.0173</b> |
| -1             | 1.43%        | 0.83%        | 9.37%         | 0.3799               | 1.3713        | <b>3.7008</b>  | 0.4996        | 1.1665        | <b>5.7216</b> |
| <b>0</b>       | <b>1.77%</b> | <b>0.86%</b> | <b>11.13%</b> | <b>0.4193</b>        | <b>1.6309</b> | <b>3.4345</b>  | <b>0.5790</b> | <b>1.1973</b> | <b>6.4607</b> |
| 1              | 0.95%        | 0.09%        | 12.09%        | 0.1960               | 1.7817        | 1.4700         | 0.6075        | 1.2404        | <b>6.5433</b> |
| 2              | 0.11%        | -0.28%       | 12.19%        | 0.0266               | 1.2962        | 0.2737         | 0.5997        | 1.2730        | <b>6.2937</b> |
| 3              | -0.57%       | -0.36%       | 11.62%        | -0.1267              | 1.4174        | -1.1944        | 0.5612        | 1.2964        | <b>5.7833</b> |
| 4              | -0.53%       | -0.33%       | 11.09%        | -0.1413              | 1.0727        | <b>-1.7600</b> | 0.5216        | 1.2751        | <b>5.4648</b> |
| 5              | -0.71%       | -0.47%       | 10.38%        | -0.1418              | 0.8786        | <b>-2.1560</b> | 0.4837        | 1.2631        | <b>5.1156</b> |
| 6              | -0.05%       | -0.29%       | 10.33%        | 0.0103               | 0.8776        | 0.1571         | 0.4766        | 1.2708        | <b>5.0103</b> |
| 7              | -0.47%       | -0.12%       | 9.86%         | -0.0482              | 1.1693        | -0.5512        | 0.4589        | 1.3001        | <b>4.7155</b> |
| 8              | -0.22%       | -0.28%       | 9.63%         | -0.0288              | 1.1136        | -0.3453        | 0.4456        | 1.3001        | <b>4.5787</b> |
| 9              | 0.09%        | -0.14%       | 9.72%         | 0.0718               | 1.0456        | 0.9171         | 0.4512        | 1.3219        | <b>4.5598</b> |
| 10             | 0.77%        | 0.13%        | 10.50%        | 0.1220               | 1.2704        | 1.2829         | 0.4658        | 1.3362        | <b>4.6568</b> |
| 11             | 0.25%        | -0.04%       | 10.75%        | 0.0450               | 1.0124        | 0.5938         | 0.4664        | 1.3698        | <b>4.5485</b> |
| 12             | -0.35%       | -0.16%       | 10.40%        | -0.0731              | 1.4431        | -0.6767        | 0.4466        | 1.4322        | <b>4.1654</b> |
| 13             | -0.12%       | -0.07%       | 10.28%        | -0.0327              | 0.8667        | -0.5034        | 0.4343        | 1.4038        | <b>4.1335</b> |
| 14             | 0.00%        | 0.09%        | 10.28%        | 0.0119               | 0.7944        | 0.1994         | 0.4301        | 1.3980        | <b>4.1098</b> |
| 15             | 0.21%        | -0.15%       | 10.49%        | 0.0013               | 0.8797        | 0.0203         | 0.4243        | 1.3713        | <b>4.1336</b> |
| 16             | -0.30%       | -0.10%       | 10.19%        | -0.0973              | 0.8807        | -1.4755        | 0.4025        | 1.3865        | <b>3.8784</b> |
| 17             | -0.04%       | -0.17%       | 10.14%        | 0.0416               | 0.8631        | 0.6438         | 0.4040        | 1.3864        | <b>3.8924</b> |
| 18             | 0.16%        | 0.03%        | 10.30%        | 0.0269               | 0.8279        | 0.4339         | 0.4030        | 1.3808        | <b>3.8994</b> |
| 19             | -0.23%       | -0.19%       | 10.07%        | -0.0561              | 0.8397        | -0.8926        | 0.3891        | 1.3864        | <b>3.7494</b> |
| 20             | 0.46%        | -0.01%       | 10.53%        | 0.1098               | 0.7562        | <b>1.9398</b>  | 0.4015        | 1.3884        | <b>3.8630</b> |
| 21             | -0.40%       | -0.34%       | 10.13%        | -0.0780              | 0.7782        | -1.3387        | 0.3846        | 1.3750        | <b>3.7371</b> |
| 22             | -0.56%       | -0.44%       | 9.57%         | -0.1846              | 0.7741        | <b>-3.1863</b> | 0.3520        | 1.3720        | <b>3.4272</b> |
| 23             | -0.63%       | -0.29%       | 8.94%         | -0.1216              | 1.1269        | -1.4417        | 0.3296        | 1.3816        | <b>3.1872</b> |
| 24             | 0.37%        | 0.03%        | 9.30%         | 0.0700               | 0.8834        | 1.0594         | 0.3364        | 1.3605        | <b>3.3031</b> |
| 25             | -0.19%       | -0.30%       | 9.12%         | -0.0645              | 0.8026        | -1.0729        | 0.3232        | 1.3662        | <b>3.1604</b> |
| 26             | 0.08%        | -0.12%       | 9.19%         | 0.0003               | 1.0455        | 0.0039         | 0.3198        | 1.3477        | <b>3.1698</b> |
| 27             | -0.43%       | -0.19%       | 8.77%         | -0.0267              | 1.1068        | -0.3227        | 0.3126        | 1.3341        | <b>3.1301</b> |
| 28             | -0.35%       | -0.20%       | 8.42%         | -0.0813              | 0.7882        | -1.3786        | 0.2978        | 1.3223        | <b>3.0082</b> |
| 29             | 0.05%        | 0.11%        | 8.47%         | 0.0152               | 0.8616        | 0.2361         | 0.2969        | 1.3128        | <b>3.0216</b> |
| 30             | 0.05%        | 0.03%        | 8.52%         | 0.0133               | 0.6930        | 0.2570         | 0.2959        | 1.3093        | <b>3.0187</b> |
| <b>-1 to 1</b> |              |              | <b>4.15%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06424</b> | 0.5746        | 1.6136        | <b>4.7571</b> |



**Table-A 6.9 SW-2 returns to Domestic Targets; All-firms; (OLS, 170); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.05%        | -0.07%       | 0.05%         | 0.0821               | 1.0604        | 1.0422         | 0.0821        | 1.0604        | 1.0422        |
| -19            | 0.12%        | 0.09%        | 0.18%         | 0.0480               | 0.8873        | 0.7290         | 0.0920        | 1.0060        | 1.2314        |
| -18            | 0.32%        | -0.21%       | 0.50%         | 0.0487               | 1.0438        | 0.6288         | 0.1033        | 0.9840        | 1.4131        |
| -17            | 0.23%        | -0.03%       | 0.73%         | 0.0917               | 1.0037        | 1.2304         | 0.1353        | 1.0652        | <b>1.7102</b> |
| -16            | 0.20%        | 0.01%        | 0.93%         | -0.0254              | 0.9131        | -0.3748        | 0.1096        | 1.0416        | 1.4173        |
| -15            | 0.41%        | 0.08%        | 1.35%         | 0.0858               | 1.0053        | 1.1489         | 0.1351        | 1.1020        | 1.6507        |
| -14            | 0.35%        | 0.13%        | 1.69%         | 0.0692               | 1.1389        | 0.8185         | 0.1512        | 1.0846        | <b>1.8777</b> |
| -13            | 0.11%        | -0.17%       | 1.80%         | 0.0217               | 1.1203        | 0.2606         | 0.1491        | 1.1045        | <b>1.8182</b> |
| -12            | 0.92%        | 0.22%        | 2.72%         | 0.2006               | 1.0230        | <b>2.6399</b>  | 0.2075        | 1.1242        | <b>2.4850</b> |
| -11            | -0.10%       | -0.03%       | 2.62%         | -0.0091              | 1.1226        | -0.1092        | 0.1940        | 1.1394        | <b>2.2919</b> |
| -10            | 0.51%        | 0.18%        | 3.13%         | 0.1333               | 1.1180        | 1.6048         | 0.2251        | 1.1806        | <b>2.5673</b> |
| -9             | 1.54%        | -0.02%       | 4.67%         | 0.1922               | 1.4651        | <b>1.7662</b>  | 0.2710        | 1.2043        | <b>3.0298</b> |
| -8             | -0.62%       | -0.40%       | 4.06%         | -0.0877              | 1.0670        | -1.1073        | 0.2360        | 1.1893        | <b>2.6723</b> |
| -7             | 0.15%        | -0.02%       | 4.21%         | 0.0641               | 1.0728        | 0.8045         | 0.2446        | 1.1627        | <b>2.8324</b> |
| -6             | 0.95%        | 0.42%        | 5.16%         | 0.2409               | 1.0694        | <b>3.0324</b>  | 0.2985        | 1.1624        | <b>3.4573</b> |
| -5             | 0.99%        | 0.21%        | 6.15%         | 0.2325               | 1.1452        | <b>2.7332</b>  | 0.3471        | 1.1510        | <b>4.0604</b> |
| -4             | 0.09%        | -0.14%       | 6.24%         | 0.0554               | 1.0172        | 0.7336         | 0.3502        | 1.1557        | <b>4.0798</b> |
| -3             | 0.83%        | -0.01%       | 7.07%         | 0.1876               | 1.0869        | <b>2.3237</b>  | 0.3845        | 1.1443        | <b>4.5247</b> |
| -2             | 0.69%        | 0.07%        | 7.76%         | 0.1607               | 1.0437        | <b>2.0736</b>  | 0.4112        | 1.1214        | <b>4.9367</b> |
| -1             | 1.44%        | 0.85%        | 9.20%         | 0.3816               | 1.3637        | <b>3.7679</b>  | 0.4861        | 1.1539        | <b>5.6717</b> |
| <b>0</b>       | <b>1.80%</b> | <b>1.03%</b> | <b>11.00%</b> | <b>0.4216</b>        | <b>1.6094</b> | <b>3.5267</b>  | <b>0.5663</b> | <b>1.1892</b> | <b>6.4123</b> |
| 1              | 0.94%        | 0.02%        | 11.94%        | 0.1932               | 1.7766        | 1.4642         | 0.5945        | 1.2325        | <b>6.4950</b> |
| 2              | 0.14%        | -0.18%       | 12.08%        | 0.0286               | 1.3025        | 0.2960         | 0.5874        | 1.2646        | <b>6.2543</b> |
| 3              | -0.55%       | -0.30%       | 11.53%        | -0.1210              | 1.4178        | -1.1488        | 0.5504        | 1.2895        | <b>5.7468</b> |
| 4              | -0.52%       | -0.37%       | 11.01%        | -0.1386              | 1.0752        | <b>-1.7353</b> | 0.5115        | 1.2692        | <b>5.4265</b> |
| 5              | -0.75%       | -0.44%       | 10.26%        | -0.1478              | 0.8913        | <b>-2.2326</b> | 0.4726        | 1.2581        | <b>5.0580</b> |
| 6              | -0.09%       | -0.25%       | 10.17%        | 0.0008               | 0.8771        | 0.0129         | 0.4639        | 1.2663        | <b>4.9329</b> |
| 7              | -0.53%       | -0.10%       | 9.64%         | -0.0564              | 1.1712        | -0.6487        | 0.4449        | 1.2962        | <b>4.6216</b> |
| 8              | -0.30%       | -0.22%       | 9.34%         | -0.0427              | 1.1176        | -0.5141        | 0.4292        | 1.2999        | <b>4.4463</b> |
| 9              | 0.08%        | -0.10%       | 9.42%         | 0.0699               | 1.0534        | 0.8931         | 0.4348        | 1.3248        | <b>4.4188</b> |
| 10             | 0.70%        | 0.03%        | 10.12%        | 0.1117               | 1.2589        | 1.1951         | 0.4478        | 1.3391        | <b>4.5025</b> |
| 11             | 0.24%        | 0.00%        | 10.36%        | 0.0438               | 1.0193        | 0.5785         | 0.4485        | 1.3738        | <b>4.3955</b> |
| 12             | -0.36%       | -0.12%       | 10.00%        | -0.0747              | 1.4428        | -0.6972        | 0.4286        | 1.4378        | <b>4.0138</b> |
| 13             | -0.14%       | -0.12%       | 9.86%         | -0.0366              | 0.8749        | -0.5626        | 0.4160        | 1.4131        | <b>3.9638</b> |
| 14             | -0.03%       | 0.07%        | 9.83%         | 0.0093               | 0.7950        | 0.1573         | 0.4116        | 1.4104        | <b>3.9291</b> |
| 15             | 0.17%        | -0.04%       | 9.99%         | -0.0042              | 0.8825        | -0.0647        | 0.4051        | 1.3814        | <b>3.9489</b> |
| 16             | -0.29%       | -0.07%       | 9.71%         | -0.0941              | 0.8760        | -1.4462        | 0.3841        | 1.3947        | <b>3.7084</b> |
| 17             | -0.06%       | -0.07%       | 9.65%         | 0.0416               | 0.8598        | 0.6520         | 0.3858        | 1.3935        | <b>3.7279</b> |
| 18             | 0.11%        | 0.02%        | 9.75%         | 0.0127               | 0.8521        | 0.2000         | 0.3829        | 1.3889        | <b>3.7116</b> |
| 19             | -0.26%       | -0.22%       | 9.49%         | -0.0585              | 0.8421        | -0.9360        | 0.3688        | 1.3943        | <b>3.5612</b> |
| 20             | 0.39%        | 0.01%        | 9.88%         | 0.0993               | 0.7638        | <b>1.7505</b>  | 0.3798        | 1.3939        | <b>3.6684</b> |
| 21             | -0.35%       | -0.27%       | 9.53%         | -0.0744              | 0.7794        | -1.2857        | 0.3637        | 1.3803        | <b>3.5481</b> |
| 22             | -0.57%       | -0.51%       | 8.95%         | -0.1845              | 0.7717        | <b>-3.2183</b> | 0.3314        | 1.3758        | <b>3.2428</b> |
| 23             | -0.63%       | -0.27%       | 8.32%         | -0.1282              | 1.1397        | -1.5141        | 0.3082        | 1.3859        | <b>2.9947</b> |
| 24             | 0.35%        | 0.09%        | 8.68%         | 0.0660               | 0.8711        | 1.0199         | 0.3146        | 1.3640        | <b>3.1060</b> |
| 25             | -0.22%       | -0.32%       | 8.46%         | -0.0736              | 0.7956        | -1.2463        | 0.3003        | 1.3663        | <b>2.9597</b> |
| 26             | 0.05%        | -0.09%       | 8.51%         | -0.0010              | 1.0414        | -0.0133        | 0.2970        | 1.3447        | <b>2.9737</b> |
| 27             | -0.45%       | -0.22%       | 8.06%         | -0.0360              | 1.1111        | -0.4364        | 0.2887        | 1.3312        | <b>2.9197</b> |
| 28             | -0.33%       | -0.34%       | 7.73%         | -0.0772              | 0.7985        | -1.3011        | 0.2747        | 1.3229        | <b>2.7957</b> |
| 29             | 0.06%        | 0.00%        | 7.79%         | 0.0142               | 0.8600        | 0.2217         | 0.2739        | 1.3108        | <b>2.8137</b> |
| 30             | 0.03%        | -0.04%       | 7.82%         | 0.0062               | 0.6900        | 0.1203         | 0.2721        | 1.3075        | <b>2.8019</b> |
| <b>-1 to 1</b> |              |              | <b>4.19%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06382</b> | 0.5752        | 1.5995        | <b>4.8423</b> |

**Table-A 6.10 SW-3 returns to Domestic Targets; All-firms; (SW-3, 170); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.08%        | -0.09%       | 0.08%         | 0.0867               | 1.0403        | 1.1316         | 0.0867        | 1.0403        | 1.1316        |
| -19            | 0.12%        | 0.08%        | 0.21%         | 0.0441               | 0.8814        | 0.6802         | 0.0925        | 0.9876        | 1.2721        |
| -18            | 0.30%        | -0.18%       | 0.51%         | 0.0456               | 1.0317        | 0.5997         | 0.1018        | 0.9689        | 1.4275        |
| -17            | 0.23%        | -0.10%       | 0.74%         | 0.0919               | 0.9995        | 1.2492         | 0.1342        | 1.0494        | <b>1.7362</b> |
| -16            | 0.22%        | 0.07%        | 0.97%         | -0.0242              | 0.9004        | -0.3657        | 0.1092        | 1.0254        | 1.4458        |
| -15            | 0.44%        | -0.07%       | 1.41%         | 0.0888               | 1.0123        | 1.1908         | 0.1359        | 1.0858        | <b>1.6996</b> |
| -14            | 0.34%        | 0.05%        | 1.75%         | 0.0690               | 1.1327        | 0.8270         | 0.1519        | 1.0717        | <b>1.9246</b> |
| -13            | 0.05%        | -0.26%       | 1.80%         | 0.0082               | 1.1285        | 0.0982         | 0.1450        | 1.0945        | <b>1.7985</b> |
| -12            | 0.98%        | 0.26%        | 2.78%         | 0.2110               | 1.0212        | <b>2.8057</b>  | 0.2070        | 1.1089        | <b>2.5349</b> |
| -11            | -0.10%       | -0.15%       | 2.68%         | -0.0139              | 1.1293        | -0.1667        | 0.1920        | 1.1287        | <b>2.3100</b> |
| -10            | 0.51%        | 0.15%        | 3.19%         | 0.1331               | 1.1104        | 1.6279         | 0.2232        | 1.1715        | <b>2.5872</b> |
| -9             | 1.54%        | -0.09%       | 4.74%         | 0.1918               | 1.4613        | <b>1.7827</b>  | 0.2691        | 1.1973        | <b>3.0518</b> |
| -8             | -0.63%       | -0.43%       | 4.11%         | -0.0904              | 1.0710        | -1.1466        | 0.2334        | 1.1841        | <b>2.6770</b> |
| -7             | 0.16%        | 0.05%        | 4.27%         | 0.0643               | 1.0731        | 0.8131         | 0.2421        | 1.1597        | <b>2.8351</b> |
| -6             | 0.97%        | 0.45%        | 5.24%         | 0.2377               | 1.0721        | <b>3.0105</b>  | 0.2953        | 1.1598        | <b>3.4572</b> |
| -5             | 0.96%        | 0.25%        | 6.20%         | 0.2241               | 1.1422        | <b>2.6641</b>  | 0.3419        | 1.1482        | <b>4.0439</b> |
| -4             | 0.13%        | -0.11%       | 6.33%         | 0.0604               | 1.0037        | 0.8171         | 0.3464        | 1.1544        | <b>4.0742</b> |
| -3             | 0.82%        | 0.09%        | 7.15%         | 0.1844               | 1.0779        | <b>2.3229</b>  | 0.3801        | 1.1411        | <b>4.5228</b> |
| -2             | 0.65%        | 0.02%        | 7.80%         | 0.1448               | 1.0505        | <b>1.8715</b>  | 0.4031        | 1.1200        | <b>4.8877</b> |
| -1             | 1.46%        | 0.92%        | 9.26%         | 0.3812               | 1.3551        | <b>3.8201</b>  | 0.4782        | 1.1526        | <b>5.6334</b> |
| <b>0</b>       | <b>1.85%</b> | <b>1.23%</b> | <b>11.11%</b> | <b>0.4350</b>        | <b>1.5887</b> | <b>3.7183</b>  | <b>0.5616</b> | <b>1.1852</b> | <b>6.4340</b> |
| 1              | 0.97%        | 0.04%        | 12.09%        | 0.1963               | 1.7636        | 1.5116         | 0.5905        | 1.2263        | <b>6.5391</b> |
| 2              | 0.16%        | -0.25%       | 12.25%        | 0.0275               | 1.2968        | 0.2877         | 0.5833        | 1.2557        | <b>6.3073</b> |
| 3              | -0.58%       | -0.25%       | 11.66%        | -0.1246              | 1.4247        | -1.1874        | 0.5455        | 1.2818        | <b>5.7795</b> |
| 4              | -0.53%       | -0.39%       | 11.14%        | -0.1368              | 1.0625        | <b>-1.7479</b> | 0.5072        | 1.2592        | <b>5.4693</b> |
| 5              | -0.76%       | -0.49%       | 10.38%        | -0.1514              | 0.8933        | <b>-2.3020</b> | 0.4676        | 1.2467        | <b>5.0934</b> |
| 6              | -0.11%       | -0.35%       | 10.26%        | -0.0040              | 0.8806        | -0.0617        | 0.4581        | 1.2540        | <b>4.9611</b> |
| 7              | -0.56%       | -0.16%       | 9.71%         | -0.0633              | 1.1564        | -0.7434        | 0.4379        | 1.2837        | <b>4.6322</b> |
| 8              | -0.34%       | -0.26%       | 9.37%         | -0.0458              | 1.1305        | -0.5503        | 0.4218        | 1.2890        | <b>4.4433</b> |
| 9              | 0.11%        | 0.01%        | 9.48%         | 0.0788               | 1.0417        | 1.0274         | 0.4291        | 1.3105        | <b>4.4462</b> |
| 10             | 0.72%        | 0.00%        | 10.20%        | 0.1159               | 1.2633        | 1.2457         | 0.4429        | 1.3266        | <b>4.5337</b> |
| 11             | 0.23%        | -0.02%       | 10.43%        | 0.0495               | 1.0281        | 0.6543         | 0.4447        | 1.3640        | <b>4.4272</b> |
| 12             | -0.44%       | -0.15%       | 9.99%         | -0.0912              | 1.4563        | -0.8501        | 0.4220        | 1.4286        | <b>4.0115</b> |
| 13             | -0.16%       | -0.25%       | 9.83%         | -0.0447              | 0.8690        | -0.6978        | 0.4081        | 1.4047        | <b>3.9454</b> |
| 14             | -0.07%       | -0.01%       | 9.76%         | -0.0008              | 0.7954        | -0.0129        | 0.4021        | 1.4050        | <b>3.8864</b> |
| 15             | 0.17%        | -0.19%       | 9.93%         | 0.0007               | 0.8684        | 0.0105         | 0.3966        | 1.3760        | <b>3.9141</b> |
| 16             | -0.28%       | -0.08%       | 9.65%         | -0.0930              | 0.8642        | -1.4617        | 0.3759        | 1.3865        | <b>3.6818</b> |
| 17             | -0.08%       | -0.13%       | 9.58%         | 0.0374               | 0.8606        | 0.5897         | 0.3770        | 1.3833        | <b>3.7010</b> |
| 18             | 0.11%        | 0.07%        | 9.68%         | 0.0083               | 0.8552        | 0.1317         | 0.3735        | 1.3763        | <b>3.6850</b> |
| 19             | -0.24%       | -0.29%       | 9.44%         | -0.0572              | 0.8355        | -0.9292        | 0.3597        | 1.3829        | <b>3.5323</b> |
| 20             | 0.39%        | 0.01%        | 9.83%         | 0.0980               | 0.7583        | <b>1.7540</b>  | 0.3706        | 1.3824        | <b>3.6406</b> |
| 21             | -0.34%       | -0.27%       | 9.48%         | -0.0770              | 0.7786        | -1.3426        | 0.3543        | 1.3693        | <b>3.5136</b> |
| 22             | -0.59%       | -0.50%       | 8.89%         | -0.1891              | 0.7761        | <b>-3.3083</b> | 0.3213        | 1.3626        | <b>3.2023</b> |
| 23             | -0.57%       | -0.30%       | 8.32%         | -0.1133              | 1.1336        | -1.3567        | 0.3006        | 1.3682        | <b>2.9831</b> |
| 24             | 0.31%        | 0.15%        | 8.63%         | 0.0518               | 0.8624        | 0.8154         | 0.3049        | 1.3448        | <b>3.0791</b> |
| 25             | -0.20%       | -0.33%       | 8.43%         | -0.0691              | 0.7939        | -1.1824        | 0.2914        | 1.3452        | <b>2.9417</b> |
| 26             | 0.05%        | -0.16%       | 8.48%         | 0.0008               | 1.0328        | 0.0110         | 0.2884        | 1.3241        | <b>2.9577</b> |
| 27             | -0.37%       | -0.19%       | 8.10%         | -0.0271              | 1.1012        | -0.3344        | 0.2815        | 1.3071        | <b>2.9242</b> |
| 28             | -0.31%       | -0.23%       | 7.80%         | -0.0710              | 0.7862        | -1.2271        | 0.2684        | 1.3003        | <b>2.8035</b> |
| 29             | 0.03%        | -0.06%       | 7.83%         | 0.0115               | 0.8543        | 0.1823         | 0.2674        | 1.2880        | <b>2.8188</b> |
| 30             | 0.05%        | -0.01%       | 7.88%         | 0.0083               | 0.6917        | 0.1637         | 0.2659        | 1.2859        | <b>2.8079</b> |
| <b>-1 to 1</b> |              |              | <b>4.28%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06325</b> | 0.5846        | 1.5765        | <b>5.0353</b> |

**Table-A 6.11 Market returns to Domestic Targets; Non-BGrp; (MM, 100); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.52%        | 0.34%        | 0.52%         | 0.2388               | 1.4232        | <b>1.6807</b>  | 0.2388        | 1.4232        | <b>1.6807</b> |
| -19            | 0.39%        | 0.32%        | 0.91%         | 0.1751               | 0.9255        | <b>1.8946</b>  | 0.2927        | 1.2930        | <b>2.2670</b> |
| -18            | 0.19%        | -0.10%       | 1.10%         | 0.0883               | 1.3549        | 0.6526         | 0.2900        | 1.2776        | <b>2.2729</b> |
| -17            | 0.44%        | 0.32%        | 1.54%         | 0.1999               | 1.2518        | 1.5992         | 0.3511        | 1.4664        | <b>2.3976</b> |
| -16            | 0.20%        | 0.06%        | 1.73%         | 0.0244               | 0.9031        | 0.2701         | 0.3249        | 1.4294        | <b>2.2762</b> |
| -15            | 0.21%        | 0.20%        | 1.94%         | 0.0948               | 1.1201        | 0.8475         | 0.3353        | 1.4223        | <b>2.3608</b> |
| -14            | 0.39%        | 0.52%        | 2.34%         | 0.1290               | 1.4057        | 0.9189         | 0.3592        | 1.3786        | <b>2.6091</b> |
| -13            | 0.32%        | -0.22%       | 2.65%         | 0.0490               | 1.3527        | 0.3627         | 0.3533        | 1.4009        | <b>2.5255</b> |
| -12            | 0.97%        | 0.34%        | 3.62%         | 0.3189               | 1.2080        | <b>2.6439</b>  | 0.4394        | 1.4896        | <b>2.9540</b> |
| -11            | 0.29%        | 0.27%        | 3.91%         | 0.0562               | 1.1943        | 0.4716         | 0.4346        | 1.4892        | <b>2.9227</b> |
| -10            | 0.66%        | 0.50%        | 4.57%         | 0.1727               | 1.1745        | 1.4725         | 0.4665        | 1.4715        | <b>3.1746</b> |
| -9             | 1.38%        | 0.32%        | 5.95%         | 0.3518               | 1.4099        | <b>2.4987</b>  | 0.5481        | 1.4958        | <b>3.6700</b> |
| -8             | -0.05%       | -0.13%       | 5.89%         | -0.0097              | 1.0985        | -0.0880        | 0.5240        | 1.4872        | <b>3.5283</b> |
| -7             | 0.51%        | 0.58%        | 6.41%         | 0.1660               | 1.2250        | 1.3570         | 0.5493        | 1.4663        | <b>3.7516</b> |
| -6             | 1.01%        | 0.42%        | 7.41%         | 0.3370               | 1.3359        | <b>2.5261</b>  | 0.6176        | 1.4271        | <b>4.3344</b> |
| -5             | 1.39%        | 0.55%        | 8.80%         | 0.3460               | 1.4887        | <b>2.3277</b>  | 0.6845        | 1.4082        | <b>4.8681</b> |
| -4             | 0.36%        | -0.08%       | 9.16%         | 0.1833               | 1.1827        | 1.5518         | 0.7085        | 1.4331        | <b>4.9514</b> |
| -3             | 1.33%        | 0.31%        | 10.49%        | 0.4168               | 1.2381        | <b>3.3711</b>  | 0.7868        | 1.4068        | <b>5.6011</b> |
| -2             | 1.07%        | 0.57%        | 11.56%        | 0.3691               | 1.2219        | <b>3.0255</b>  | 0.8505        | 1.4008        | <b>6.0806</b> |
| -1             | 2.11%        | 1.32%        | 13.67%        | 0.6566               | 1.7519        | <b>3.7533</b>  | 0.9758        | 1.4651        | <b>6.6701</b> |
| <b>0</b>       | <b>2.37%</b> | <b>1.14%</b> | <b>16.04%</b> | <b>0.6324</b>        | <b>1.9566</b> | <b>3.2369</b>  | <b>1.0903</b> | <b>1.5026</b> | <b>7.2667</b> |
| 1              | 0.94%        | 0.08%        | 16.99%        | 0.1449               | 1.7306        | 0.8386         | 1.0961        | 1.5483        | <b>7.0898</b> |
| 2              | -0.21%       | -0.35%       | 16.78%        | -0.0915              | 1.1681        | -0.7844        | 1.0529        | 1.5227        | <b>6.9253</b> |
| 3              | -0.79%       | -0.27%       | 15.99%        | -0.1792              | 1.7852        | -1.0054        | 0.9942        | 1.6131        | <b>6.1723</b> |
| 4              | -0.72%       | -0.81%       | 15.27%        | -0.1812              | 1.4171        | -1.2805        | 0.9379        | 1.5908        | <b>5.9044</b> |
| 5              | -0.63%       | -0.29%       | 14.64%        | -0.1087              | 1.0301        | -1.0569        | 0.8983        | 1.5860        | <b>5.6724</b> |
| 6              | 0.00%        | -0.02%       | 14.64%        | 0.0419               | 1.0704        | 0.3918         | 0.8896        | 1.5863        | <b>5.6163</b> |
| 7              | -0.11%       | -0.09%       | 14.53%        | 0.0230               | 1.3691        | 0.1682         | 0.8779        | 1.6540        | <b>5.3158</b> |
| 8              | -0.13%       | -0.46%       | 14.40%        | 0.0264               | 1.4705        | 0.1800         | 0.8675        | 1.6812        | <b>5.1681</b> |
| 9              | 0.00%        | -0.05%       | 14.40%        | 0.0838               | 1.2969        | 0.6474         | 0.8683        | 1.7392        | <b>4.9996</b> |
| 10             | -0.21%       | 0.19%        | 14.19%        | -0.0208              | 0.9207        | -0.2257        | 0.8504        | 1.7659        | <b>4.8229</b> |
| 11             | 0.16%        | 0.05%        | 14.35%        | 0.1066               | 1.2073        | 0.8839         | 0.8559        | 1.8073        | <b>4.7426</b> |
| 12             | -0.32%       | 0.30%        | 14.03%        | -0.0680              | 2.0553        | -0.3315        | 0.8310        | 1.9342        | <b>4.3025</b> |
| 13             | 0.12%        | -0.28%       | 14.15%        | -0.0243              | 1.0574        | -0.2302        | 0.8145        | 1.8794        | <b>4.3400</b> |
| 14             | 0.05%        | 0.16%        | 14.20%        | 0.0363               | 0.7754        | 0.4685         | 0.8089        | 1.8692        | <b>4.3338</b> |
| 15             | 0.70%        | -0.03%       | 14.90%        | 0.1347               | 1.1944        | 1.1292         | 0.8200        | 1.8298        | <b>4.4882</b> |
| 16             | -0.50%       | -0.02%       | 14.40%        | -0.1238              | 1.3130        | -0.9444        | 0.7885        | 1.8615        | <b>4.2422</b> |
| 17             | 0.28%        | 0.09%        | 14.68%        | 0.1159               | 1.0652        | 1.0895         | 0.7969        | 1.8543        | <b>4.3038</b> |
| 18             | 0.65%        | 0.06%        | 15.33%        | 0.1120               | 1.1440        | 0.9801         | 0.8045        | 1.8391        | <b>4.3810</b> |
| 19             | 0.44%        | 0.14%        | 15.78%        | 0.1783               | 1.1040        | 1.6172         | 0.8226        | 1.8443        | <b>4.4668</b> |
| 20             | 0.72%        | 0.23%        | 16.50%        | 0.2149               | 1.0140        | <b>2.1222</b>  | 0.8460        | 1.8296        | <b>4.6310</b> |
| 21             | -0.53%       | -0.20%       | 15.97%        | -0.0718              | 0.8901        | -0.8078        | 0.8248        | 1.8361        | <b>4.4989</b> |
| 22             | -0.24%       | -0.28%       | 15.73%        | -0.1221              | 0.8753        | -1.3974        | 0.7966        | 1.8407        | <b>4.3340</b> |
| 23             | 0.20%        | -0.01%       | 15.92%        | 0.0589               | 1.0080        | 0.5851         | 0.7963        | 1.8545        | <b>4.3004</b> |
| 24             | 0.99%        | 0.35%        | 16.91%        | 0.2756               | 1.1514        | <b>2.3977</b>  | 0.8285        | 1.8355        | <b>4.5207</b> |
| 25             | -0.02%       | -0.01%       | 16.89%        | -0.0246              | 0.9343        | -0.2632        | 0.8158        | 1.8443        | <b>4.4302</b> |
| 26             | 0.11%        | -0.11%       | 17.00%        | 0.0144               | 0.8486        | 0.1695         | 0.8092        | 1.8188        | <b>4.4559</b> |
| 27             | 0.30%        | 0.09%        | 17.30%        | 0.0650               | 1.0825        | 0.6011         | 0.8101        | 1.8023        | <b>4.5017</b> |
| 28             | 0.04%        | 0.04%        | 17.34%        | -0.0255              | 0.9365        | -0.2726        | 0.7982        | 1.7925        | <b>4.4595</b> |
| 29             | 0.43%        | 0.24%        | 17.77%        | 0.1186               | 1.0889        | 1.0908         | 0.8069        | 1.7698        | <b>4.5663</b> |
| 30             | 0.31%        | 0.40%        | 18.08%        | 0.0840               | 0.8126        | 1.0356         | 0.8107        | 1.7572        | <b>4.6205</b> |
| <b>-1 to 1</b> |              |              | <b>5.43%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.05995</b> | 0.8278        | 1.9442        | <b>4.2644</b> |



**Table-A 6.12 Market returns to Domestic Targets; BGrp; (MM, 65); VWI**

| Days           | AAR          | Median       | CAAR          | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|---------------|----------------------|----------------|---------------|---------------|---------------|
| -20            | 0.51%        | -0.27%       | 0.51%         | 0.1304        | 1.1113               | 0.9381         | 0.1304        | 1.1113        | 0.9381        |
| -19            | 0.32%        | -0.13%       | 0.82%         | 0.1593        | 1.1646               | 1.0931         | 0.2048        | 1.1752        | 1.3932        |
| -18            | 0.66%        | -0.06%       | 1.48%         | 0.1741        | 0.9916               | 1.4036         | 0.2678        | 0.9412        | <b>2.2743</b> |
| -17            | 0.63%        | -0.16%       | 2.12%         | 0.1491        | 1.1822               | 1.0084         | 0.3065        | 1.0633        | <b>2.3040</b> |
| -16            | 0.15%        | 0.15%        | 2.27%         | -0.0692       | 1.2385               | -0.4465        | 0.2432        | 1.0704        | <b>1.8161</b> |
| -15            | 0.70%        | 0.34%        | 2.97%         | 0.1750        | 1.1159               | 1.2540         | 0.2934        | 1.1957        | <b>1.9619</b> |
| -14            | 0.41%        | 0.10%        | 3.38%         | 0.1442        | 1.3447               | 0.8575         | 0.3262        | 1.2803        | <b>2.0368</b> |
| -13            | 0.45%        | 0.28%        | 3.83%         | 0.1926        | 1.3497               | 1.1406         | 0.3732        | 1.2693        | <b>2.3505</b> |
| -12            | 0.83%        | 0.10%        | 4.66%         | 0.2051        | 1.1078               | 1.4803         | 0.4203        | 1.2396        | <b>2.7102</b> |
| -11            | 0.50%        | 0.09%        | 5.16%         | 0.1739        | 1.5118               | 0.9197         | 0.4537        | 1.2777        | <b>2.8384</b> |
| -10            | 0.96%        | 0.17%        | 6.12%         | 0.2715        | 1.6317               | 1.3303         | 0.5144        | 1.4286        | <b>2.8785</b> |
| -9             | 0.21%        | -0.04%       | 6.33%         | 0.0797        | 1.1460               | 0.5560         | 0.5155        | 1.3952        | <b>2.9539</b> |
| -8             | 0.20%        | 0.04%        | 6.53%         | 0.0540        | 1.1575               | 0.3727         | 0.5103        | 1.4177        | <b>2.8774</b> |
| -7             | 0.32%        | -0.14%       | 6.86%         | 0.0974        | 1.2157               | 0.6405         | 0.5178        | 1.3529        | <b>3.0594</b> |
| -6             | 1.14%        | 1.00%        | 7.99%         | 0.4653        | 1.5907               | <b>2.3385</b>  | 0.6204        | 1.3779        | <b>3.5989</b> |
| -5             | 1.03%        | 0.41%        | 9.02%         | 0.3359        | 1.1644               | <b>2.3061</b>  | 0.6846        | 1.3729        | <b>3.9864</b> |
| -4             | 0.42%        | 0.07%        | 9.44%         | 0.0392        | 1.1882               | 0.2638         | 0.6737        | 1.3574        | <b>3.9675</b> |
| -3             | 0.02%        | -0.13%       | 9.46%         | -0.0454       | 1.3416               | -0.2703        | 0.6440        | 1.3671        | <b>3.7658</b> |
| -2             | 0.59%        | 0.28%        | 10.05%        | 0.1171        | 1.2681               | 0.7379         | 0.6537        | 1.3395        | <b>3.9013</b> |
| -1             | 0.86%        | 0.40%        | 10.91%        | 0.3000        | 1.4422               | 1.6630         | 0.7042        | 1.4251        | <b>3.9503</b> |
| <b>0</b>       | <b>1.39%</b> | <b>1.24%</b> | <b>12.30%</b> | <b>0.3839</b> | <b>1.8755</b>        | <b>1.6362</b>  | <b>0.7710</b> | <b>1.4932</b> | <b>4.1278</b> |
| 1              | 1.50%        | 0.75%        | 13.80%        | 0.3728        | 3.0734               | 0.9697         | 0.8328        | 1.5658        | <b>4.2516</b> |
| 2              | 1.08%        | 0.38%        | 14.88%        | 0.2649        | 1.9130               | 1.1069         | 0.8697        | 1.6889        | <b>4.1165</b> |
| 3              | 0.46%        | 0.38%        | 15.34%        | 0.0504        | 1.4994               | 0.2689         | 0.8617        | 1.6944        | <b>4.0653</b> |
| 4              | 0.05%        | 0.15%        | 15.39%        | 0.0253        | 1.1590               | 0.1745         | 0.8493        | 1.6456        | <b>4.1259</b> |
| 5              | -0.04%       | -0.17%       | 15.35%        | -0.0665       | 0.8642               | -0.6147        | 0.8198        | 1.6191        | <b>4.0476</b> |
| 6              | 0.40%        | -0.04%       | 15.76%        | 0.1142        | 0.9381               | 0.9731         | 0.8265        | 1.6209        | <b>4.0759</b> |
| 7              | 0.42%        | 0.22%        | 16.17%        | 0.1803        | 0.8666               | 1.6636         | 0.8457        | 1.5690        | <b>4.3086</b> |
| 8              | 0.30%        | 0.23%        | 16.47%        | 0.0939        | 0.9359               | 0.8024         | 0.8484        | 1.5471        | <b>4.3837</b> |
| 9              | 0.90%        | 0.37%        | 17.37%        | 0.2896        | 1.1548               | <b>2.0047</b>  | 0.8870        | 1.5251        | <b>4.6494</b> |
| 10             | 0.99%        | 0.43%        | 18.36%        | 0.2494        | 1.0336               | <b>1.9286</b>  | 0.9174        | 1.5290        | <b>4.7961</b> |
| 11             | 1.13%        | 0.32%        | 19.49%        | 0.2480        | 1.1779               | <b>1.6828</b>  | 0.9468        | 1.5426        | <b>4.9062</b> |
| 12             | 0.36%        | 0.05%        | 19.85%        | 0.1220        | 1.0044               | 0.9710         | 0.9535        | 1.5749        | <b>4.8399</b> |
| 13             | -0.09%       | 0.26%        | 19.77%        | -0.0178       | 1.0617               | -0.1341        | 0.9364        | 1.5758        | <b>4.7500</b> |
| 14             | 0.25%        | 0.15%        | 20.02%        | 0.0902        | 1.0860               | 0.6637         | 0.9381        | 1.5837        | <b>4.7352</b> |
| 15             | 0.22%        | 0.07%        | 20.24%        | 0.0491        | 0.8257               | 0.4750         | 0.9332        | 1.5913        | <b>4.6879</b> |
| 16             | 0.46%        | 0.13%        | 20.71%        | 0.1174        | 0.8069               | 1.1633         | 0.9398        | 1.5770        | <b>4.7639</b> |
| 17             | 0.16%        | 0.21%        | 20.87%        | 0.0976        | 1.0824               | 0.7210         | 0.9432        | 1.6062        | <b>4.6941</b> |
| 18             | -0.10%       | -0.07%       | 20.77%        | -0.0521       | 0.9428               | -0.4422        | 0.9227        | 1.5817        | <b>4.6631</b> |
| 19             | -0.92%       | -0.36%       | 19.84%        | -0.2849       | 0.9081               | <b>-2.5077</b> | 0.8660        | 1.5888        | <b>4.3574</b> |
| 20             | 0.54%        | 0.02%        | 20.39%        | 0.2289        | 0.9069               | <b>2.0177</b>  | 0.8911        | 1.5943        | <b>4.4682</b> |
| 21             | 0.11%        | -0.02%       | 20.50%        | 0.0919        | 0.9563               | 0.7684         | 0.8946        | 1.5685        | <b>4.5596</b> |
| 22             | -0.69%       | -0.34%       | 19.81%        | -0.2506       | 0.9731               | <b>-2.0586</b> | 0.8460        | 1.5808        | <b>4.2780</b> |
| 23             | -0.24%       | -0.14%       | 19.57%        | -0.0876       | 0.9248               | -0.7570        | 0.8231        | 1.5612        | <b>4.2145</b> |
| 24             | 0.13%        | 0.15%        | 19.70%        | 0.0407        | 0.7910               | 0.4111         | 0.8200        | 1.5177        | <b>4.3189</b> |
| 25             | 0.23%        | -0.27%       | 19.92%        | 0.0567        | 0.8883               | 0.5101         | 0.8194        | 1.5018        | <b>4.3612</b> |
| 26             | -0.29%       | 0.15%        | 19.63%        | 0.0322        | 0.7579               | 0.3400         | 0.8153        | 1.4987        | <b>4.3488</b> |
| 27             | -0.18%       | -0.15%       | 19.45%        | -0.0295       | 0.8737               | -0.2696        | 0.8025        | 1.4810        | <b>4.3317</b> |
| 28             | -0.39%       | -0.19%       | 19.06%        | -0.0597       | 0.9263               | -0.5150        | 0.7857        | 1.4567        | <b>4.3119</b> |
| 29             | -0.02%       | -0.03%       | 19.03%        | 0.0291        | 0.8834               | 0.2631         | 0.7820        | 1.4577        | <b>4.2883</b> |
| 30             | 0.06%        | -0.05%       | 19.09%        | 0.0229        | 0.7853               | 0.2335         | 0.7775        | 1.4705        | <b>4.2263</b> |
| <b>-1 to 1</b> |              |              | <b>3.75%</b>  |               | <b>StdDev(AAR-0)</b> | <b>0.06354</b> | 0.6101        | 2.1456        | <b>2.2730</b> |

**Table-A 6.13 Market returns to Domestic Targets; Non-BGrp (OLS, 104); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.12%       | 0.13%        | -0.12%        | 0.0753               | 1.1580        | 0.6808         | 0.0753        | 1.1580        | 0.6808        |
| -19            | 0.05%        | 0.09%        | -0.07%        | 0.0340               | 0.8022        | 0.4436         | 0.0773        | 1.0070        | 0.8034        |
| -18            | 0.20%        | -0.40%       | 0.13%         | 0.0358               | 1.1340        | 0.3306         | 0.0838        | 1.0778        | 0.8137        |
| -17            | 0.00%        | 0.03%        | 0.13%         | 0.0914               | 1.0530        | 0.9083         | 0.1183        | 1.1599        | 1.0671        |
| -16            | -0.05%       | -0.14%       | 0.08%         | -0.0456              | 0.8087        | -0.5902        | 0.0854        | 1.1372        | 0.7858        |
| -15            | 0.26%        | 0.00%        | 0.34%         | 0.0576               | 1.0180        | 0.5920         | 0.1015        | 1.1672        | 0.9097        |
| -14            | 0.44%        | 0.39%        | 0.79%         | 0.0932               | 1.1966        | 0.8153         | 0.1292        | 1.1167        | 1.2105        |
| -13            | 0.14%        | -0.33%       | 0.92%         | -0.0145              | 1.2019        | -0.1263        | 0.1157        | 1.1699        | 1.0350        |
| -12            | 0.99%        | 0.17%        | 1.91%         | 0.2263               | 1.0631        | <b>2.2273</b>  | 0.1845        | 1.2305        | 1.5692        |
| -11            | -0.21%       | -0.11%       | 1.70%         | -0.0279              | 1.0217        | -0.2853        | 0.1663        | 1.2358        | 1.4077        |
| -10            | 0.39%        | 0.14%        | 2.10%         | 0.0927               | 0.9797        | 0.9905         | 0.1865        | 1.2116        | 1.6105        |
| -9             | 2.43%        | 0.21%        | 4.53%         | 0.3201               | 1.7035        | <b>1.9662</b>  | 0.2710        | 1.2698        | <b>2.2326</b> |
| -8             | -0.93%       | -0.30%       | 3.60%         | -0.0948              | 1.0667        | -0.9298        | 0.2340        | 1.2415        | <b>1.9723</b> |
| -7             | 0.13%        | 0.23%        | 3.73%         | 0.0645               | 1.0889        | 0.6202         | 0.2428        | 1.2252        | <b>2.0732</b> |
| -6             | 0.90%        | 0.15%        | 4.63%         | 0.2057               | 1.1123        | <b>1.9350</b>  | 0.2877        | 1.1967        | <b>2.5150</b> |
| -5             | 1.10%        | 0.22%        | 5.73%         | 0.2438               | 1.2405        | <b>2.0565</b>  | 0.3395        | 1.1891        | <b>2.9871</b> |
| -4             | -0.08%       | -0.41%       | 5.64%         | 0.0694               | 1.0323        | 0.7037         | 0.3462        | 1.2035        | <b>3.0097</b> |
| -3             | 1.36%        | 0.22%        | 7.01%         | 0.3219               | 1.0962        | <b>3.0724</b>  | 0.4123        | 1.1751        | <b>3.6711</b> |
| -2             | 1.00%        | 0.15%        | 8.01%         | 0.2505               | 1.0398        | <b>2.5204</b>  | 0.4588        | 1.1620        | <b>4.1307</b> |
| -1             | 1.75%        | 1.08%        | 9.76%         | 0.4765               | 1.4853        | <b>3.3563</b>  | 0.5537        | 1.1855        | <b>4.8867</b> |
| <b>0</b>       | <b>2.22%</b> | <b>0.99%</b> | <b>11.98%</b> | <b>0.4997</b>        | <b>1.6575</b> | <b>3.1544</b>  | <b>0.6494</b> | <b>1.2173</b> | <b>5.5816</b> |
| 1              | 0.61%        | -0.17%       | 12.59%        | 0.0788               | 1.4745        | 0.5592         | 0.6513        | 1.2634        | <b>5.3933</b> |
| 2              | -0.52%       | -0.75%       | 12.07%        | -0.1293              | 1.0149        | -1.3327        | 0.6100        | 1.2388        | <b>5.1520</b> |
| 3              | -1.08%       | -0.55%       | 10.99%        | -0.1992              | 1.5218        | -1.3694        | 0.5565        | 1.2923        | <b>4.5055</b> |
| 4              | -0.74%       | -1.14%       | 10.25%        | -0.1917              | 1.1817        | <b>-1.6973</b> | 0.5069        | 1.2856        | <b>4.1255</b> |
| 5              | -1.04%       | -0.75%       | 9.21%         | -0.1780              | 0.9374        | <b>-1.9869</b> | 0.4622        | 1.2791        | <b>3.7804</b> |
| 6              | -0.25%       | -0.34%       | 8.96%         | -0.0244              | 0.9215        | -0.2773        | 0.4488        | 1.2921        | <b>3.6344</b> |
| 7              | -0.96%       | -0.34%       | 8.01%         | -0.1374              | 1.3867        | -1.0363        | 0.4148        | 1.3601        | <b>3.1908</b> |
| 8              | -0.38%       | -0.62%       | 7.62%         | -0.0658              | 1.2792        | -0.5381        | 0.3953        | 1.3800        | <b>2.9974</b> |
| 9              | -0.34%       | -0.30%       | 7.28%         | -0.0086              | 1.0891        | -0.0827        | 0.3871        | 1.4193        | <b>2.8538</b> |
| 10             | 0.06%        | -0.10%       | 7.34%         | 0.0117               | 1.2194        | 0.1000         | 0.3829        | 1.4172        | <b>2.8270</b> |
| 11             | -0.18%       | -0.35%       | 7.16%         | -0.0053              | 1.0393        | -0.0537        | 0.3760        | 1.4571        | <b>2.6995</b> |
| 12             | -0.62%       | -0.09%       | 6.54%         | -0.1541              | 1.7222        | -0.9363        | 0.3434        | 1.5478        | <b>2.3212</b> |
| 13             | -0.06%       | -0.48%       | 6.48%         | -0.0428              | 0.8668        | -0.5164        | 0.3310        | 1.4981        | <b>2.3114</b> |
| 14             | 0.00%        | 0.05%        | 6.48%         | 0.0051               | 0.7425        | 0.0714         | 0.3271        | 1.4849        | <b>2.3045</b> |
| 15             | 0.42%        | -0.17%       | 6.90%         | 0.0345               | 0.9652        | 0.3736         | 0.3282        | 1.4442        | <b>2.3779</b> |
| 16             | -0.67%       | -0.19%       | 6.23%         | -0.1773              | 0.9770        | <b>-1.8984</b> | 0.2946        | 1.4724        | <b>2.0936</b> |
| 17             | -0.12%       | -0.21%       | 6.11%         | 0.0074               | 0.8735        | 0.0891         | 0.2919        | 1.4573        | <b>2.0959</b> |
| 18             | 0.30%        | -0.09%       | 6.40%         | 0.0747               | 0.8720        | 0.8965         | 0.3001        | 1.4549        | <b>2.1583</b> |
| 19             | 0.26%        | -0.04%       | 6.66%         | 0.0838               | 0.8495        | 1.0323         | 0.3096        | 1.4676        | <b>2.2073</b> |
| 20             | 0.46%        | 0.11%        | 7.13%         | 0.1047               | 0.7970        | 1.3747         | 0.3222        | 1.4668        | <b>2.2980</b> |
| 21             | -0.67%       | -0.40%       | 6.46%         | -0.1472              | 0.7551        | <b>-2.0402</b> | 0.2956        | 1.4557        | <b>2.1245</b> |
| 22             | -0.40%       | -0.38%       | 6.05%         | -0.1437              | 0.7215        | <b>-2.0844</b> | 0.2702        | 1.4489        | <b>1.9512</b> |
| 23             | -0.74%       | -0.29%       | 5.31%         | -0.1072              | 1.2938        | -0.8665        | 0.2510        | 1.4716        | <b>1.7843</b> |
| 24             | 0.67%        | 0.10%        | 5.98%         | 0.1373               | 1.0274        | 1.3986         | 0.2686        | 1.4619        | <b>1.9225</b> |
| 25             | -0.44%       | -0.29%       | 5.54%         | -0.1162              | 0.8455        | -1.4377        | 0.2486        | 1.4752        | <b>1.7629</b> |
| 26             | 0.45%        | -0.17%       | 5.99%         | 0.0251               | 1.2335        | 0.2130         | 0.2496        | 1.4575        | <b>1.7915</b> |
| 27             | -0.70%       | -0.18%       | 5.29%         | -0.0397              | 1.3287        | -0.3123        | 0.2412        | 1.4420        | <b>1.7503</b> |
| 28             | -0.24%       | -0.11%       | 5.05%         | -0.0769              | 0.8050        | -0.9993        | 0.2278        | 1.4370        | 1.6583        |
| 29             | 0.29%        | 0.15%        | 5.34%         | 0.0500               | 0.9169        | 0.5710         | 0.2326        | 1.4257        | <b>1.7066</b> |
| 30             | 0.00%        | 0.16%        | 5.34%         | 0.0167               | 0.7321        | 0.2384         | 0.2326        | 1.4125        | <b>1.7230</b> |
| <b>-1 to 1</b> |              |              | <b>4.58%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06139</b> | 0.6091        | 1.6398        | <b>3.8863</b> |

**Table-A 6.14 Market returns to Domestic Targets; BGroup; (OLS, 66); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.33%        | -0.48%       | 0.33%         | 0.0710               | 0.9674        | 0.6128         | 0.0710        | 0.9674        | 0.6128        |
| -19            | 0.16%        | -0.07%       | 0.50%         | 0.0649               | 1.0028        | 0.5405         | 0.0961        | 1.0364        | 0.7743        |
| -18            | 0.47%        | -0.20%       | 0.97%         | 0.0888               | 0.8651        | 0.8574         | 0.1298        | 0.8249        | 1.3134        |
| -17            | 0.48%        | -0.20%       | 1.45%         | 0.0896               | 0.9829        | 0.7607         | 0.1572        | 0.9280        | 1.4139        |
| -16            | 0.37%        | 0.15%        | 1.82%         | -0.0294              | 1.1251        | -0.2178        | 0.1275        | 0.9391        | 1.1330        |
| -15            | 0.62%        | 0.20%        | 2.44%         | 0.1234               | 0.9590        | 1.0746         | 0.1667        | 1.0609        | 1.3121        |
| -14            | 0.50%        | -0.04%       | 2.95%         | 0.1015               | 1.0740        | 0.7892         | 0.1927        | 1.1300        | 1.4240        |
| -13            | 0.28%        | -0.10%       | 3.23%         | 0.1272               | 1.0393        | 1.0216         | 0.2253        | 1.0960        | <b>1.7158</b> |
| -12            | 0.66%        | -0.03%       | 3.89%         | 0.1304               | 0.9598        | 1.1338         | 0.2558        | 1.0644        | <b>2.0066</b> |
| -11            | 0.40%        | 0.20%        | 4.28%         | 0.0995               | 1.2460        | 0.6665         | 0.2742        | 1.0864        | <b>2.1067</b> |
| -10            | 0.83%        | 0.09%        | 5.11%         | 0.2365               | 1.3468        | 1.4658         | 0.3327        | 1.2279        | <b>2.2619</b> |
| -9             | 0.30%        | -0.29%       | 5.41%         | 0.0494               | 1.0275        | 0.4010         | 0.3328        | 1.2228        | <b>2.2720</b> |
| -8             | 0.02%        | -0.18%       | 5.42%         | -0.0255              | 1.0155        | -0.2100        | 0.3127        | 1.2338        | <b>2.1153</b> |
| -7             | 0.13%        | -0.59%       | 5.55%         | 0.0381               | 1.0614        | 0.2995         | 0.3115        | 1.1881        | <b>2.1884</b> |
| -6             | 1.00%        | 0.86%        | 6.55%         | 0.2962               | 1.0196        | <b>2.4247</b>  | 0.3774        | 1.2179        | <b>2.5866</b> |
| -5             | 0.82%        | 0.33%        | 7.38%         | 0.2447               | 0.9741        | <b>2.0971</b>  | 0.4266        | 1.1896        | <b>2.9933</b> |
| -4             | 0.32%        | -0.05%       | 7.69%         | 0.0401               | 1.0318        | 0.3247         | 0.4236        | 1.1774        | <b>3.0029</b> |
| -3             | 0.06%        | -0.31%       | 7.75%         | -0.0012              | 1.0827        | -0.0096        | 0.4113        | 1.1815        | <b>2.9063</b> |
| -2             | 0.43%        | 0.16%        | 8.18%         | 0.0992               | 1.0212        | 0.8109         | 0.4231        | 1.1639        | <b>3.0346</b> |
| -1             | 0.92%        | 0.41%        | 9.10%         | 0.2282               | 1.1935        | 1.5964         | 0.4634        | 1.2133        | <b>3.1886</b> |
| <b>0</b>       | <b>1.20%</b> | <b>1.10%</b> | <b>10.30%</b> | <b>0.3249</b>        | <b>1.5789</b> | <b>1.7178</b>  | <b>0.5232</b> | <b>1.2312</b> | <b>3.5472</b> |
| 1              | 1.37%        | 0.39%        | 11.66%        | 0.3510               | 2.1958        | 1.3344         | 0.5860        | 1.2801        | <b>3.8213</b> |
| 2              | 0.89%        | 0.05%        | 12.55%        | 0.2217               | 1.6284        | 1.1364         | 0.6193        | 1.3931        | <b>3.7112</b> |
| 3              | 0.29%        | 0.00%        | 12.84%        | 0.0059               | 1.2387        | 0.0400         | 0.6075        | 1.3932        | <b>3.6400</b> |
| 4              | -0.14%       | -0.20%       | 12.70%        | -0.0618              | 0.9204        | -0.5601        | 0.5829        | 1.3555        | <b>3.5896</b> |
| 5              | -0.19%       | -0.27%       | 12.52%        | -0.0770              | 0.7702        | -0.8343        | 0.5564        | 1.3320        | <b>3.4875</b> |
| 6              | 0.24%        | -0.19%       | 12.76%        | 0.0503               | 0.8009        | 0.5243         | 0.5557        | 1.3321        | <b>3.4826</b> |
| 7              | 0.25%        | 0.13%        | 13.01%        | 0.0754               | 0.6780        | 0.9285         | 0.5600        | 1.2952        | <b>3.6090</b> |
| 8              | 0.08%        | 0.14%        | 13.09%        | 0.0400               | 0.7614        | 0.4382         | 0.5576        | 1.2622        | <b>3.6880</b> |
| 9              | 0.77%        | 0.25%        | 13.86%        | 0.1893               | 0.9766        | 1.6178         | 0.5828        | 1.2535        | <b>3.8814</b> |
| 10             | 1.87%        | 0.26%        | 15.73%        | 0.2961               | 1.3237        | <b>1.8672</b>  | 0.6265        | 1.2922        | <b>4.0474</b> |
| 11             | 0.91%        | 0.30%        | 16.63%        | 0.1136               | 0.9698        | 0.9777         | 0.6367        | 1.3123        | <b>4.0503</b> |
| 12             | 0.13%        | 0.01%        | 16.77%        | 0.0687               | 0.8552        | 0.6704         | 0.6390        | 1.3342        | <b>3.9980</b> |
| 13             | -0.28%       | 0.22%        | 16.48%        | -0.0214              | 0.9062        | -0.1971        | 0.6258        | 1.3251        | <b>3.9425</b> |
| 14             | 0.18%        | 0.10%        | 16.66%        | 0.0662               | 0.8856        | 0.6244         | 0.6280        | 1.3233        | <b>3.9620</b> |
| 15             | -0.03%       | -0.02%       | 16.64%        | -0.0217              | 0.7393        | -0.2447        | 0.6156        | 1.3269        | <b>3.8731</b> |
| 16             | 0.30%        | -0.13%       | 16.93%        | 0.0336               | 0.6968        | 0.4030         | 0.6128        | 1.3166        | <b>3.8853</b> |
| 17             | -0.02%       | -0.09%       | 16.91%        | 0.0643               | 0.8704        | 0.6168         | 0.6151        | 1.3369        | <b>3.8409</b> |
| 18             | -0.22%       | -0.06%       | 16.68%        | -0.0698              | 0.7603        | -0.7662        | 0.5960        | 1.3228        | <b>3.7610</b> |
| 19             | -1.09%       | -0.57%       | 15.59%        | -0.2914              | 0.7798        | <b>-3.1192</b> | 0.5424        | 1.3259        | <b>3.4150</b> |
| 20             | 0.41%        | -0.19%       | 16.01%        | 0.1157               | 0.7117        | 1.3568         | 0.5538        | 1.3297        | <b>3.4770</b> |
| 21             | 0.05%        | -0.02%       | 16.06%        | 0.0447               | 0.8160        | 0.4571         | 0.5541        | 1.3040        | <b>3.5472</b> |
| 22             | -0.74%       | -0.49%       | 15.32%        | -0.2324              | 0.8253        | <b>-2.3508</b> | 0.5122        | 1.3116        | <b>3.2599</b> |
| 23             | -0.46%       | -0.20%       | 14.85%        | -0.1474              | 0.7789        | -1.5793        | 0.4841        | 1.3010        | <b>3.1063</b> |
| 24             | 0.02%        | 0.05%        | 14.87%        | 0.0020               | 0.6712        | 0.0246         | 0.4790        | 1.2642        | <b>3.1629</b> |
| 25             | 0.04%        | -0.33%       | 14.91%        | -0.0214              | 0.7497        | -0.2379        | 0.4706        | 1.2533        | <b>3.1346</b> |
| 26             | -0.54%       | -0.08%       | 14.37%        | -0.0480              | 0.6392        | -0.6267        | 0.4586        | 1.2403        | <b>3.0863</b> |
| 27             | -0.19%       | -0.17%       | 14.19%        | -0.0425              | 0.6577        | -0.5398        | 0.4476        | 1.2283        | <b>3.0422</b> |
| 28             | -0.55%       | -0.34%       | 13.64%        | -0.0905              | 0.7444        | -1.0147        | 0.4301        | 1.2061        | <b>2.9770</b> |
| 29             | -0.24%       | -0.10%       | 13.39%        | -0.0204              | 0.7539        | -0.2254        | 0.4229        | 1.2085        | <b>2.9213</b> |
| 30             | 0.04%        | -0.08%       | 13.43%        | -0.0130              | 0.6625        | -0.1636        | 0.4169        | 1.2214        | <b>2.8496</b> |
| <b>-1 to 1</b> |              |              | <b>3.48%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06358</b> | 0.5220        | 1.6192        | <b>2.6912</b> |

**Table-A 6.15 Market returns to Domestic Targets; Unrelated; (MM, 112); VWI**

| Days           | AAR          | Median       | CAAR          | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|---------------|----------------------|----------------|---------------|---------------|---------------|
| -20            | 0.68%        | 0.26%        | 0.68%         | 0.2514        | 1.4136               | <b>1.8313</b>  | 0.2514        | 1.4136        | <b>1.8313</b> |
| -19            | 0.51%        | 0.16%        | 1.19%         | 0.2076        | 1.0061               | <b>2.1245</b>  | 0.3245        | 1.3254        | <b>2.5213</b> |
| -18            | 0.59%        | -0.10%       | 1.78%         | 0.1683        | 1.3169               | 1.3157         | 0.3621        | 1.2184        | <b>3.0604</b> |
| -17            | 0.67%        | 0.10%        | 2.46%         | 0.2492        | 1.2354               | <b>2.0774</b>  | 0.4382        | 1.4120        | <b>3.1960</b> |
| -16            | 0.49%        | 0.22%        | 2.94%         | 0.0525        | 1.1320               | 0.4773         | 0.4154        | 1.4022        | <b>3.0508</b> |
| -15            | 0.89%        | 0.76%        | 3.84%         | 0.2745        | 1.1398               | <b>2.4800</b>  | 0.4913        | 1.4133        | <b>3.5796</b> |
| -14            | 0.53%        | 0.46%        | 4.36%         | 0.1895        | 1.5310               | 1.2748         | 0.5265        | 1.4260        | <b>3.8018</b> |
| -13            | 0.80%        | 0.06%        | 5.16%         | 0.2430        | 1.4704               | <b>1.7017</b>  | 0.5784        | 1.4272        | <b>4.1732</b> |
| -12            | 0.89%        | 0.27%        | 6.05%         | 0.2878        | 1.2127               | <b>2.4438</b>  | 0.6413        | 1.4876        | <b>4.4387</b> |
| -11            | 0.03%        | -0.02%       | 6.09%         | 0.0205        | 1.4665               | 0.1439         | 0.6149        | 1.5371        | <b>4.1188</b> |
| -10            | 1.10%        | 0.43%        | 7.18%         | 0.2894        | 1.4166               | <b>2.1035</b>  | 0.6735        | 1.6066        | <b>4.3164</b> |
| -9             | 1.08%        | 0.23%        | 8.26%         | 0.2541        | 1.2374               | <b>2.1145</b>  | 0.7182        | 1.5627        | <b>4.7321</b> |
| -8             | 0.31%        | 0.44%        | 8.58%         | 0.0650        | 1.1043               | 0.6061         | 0.7080        | 1.5530        | <b>4.6946</b> |
| -7             | 0.06%        | 0.31%        | 8.64%         | 0.0582        | 1.1808               | 0.5077         | 0.6978        | 1.5046        | <b>4.7756</b> |
| -6             | 1.25%        | 0.54%        | 9.89%         | 0.4443        | 1.5662               | <b>2.9213</b>  | 0.7889        | 1.4645        | <b>5.5469</b> |
| -5             | 1.27%        | 0.49%        | 11.16%        | 0.3580        | 1.3390               | <b>2.7532</b>  | 0.8534        | 1.4197        | <b>6.1892</b> |
| -4             | 0.63%        | -0.07%       | 11.79%        | 0.1926        | 1.0940               | <b>1.8126</b>  | 0.8746        | 1.4143        | <b>6.3673</b> |
| -3             | 0.91%        | 0.20%        | 12.70%        | 0.2637        | 1.3212               | <b>2.0556</b>  | 0.9121        | 1.3848        | <b>6.7822</b> |
| -2             | 0.92%        | 0.38%        | 13.62%        | 0.2720        | 1.3142               | <b>2.1313</b>  | 0.9502        | 1.3708        | <b>7.1373</b> |
| -1             | 1.82%        | 1.32%        | 15.44%        | 0.6092        | 1.7486               | <b>3.5874</b>  | 1.0624        | 1.4948        | <b>7.3180</b> |
| <b>0</b>       | <b>2.12%</b> | <b>1.80%</b> | <b>17.56%</b> | <b>0.5892</b> | <b>1.7705</b>        | <b>3.4268</b>  | <b>1.1653</b> | <b>1.5884</b> | <b>7.5543</b> |
| 1              | 0.39%        | 0.37%        | 17.95%        | -0.0301       | 2.3063               | -0.1342        | 1.1321        | 1.6814        | <b>6.9331</b> |
| 2              | 0.45%        | -0.07%       | 18.40%        | 0.0983        | 1.4866               | 0.6812         | 1.1277        | 1.7403        | <b>6.6728</b> |
| 3              | -0.44%       | -0.17%       | 17.96%        | -0.1274       | 1.6741               | -0.7836        | 1.0780        | 1.7892        | <b>6.2038</b> |
| 4              | -0.62%       | -0.27%       | 17.34%        | -0.1524       | 1.3039               | -1.2033        | 1.0257        | 1.7438        | <b>6.0570</b> |
| 5              | -0.09%       | -0.20%       | 17.26%        | 0.0184        | 0.9353               | 0.2024         | 1.0094        | 1.7306        | <b>6.0062</b> |
| 6              | 0.41%        | 0.01%        | 17.67%        | 0.1522        | 1.0120               | 1.5490         | 1.0199        | 1.7417        | <b>6.0294</b> |
| 7              | -0.12%       | -0.09%       | 17.54%        | 0.0496        | 1.3641               | 0.3743         | 1.0109        | 1.7831        | <b>5.8375</b> |
| 8              | 0.19%        | -0.13%       | 17.73%        | 0.1521        | 1.2095               | 1.2950         | 1.0215        | 1.7878        | <b>5.8834</b> |
| 9              | 0.66%        | -0.04%       | 18.38%        | 0.2549        | 1.2961               | <b>2.0247</b>  | 1.0509        | 1.8223        | <b>5.9379</b> |
| 10             | 0.10%        | 0.24%        | 18.49%        | 0.0650        | 0.9622               | 0.6953         | 1.0455        | 1.8485        | <b>5.8235</b> |
| 11             | 0.70%        | 0.41%        | 19.18%        | 0.2347        | 1.2527               | <b>1.9293</b>  | 1.0705        | 1.8824        | <b>5.8555</b> |
| 12             | -0.22%       | -0.03%       | 18.96%        | -0.0253       | 1.9767               | -0.1316        | 1.0497        | 1.9955        | <b>5.4167</b> |
| 13             | 0.38%        | -0.16%       | 19.35%        | 0.0634        | 1.1659               | 0.5596         | 1.0451        | 1.9533        | <b>5.5090</b> |
| 14             | 0.15%        | 0.39%        | 19.49%        | 0.0501        | 0.8985               | 0.5747         | 1.0385        | 1.9590        | <b>5.4585</b> |
| 15             | 0.44%        | 0.15%        | 19.93%        | 0.0784        | 1.0581               | 0.7632         | 1.0370        | 1.9330        | <b>5.5242</b> |
| 16             | 0.08%        | 0.19%        | 20.01%        | 0.0203        | 0.9411               | 0.2224         | 1.0263        | 1.9340        | <b>5.4640</b> |
| 17             | 0.32%        | 0.39%        | 20.33%        | 0.1841        | 1.0060               | <b>1.8842</b>  | 1.0425        | 1.9390        | <b>5.5363</b> |
| 18             | 0.36%        | -0.02%       | 20.69%        | 0.0668        | 1.0932               | 0.6297         | 1.0398        | 1.9126        | <b>5.5981</b> |
| 19             | -0.10%       | -0.26%       | 20.59%        | -0.0012       | 1.0531               | -0.0116        | 1.0265        | 1.9323        | <b>5.4704</b> |
| 20             | 0.70%        | 0.08%        | 21.30%        | 0.2214        | 1.0837               | <b>2.1039</b>  | 1.0485        | 1.9231        | <b>5.6142</b> |
| 21             | -0.42%       | -0.32%       | 20.88%        | -0.0650       | 0.8843               | -0.7572        | 1.0259        | 1.9232        | <b>5.4927</b> |
| 22             | -0.48%       | -0.52%       | 20.40%        | -0.1854       | 0.8883               | <b>-2.1490</b> | 0.9857        | 1.9273        | <b>5.2661</b> |
| 23             | -0.02%       | -0.20%       | 20.38%        | -0.0030       | 1.0257               | -0.0297        | 0.9739        | 1.9276        | <b>5.2026</b> |
| 24             | 0.90%        | 0.17%        | 21.28%        | 0.2258        | 1.1442               | <b>2.0317</b>  | 0.9967        | 1.8964        | <b>5.4120</b> |
| 25             | -0.10%       | -0.10%       | 21.18%        | -0.0456       | 0.9121               | -0.5144        | 0.9791        | 1.9009        | <b>5.3038</b> |
| 26             | 0.22%        | 0.19%        | 21.40%        | 0.1020        | 0.8439               | 1.2448         | 0.9835        | 1.8831        | <b>5.3779</b> |
| 27             | 0.40%        | -0.06%       | 21.80%        | 0.0939        | 0.9328               | 1.0367         | 0.9868        | 1.8624        | <b>5.4559</b> |
| 28             | -0.20%       | -0.18%       | 21.60%        | -0.0725       | 0.8598               | -0.8678        | 0.9663        | 1.8539        | <b>5.3671</b> |
| 29             | 0.34%        | 0.36%        | 21.94%        | 0.1002        | 0.9963               | 1.0358         | 0.9708        | 1.8296        | <b>5.4635</b> |
| 30             | 0.48%        | 0.56%        | 22.43%        | 0.1417        | 0.7982               | <b>1.8275</b>  | 0.9810        | 1.8269        | <b>5.5292</b> |
| <b>-1 to 1</b> |              |              | <b>4.33%</b>  |               | <b>StdDev(AAR-0)</b> | <b>0.05982</b> | 0.6746        | 2.0783        | <b>3.3421</b> |

**Table-A 6.16 Market returns to Domestic Targets; Related; (MM, 53); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.15%        | -0.05%       | 0.15%        | 0.0793               | 1.0485        | 0.6067         | 0.0793        | 1.0485        | 0.6067        |
| -19            | 0.05%        | -0.07%       | 0.20%        | 0.0870               | 1.0628        | 0.6566         | 0.1176        | 1.0531        | 0.8956        |
| -18            | -0.08%       | -0.06%       | 0.12%        | 0.0245               | 0.9972        | 0.1973         | 0.1102        | 0.9925        | 0.8904        |
| -17            | 0.18%        | 0.23%        | 0.30%        | 0.0334               | 1.1896        | 0.2248         | 0.1121        | 1.0759        | 0.8356        |
| -16            | -0.47%       | -0.20%       | -0.16%       | -0.1498              | 0.8266        | -1.4530        | 0.0333        | 1.0036        | 0.2660        |
| -15            | -0.63%       | -0.53%       | -0.79%       | -0.1866              | 1.0027        | -1.4927        | -0.0458       | 1.0718        | -0.3427       |
| -14            | 0.13%        | 0.06%        | -0.67%       | 0.0197               | 0.9822        | 0.1612         | -0.0349       | 1.0381        | -0.2699       |
| -13            | -0.53%       | -0.19%       | -1.20%       | -0.1849              | 0.9997        | -1.4832        | -0.0981       | 1.0272        | -0.7656       |
| -12            | 0.97%        | 0.10%        | -0.23%       | 0.2451               | 1.0762        | <b>1.8266</b>  | -0.0107       | 1.0478        | -0.0822       |
| -11            | 1.08%        | 0.50%        | 0.85%        | 0.2761               | 0.9503        | <b>2.3301</b>  | 0.0771        | 0.9941        | 0.6222        |
| -10            | 0.10%        | 0.28%        | 0.95%        | 0.0473               | 1.2594        | 0.3012         | 0.0878        | 0.9429        | 0.7468        |
| -9             | 0.57%        | 0.22%        | 1.52%        | 0.2245               | 1.4791        | 1.2171         | 0.1489        | 1.1041        | 1.0812        |
| -8             | -0.51%       | -0.25%       | 1.01%        | -0.0894              | 1.1531        | -0.6217        | 0.1182        | 1.1385        | 0.8328        |
| -7             | 1.23%        | 0.66%        | 2.24%        | 0.3096               | 1.2884        | <b>1.9271</b>  | 0.1967        | 1.1576        | 1.3625        |
| -6             | 0.66%        | 0.40%        | 2.90%        | 0.2675               | 1.1253        | <b>1.9062</b>  | 0.2591        | 1.2009        | <b>1.7300</b> |
| -5             | 1.20%        | 0.41%        | 4.09%        | 0.3082               | 1.4348        | <b>1.7226</b>  | 0.3279        | 1.2656        | <b>2.0777</b> |
| -4             | -0.14%       | 0.04%        | 3.95%        | -0.0131              | 1.3536        | -0.0777        | 0.3149        | 1.3008        | <b>1.9415</b> |
| -3             | 0.61%        | 0.18%        | 4.56%        | 0.1734               | 1.2507        | 1.1118         | 0.3469        | 1.3301        | <b>2.0916</b> |
| -2             | 0.79%        | 0.39%        | 5.35%        | 0.2652               | 1.0878        | <b>1.9554</b>  | 0.3985        | 1.3234        | <b>2.4148</b> |
| -1             | 1.19%        | 0.40%        | 6.54%        | 0.3194               | 1.3836        | <b>1.8511</b>  | 0.4598        | 1.2733        | <b>2.8962</b> |
| <b>0</b>       | <b>1.70%</b> | <b>0.72%</b> | <b>8.24%</b> | <b>0.4189</b>        | <b>2.2256</b> | <b>1.5093</b>  | <b>0.5401</b> | <b>1.2098</b> | <b>3.5804</b> |
| 1              | 2.80%        | 0.53%        | 11.04%       | 0.7941               | 2.3543        | <b>2.7051</b>  | 0.6970        | 1.2117        | <b>4.6132</b> |
| 2              | -0.01%       | -0.22%       | 11.03%       | -0.0556              | 1.5698        | -0.2839        | 0.6701        | 1.1579        | <b>4.6414</b> |
| 3              | 0.00%        | 0.13%        | 11.03%       | -0.0071              | 1.6977        | -0.0334        | 0.6546        | 1.2422        | <b>4.2258</b> |
| 4              | 0.00%        | 0.17%        | 11.03%       | 0.0111               | 1.3642        | 0.0655         | 0.6436        | 1.2509        | <b>4.1261</b> |
| 5              | -1.05%       | -0.27%       | 9.99%        | -0.3255              | 0.9959        | <b>-2.6209</b> | 0.5673        | 1.2216        | <b>3.7239</b> |
| 6              | -0.38%       | -0.41%       | 9.60%        | -0.1027              | 1.0185        | -0.8083        | 0.5369        | 1.1792        | <b>3.6513</b> |
| 7              | 0.57%        | 0.22%        | 10.17%       | 0.1598               | 0.7287        | <b>1.7583</b>  | 0.5574        | 1.1444        | <b>3.9061</b> |
| 8              | -0.26%       | -0.12%       | 9.91%        | -0.1564              | 1.4176        | -0.8847        | 0.5187        | 1.1529        | <b>3.6079</b> |
| 9              | -0.29%       | 0.19%        | 9.62%        | -0.0252              | 1.1113        | -0.1820        | 0.5054        | 1.1521        | <b>3.5178</b> |
| 10             | 0.60%        | 0.30%        | 10.22%       | 0.1294               | 1.0023        | 1.0351         | 0.5204        | 1.1545        | <b>3.6147</b> |
| 11             | 0.23%        | -0.59%       | 10.44%       | 0.0092               | 1.0550        | 0.0697         | 0.5138        | 1.1727        | <b>3.5137</b> |
| 12             | 0.31%        | 0.51%        | 10.75%       | 0.0746               | 0.9813        | 0.6098         | 0.5189        | 1.2212        | <b>3.4079</b> |
| 13             | -0.70%       | 0.07%        | 10.05%       | -0.2016              | 0.7524        | <b>-2.1489</b> | 0.4767        | 1.1935        | <b>3.2030</b> |
| 14             | 0.10%        | -0.10%       | 10.15%       | 0.0730               | 0.9351        | 0.6264         | 0.4822        | 1.1599        | <b>3.3338</b> |
| 15             | 0.67%        | 0.03%        | 10.82%       | 0.1485               | 1.0803        | 1.1026         | 0.5002        | 1.1510        | <b>3.4851</b> |
| 16             | -0.54%       | -0.08%       | 10.28%       | -0.1326              | 1.4902        | -0.7133        | 0.4716        | 1.2157        | <b>3.1108</b> |
| 17             | 0.06%        | -0.35%       | 10.34%       | -0.0506              | 1.1848        | -0.3428        | 0.4571        | 1.2144        | <b>3.0188</b> |
| 18             | 0.34%        | 0.11%        | 10.68%       | 0.0060               | 1.0261        | 0.0470         | 0.4522        | 1.2173        | <b>2.9790</b> |
| 19             | -0.09%       | 0.16%        | 10.59%       | -0.0105              | 1.0634        | -0.0792        | 0.4448        | 1.1747        | <b>3.0370</b> |
| 20             | 0.54%        | 0.20%        | 11.13%       | 0.2183               | 0.6807        | <b>2.5715</b>  | 0.4735        | 1.1746        | <b>3.2326</b> |
| 21             | 0.02%        | 0.25%        | 11.15%       | 0.1147               | 0.9811        | 0.9376         | 0.4855        | 1.1630        | <b>3.3478</b> |
| 22             | -0.29%       | -0.21%       | 10.86%       | -0.1460              | 0.9753        | -1.2005        | 0.4575        | 1.1857        | <b>3.0948</b> |
| 23             | 0.12%        | 0.05%        | 10.98%       | 0.0100               | 0.8705        | 0.0918         | 0.4538        | 1.1956        | <b>3.0440</b> |
| 24             | 0.12%        | 0.27%        | 11.10%       | 0.0929               | 0.7271        | 1.0243         | 0.4626        | 1.1726        | <b>3.1638</b> |
| 25             | 0.44%        | -0.01%       | 11.54%       | 0.1195               | 0.9184        | 1.0433         | 0.4752        | 1.1676        | <b>3.2636</b> |
| 26             | -0.62%       | -0.46%       | 10.92%       | -0.1490              | 0.7172        | -1.6657        | 0.4483        | 1.1377        | <b>3.1603</b> |
| 27             | -0.50%       | 0.06%        | 10.42%       | -0.1120              | 1.1358        | -0.7909        | 0.4275        | 1.1241        | <b>3.0499</b> |
| 28             | 0.02%        | 0.08%        | 10.44%       | 0.0318               | 1.0682        | 0.2391         | 0.4276        | 1.0917        | <b>3.1415</b> |
| 29             | 0.05%        | -0.16%       | 10.49%       | 0.0476               | 1.0504        | 0.3638         | 0.4301        | 1.1095        | <b>3.1086</b> |
| 30             | -0.36%       | -0.35%       | 10.14%       | -0.1127              | 0.7838        | -1.1528        | 0.4101        | 1.0913        | <b>3.0134</b> |
| <b>-1 to 1</b> |              |              | <b>5.69%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06506</b> | 0.8847        | 1.9098        | <b>3.7151</b> |



**Table-A 6.17 Market returns to Domestic Targets; Unrelated; (OLS, 116); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.08%        | -0.07%       | 0.08%         | 0.0928               | 1.1660        | 0.8420         | 0.0928        | 1.1660        | 0.8420        |
| -19            | 0.20%        | 0.07%        | 0.28%         | 0.0632               | 0.8831        | 0.7566         | 0.1103        | 1.0657        | 1.0947        |
| -18            | 0.57%        | -0.31%       | 0.85%         | 0.1084               | 1.1072        | 1.0355         | 0.1526        | 1.0461        | 1.5433        |
| -17            | 0.27%        | -0.06%       | 1.12%         | 0.1565               | 1.0423        | 1.5881         | 0.2104        | 1.1432        | <b>1.9470</b> |
| -16            | 0.27%        | 0.12%        | 1.39%         | 0.0088               | 0.9890        | 0.0941         | 0.1921        | 1.1357        | <b>1.7896</b> |
| -15            | 0.93%        | 0.64%        | 2.32%         | 0.2227               | 1.0185        | <b>2.3127</b>  | 0.2663        | 1.1850        | <b>2.3772</b> |
| -14            | 0.55%        | 0.27%        | 2.87%         | 0.1449               | 1.2427        | 1.2332         | 0.3013        | 1.1773        | <b>2.7073</b> |
| -13            | 0.60%        | -0.18%       | 3.47%         | 0.1473               | 1.2510        | 1.2453         | 0.3339        | 1.1947        | <b>2.9566</b> |
| -12            | 0.89%        | 0.08%        | 4.35%         | 0.2031               | 1.0631        | <b>2.0213</b>  | 0.3825        | 1.2345        | <b>3.2778</b> |
| -11            | -0.41%       | -0.14%       | 3.94%         | -0.0650              | 1.2168        | -0.5652        | 0.3423        | 1.2694        | <b>2.8526</b> |
| -10            | 0.83%        | 0.12%        | 4.77%         | 0.2188               | 1.1694        | <b>1.9788</b>  | 0.3924        | 1.3323        | <b>3.1152</b> |
| -9             | 2.04%        | 0.07%        | 6.81%         | 0.2472               | 1.5752        | <b>1.6599</b>  | 0.4470        | 1.3313        | <b>3.5518</b> |
| -8             | -0.50%       | 0.02%        | 6.31%         | -0.0493              | 1.0691        | -0.4882        | 0.4158        | 1.3106        | <b>3.5561</b> |
| -7             | -0.29%       | -0.16%       | 6.02%         | -0.0083              | 1.0511        | -0.0837        | 0.3985        | 1.2757        | <b>3.3038</b> |
| -6             | 1.14%        | 0.26%        | 7.16%         | 0.2645               | 1.1317        | <b>2.4726</b>  | 0.4533        | 1.2520        | <b>3.8295</b> |
| -5             | 0.96%        | 0.25%        | 8.11%         | 0.2376               | 1.1313        | <b>2.2215</b>  | 0.4983        | 1.2135        | <b>4.3433</b> |
| -4             | 0.23%        | -0.31%       | 8.35%         | 0.1031               | 0.9799        | 1.1129         | 0.5084        | 1.2094        | <b>4.4464</b> |
| -3             | 0.95%        | 0.08%        | 9.29%         | 0.2346               | 1.1347        | <b>2.1867</b>  | 0.5493        | 1.1772        | <b>4.9360</b> |
| -2             | 0.87%        | 0.05%        | 10.17%        | 0.2203               | 1.0907        | <b>2.1366</b>  | 0.5852        | 1.1600        | <b>5.3365</b> |
| -1             | 1.50%        | 1.05%        | 11.66%        | 0.4314               | 1.4452        | <b>3.1576</b>  | 0.6669        | 1.2191        | <b>5.7864</b> |
| <b>0</b>       | <b>1.98%</b> | <b>1.36%</b> | <b>13.65%</b> | <b>0.4680</b>        | <b>1.5020</b> | <b>3.2960</b>  | <b>0.7529</b> | <b>1.2713</b> | <b>6.2646</b> |
| 1              | 0.11%        | 0.02%        | 13.75%        | -0.0196              | 1.7182        | -0.1210        | 0.7314        | 1.3447        | <b>5.7536</b> |
| 2              | 0.12%        | -0.27%       | 13.87%        | 0.0349               | 1.2441        | 0.2964         | 0.7226        | 1.3923        | <b>5.4901</b> |
| 3              | -0.70%       | -0.31%       | 13.17%        | -0.1383              | 1.4405        | -1.0159        | 0.6792        | 1.4172        | <b>5.0692</b> |
| 4              | -0.66%       | -0.37%       | 12.51%        | -0.1985              | 1.0241        | <b>-2.0500</b> | 0.6258        | 1.3959        | <b>4.7420</b> |
| 5              | -0.49%       | -0.40%       | 12.01%        | -0.0562              | 0.8564        | -0.6943        | 0.6026        | 1.3824        | <b>4.6108</b> |
| 6              | 0.17%        | -0.12%       | 12.18%        | 0.0755               | 0.8765        | 0.9111         | 0.6059        | 1.3995        | <b>4.5792</b> |
| 7              | -0.90%       | -0.28%       | 11.28%        | -0.1146              | 1.3486        | -0.8990        | 0.5733        | 1.4483        | <b>4.1868</b> |
| 8              | -0.10%       | -0.40%       | 11.18%        | 0.0254               | 1.0449        | 0.2576         | 0.5680        | 1.4461        | <b>4.1549</b> |
| 9              | 0.29%        | -0.27%       | 11.47%        | 0.1179               | 1.0968        | 1.1373         | 0.5800        | 1.4753        | <b>4.1586</b> |
| 10             | 0.33%        | 0.03%        | 11.81%        | 0.0850               | 1.1908        | 0.7548         | 0.5858        | 1.4764        | <b>4.1974</b> |
| 11             | 0.36%        | 0.22%        | 12.17%        | 0.0769               | 1.0534        | 0.7721         | 0.5902        | 1.5143        | <b>4.1226</b> |
| 12             | -0.50%       | -0.26%       | 11.67%        | -0.1030              | 1.6596        | -0.6565        | 0.5633        | 1.5979        | <b>3.7286</b> |
| 13             | 0.20%        | -0.30%       | 11.87%        | 0.0569               | 0.9585        | 0.6284         | 0.5647        | 1.5547        | <b>3.8419</b> |
| 14             | 0.09%        | 0.18%        | 11.95%        | 0.0437               | 0.7910        | 0.5841         | 0.5639        | 1.5498        | <b>3.8490</b> |
| 15             | 0.21%        | -0.12%       | 12.16%        | 0.0045               | 0.8902        | 0.0536         | 0.5568        | 1.5221        | <b>3.8694</b> |
| 16             | -0.12%       | -0.08%       | 12.04%        | -0.0647              | 0.8339        | -0.8201        | 0.5386        | 1.5372        | <b>3.7062</b> |
| 17             | -0.09%       | 0.11%        | 11.95%        | 0.0752               | 0.8561        | 0.9298         | 0.5437        | 1.5403        | <b>3.7337</b> |
| 18             | 0.02%        | -0.10%       | 11.97%        | 0.0142               | 0.8750        | 0.1720         | 0.5389        | 1.5319        | <b>3.7214</b> |
| 19             | -0.26%       | -0.34%       | 11.71%        | -0.0638              | 0.8375        | -0.8055        | 0.5221        | 1.5463        | <b>3.5714</b> |
| 20             | 0.48%        | -0.19%       | 12.19%        | 0.1062               | 0.8439        | 1.3310         | 0.5323        | 1.5471        | <b>3.6391</b> |
| 21             | -0.56%       | -0.52%       | 11.63%        | -0.1193              | 0.7600        | <b>-1.6610</b> | 0.5075        | 1.5301        | <b>3.5080</b> |
| 22             | -0.62%       | -0.55%       | 11.01%        | -0.1988              | 0.7371        | <b>-2.8530</b> | 0.4712        | 1.5175        | <b>3.2846</b> |
| 23             | -0.86%       | -0.49%       | 10.15%        | -0.1585              | 1.2566        | -1.3343        | 0.4419        | 1.5311        | <b>3.0531</b> |
| 24             | 0.59%        | 0.08%        | 10.75%        | 0.1067               | 1.0324        | 1.0932         | 0.4529        | 1.5088        | <b>3.1751</b> |
| 25             | -0.52%       | -0.26%       | 10.23%        | -0.1402              | 0.8258        | <b>-1.7961</b> | 0.4273        | 1.5173        | <b>2.9786</b> |
| 26             | 0.50%        | -0.13%       | 10.73%        | 0.0809               | 1.1844        | 0.7226         | 0.4345        | 1.5032        | <b>3.0575</b> |
| 27             | -0.51%       | -0.18%       | 10.22%        | -0.0258              | 1.2379        | -0.2204        | 0.4262        | 1.4897        | <b>3.0264</b> |
| 28             | -0.45%       | -0.31%       | 9.77%         | -0.1011              | 0.7313        | -1.4629        | 0.4074        | 1.4861        | <b>2.9000</b> |
| 29             | 0.24%        | 0.20%        | 10.01%        | 0.0416               | 0.8490        | 0.5179         | 0.4092        | 1.4725        | <b>2.9394</b> |
| 30             | 0.18%        | 0.31%        | 10.19%        | 0.0649               | 0.7082        | 0.9699         | 0.4143        | 1.4680        | <b>2.9849</b> |
| <b>-1 to 1</b> |              |              | <b>3.59%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06057</b> | 0.5079        | 1.6444        | <b>3.2673</b> |

**Table-A 6.18 Market returns to Domestic Targets; Related; (OLS, 54); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats        |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|----------------|
| -20            | 0.01%        | -0.10%       | 0.01%        | 0.0325               | 0.8953        | 0.2956         | 0.0325        | 0.8953        | 0.2956         |
| -19            | -0.13%       | -0.18%       | -0.12%       | 0.0092               | 0.8891        | 0.0839         | 0.0295        | 0.9053        | 0.2650         |
| -18            | -0.27%       | -0.24%       | -0.39%       | -0.0552              | 0.8605        | -0.5221        | -0.0078       | 0.8375        | -0.0758        |
| -17            | 0.01%        | 0.17%        | -0.38%       | -0.0506              | 0.9760        | -0.4220        | -0.0321       | 0.8917        | -0.2926        |
| -16            | -0.22%       | -0.27%       | -0.60%       | -0.1426              | 0.8279        | -1.4013        | -0.0925       | 0.8611        | -0.8735        |
| -15            | -0.73%       | -0.53%       | -1.33%       | -0.2165              | 0.8721        | <b>-2.0195</b> | -0.1728       | 0.9221        | -1.5243        |
| -14            | 0.28%        | -0.05%       | -1.05%       | -0.0075              | 0.9113        | -0.0673        | -0.1628       | 0.9141        | -1.4490        |
| -13            | -0.68%       | -0.26%       | -1.73%       | -0.1889              | 0.8204        | <b>-1.8726</b> | -0.2191       | 0.9125        | <b>-1.9530</b> |
| -12            | 0.81%        | 0.04%        | -0.92%       | 0.1588               | 0.9379        | 1.3772         | -0.1536       | 0.9107        | -1.3722        |
| -11            | 0.96%        | 0.41%        | 0.04%        | 0.2076               | 0.8251        | <b>2.0466</b>  | -0.0801       | 0.8964        | -0.7268        |
| -10            | 0.00%        | 0.16%        | 0.04%        | -0.0023              | 1.0507        | -0.0179        | -0.0771       | 0.8445        | -0.7423        |
| -9             | 0.67%        | 0.12%        | 0.71%        | 0.1459               | 1.2645        | 0.9382         | -0.0317       | 0.9825        | -0.2623        |
| -8             | -0.69%       | -0.41%       | 0.02%        | -0.1078              | 0.9987        | -0.8779        | -0.0603       | 0.9915        | -0.4950        |
| -7             | 1.02%        | 0.49%        | 1.04%        | 0.1887               | 1.1235        | 1.3662         | -0.0077       | 1.0030        | -0.0625        |
| -6             | 0.52%        | 0.30%        | 1.56%        | 0.1899               | 0.9502        | 1.6255         | 0.0416        | 1.0439        | 0.3240         |
| -5             | 1.06%        | 0.35%        | 2.61%        | 0.2583               | 1.1734        | <b>1.7903</b>  | 0.1048        | 1.0893        | 0.7828         |
| -4             | -0.27%       | -0.26%       | 2.34%        | -0.0387              | 1.1312        | -0.2782        | 0.0923        | 1.1070        | 0.6783         |
| -3             | 0.66%        | -0.01%       | 3.01%        | 0.1145               | 1.0241        | 0.9096         | 0.1167        | 1.1217        | 0.8463         |
| -2             | 0.58%        | 0.20%        | 3.59%        | 0.1304               | 0.9004        | 1.1777         | 0.1435        | 1.1096        | 1.0520         |
| -1             | 1.27%        | 0.38%        | 4.86%        | 0.2699               | 1.2376        | <b>1.7738</b>  | 0.2002        | 1.0802        | 1.5076         |
| <b>0</b>       | <b>1.48%</b> | <b>0.65%</b> | <b>6.34%</b> | <b>0.3541</b>        | <b>1.8750</b> | <b>1.5362</b>  | <b>0.2727</b> | <b>1.0410</b> | <b>2.1305</b>  |
| 1              | 2.62%        | 0.22%        | 8.96%        | 0.6230               | 1.8714        | <b>2.7076</b>  | 0.3992        | 1.0558        | <b>3.0756</b>  |
| 2              | -0.17%       | -0.42%       | 8.79%        | -0.0529              | 1.4084        | -0.3056        | 0.3794        | 1.0366        | <b>2.9771</b>  |
| 3              | -0.22%       | -0.18%       | 8.57%        | -0.0792              | 1.3820        | -0.4660        | 0.3553        | 1.0942        | <b>2.6409</b>  |
| 4              | -0.18%       | 0.11%        | 8.39%        | -0.0183              | 1.2115        | -0.1231        | 0.3444        | 1.0894        | <b>2.5714</b>  |
| 5              | -1.16%       | -0.63%       | 7.23%        | -0.3162              | 0.8970        | <b>-2.8669</b> | 0.2757        | 1.0683        | <b>2.0993</b>  |
| 6              | -0.55%       | -0.72%       | 6.68%        | -0.1477              | 0.8600        | -1.3971        | 0.2421        | 1.0430        | <b>1.8884</b>  |
| 7              | 0.39%        | 0.08%        | 7.07%        | 0.0739               | 0.6037        | 0.9951         | 0.2517        | 1.0223        | <b>2.0029</b>  |
| 8              | -0.41%       | -0.15%       | 6.66%        | -0.1325              | 1.2299        | -0.8763        | 0.2228        | 1.0270        | <b>1.7642</b>  |
| 9              | -0.35%       | 0.03%        | 6.31%        | -0.0386              | 0.9366        | -0.3352        | 0.2120        | 1.0268        | <b>1.6791</b>  |
| 10             | 1.68%        | 0.15%        | 7.99%        | 0.2018               | 1.4192        | 1.1564         | 0.2448        | 1.0891        | <b>1.8279</b>  |
| 11             | -0.01%       | -0.72%       | 7.98%        | -0.0366              | 0.9201        | -0.3237        | 0.2344        | 1.1075        | <b>1.7217</b>  |
| 12             | 0.03%        | 0.35%        | 8.01%        | 0.0084               | 0.8451        | 0.0807         | 0.2323        | 1.1353        | 1.6643         |
| 13             | -0.88%       | -0.02%       | 7.13%        | -0.2309              | 0.6454        | <b>-2.9092</b> | 0.1893        | 1.1129        | 1.3833         |
| 14             | 0.04%        | -0.18%       | 7.16%        | -0.0031              | 0.8227        | -0.0307        | 0.1860        | 1.0912        | 1.3867         |
| 15             | 0.34%        | -0.05%       | 7.51%        | 0.0302               | 0.8737        | 0.2812         | 0.1885        | 1.0742        | 1.4270         |
| 16             | -0.67%       | -0.22%       | 6.83%        | -0.1614              | 0.9843        | -1.3337        | 0.1594        | 1.0903        | 1.1889         |
| 17             | -0.07%       | -0.47%       | 6.76%        | -0.0687              | 0.9000        | -0.6210        | 0.1461        | 1.0683        | 1.1124         |
| 18             | 0.26%        | 0.07%        | 7.02%        | 0.0280               | 0.7357        | 0.3100         | 0.1487        | 1.0623        | 1.1386         |
| 19             | -0.29%       | -0.10%       | 6.73%        | -0.0577              | 0.8565        | -0.5481        | 0.1377        | 1.0451        | 1.0717         |
| 20             | 0.37%        | 0.11%        | 7.11%        | 0.1150               | 0.5573        | <b>1.6778</b>  | 0.1540        | 1.0476        | 1.1955         |
| 21             | -0.02%       | 0.00%        | 7.08%        | 0.0274               | 0.8273        | 0.2693         | 0.1564        | 1.0432        | 1.2191         |
| 22             | -0.36%       | -0.17%       | 6.72%        | -0.1339              | 0.8194        | -1.3287        | 0.1341        | 1.0762        | 1.0136         |
| 23             | -0.15%       | -0.02%       | 6.57%        | -0.0460              | 0.7505        | -0.4982        | 0.1257        | 1.0813        | 0.9452         |
| 24             | 0.03%        | 0.17%        | 6.60%        | 0.0377               | 0.5491        | 0.5582         | 0.1299        | 1.0654        | 0.9915         |
| 25             | 0.33%        | -0.38%       | 6.93%        | 0.0513               | 0.7619        | 0.5481         | 0.1360        | 1.0670        | 1.0369         |
| 26             | -0.87%       | -0.55%       | 6.06%        | -0.1841              | 0.6078        | <b>-2.4638</b> | 0.1077        | 1.0349        | 0.8465         |
| 27             | -0.47%       | -0.16%       | 5.58%        | -0.0729              | 0.7965        | -0.7449        | 0.0961        | 1.0159        | 0.7690         |
| 28             | -0.18%       | 0.04%        | 5.41%        | -0.0414              | 0.8810        | -0.3822        | 0.0892        | 0.9830        | 0.7377         |
| 29             | -0.24%       | -0.37%       | 5.16%        | -0.0178              | 0.8766        | -0.1652        | 0.0857        | 0.9957        | 0.7004         |
| 30             | -0.34%       | -0.56%       | 4.82%        | -0.1232              | 0.6838        | -1.4659        | 0.0676        | 0.9862        | 0.5578         |
| <b>-1 to 1</b> |              |              | <b>5.37%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06621</b> | 0.7200        | 1.5964        | <b>3.6682</b>  |

**Table-A 6.19 Market returns to Domestic Acquirers; All-firms; (MM, 191); VWI**

| Days           | AAR          | Median       | CAAR         | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|---------------|----------------------|----------------|---------------|---------------|---------------|
| -20            | 0.21%        | 0.00%        | 0.21%        | 0.2950        | 3.3006               | 1.2823         | 0.2950        | 3.3006        | 1.2823        |
| -19            | 0.17%        | -0.01%       | 0.39%        | 0.0134        | 1.1983               | 0.1604         | 0.2181        | 2.4309        | 1.2871        |
| -18            | -0.11%       | -0.18%       | 0.28%        | -0.1004       | 1.4110               | -1.0206        | 0.1201        | 1.8166        | 0.9486        |
| -17            | 0.47%        | 0.21%        | 0.75%        | 0.2170        | 1.5848               | <b>1.9647</b>  | 0.2125        | 1.7794        | <b>1.7136</b> |
| -16            | 0.05%        | -0.29%       | 0.79%        | 0.0650        | 1.4871               | 0.6271         | 0.2191        | 1.7381        | <b>1.8090</b> |
| -15            | -0.19%       | -0.18%       | 0.61%        | -0.0268       | 1.3870               | -0.2768        | 0.1891        | 1.7513        | 1.5494        |
| -14            | -0.03%       | -0.15%       | 0.58%        | -0.0153       | 1.3427               | -0.1636        | 0.1693        | 1.5875        | 1.5302        |
| -13            | 0.40%        | 0.13%        | 0.98%        | 0.1944        | 1.3400               | <b>2.0814</b>  | 0.2271        | 1.5858        | <b>2.0547</b> |
| -12            | -0.16%       | -0.31%       | 0.81%        | -0.0568       | 1.2717               | -0.6409        | 0.1952        | 1.5000        | <b>1.8669</b> |
| -11            | -0.16%       | -0.18%       | 0.66%        | -0.0705       | 1.1138               | -0.9078        | 0.1629        | 1.4421        | 1.6205        |
| -10            | 0.00%        | -0.14%       | 0.66%        | 0.0378        | 1.5413               | 0.3516         | 0.1667        | 1.5393        | 1.5537        |
| -9             | 0.70%        | 0.14%        | 1.36%        | 0.1951        | 1.5367               | <b>1.8213</b>  | 0.2159        | 1.4156        | <b>2.1883</b> |
| -8             | 0.03%        | -0.08%       | 1.39%        | 0.0100        | 1.7743               | 0.0807         | 0.2102        | 1.5552        | <b>1.9393</b> |
| -7             | 0.46%        | 0.08%        | 1.85%        | 0.1337        | 1.7371               | 1.1046         | 0.2383        | 1.4048        | <b>2.4338</b> |
| -6             | 0.18%        | 0.10%        | 2.03%        | 0.1267        | 1.2548               | 1.4487         | 0.2629        | 1.3834        | <b>2.7269</b> |
| -5             | 0.19%        | 0.02%        | 2.22%        | 0.0647        | 1.3221               | 0.7023         | 0.2708        | 1.3311        | <b>2.9185</b> |
| -4             | -0.04%       | -0.06%       | 2.18%        | -0.1834       | 2.7416               | -0.9598        | 0.2182        | 1.2530        | <b>2.4985</b> |
| -3             | -0.09%       | -0.14%       | 2.09%        | 0.0480        | 1.6273               | 0.4230         | 0.2233        | 1.2798        | <b>2.5041</b> |
| -2             | 0.30%        | 0.13%        | 2.39%        | 0.0251        | 1.6157               | 0.2231         | 0.2232        | 1.2766        | <b>2.5082</b> |
| -1             | 0.84%        | 0.27%        | 3.23%        | 0.4121        | 2.2853               | <b>2.5874</b>  | 0.3097        | 1.3935        | <b>3.1884</b> |
| <b>0</b>       | <b>0.24%</b> | <b>0.11%</b> | <b>3.46%</b> | <b>0.0593</b> | <b>2.1055</b>        | <b>0.4044</b>  | <b>0.3151</b> | <b>1.4129</b> | <b>3.2004</b> |
| 1              | 0.50%        | 0.06%        | 3.96%        | 0.2202        | 2.2407               | 1.4099         | 0.3548        | 1.3835        | <b>3.6799</b> |
| 2              | 0.76%        | 0.17%        | 4.73%        | 0.3798        | 2.5050               | <b>2.1756</b>  | 0.4262        | 1.5281        | <b>4.0021</b> |
| 3              | 0.16%        | 0.02%        | 4.89%        | 0.1111        | 2.0011               | 0.7965         | 0.4399        | 1.4132        | <b>4.4668</b> |
| 4              | 0.30%        | 0.02%        | 5.19%        | 0.0568        | 1.1530               | 0.7068         | 0.4424        | 1.3914        | <b>4.5622</b> |
| 5              | 0.05%        | -0.14%       | 5.24%        | 0.1180        | 1.6035               | 1.0557         | 0.4570        | 1.4158        | <b>4.6310</b> |
| 6              | -0.18%       | 0.00%        | 5.05%        | -0.0070       | 1.6683               | -0.0604        | 0.4471        | 1.4671        | <b>4.3723</b> |
| 7              | 0.37%        | 0.07%        | 5.43%        | 0.1620        | 2.4170               | 0.9615         | 0.4696        | 1.5412        | <b>4.3721</b> |
| 8              | 0.21%        | -0.09%       | 5.64%        | 0.1135        | 1.4707               | 1.1069         | 0.4825        | 1.6167        | <b>4.2823</b> |
| 9              | 0.02%        | -0.14%       | 5.66%        | -0.0228       | 1.4132               | -0.2317        | 0.4702        | 1.5419        | <b>4.3757</b> |
| 10             | 0.04%        | -0.09%       | 5.70%        | 0.0908        | 1.7092               | 0.7619         | 0.4789        | 1.5328        | <b>4.4828</b> |
| 11             | -0.10%       | -0.10%       | 5.60%        | -0.0388       | 1.3556               | -0.4104        | 0.4645        | 1.4853        | <b>4.4871</b> |
| 12             | 0.31%        | -0.01%       | 5.91%        | 0.1348        | 1.2208               | 1.5844         | 0.4809        | 1.5126        | <b>4.5615</b> |
| 13             | 0.69%        | 0.16%        | 6.60%        | 0.2373        | 1.2233               | <b>2.7836</b>  | 0.5144        | 1.5030        | <b>4.9112</b> |
| 14             | 0.18%        | 0.26%        | 6.78%        | 0.0609        | 1.1327               | 0.7715         | 0.5173        | 1.5196        | <b>4.8847</b> |
| 15             | -0.06%       | -0.12%       | 6.72%        | -0.1523       | 1.6203               | -1.3484        | 0.4847        | 1.4819        | <b>4.6932</b> |
| 16             | 0.07%        | -0.11%       | 6.79%        | 0.0618        | 1.3866               | 0.6392         | 0.4883        | 1.5207        | <b>4.6071</b> |
| 17             | -0.15%       | -0.15%       | 6.64%        | -0.0125       | 1.3234               | -0.1361        | 0.4798        | 1.5561        | <b>4.4240</b> |
| 18             | -0.06%       | 0.17%        | 6.58%        | 0.0338        | 1.5230               | 0.3185         | 0.4790        | 1.6140        | <b>4.2584</b> |
| 19             | -0.20%       | 0.02%        | 6.38%        | -0.1719       | 1.7108               | -1.4415        | 0.4458        | 1.5672        | <b>4.0816</b> |
| 20             | 0.03%        | 0.06%        | 6.41%        | 0.0819        | 1.4725               | 0.7976         | 0.4531        | 1.5972        | <b>4.0704</b> |
| 21             | -0.07%       | 0.10%        | 6.34%        | -0.0036       | 2.0781               | -0.0252        | 0.4471        | 1.6630        | <b>3.8579</b> |
| 22             | -0.09%       | 0.10%        | 6.25%        | 0.0980        | 1.7233               | 0.8160         | 0.4568        | 1.7142        | <b>3.8240</b> |
| 23             | 0.40%        | 0.06%        | 6.65%        | 0.1480        | 1.3816               | 1.5367         | 0.4739        | 1.6406        | <b>4.1449</b> |
| 24             | -0.02%       | -0.10%       | 6.63%        | 0.1179        | 1.8967               | 0.8916         | 0.4862        | 1.7258        | <b>4.0423</b> |
| 25             | 0.06%        | -0.12%       | 6.69%        | 0.0219        | 1.3847               | 0.2269         | 0.4841        | 1.6745        | <b>4.1482</b> |
| 26             | 0.31%        | -0.05%       | 7.00%        | 0.0938        | 1.2201               | 1.1034         | 0.4926        | 1.6416        | <b>4.3059</b> |
| 27             | 0.33%        | 0.03%        | 7.33%        | 0.1500        | 1.3065               | 1.6470         | 0.5091        | 1.6435        | <b>4.4447</b> |
| 28             | 0.08%        | -0.01%       | 7.41%        | 0.1055        | 1.3594               | 1.1132         | 0.5190        | 1.7018        | <b>4.3756</b> |
| 29             | 0.07%        | -0.09%       | 7.48%        | -0.0143       | 1.4361               | -0.1433        | 0.5117        | 1.6572        | <b>4.4306</b> |
| 30             | 0.57%        | 0.27%        | 8.05%        | 0.2593        | 1.2007               | <b>3.0989</b>  | 0.5430        | 1.6868        | <b>4.6189</b> |
| <b>-1 to 1</b> |              |              | <b>1.58%</b> |               | <b>StdDev(AAR-0)</b> | <b>0.04298</b> | 0.3993        | 1.9412        | <b>2.9514</b> |



Table-A 6.20 Market returns to Domestic Acquirers; All-firms; (OLS, 195); VWI

| Days           | AAR          | Median        | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|---------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.01%       | -0.13%        | -0.01%       | 0.0327               | 0.9695        | 0.4946         | 0.0327        | 0.9695        | 0.4946        |
| -19            | 0.08%        | -0.17%        | 0.07%        | -0.0008              | 0.9733        | -0.0125        | 0.0226        | 0.9522        | 0.3471        |
| -18            | -0.22%       | -0.42%        | -0.15%       | -0.0669              | 1.0361        | -0.9456        | -0.0202       | 0.9906        | -0.2986       |
| -17            | 0.34%        | 0.09%         | 0.19%        | 0.1082               | 1.1483        | 1.3804         | 0.0366        | 0.9904        | 0.5416        |
| -16            | -0.12%       | -0.43%        | 0.07%        | -0.0163              | 1.0304        | -0.2313        | 0.0255        | 1.0675        | 0.3496        |
| -15            | -0.35%       | -0.36%        | -0.28%       | -0.1066              | 1.1239        | -1.3892        | -0.0203       | 1.0828        | -0.2740       |
| -14            | -0.22%       | -0.19%        | -0.50%       | -0.0135              | 1.0763        | -0.1841        | -0.0239       | 1.0191        | -0.3430       |
| -13            | 0.35%        | 0.07%         | -0.15%       | 0.1346               | 1.1493        | <b>1.7153</b>  | 0.0253        | 1.0861        | 0.3406        |
| -12            | -0.29%       | -0.50%        | -0.44%       | -0.0988              | 0.9225        | -1.5695        | -0.0091       | 1.0432        | -0.1283       |
| -11            | -0.27%       | -0.35%        | -0.70%       | -0.0817              | 0.9486        | -1.2621        | -0.0345       | 1.0317        | -0.4900       |
| -10            | -0.08%       | -0.31%        | -0.79%       | -0.0239              | 1.0427        | -0.3363        | -0.0401       | 1.0357        | -0.5675       |
| -9             | 0.47%        | 0.05%         | -0.32%       | 0.1361               | 1.1351        | <b>1.7568</b>  | 0.0009        | 1.0644        | 0.0122        |
| -8             | -0.12%       | -0.16%        | -0.44%       | -0.0547              | 1.0907        | -0.7353        | -0.0143       | 1.0830        | -0.1939       |
| -7             | 0.31%        | -0.11%        | -0.13%       | 0.1070               | 0.9044        | <b>1.7328</b>  | 0.0148        | 1.0854        | 0.1994        |
| -6             | 0.16%        | 0.02%         | 0.03%        | 0.0722               | 1.0470        | 1.0097         | 0.0329        | 1.1019        | 0.4375        |
| -5             | -0.08%       | -0.16%        | -0.05%       | -0.0222              | 1.0854        | -0.2991        | 0.0263        | 1.0652        | 0.3620        |
| -4             | -0.22%       | -0.27%        | -0.27%       | -0.0885              | 1.0126        | -1.2801        | 0.0041        | 1.0154        | 0.0588        |
| -3             | -0.18%       | -0.24%        | -0.45%       | -0.0504              | 0.9928        | -0.7432        | -0.0079       | 1.0438        | -0.1110       |
| -2             | 0.18%        | -0.03%        | -0.27%       | 0.0310               | 0.9217        | 0.4928         | -0.0006       | 1.0259        | -0.0083       |
| -1             | 0.66%        | 0.21%         | 0.39%        | 0.1941               | 1.0674        | <b>2.6641</b>  | 0.0428        | 1.0670        | 0.5882        |
| <b>0</b>       | <b>0.11%</b> | <b>-0.04%</b> | <b>0.50%</b> | <b>0.0783</b>        | <b>1.4769</b> | <b>0.7770</b>  | <b>0.0589</b> | <b>1.1065</b> | <b>0.7798</b> |
| 1              | 0.39%        | -0.05%        | 0.89%        | 0.1308               | 1.5535        | 1.2337         | 0.0854        | 1.1201        | 1.1174        |
| 2              | 0.63%        | 0.09%         | 1.52%        | 0.2198               | 1.3838        | <b>2.3267</b>  | 0.1294        | 1.1487        | 1.6501        |
| 3              | 0.01%        | -0.12%        | 1.52%        | 0.0211               | 1.1650        | 0.2657         | 0.1310        | 1.1480        | <b>1.6714</b> |
| 4              | 0.15%        | -0.08%        | 1.67%        | 0.0233               | 0.9433        | 0.3621         | 0.1330        | 1.1433        | <b>1.7041</b> |
| 5              | -0.12%       | -0.27%        | 1.55%        | -0.0238              | 0.9232        | -0.3776        | 0.1257        | 1.1331        | 1.6256        |
| 6              | -0.38%       | -0.14%        | 1.17%        | -0.1104              | 1.1019        | -1.4686        | 0.1021        | 1.1426        | 1.3095        |
| 7              | 0.37%        | 0.00%         | 1.53%        | 0.1102               | 0.9641        | <b>1.6743</b>  | 0.1211        | 1.1589        | 1.5311        |
| 8              | 0.03%        | -0.16%        | 1.56%        | -0.0255              | 1.0202        | -0.3657        | 0.1143        | 1.1557        | 1.4487        |
| 9              | -0.13%       | -0.46%        | 1.43%        | -0.0154              | 1.0062        | -0.2246        | 0.1095        | 1.1586        | 1.3851        |
| 10             | -0.06%       | -0.28%        | 1.37%        | 0.0053               | 0.9943        | 0.0774         | 0.1087        | 1.1854        | 1.3435        |
| 11             | -0.22%       | -0.24%        | 1.15%        | -0.0312              | 0.9237        | -0.4955        | 0.1015        | 1.2189        | 1.2196        |
| 12             | 0.14%        | -0.18%        | 1.30%        | 0.0410               | 0.9441        | 0.6369         | 0.1071        | 1.2253        | 1.2801        |
| 13             | 0.48%        | 0.10%         | 1.77%        | 0.1316               | 0.9475        | <b>2.0343</b>  | 0.1280        | 1.2296        | 1.5255        |
| 14             | 0.01%        | 0.13%         | 1.79%        | -0.0125              | 0.8942        | -0.2050        | 0.1241        | 1.2141        | 1.4973        |
| 15             | -0.14%       | -0.26%        | 1.65%        | -0.0734              | 0.9515        | -1.1300        | 0.1101        | 1.2328        | 1.3086        |
| 16             | -0.15%       | -0.24%        | 1.50%        | -0.0774              | 1.0220        | -1.1090        | 0.0959        | 1.2068        | 1.1642        |
| 17             | -0.33%       | -0.26%        | 1.16%        | -0.1120              | 0.9061        | <b>-1.8106</b> | 0.0765        | 1.1902        | 0.9412        |
| 18             | -0.22%       | -0.02%        | 0.95%        | -0.0479              | 1.1225        | -0.6254        | 0.0678        | 1.1776        | 0.8436        |
| 19             | -0.36%       | -0.16%        | 0.59%        | -0.0961              | 0.9991        | -1.4087        | 0.0518        | 1.1422        | 0.6639        |
| 20             | -0.22%       | -0.26%        | 0.37%        | -0.0479              | 1.0870        | -0.6456        | 0.0436        | 1.1315        | 0.5651        |
| 21             | -0.25%       | -0.08%        | 0.12%        | -0.0741              | 1.0506        | -1.0331        | 0.0317        | 1.1321        | 0.4101        |
| 22             | -0.41%       | -0.11%        | -0.28%       | -0.1120              | 0.8561        | <b>-1.9172</b> | 0.0142        | 1.1135        | 0.1873        |
| 23             | 0.28%        | -0.14%        | 0.00%        | 0.0795               | 0.9254        | 1.2589         | 0.0261        | 1.1052        | 0.3455        |
| 24             | -0.17%       | -0.19%        | -0.17%       | -0.0205              | 1.1426        | -0.2624        | 0.0227        | 1.1264        | 0.2955        |
| 25             | -0.20%       | -0.28%        | -0.37%       | -0.0614              | 1.0933        | -0.8224        | 0.0134        | 1.1105        | 0.1771        |
| 26             | 0.08%        | -0.21%        | -0.29%       | 0.0106               | 0.9677        | 0.1606         | 0.0148        | 1.0949        | 0.1984        |
| 27             | 0.14%        | -0.01%        | -0.16%       | 0.0642               | 1.0155        | 0.9267         | 0.0239        | 1.0802        | 0.3247        |
| 28             | -0.13%       | -0.16%        | -0.29%       | -0.0109              | 0.8628        | -0.1859        | 0.0221        | 1.0870        | 0.2983        |
| 29             | -0.16%       | -0.28%        | -0.45%       | -0.0258              | 0.9055        | -0.4181        | 0.0183        | 1.0788        | 0.2479        |
| 30             | 0.42%        | 0.07%         | -0.03%       | 0.1339               | 1.0152        | <b>1.9320</b>  | 0.0368        | 1.0713        | 0.5036        |
| <b>-1 to 1</b> |              |               | <b>1.16%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04308</b> | 0.2328        | 1.4996        | <b>2.2745</b> |

**Table-A 6.21 Market returns to Acquirers Targets; MM firms; (OLS, 191); VWI**

| Days           | AAR          | Median        | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|---------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.03%        | -0.13%        | 0.03%        | 0.0422               | 0.9698        | 0.6275         | 0.0422        | 0.9698        | 0.6275        |
| -19            | 0.02%        | -0.17%        | 0.05%        | -0.0184              | 0.9582        | -0.2778        | 0.0168        | 0.9545        | 0.2536        |
| -18            | -0.27%       | -0.42%        | -0.22%       | -0.0831              | 1.0202        | -1.1755        | -0.0343       | 0.9736        | -0.5081       |
| -17            | 0.31%        | 0.08%         | 0.10%        | 0.1021               | 1.1562        | 1.2746         | 0.0214        | 0.9789        | 0.3151        |
| -16            | -0.14%       | -0.44%        | -0.04%       | -0.0178              | 1.0400        | -0.2464        | 0.0112        | 1.0645        | 0.1515        |
| -15            | -0.36%       | -0.36%        | -0.40%       | -0.0983              | 1.1041        | -1.2845        | -0.0299       | 1.0800        | -0.3998       |
| -14            | -0.21%       | -0.19%        | -0.61%       | -0.0233              | 1.0477        | -0.3214        | -0.0365       | 1.0192        | -0.5171       |
| -13            | 0.23%        | 0.05%         | -0.38%       | 0.0990               | 1.0479        | 1.3640         | 0.0009        | 1.0527        | 0.0118        |
| -12            | -0.31%       | -0.50%        | -0.69%       | -0.0997              | 0.9186        | -1.5671        | -0.0324       | 1.0121        | -0.4625       |
| -11            | -0.32%       | -0.36%        | -1.01%       | -0.0973              | 0.9409        | -1.4926        | -0.0615       | 0.9865        | -0.9004       |
| -10            | -0.13%       | -0.35%        | -1.15%       | -0.0393              | 1.0336        | -0.5491        | -0.0705       | 0.9740        | -1.0452       |
| -9             | 0.53%        | 0.05%         | -0.62%       | 0.1450               | 1.1365        | <b>1.8416</b>  | -0.0257       | 1.0071        | -0.3678       |
| -8             | -0.13%       | -0.20%        | -0.76%       | -0.0571              | 1.1015        | -0.7487        | -0.0405       | 1.0337        | -0.5656       |
| -7             | 0.32%        | -0.05%        | -0.43%       | 0.1118               | 0.9128        | <b>1.7680</b>  | -0.0091       | 1.0438        | -0.1265       |
| -6             | 0.08%        | 0.00%         | -0.35%       | 0.0514               | 1.0307        | 0.7203         | 0.0044        | 1.0458        | 0.0613        |
| -5             | 0.02%        | -0.12%        | -0.34%       | 0.0122               | 1.0449        | 0.1689         | 0.0074        | 1.0278        | 0.1034        |
| -4             | -0.20%       | -0.27%        | -0.54%       | -0.0853              | 0.9878        | -1.2461        | -0.0135       | 0.9944        | -0.1966       |
| -3             | -0.21%       | -0.24%        | -0.75%       | -0.0615              | 0.9926        | -0.8950        | -0.0277       | 1.0172        | -0.3926       |
| -2             | 0.13%        | -0.04%        | -0.63%       | 0.0154               | 0.9088        | 0.2444         | -0.0234       | 0.9866        | -0.3423       |
| -1             | 0.63%        | 0.22%         | 0.00%        | 0.1829               | 1.0603        | <b>2.4905</b>  | 0.0181        | 1.0184        | 0.2565        |
| <b>0</b>       | <b>0.09%</b> | <b>-0.04%</b> | <b>0.09%</b> | <b>0.0739</b>        | <b>1.4907</b> | <b>0.7158</b>  | <b>0.0338</b> | <b>1.0584</b> | <b>0.4609</b> |
| 1              | 0.36%        | -0.05%        | 0.46%        | 0.1264               | 1.5658        | 1.1648         | 0.0600        | 1.0768        | 0.8037        |
| 2              | 0.60%        | 0.09%         | 1.05%        | 0.2098               | 1.3839        | <b>2.1885</b>  | 0.1024        | 1.0961        | 1.3483        |
| 3              | -0.04%       | -0.13%        | 1.01%        | 0.0059               | 1.1528        | 0.0734         | 0.1014        | 1.0806        | 1.3548        |
| 4              | 0.13%        | -0.10%        | 1.14%        | 0.0174               | 0.9352        | 0.2691         | 0.1029        | 1.0724        | 1.3846        |
| 5              | -0.12%       | -0.42%        | 1.02%        | -0.0280              | 0.9125        | -0.4424        | 0.0954        | 1.0519        | 1.3088        |
| 6              | -0.32%       | -0.14%        | 0.70%        | -0.1043              | 1.0725        | -1.4043        | 0.0735        | 1.0514        | 1.0093        |
| 7              | 0.24%        | -0.06%        | 0.93%        | 0.0706               | 0.9161        | 1.1128         | 0.0855        | 1.0598        | 1.1651        |
| 8              | 0.03%        | -0.23%        | 0.96%        | -0.0259              | 1.0304        | -0.3633        | 0.0792        | 1.0623        | 1.0766        |
| 9              | -0.14%       | -0.45%        | 0.82%        | -0.0227              | 1.0081        | -0.3257        | 0.0738        | 1.0690        | 0.9959        |
| 10             | -0.12%       | -0.28%        | 0.70%        | -0.0148              | 0.9795        | -0.2179        | 0.0699        | 1.0856        | 0.9294        |
| 11             | -0.28%       | -0.28%        | 0.42%        | -0.0492              | 0.9054        | -0.7849        | 0.0601        | 1.1081        | 0.7828        |
| 12             | 0.09%        | -0.22%        | 0.51%        | 0.0158               | 0.8941        | 0.2555         | 0.0619        | 1.1108        | 0.8048        |
| 13             | 0.53%        | 0.10%         | 1.04%        | 0.1427               | 0.9471        | <b>2.1748</b>  | 0.0855        | 1.1188        | 1.1029        |
| 14             | 0.02%        | 0.13%         | 1.06%        | -0.0122              | 0.9034        | -0.1951        | 0.0822        | 1.1053        | 1.0734        |
| 15             | -0.21%       | -0.27%        | 0.85%        | -0.0996              | 0.9235        | -1.5564        | 0.0644        | 1.1084        | 0.8392        |
| 16             | -0.06%       | -0.22%        | 0.79%        | -0.0412              | 0.9619        | -0.6185        | 0.0568        | 1.1063        | 0.7410        |
| 17             | -0.33%       | -0.27%        | 0.46%        | -0.1077              | 0.9103        | <b>-1.7080</b> | 0.0386        | 1.0923        | 0.5096        |
| 18             | -0.21%       | -0.01%        | 0.26%        | -0.0582              | 1.0739        | -0.7826        | 0.0287        | 1.0783        | 0.3848        |
| 19             | -0.37%       | -0.16%        | -0.11%       | -0.0935              | 0.9788        | -1.3784        | 0.0136        | 1.0562        | 0.1859        |
| 20             | -0.13%       | -0.23%        | -0.24%       | -0.0180              | 1.0601        | -0.2445        | 0.0106        | 1.0632        | 0.1443        |
| 21             | -0.27%       | -0.08%        | -0.51%       | -0.0779              | 1.0229        | -1.0999        | -0.0015       | 1.0758        | -0.0204       |
| 22             | -0.28%       | -0.05%        | -0.79%       | -0.0750              | 0.8120        | -1.3339        | -0.0129       | 1.0697        | -0.1747       |
| 23             | 0.26%        | -0.14%        | -0.54%       | 0.0750               | 0.9282        | 1.1656         | -0.0015       | 1.0629        | -0.0204       |
| 24             | -0.13%       | -0.18%        | -0.66%       | -0.0030              | 1.1327        | -0.0378        | -0.0019       | 1.0896        | -0.0255       |
| 25             | -0.11%       | -0.28%        | -0.78%       | -0.0298              | 1.0598        | -0.4061        | -0.0063       | 1.0837        | -0.0839       |
| 26             | 0.14%        | -0.21%        | -0.64%       | 0.0290               | 0.9447        | 0.4436         | -0.0020       | 1.0772        | -0.0268       |
| 27             | 0.15%        | 0.03%         | -0.49%       | 0.0759               | 1.0050        | 1.0899         | 0.0090        | 1.0668        | 0.1215        |
| 28             | -0.06%       | -0.16%        | -0.55%       | 0.0087               | 0.8489        | 0.1473         | 0.0101        | 1.0733        | 0.1361        |
| 29             | -0.14%       | -0.28%        | -0.69%       | -0.0172              | 0.9048        | -0.2741        | 0.0076        | 1.0653        | 0.1028        |
| 30             | 0.46%        | 0.08%         | -0.23%       | 0.1370               | 0.9367        | <b>2.1103</b>  | 0.0267        | 1.0663        | 0.3613        |
| <b>-1 to 1</b> |              |               | <b>1.08%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04346</b> | 0.2213        | 1.5075        | <b>2.1184</b> |

**Table-A 6.22 FF returns to Domestic Acquirers; All-firms; (OLS, 177); VWI**

| Days           | AAR          | Median        | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|---------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.02%       | -0.10%        | -0.02%       | 0.0131               | 0.9544        | 0.1874         | 0.0131        | 0.9544        | 0.1874        |
| -19            | 0.17%        | -0.14%        | 0.14%        | 0.0137               | 0.9902        | 0.1896         | 0.0190        | 0.9489        | 0.2732        |
| -18            | -0.09%       | -0.25%        | 0.05%        | -0.0231              | 1.0287        | -0.3067        | 0.0022        | 1.0102        | 0.0292        |
| -17            | 0.36%        | 0.01%         | 0.41%        | 0.1069               | 1.2126        | 1.2045         | 0.0553        | 1.0302        | 0.7336        |
| -16            | -0.10%       | -0.20%        | 0.30%        | -0.0110              | 1.0147        | -0.1481        | 0.0445        | 1.0885        | 0.5593        |
| -15            | -0.35%       | -0.37%        | -0.05%       | -0.1035              | 1.1372        | -1.2444        | -0.0016       | 1.1039        | -0.0199       |
| -14            | -0.18%       | -0.12%        | -0.22%       | 0.0055               | 1.1395        | 0.0654         | 0.0006        | 1.0687        | 0.0073        |
| -13            | 0.35%        | 0.11%         | 0.13%        | 0.1142               | 1.1378        | 1.3719         | 0.0409        | 1.1253        | 0.4969        |
| -12            | -0.31%       | -0.51%        | -0.18%       | -0.1240              | 0.8975        | <b>-1.8879</b> | -0.0027       | 1.0808        | -0.0347       |
| -11            | -0.19%       | -0.20%        | -0.37%       | -0.0699              | 0.9671        | -0.9874        | -0.0247       | 1.0423        | -0.3239       |
| -10            | -0.06%       | -0.41%        | -0.43%       | -0.0182              | 1.0037        | -0.2477        | -0.0290       | 1.0291        | -0.3856       |
| -9             | 0.33%        | 0.05%         | -0.10%       | 0.0821               | 1.1654        | 0.9598         | -0.0039       | 1.0464        | -0.0515       |
| -8             | 0.01%        | -0.10%        | -0.09%       | -0.0178              | 1.1093        | -0.2198        | -0.0087       | 1.0671        | -0.1113       |
| -7             | 0.38%        | -0.13%        | 0.28%        | 0.1127               | 0.9425        | 1.6344         | 0.0217        | 1.0575        | 0.2809        |
| -6             | 0.14%        | -0.14%        | 0.42%        | 0.0432               | 1.0197        | 0.5793         | 0.0321        | 1.0605        | 0.4142        |
| -5             | 0.02%        | 0.05%         | 0.44%        | 0.0236               | 1.1325        | 0.2850         | 0.0370        | 1.0605        | 0.4766        |
| -4             | -0.08%       | -0.06%        | 0.36%        | -0.0525              | 1.0253        | -0.6996        | 0.0232        | 1.0122        | 0.3137        |
| -3             | -0.12%       | -0.39%        | 0.24%        | -0.0395              | 0.9050        | -0.5967        | 0.0133        | 1.0362        | 0.1750        |
| -2             | 0.11%        | -0.16%        | 0.35%        | 0.0275               | 0.9720        | 0.3873         | 0.0192        | 1.0236        | 0.2567        |
| -1             | 0.65%        | 0.20%         | 1.00%        | 0.1896               | 1.1491        | <b>2.2550</b>  | 0.0611        | 1.0733        | 0.7779        |
| <b>0</b>       | <b>0.23%</b> | <b>-0.01%</b> | <b>1.24%</b> | <b>0.1178</b>        | <b>1.3772</b> | <b>1.1687</b>  | <b>0.0853</b> | <b>1.0953</b> | <b>1.0643</b> |
| 1              | 0.26%        | -0.03%        | 1.50%        | 0.0800               | 1.2878        | 0.8489         | 0.1003        | 1.1136        | 1.2312        |
| 2              | 0.71%        | 0.21%         | 2.21%        | 0.2247               | 1.4617        | <b>2.1014</b>  | 0.1450        | 1.1359        | <b>1.7443</b> |
| 3              | 0.04%        | -0.14%        | 2.24%        | 0.0124               | 1.1396        | 0.1491         | 0.1445        | 1.1378        | <b>1.7353</b> |
| 4              | 0.17%        | -0.20%        | 2.41%        | 0.0204               | 0.9290        | 0.3008         | 0.1456        | 1.1280        | <b>1.7642</b> |
| 5              | -0.12%       | -0.25%        | 2.29%        | -0.0107              | 0.9509        | -0.1532        | 0.1407        | 1.1398        | <b>1.6870</b> |
| 6              | -0.30%       | -0.14%        | 2.00%        | -0.0904              | 1.1233        | -1.1005        | 0.1206        | 1.1551        | 1.4276        |
| 7              | 0.28%        | -0.09%        | 2.28%        | 0.0783               | 0.9805        | 1.0912         | 0.1333        | 1.1639        | 1.5651        |
| 8              | 0.00%        | -0.23%        | 2.28%        | -0.0226              | 1.0548        | -0.2928        | 0.1267        | 1.1590        | 1.4947        |
| 9              | -0.33%       | -0.68%        | 1.94%        | -0.0887              | 1.0188        | -1.1905        | 0.1084        | 1.1675        | 1.2691        |
| 10             | -0.04%       | -0.14%        | 1.91%        | 0.0202               | 1.0427        | 0.2653         | 0.1103        | 1.1979        | 1.2583        |
| 11             | -0.32%       | -0.23%        | 1.59%        | -0.0671              | 0.9161        | -1.0005        | 0.0967        | 1.2207        | 1.0825        |
| 12             | 0.10%        | 0.06%         | 1.69%        | 0.0340               | 0.9209        | 0.5048         | 0.1011        | 1.2253        | 1.1280        |
| 13             | 0.39%        | 0.04%         | 2.08%        | 0.1116               | 0.9984        | 1.5272         | 0.1188        | 1.2430        | 1.3058        |
| 14             | 0.01%        | 0.01%         | 2.09%        | -0.0050              | 0.9515        | -0.0720        | 0.1162        | 1.2293        | 1.2920        |
| 15             | -0.21%       | -0.28%        | 1.87%        | -0.1150              | 0.9776        | -1.6030        | 0.0955        | 1.2419        | 1.0509        |
| 16             | -0.30%       | -0.55%        | 1.57%        | -0.1422              | 1.0232        | <b>-1.8940</b> | 0.0709        | 1.2103        | 0.8009        |
| 17             | -0.36%       | -0.30%        | 1.22%        | -0.1265              | 0.8744        | <b>-1.9717</b> | 0.0496        | 1.2002        | 0.5643        |
| 18             | -0.18%       | -0.27%        | 1.03%        | -0.0215              | 1.1387        | -0.2577        | 0.0455        | 1.1946        | 0.5200        |
| 19             | -0.33%       | -0.17%        | 0.71%        | -0.0741              | 1.0306        | -0.9803        | 0.0332        | 1.1541        | 0.3932        |
| 20             | -0.18%       | -0.29%        | 0.53%        | -0.0356              | 0.9846        | -0.4928        | 0.0272        | 1.1391        | 0.3268        |
| 21             | -0.40%       | -0.13%        | 0.13%        | -0.1459              | 1.0332        | <b>-1.9250</b> | 0.0045        | 1.1392        | 0.0539        |
| 22             | -0.31%       | -0.16%        | -0.18%       | -0.0637              | 0.8710        | -0.9965        | -0.0052       | 1.1255        | -0.0637       |
| 23             | 0.41%        | -0.04%        | 0.23%        | 0.1125               | 0.9324        | 1.6392         | 0.0116        | 1.1313        | 0.1400        |
| 24             | -0.32%       | -0.49%        | -0.09%       | -0.0858              | 1.1830        | -0.9858        | -0.0012       | 1.1612        | -0.0140       |
| 25             | -0.33%       | -0.47%        | -0.43%       | -0.1256              | 1.1685        | -1.4604        | -0.0195       | 1.1387        | -0.2339       |
| 26             | 0.07%        | 0.02%         | -0.35%       | 0.0018               | 0.9197        | 0.0270         | -0.0190       | 1.1171        | -0.2326       |
| 27             | 0.14%        | -0.02%        | -0.22%       | 0.0769               | 0.9587        | 1.0895         | -0.0078       | 1.1037        | -0.0971       |
| 28             | -0.18%       | -0.09%        | -0.40%       | -0.0498              | 0.8839        | -0.7652        | -0.0148       | 1.1083        | -0.1825       |
| 29             | -0.10%       | -0.20%        | -0.51%       | -0.0446              | 0.9222        | -0.6571        | -0.0209       | 1.1021        | -0.2590       |
| 30             | 0.51%        | 0.19%         | 0.00%        | 0.1732               | 1.0592        | <b>2.2216</b>  | 0.0033        | 1.1015        | 0.0409        |
| <b>-1 to 1</b> |              |               | <b>1.15%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.0386</b>  | 0.2236        | 1.5243        | <b>2.0051</b> |

**Table-A 6.23 FF returns to Domestic Acquirers; All-firms; (MM, 173); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.14%        | 0.09%        | 0.14%        | 0.2558               | 3.2806        | 1.0465         | 0.2558        | 3.2806        | 1.0465        |
| -19            | 0.22%        | -0.08%       | 0.35%        | 0.0229               | 1.2329        | 0.2496         | 0.1971        | 2.4244        | 1.0910        |
| -18            | 0.01%        | -0.16%       | 0.37%        | -0.0540              | 1.3988        | -0.5186        | 0.1297        | 1.8248        | 0.9540        |
| -17            | 0.48%        | 0.14%        | 0.85%        | 0.2130               | 1.6227        | <b>1.7623</b>  | 0.2188        | 1.7958        | 1.6357        |
| -16            | 0.05%        | -0.18%       | 0.90%        | 0.0550               | 1.4653        | 0.5037         | 0.2203        | 1.7341        | <b>1.7055</b> |
| -15            | -0.20%       | -0.28%       | 0.70%        | -0.0298              | 1.3811        | -0.2899        | 0.1890        | 1.7247        | 1.4706        |
| -14            | -0.01%       | -0.10%       | 0.69%        | -0.0065              | 1.3819        | -0.0627        | 0.1725        | 1.5905        | 1.4558        |
| -13            | 0.41%        | 0.19%        | 1.11%        | 0.1980               | 1.3167        | <b>2.0182</b>  | 0.2313        | 1.5965        | <b>1.9452</b> |
| -12            | -0.19%       | -0.35%       | 0.92%        | -0.0829              | 1.2195        | -0.9129        | 0.1905        | 1.5040        | <b>1.6999</b> |
| -11            | -0.07%       | -0.16%       | 0.85%        | -0.0581              | 1.1421        | -0.6830        | 0.1623        | 1.4262        | 1.5277        |
| -10            | 0.01%        | -0.12%       | 0.86%        | 0.0420               | 1.4959        | 0.3770         | 0.1674        | 1.5105        | 1.4879        |
| -9             | 0.59%        | 0.16%        | 1.45%        | 0.1371               | 1.5485        | 1.1849         | 0.2000        | 1.3799        | <b>1.9455</b> |
| -8             | 0.13%        | -0.05%       | 1.57%        | 0.0377               | 1.7943        | 0.2822         | 0.2027        | 1.5286        | <b>1.7799</b> |
| -7             | 0.55%        | 0.14%        | 2.13%        | 0.1406               | 1.7541        | 1.0759         | 0.2329        | 1.3626        | <b>2.2939</b> |
| -6             | 0.20%        | 0.07%        | 2.33%        | 0.1115               | 1.2320        | 1.2147         | 0.2537        | 1.3320        | <b>2.5570</b> |
| -5             | 0.27%        | 0.10%        | 2.60%        | 0.1191               | 1.3417        | 1.1913         | 0.2754        | 1.3152        | <b>2.8107</b> |
| -4             | 0.10%        | -0.01%       | 2.70%        | -0.1365              | 2.7402        | -0.6687        | 0.2342        | 1.2324        | <b>2.5508</b> |
| -3             | -0.02%       | -0.13%       | 2.68%        | 0.0835               | 1.6020        | 0.6995         | 0.2472        | 1.2638        | <b>2.6261</b> |
| -2             | 0.24%        | 0.03%        | 2.92%        | 0.0141               | 1.6465        | 0.1148         | 0.2439        | 1.2599        | <b>2.5981</b> |
| -1             | 0.79%        | 0.40%        | 3.72%        | 0.3998               | 2.3262        | <b>2.3070</b>  | 0.3270        | 1.3799        | <b>3.1813</b> |
| <b>0</b>       | <b>0.41%</b> | <b>0.02%</b> | <b>4.12%</b> | <b>0.1115</b>        | <b>1.9814</b> | <b>0.7552</b>  | <b>0.3434</b> | <b>1.3790</b> | <b>3.3432</b> |
| 1              | 0.37%        | 0.14%        | 4.49%        | 0.1429               | 1.9188        | 0.9994         | 0.3659        | 1.3540        | <b>3.6276</b> |
| 2              | 0.82%        | 0.24%        | 5.31%        | 0.3715               | 2.5296        | <b>1.9716</b>  | 0.4353        | 1.4885        | <b>3.9257</b> |
| 3              | 0.17%        | 0.03%        | 5.48%        | 0.0940               | 1.9619        | 0.6428         | 0.4454        | 1.3704        | <b>4.3621</b> |
| 4              | 0.33%        | 0.07%        | 5.81%        | 0.0581               | 1.1078        | 0.7036         | 0.4479        | 1.3466        | <b>4.4651</b> |
| 5              | 0.09%        | -0.11%       | 5.90%        | 0.1446               | 1.6055        | 1.2086         | 0.4676        | 1.3951        | <b>4.4991</b> |
| 6              | -0.12%       | -0.01%       | 5.78%        | 0.0065               | 1.6828        | 0.0521         | 0.4601        | 1.4511        | <b>4.2560</b> |
| 7              | 0.32%        | 0.06%        | 6.09%        | 0.1275               | 2.4193        | 0.7074         | 0.4759        | 1.5192        | <b>4.2052</b> |
| 8              | 0.16%        | -0.01%       | 6.26%        | 0.1184               | 1.4880        | 1.0681         | 0.4896        | 1.5951        | <b>4.1202</b> |
| 9              | -0.15%       | -0.47%       | 6.10%        | -0.0981              | 1.4146        | -0.9310        | 0.4635        | 1.5257        | <b>4.0775</b> |
| 10             | 0.07%        | 0.00%        | 6.17%        | 0.1081               | 1.7437        | 0.8320         | 0.4753        | 1.5186        | <b>4.2015</b> |
| 11             | -0.22%       | -0.14%       | 5.95%        | -0.0888              | 1.3555        | -0.8797        | 0.4521        | 1.4637        | <b>4.1463</b> |
| 12             | 0.29%        | 0.15%        | 6.24%        | 0.1215               | 1.2112        | 1.3466         | 0.4664        | 1.4913        | <b>4.1979</b> |
| 13             | 0.65%        | 0.10%        | 6.89%        | 0.2251               | 1.2511        | <b>2.4148</b>  | 0.4981        | 1.4978        | <b>4.4637</b> |
| 14             | 0.15%        | 0.19%        | 7.04%        | 0.0638               | 1.1921        | 0.7189         | 0.5017        | 1.5242        | <b>4.4183</b> |
| 15             | -0.16%       | -0.27%       | 6.88%        | -0.2005              | 1.6201        | <b>-1.6566</b> | 0.4614        | 1.4844        | <b>4.1726</b> |
| 16             | -0.10%       | -0.25%       | 6.78%        | -0.0029              | 1.3610        | -0.0281        | 0.4546        | 1.5159        | <b>4.0257</b> |
| 17             | -0.24%       | -0.18%       | 6.54%        | -0.0416              | 1.2740        | -0.4373        | 0.4419        | 1.5602        | <b>3.8018</b> |
| 18             | -0.02%       | 0.02%        | 6.52%        | 0.0778               | 1.4968        | 0.6953         | 0.4485        | 1.6311        | <b>3.6912</b> |
| 19             | -0.15%       | 0.05%        | 6.37%        | -0.1447              | 1.7267        | -1.1213        | 0.4201        | 1.5773        | <b>3.5752</b> |
| 20             | 0.04%        | -0.06%       | 6.40%        | 0.0958               | 1.3503        | 0.9494         | 0.4298        | 1.6042        | <b>3.5964</b> |
| 21             | -0.23%       | -0.05%       | 6.18%        | -0.0738              | 1.9654        | -0.5026        | 0.4133        | 1.6583        | <b>3.3454</b> |
| 22             | -0.01%       | 0.07%        | 6.17%        | 0.1490               | 1.7205        | 1.1590         | 0.4310        | 1.7128        | <b>3.3780</b> |
| 23             | 0.52%        | 0.10%        | 6.69%        | 0.1700               | 1.3936        | 1.6274         | 0.4515        | 1.6493        | <b>3.6745</b> |
| 24             | -0.12%       | -0.21%       | 6.57%        | 0.0650               | 1.9186        | 0.4522         | 0.4561        | 1.7441        | <b>3.5102</b> |
| 25             | -0.06%       | -0.25%       | 6.52%        | -0.0455              | 1.4142        | -0.4290        | 0.4445        | 1.6828        | <b>3.5459</b> |
| 26             | 0.28%        | 0.00%        | 6.80%        | 0.0870               | 1.1918        | 0.9745         | 0.4524        | 1.6461        | <b>3.6890</b> |
| 27             | 0.33%        | 0.13%        | 7.13%        | 0.1650               | 1.2087        | <b>1.8216</b>  | 0.4713        | 1.6535        | <b>3.8257</b> |
| 28             | -0.01%       | -0.08%       | 7.12%        | 0.0544               | 1.3549        | 0.5353         | 0.4741        | 1.7086        | <b>3.7250</b> |
| 29             | 0.07%        | -0.15%       | 7.19%        | -0.0393              | 1.4411        | -0.3639        | 0.4639        | 1.6623        | <b>3.7463</b> |
| 30             | 0.67%        | 0.23%        | 7.86%        | 0.3089               | 1.2364        | <b>3.3329</b>  | 0.5022        | 1.6950        | <b>3.9769</b> |
| <b>-1 to 1</b> |              |              | <b>1.57%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.03872</b> | 0.3777        | 1.9467        | <b>2.6041</b> |

**Table-A 6.24 Market returns to Domestic Acquirers; FF-firms; (OLS, 177); VWI**

| Days           | AAR          | Median        | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|---------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.07%       | -0.27%        | -0.07%       | 0.0110               | 0.9902        | 0.1529         | 0.0110        | 0.9902        | 0.1529        |
| -19            | 0.07%        | -0.17%        | 0.00%        | -0.0158              | 0.9519        | -0.2277        | -0.0034       | 0.9331        | -0.0495       |
| -18            | -0.21%       | -0.36%        | -0.20%       | -0.0705              | 1.0593        | -0.9138        | -0.0434       | 0.9820        | -0.6076       |
| -17            | 0.28%        | -0.02%        | 0.08%        | 0.0729               | 1.1614        | 0.8623         | -0.0012       | 0.9816        | -0.0163       |
| -16            | -0.20%       | -0.44%        | -0.12%       | -0.0445              | 1.0233        | -0.5967        | -0.0209       | 1.0551        | -0.2723       |
| -15            | -0.34%       | -0.50%        | -0.46%       | -0.1052              | 1.1198        | -1.2907        | -0.0621       | 1.0542        | -0.8085       |
| -14            | -0.19%       | -0.25%        | -0.65%       | -0.0021              | 1.0927        | -0.0265        | -0.0583       | 1.0011        | -0.7992       |
| -13            | 0.50%        | 0.13%         | -0.15%       | 0.1772               | 1.1750        | <b>2.0706</b>  | 0.0081        | 1.0712        | 0.1043        |
| -12            | -0.29%       | -0.50%        | -0.44%       | -0.0983              | 0.9066        | -1.4893        | -0.0251       | 1.0412        | -0.3311       |
| -11            | -0.22%       | -0.35%        | -0.66%       | -0.0627              | 0.9772        | -0.8817        | -0.0437       | 1.0364        | -0.5784       |
| -10            | -0.07%       | -0.30%        | -0.74%       | -0.0255              | 1.0328        | -0.3391        | -0.0493       | 1.0412        | -0.6503       |
| -9             | 0.46%        | 0.04%         | -0.28%       | 0.1200               | 1.1443        | 1.4402         | -0.0126       | 1.0612        | -0.1626       |
| -8             | -0.08%       | -0.20%        | -0.36%       | -0.0418              | 1.1254        | -0.5099        | -0.0237       | 1.0782        | -0.3014       |
| -7             | 0.34%        | -0.11%        | -0.02%       | 0.0981               | 0.9067        | 1.4862         | 0.0034        | 1.0672        | 0.0441        |
| -6             | 0.13%        | -0.04%        | 0.11%        | 0.0527               | 1.0418        | 0.6940         | 0.0169        | 1.0801        | 0.2149        |
| -5             | -0.04%       | -0.11%        | 0.07%        | -0.0039              | 1.1229        | -0.0482        | 0.0154        | 1.0409        | 0.2029        |
| -4             | -0.19%       | -0.22%        | -0.13%       | -0.0755              | 1.0240        | -1.0120        | -0.0034       | 0.9901        | -0.0469       |
| -3             | -0.09%       | -0.21%        | -0.22%       | -0.0342              | 0.9194        | -0.5112        | -0.0114       | 1.0264        | -0.1519       |
| -2             | 0.17%        | -0.04%        | -0.06%       | 0.0312               | 0.9251        | 0.4630         | -0.0039       | 1.0189        | -0.0525       |
| -1             | 0.65%        | 0.03%         | 0.59%        | 0.1893               | 1.0994        | <b>2.3646</b>  | 0.0385        | 1.0685        | 0.4953        |
| <b>0</b>       | <b>0.21%</b> | <b>-0.04%</b> | <b>0.81%</b> | <b>0.0949</b>        | <b>1.3367</b> | <b>0.9746</b>  | <b>0.0583</b> | <b>1.0824</b> | <b>0.7398</b> |
| 1              | 0.23%        | -0.04%        | 1.03%        | 0.0739               | 1.2628        | 0.8039         | 0.0727        | 1.1054        | 0.9035        |
| 2              | 0.71%        | 0.07%         | 1.74%        | 0.2306               | 1.4228        | <b>2.2253</b>  | 0.1192        | 1.1346        | 1.4429        |
| 3              | -0.07%       | -0.23%        | 1.67%        | -0.0111              | 1.0979        | -0.1388        | 0.1144        | 1.1350        | 1.3845        |
| 4              | 0.16%        | -0.08%        | 1.83%        | 0.0227               | 0.9531        | 0.3264         | 0.1167        | 1.1350        | 1.4114        |
| 5              | -0.14%       | -0.26%        | 1.69%        | -0.0202              | 0.9157        | -0.3031        | 0.1104        | 1.1300        | 1.3419        |
| 6              | -0.38%       | -0.11%        | 1.32%        | -0.1061              | 1.1155        | -1.3058        | 0.0879        | 1.1435        | 1.0561        |
| 7              | 0.33%        | -0.06%        | 1.64%        | 0.0896               | 0.9778        | 1.2580         | 0.1033        | 1.1588        | 1.2241        |
| 8              | 0.05%        | -0.23%        | 1.70%        | -0.0116              | 1.0565        | -0.1508        | 0.0993        | 1.1578        | 1.1782        |
| 9              | -0.25%       | -0.51%        | 1.44%        | -0.0485              | 1.0035        | -0.6633        | 0.0888        | 1.1674        | 1.0448        |
| 10             | -0.04%       | -0.26%        | 1.41%        | 0.0266               | 0.9919        | 0.3687         | 0.0922        | 1.1966        | 1.0576        |
| 11             | -0.29%       | -0.27%        | 1.11%        | -0.0470              | 0.9316        | -0.6926        | 0.0824        | 1.2330        | 0.9178        |
| 12             | 0.19%        | -0.13%        | 1.30%        | 0.0608               | 0.9606        | 0.8688         | 0.0917        | 1.2433        | 1.0131        |
| 13             | 0.54%        | 0.11%         | 1.85%        | 0.1595               | 0.9565        | <b>2.2894</b>  | 0.1177        | 1.2517        | 1.2914        |
| 14             | -0.02%       | 0.13%         | 1.83%        | -0.0238              | 0.9058        | -0.3609        | 0.1120        | 1.2380        | 1.2423        |
| 15             | -0.06%       | -0.17%        | 1.77%        | -0.0512              | 0.9649        | -0.7293        | 0.1019        | 1.2554        | 1.1145        |
| 16             | -0.28%       | -0.38%        | 1.49%        | -0.1250              | 0.9666        | <b>-1.7762</b> | 0.0799        | 1.2208        | 0.8993        |
| 17             | -0.36%       | -0.30%        | 1.13%        | -0.1211              | 0.9227        | <b>-1.8029</b> | 0.0592        | 1.2035        | 0.6759        |
| 18             | -0.07%       | 0.00%         | 1.06%        | 0.0212               | 1.1065        | 0.2633         | 0.0619        | 1.1970        | 0.7098        |
| 19             | -0.35%       | -0.12%        | 0.71%        | -0.0884              | 1.0274        | -1.1812        | 0.0471        | 1.1603        | 0.5576        |
| 20             | -0.18%       | -0.26%        | 0.53%        | -0.0428              | 1.0739        | -0.5473        | 0.0399        | 1.1453        | 0.4779        |
| 21             | -0.37%       | -0.14%        | 0.16%        | -0.1210              | 1.0575        | -1.5709        | 0.0207        | 1.1427        | 0.2489        |
| 22             | -0.32%       | 0.00%         | -0.16%       | -0.0755              | 0.8677        | -1.1941        | 0.0090        | 1.1220        | 0.1097        |
| 23             | 0.35%        | -0.03%        | 0.18%        | 0.1076               | 0.9520        | 1.5524         | 0.0251        | 1.1151        | 0.3089        |
| 24             | -0.16%       | -0.19%        | 0.03%        | -0.0288              | 1.1752        | -0.3369        | 0.0205        | 1.1376        | 0.2475        |
| 25             | -0.26%       | -0.28%        | -0.24%       | -0.1022              | 1.0583        | -1.3261        | 0.0052        | 1.1160        | 0.0642        |
| 26             | 0.08%        | -0.28%        | -0.16%       | 0.0012               | 0.9607        | 0.0174         | 0.0053        | 1.0997        | 0.0666        |
| 27             | 0.16%        | -0.03%        | -0.01%       | 0.0767               | 0.9661        | 1.0897         | 0.0163        | 1.0849        | 0.2069        |
| 28             | -0.23%       | -0.19%        | -0.24%       | -0.0520              | 0.8367        | -0.8543        | 0.0087        | 1.0934        | 0.1098        |
| 29             | -0.20%       | -0.27%        | -0.44%       | -0.0533              | 0.8796        | -0.8323        | 0.0011        | 1.0845        | 0.0141        |
| 30             | 0.50%        | 0.13%         | 0.06%        | 0.1647               | 1.0159        | <b>2.2257</b>  | 0.0242        | 1.0749        | 0.3087        |
| <b>-1 to 1</b> |              |               | <b>1.09%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.0386</b>  | 0.2067        | 1.5168        | <b>1.8718</b> |



**Table-A 6.25 Market returns to Domestic Acquirers; FF-firms; (MM, 173); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.15%        | -0.06%       | 0.15%        | 0.2908               | 3.4594        | 1.1332         | 0.2908        | 3.4594        | 1.1332        |
| -19            | 0.15%        | -0.01%       | 0.31%        | -0.0115              | 1.1844        | -0.1305        | 0.1975        | 2.5219        | 1.0558        |
| -18            | -0.10%       | -0.17%       | 0.21%        | -0.1118              | 1.4533        | -1.0373        | 0.0967        | 1.8666        | 0.6984        |
| -17            | 0.43%        | 0.08%        | 0.64%        | 0.1873               | 1.6129        | 1.5656         | 0.1774        | 1.8278        | 1.3084        |
| -16            | -0.03%       | -0.30%       | 0.61%        | 0.0338               | 1.5107        | 0.3018         | 0.1738        | 1.7757        | 1.3195        |
| -15            | -0.17%       | -0.18%       | 0.44%        | -0.0205              | 1.3935        | -0.1986        | 0.1503        | 1.7764        | 1.1404        |
| -14            | 0.00%        | -0.21%       | 0.44%        | -0.0109              | 1.3689        | -0.1077        | 0.1350        | 1.6110        | 1.1296        |
| -13            | 0.53%        | 0.22%        | 0.97%        | 0.2469               | 1.3704        | <b>2.4282</b>  | 0.2136        | 1.6039        | <b>1.7948</b> |
| -12            | -0.15%       | -0.31%       | 0.82%        | -0.0514              | 1.2738        | -0.5440        | 0.1842        | 1.5222        | 1.6312        |
| -11            | -0.12%       | -0.18%       | 0.69%        | -0.0545              | 1.1512        | -0.6386        | 0.1575        | 1.4676        | 1.4468        |
| -10            | 0.01%        | -0.14%       | 0.70%        | 0.0374               | 1.5704        | 0.3209         | 0.1615        | 1.5745        | 1.3822        |
| -9             | 0.69%        | 0.13%        | 1.39%        | 0.1683               | 1.5584        | 1.4559         | 0.2032        | 1.4288        | <b>1.9168</b> |
| -8             | 0.06%        | -0.08%       | 1.44%        | 0.0221               | 1.8494        | 0.1609         | 0.2013        | 1.5786        | <b>1.7191</b> |
| -7             | 0.49%        | 0.08%        | 1.93%        | 0.1210               | 1.7988        | 0.9067         | 0.2264        | 1.4015        | <b>2.1770</b> |
| -6             | 0.14%        | 0.05%        | 2.08%        | 0.1040               | 1.2548        | 1.1173         | 0.2455        | 1.3694        | <b>2.4168</b> |
| -5             | 0.24%        | 0.07%        | 2.32%        | 0.0861               | 1.3687        | 0.8476         | 0.2593        | 1.3124        | <b>2.6626</b> |
| -4             | -0.01%       | -0.04%       | 2.31%        | -0.1823              | 2.8628        | -0.8582        | 0.2073        | 1.2312        | <b>2.2695</b> |
| -3             | -0.01%       | -0.14%       | 2.29%        | 0.0767               | 1.6228        | 0.6371         | 0.2195        | 1.2646        | <b>2.3400</b> |
| -2             | 0.28%        | 0.02%        | 2.57%        | 0.0118               | 1.6648        | 0.0954         | 0.2164        | 1.2741        | <b>2.2892</b> |
| -1             | 0.81%        | 0.18%        | 3.39%        | 0.4120               | 2.3858        | <b>2.3273</b>  | 0.3030        | 1.4075        | <b>2.9019</b> |
| <b>0</b>       | <b>0.34%</b> | <b>0.10%</b> | <b>3.72%</b> | <b>0.0752</b>        | <b>1.9999</b> | <b>0.5070</b>  | <b>0.3121</b> | <b>1.3977</b> | <b>3.0101</b> |
| 1              | 0.33%        | 0.09%        | 4.06%        | 0.1419               | 1.9366        | 0.9878         | 0.3352        | 1.3693        | <b>3.2999</b> |
| 2              | 0.85%        | 0.13%        | 4.90%        | 0.4004               | 2.6071        | <b>2.0699</b>  | 0.4113        | 1.5250        | <b>3.6356</b> |
| 3              | 0.08%        | -0.07%       | 4.99%        | 0.0709               | 2.0031        | 0.4770         | 0.4171        | 1.3979        | <b>4.0222</b> |
| 4              | 0.32%        | 0.03%        | 5.31%        | 0.0509               | 1.1668        | 0.5876         | 0.4189        | 1.3780        | <b>4.0974</b> |
| 5              | 0.03%        | -0.07%       | 5.34%        | 0.1279               | 1.6476        | 1.0464         | 0.4358        | 1.4113        | <b>4.1626</b> |
| 6              | -0.17%       | 0.01%        | 5.17%        | 0.0059               | 1.7145        | 0.0460         | 0.4288        | 1.4687        | <b>3.9354</b> |
| 7              | 0.32%        | 0.03%        | 5.49%        | 0.1312               | 2.5174        | 0.7027         | 0.4459        | 1.5448        | <b>3.8904</b> |
| 8              | 0.24%        | -0.10%       | 5.73%        | 0.1370               | 1.5284        | 1.2082         | 0.4636        | 1.6315        | <b>3.8299</b> |
| 9              | -0.10%       | -0.21%       | 5.62%        | -0.0709              | 1.4273        | -0.6696        | 0.4428        | 1.5582        | <b>3.8307</b> |
| 10             | 0.07%        | -0.08%       | 5.69%        | 0.1149               | 1.7563        | 0.8819         | 0.4563        | 1.5479        | <b>3.9732</b> |
| 11             | -0.18%       | -0.10%       | 5.51%        | -0.0675              | 1.3861        | -0.6563        | 0.4372        | 1.4950        | <b>3.9414</b> |
| 12             | 0.35%        | 0.00%        | 5.86%        | 0.1562               | 1.2502        | <b>1.6843</b>  | 0.4577        | 1.5301        | <b>4.0316</b> |
| 13             | 0.77%        | 0.20%        | 6.63%        | 0.2726               | 1.2443        | <b>2.9531</b>  | 0.4977        | 1.5253        | <b>4.3977</b> |
| 14             | 0.14%        | 0.24%        | 6.76%        | 0.0469               | 1.1573        | 0.5462         | 0.4984        | 1.5487        | <b>4.3378</b> |
| 15             | 0.01%        | -0.06%       | 6.77%        | -0.1376              | 1.6764        | -1.1065        | 0.4685        | 1.5048        | <b>4.1966</b> |
| 16             | -0.05%       | -0.12%       | 6.73%        | 0.0179               | 1.3585        | 0.1779         | 0.4651        | 1.5400        | <b>4.0707</b> |
| 17             | -0.17%       | -0.17%       | 6.56%        | -0.0162              | 1.3584        | -0.1610        | 0.4563        | 1.5810        | <b>3.8902</b> |
| 18             | 0.09%        | 0.21%        | 6.64%        | 0.1185               | 1.5205        | 1.0505         | 0.4694        | 1.6530        | <b>3.8273</b> |
| 19             | -0.18%       | 0.04%        | 6.46%        | -0.1754              | 1.7799        | -1.3281        | 0.4358        | 1.6027        | <b>3.6646</b> |
| 20             | 0.08%        | 0.06%        | 6.54%        | 0.0958               | 1.4639        | 0.8818         | 0.4454        | 1.6306        | <b>3.6813</b> |
| 21             | -0.19%       | 0.08%        | 6.35%        | -0.0614              | 2.1483        | -0.3850        | 0.4306        | 1.6982        | <b>3.4174</b> |
| 22             | 0.01%        | 0.19%        | 6.36%        | 0.1597               | 1.7835        | 1.2065         | 0.4499        | 1.7530        | <b>3.4590</b> |
| 23             | 0.46%        | 0.15%        | 6.82%        | 0.1780               | 1.4316        | <b>1.6760</b>  | 0.4716        | 1.6749        | <b>3.7949</b> |
| 24             | 0.00%        | -0.16%       | 6.82%        | 0.1198               | 1.9719        | 0.8189         | 0.4842        | 1.7656        | <b>3.6960</b> |
| 25             | 0.00%        | -0.15%       | 6.82%        | -0.0247              | 1.3556        | -0.2459        | 0.4752        | 1.7047        | <b>3.7574</b> |
| 26             | 0.31%        | -0.08%       | 7.13%        | 0.0840               | 1.2209        | 0.9277         | 0.4824        | 1.6715        | <b>3.8898</b> |
| 27             | 0.37%        | 0.02%        | 7.50%        | 0.1747               | 1.2469        | <b>1.8889</b>  | 0.5026        | 1.6788        | <b>4.0350</b> |
| 28             | -0.01%       | -0.08%       | 7.49%        | 0.0591               | 1.3616        | 0.5847         | 0.5058        | 1.7428        | <b>3.9121</b> |
| 29             | 0.04%        | -0.04%       | 7.52%        | -0.0480              | 1.4503        | -0.4464        | 0.4940        | 1.6944        | <b>3.9293</b> |
| 30             | 0.66%        | 0.35%        | 8.18%        | 0.3009               | 1.2062        | <b>3.3621</b>  | 0.5312        | 1.7256        | <b>4.1494</b> |
| <b>-1 to 1</b> |              |              | <b>1.48%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.03895</b> | 0.3632        | 1.9729        | <b>2.4814</b> |

Table-A 6.26 SW-1 returns to Domestic Acquirers; All-firms; (OLS, 195); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.01%        | -0.15%       | 0.01%        | 0.0416               | 0.9630        | 0.6381         | 0.0416        | 0.9630        | 0.6381        |
| -19            | 0.07%        | -0.14%       | 0.09%        | -0.0038              | 0.9714        | -0.0574        | 0.0267        | 0.9392        | 0.4206        |
| -18            | -0.30%       | -0.47%       | -0.21%       | -0.0848              | 1.0222        | -1.2267        | -0.0271       | 0.9786        | -0.4102       |
| -17            | 0.35%        | 0.08%        | 0.13%        | 0.1076               | 1.1567        | 1.3753         | 0.0303        | 0.9879        | 0.4533        |
| -16            | -0.14%       | -0.42%       | 0.00%        | -0.0199              | 1.0448        | -0.2814        | 0.0182        | 1.0706        | 0.2513        |
| -15            | -0.35%       | -0.38%       | -0.35%       | -0.1046              | 1.1253        | -1.3738        | -0.0261       | 1.0850        | -0.3553       |
| -14            | -0.18%       | -0.22%       | -0.53%       | -0.0035              | 1.0811        | -0.0479        | -0.0255       | 1.0271        | -0.3666       |
| -13            | 0.40%        | 0.08%        | -0.13%       | 0.1464               | 1.1443        | <b>1.8920</b>  | 0.0279        | 1.0889        | 0.3795        |
| -12            | -0.28%       | -0.45%       | -0.41%       | -0.0921              | 0.9186        | -1.4825        | -0.0044       | 1.0424        | -0.0617       |
| -11            | -0.29%       | -0.41%       | -0.70%       | -0.0871              | 0.9307        | -1.3833        | -0.0317       | 1.0316        | -0.4538       |
| -10            | -0.10%       | -0.31%       | -0.80%       | -0.0270              | 1.0337        | -0.3855        | -0.0383       | 1.0312        | -0.5494       |
| -9             | 0.44%        | 0.08%        | -0.36%       | 0.1273               | 1.1261        | <b>1.6708</b>  | 0.0000        | 1.0592        | 0.0007        |
| -8             | -0.15%       | -0.17%       | -0.51%       | -0.0656              | 1.0825        | -0.8966        | -0.0182       | 1.0803        | -0.2486       |
| -7             | 0.33%        | -0.06%       | -0.18%       | 0.1111               | 0.9149        | <b>1.7960</b>  | 0.0122        | 1.0812        | 0.1668        |
| -6             | 0.17%        | 0.08%        | -0.01%       | 0.0735               | 1.0335        | 1.0516         | 0.0308        | 1.0960        | 0.4150        |
| -5             | -0.06%       | -0.10%       | -0.07%       | -0.0180              | 1.0999        | -0.2424        | 0.0253        | 1.0549        | 0.3543        |
| -4             | -0.21%       | -0.31%       | -0.28%       | -0.0873              | 1.0217        | -1.2633        | 0.0034        | 1.0076        | 0.0492        |
| -3             | -0.15%       | -0.36%       | -0.43%       | -0.0435              | 0.9770        | -0.6579        | -0.0070       | 1.0312        | -0.1002       |
| -2             | 0.16%        | 0.10%        | -0.27%       | 0.0284               | 0.9101        | 0.4619         | -0.0003       | 1.0141        | -0.0041       |
| -1             | 0.64%        | 0.16%        | 0.36%        | 0.1868               | 1.0645        | <b>2.5952</b>  | 0.0415        | 1.0568        | 0.5807        |
| <b>0</b>       | <b>0.14%</b> | <b>0.00%</b> | <b>0.50%</b> | <b>0.0799</b>        | <b>1.4849</b> | <b>0.7957</b>  | <b>0.0579</b> | <b>1.0995</b> | <b>0.7792</b> |
| 1              | 0.42%        | 0.01%        | 0.92%        | 0.1376               | 1.5552        | 1.3082         | 0.0859        | 1.1130        | 1.1418        |
| 2              | 0.66%        | 0.10%        | 1.58%        | 0.2202               | 1.3828        | <b>2.3544</b>  | 0.1300        | 1.1363        | <b>1.6911</b> |
| 3              | 0.01%        | -0.01%       | 1.59%        | 0.0206               | 1.1679        | 0.2608         | 0.1314        | 1.1333        | <b>1.7149</b> |
| 4              | 0.11%        | -0.15%       | 1.70%        | 0.0121               | 0.9343        | 0.1916         | 0.1312        | 1.1283        | <b>1.7194</b> |
| 5              | -0.14%       | -0.40%       | 1.56%        | -0.0326              | 0.9199        | -0.5232        | 0.1223        | 1.1163        | 1.6195        |
| 6              | -0.34%       | -0.14%       | 1.22%        | -0.0964              | 1.0823        | -1.3173        | 0.1014        | 1.1224        | 1.3361        |
| 7              | 0.39%        | -0.08%       | 1.62%        | 0.1183               | 0.9834        | <b>1.7791</b>  | 0.1220        | 1.1416        | 1.5796        |
| 8              | 0.05%        | -0.23%       | 1.66%        | -0.0231              | 1.0274        | -0.3329        | 0.1156        | 1.1395        | 1.4993        |
| 9              | -0.12%       | -0.21%       | 1.54%        | -0.0100              | 1.0131        | -0.1455        | 0.1118        | 1.1417        | 1.4477        |
| 10             | -0.07%       | -0.39%       | 1.47%        | 0.0058               | 0.9886        | 0.0862         | 0.1110        | 1.1714        | 1.4011        |
| 11             | -0.23%       | -0.27%       | 1.25%        | -0.0357              | 0.9296        | -0.5672        | 0.1030        | 1.2014        | 1.2671        |
| 12             | 0.10%        | -0.26%       | 1.34%        | 0.0283               | 0.9604        | 0.4352         | 0.1063        | 1.2109        | 1.2980        |
| 13             | 0.45%        | 0.03%        | 1.79%        | 0.1249               | 0.9286        | <b>1.9887</b>  | 0.1261        | 1.2193        | 1.5297        |
| 14             | 0.00%        | 0.16%        | 1.79%        | -0.0155              | 0.8715        | -0.2622        | 0.1217        | 1.2028        | 1.4963        |
| 15             | -0.14%       | -0.30%       | 1.65%        | -0.0739              | 0.9570        | -1.1420        | 0.1077        | 1.2196        | 1.3057        |
| 16             | -0.17%       | -0.22%       | 1.47%        | -0.0859              | 0.9977        | -1.2723        | 0.0921        | 1.1933        | 1.1414        |
| 17             | -0.36%       | -0.25%       | 1.12%        | -0.1220              | 0.9113        | <b>-1.9790</b> | 0.0711        | 1.1766        | 0.8936        |
| 18             | -0.19%       | -0.04%       | 0.93%        | -0.0454              | 1.1167        | -0.6013        | 0.0629        | 1.1639        | 0.7993        |
| 19             | -0.36%       | -0.21%       | 0.57%        | -0.0987              | 1.0066        | -1.4494        | 0.0465        | 1.1283        | 0.6097        |
| 20             | -0.24%       | -0.24%       | 0.32%        | -0.0572              | 1.1044        | -0.7655        | 0.0370        | 1.1165        | 0.4903        |
| 21             | -0.21%       | -0.13%       | 0.11%        | -0.0644              | 1.0683        | -0.8906        | 0.0267        | 1.1175        | 0.3526        |
| 22             | -0.43%       | -0.15%       | -0.32%       | -0.1179              | 0.8583        | <b>-2.0304</b> | 0.0084        | 1.1007        | 0.1124        |
| 23             | 0.26%        | -0.18%       | -0.06%       | 0.0762               | 0.9424        | 1.1953         | 0.0198        | 1.0924        | 0.2674        |
| 24             | -0.18%       | -0.23%       | -0.24%       | -0.0229              | 1.1439        | -0.2958        | 0.0161        | 1.1086        | 0.2150        |
| 25             | -0.20%       | -0.28%       | -0.43%       | -0.0602              | 1.0734        | -0.8286        | 0.0071        | 1.0950        | 0.0956        |
| 26             | 0.11%        | -0.21%       | -0.33%       | 0.0223               | 0.9797        | 0.3369         | 0.0103        | 1.0782        | 0.1407        |
| 27             | 0.15%        | -0.07%       | -0.18%       | 0.0657               | 1.0196        | 0.9533         | 0.0196        | 1.0617        | 0.2735        |
| 28             | -0.13%       | -0.20%       | -0.31%       | -0.0095              | 0.8664        | -0.1629        | 0.0181        | 1.0692        | 0.2499        |
| 29             | -0.18%       | -0.32%       | -0.49%       | -0.0277              | 0.9092        | -0.4508        | 0.0140        | 1.0599        | 0.1949        |
| 30             | 0.43%        | 0.16%        | -0.06%       | 0.1354               | 1.0227        | <b>1.9580</b>  | 0.0328        | 1.0553        | 0.4595        |
| <b>-1 to 1</b> |              |              | <b>1.20%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04373</b> | 0.2335        | 1.4941        | <b>2.3102</b> |

Table-A 6.27 SW-2 returns to Domestic Acquirers; All-firms; (OLS, 195); VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.00%        | -0.13%       | 0.00%        | 0.0414               | 0.9563        | 0.6353         | 0.0414        | 0.9563        | 0.6353        |
| -19            | 0.04%        | -0.18%       | 0.04%        | -0.0115              | 0.9763        | -0.1724        | 0.0212        | 0.9356        | 0.3320        |
| -18            | -0.27%       | -0.42%       | -0.23%       | -0.0788              | 1.0323        | -1.1204        | -0.0282       | 0.9841        | -0.4208       |
| -17            | 0.37%        | 0.16%        | 0.14%        | 0.1155               | 1.1509        | 1.4733         | 0.0333        | 0.9866        | 0.4958        |
| -16            | -0.17%       | -0.44%       | -0.03%       | -0.0297              | 1.0352        | -0.4208        | 0.0165        | 1.0654        | 0.2278        |
| -15            | -0.35%       | -0.36%       | -0.38%       | -0.1041              | 1.1352        | -1.3456        | -0.0274       | 1.0757        | -0.3737       |
| -14            | -0.24%       | -0.26%       | -0.62%       | -0.0186              | 1.0848        | -0.2523        | -0.0324       | 1.0232        | -0.4649       |
| -13            | 0.36%        | -0.02%       | -0.26%       | 0.1344               | 1.1473        | <b>1.7202</b>  | 0.0172        | 1.0812        | 0.2338        |
| -12            | -0.28%       | -0.38%       | -0.54%       | -0.0931              | 0.9190        | -1.4869        | -0.0148       | 1.0324        | -0.2103       |
| -11            | -0.31%       | -0.38%       | -0.85%       | -0.0913              | 0.9287        | -1.4423        | -0.0429       | 1.0182        | -0.6183       |
| -10            | -0.14%       | -0.37%       | -0.99%       | -0.0411              | 1.0397        | -0.5807        | -0.0533       | 1.0202        | -0.7668       |
| -9             | 0.43%        | 0.08%        | -0.56%       | 0.1254               | 1.1313        | 1.6267         | -0.0148       | 1.0485        | -0.2077       |
| -8             | -0.17%       | -0.11%       | -0.73%       | -0.0679              | 1.0802        | -0.9231        | -0.0331       | 1.0710        | -0.4536       |
| -7             | 0.35%        | -0.04%       | -0.38%       | 0.1174               | 0.9151        | <b>1.8829</b>  | -0.0005       | 1.0691        | -0.0072       |
| -6             | 0.17%        | 0.04%        | -0.21%       | 0.0748               | 1.0436        | 1.0521         | 0.0188        | 1.0888        | 0.2536        |
| -5             | -0.04%       | -0.07%       | -0.25%       | -0.0129              | 1.0934        | -0.1732        | 0.0150        | 1.0546        | 0.2086        |
| -4             | -0.21%       | -0.29%       | -0.45%       | -0.0866              | 1.0265        | -1.2380        | -0.0065       | 1.0115        | -0.0937       |
| -3             | -0.17%       | -0.34%       | -0.62%       | -0.0489              | 0.9799        | -0.7327        | -0.0178       | 1.0370        | -0.2521       |
| -2             | 0.18%        | 0.02%        | -0.44%       | 0.0379               | 0.9199        | 0.6050         | -0.0086       | 1.0160        | -0.1247       |
| -1             | 0.63%        | 0.20%        | 0.19%        | 0.1813               | 1.0586        | <b>2.5146</b>  | 0.0321        | 1.0581        | 0.4458        |
| <b>0</b>       | <b>0.16%</b> | <b>0.00%</b> | <b>0.35%</b> | <b>0.0920</b>        | <b>1.4798</b> | <b>0.9122</b>  | <b>0.0514</b> | <b>1.1005</b> | <b>0.6859</b> |
| 1              | 0.44%        | -0.01%       | 0.79%        | 0.1407               | 1.5575        | 1.3256         | 0.0802        | 1.1097        | 1.0613        |
| 2              | 0.69%        | 0.13%        | 1.48%        | 0.2285               | 1.3834        | <b>2.4244</b>  | 0.1261        | 1.1338        | 1.6326        |
| 3              | 0.06%        | -0.10%       | 1.55%        | 0.0331               | 1.1743        | 0.4132         | 0.1302        | 1.1321        | <b>1.6881</b> |
| 4              | 0.12%        | -0.12%       | 1.67%        | 0.0123               | 0.9370        | 0.1921         | 0.1300        | 1.1307        | <b>1.6880</b> |
| 5              | -0.13%       | -0.37%       | 1.53%        | -0.0267              | 0.9275        | -0.4232        | 0.1223        | 1.1222        | 1.5992        |
| 6              | -0.31%       | -0.14%       | 1.22%        | -0.0911              | 1.0887        | -1.2277        | 0.1024        | 1.1270        | 1.3344        |
| 7              | 0.37%        | -0.11%       | 1.59%        | 0.1144               | 0.9765        | <b>1.7193</b>  | 0.1222        | 1.1479        | 1.5628        |
| 8              | 0.02%        | -0.21%       | 1.61%        | -0.0320              | 1.0325        | -0.4554        | 0.1141        | 1.1442        | 1.4643        |
| 9              | -0.12%       | -0.25%       | 1.50%        | -0.0082              | 1.0195        | -0.1185        | 0.1107        | 1.1455        | 1.4187        |
| 10             | -0.10%       | -0.38%       | 1.39%        | 0.0020               | 1.0042        | 0.0298         | 0.1093        | 1.1742        | 1.3662        |
| 11             | -0.19%       | -0.22%       | 1.21%        | -0.0238              | 0.9264        | -0.3779        | 0.1033        | 1.2010        | 1.2632        |
| 12             | 0.10%        | -0.24%       | 1.30%        | 0.0284               | 0.9590        | 0.4340         | 0.1067        | 1.2115        | 1.2928        |
| 13             | 0.47%        | -0.02%       | 1.77%        | 0.1308               | 0.9442        | <b>2.0335</b>  | 0.1276        | 1.2209        | 1.5336        |
| 14             | -0.01%       | 0.12%        | 1.76%        | -0.0197              | 0.8770        | -0.3296        | 0.1224        | 1.2092        | 1.4858        |
| 15             | -0.14%       | -0.28%       | 1.62%        | -0.0733              | 0.9687        | -1.1099        | 0.1085        | 1.2228        | 1.3021        |
| 16             | -0.15%       | -0.19%       | 1.47%        | -0.0735              | 1.0035        | -1.0753        | 0.0949        | 1.1952        | 1.1656        |
| 17             | -0.38%       | -0.24%       | 1.09%        | -0.1241              | 0.9084        | <b>-2.0047</b> | 0.0735        | 1.1785        | 0.9159        |
| 18             | -0.20%       | -0.11%       | 0.89%        | -0.0493              | 1.1284        | -0.6419        | 0.0647        | 1.1674        | 0.8133        |
| 19             | -0.37%       | -0.26%       | 0.52%        | -0.0983              | 1.0114        | -1.4262        | 0.0483        | 1.1335        | 0.6258        |
| 20             | -0.26%       | -0.21%       | 0.26%        | -0.0614              | 1.1218        | -0.8034        | 0.0381        | 1.1213        | 0.4994        |
| 21             | -0.20%       | -0.10%       | 0.07%        | -0.0581              | 1.0705        | -0.7971        | 0.0287        | 1.1219        | 0.3757        |
| 22             | -0.46%       | -0.22%       | -0.39%       | -0.1207              | 0.8659        | <b>-2.0462</b> | 0.0100        | 1.1054        | 0.1325        |
| 23             | 0.26%        | -0.16%       | -0.13%       | 0.0746               | 0.9395        | 1.1661         | 0.0211        | 1.0981        | 0.2822        |
| 24             | -0.17%       | -0.15%       | -0.31%       | -0.0216              | 1.1560        | -0.2741        | 0.0177        | 1.1144        | 0.2326        |
| 25             | -0.26%       | -0.32%       | -0.56%       | -0.0769              | 1.0913        | -1.0345        | 0.0061        | 1.0984        | 0.0819        |
| 26             | 0.09%        | -0.22%       | -0.47%       | 0.0157               | 0.9835        | 0.2344         | 0.0084        | 1.0782        | 0.1137        |
| 27             | 0.15%        | 0.00%        | -0.33%       | 0.0629               | 1.0259        | 0.8994         | 0.0173        | 1.0588        | 0.2404        |
| 28             | -0.12%       | -0.11%       | -0.45%       | -0.0073              | 0.8684        | -0.1228        | 0.0161        | 1.0667        | 0.2218        |
| 29             | -0.16%       | -0.30%       | -0.60%       | -0.0231              | 0.9058        | -0.3740        | 0.0127        | 1.0561        | 0.1765        |
| 30             | 0.43%        | 0.16%        | -0.17%       | 0.1375               | 1.0391        | <b>1.9419</b>  | 0.0318        | 1.0481        | 0.4456        |
| <b>-1 to 1</b> |              |              | <b>1.23%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04376</b> | 0.2390        | 1.4835        | <b>2.3648</b> |



Table-A 6.28 SW-3 returns to Domestic Acquirers; All-firms; (OLS, 195); VWI

| Days           | AAR          | Median        | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|---------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.02%        | -0.13%        | 0.02%        | 0.0451               | 0.9407        | 0.7041         | 0.0451        | 0.9407        | 0.7041        |
| -19            | 0.06%        | -0.16%        | 0.09%        | -0.0011              | 0.9721        | -0.0159        | 0.0312        | 0.9224        | 0.4959        |
| -18            | -0.24%       | -0.42%        | -0.15%       | -0.0724              | 1.0338        | -1.0283        | -0.0164       | 0.9736        | -0.2468       |
| -17            | 0.34%        | 0.11%         | 0.19%        | 0.1030               | 1.1442        | 1.3213         | 0.0373        | 0.9732        | 0.5629        |
| -16            | -0.19%       | -0.39%        | -0.01%       | -0.0380              | 1.0129        | -0.5504        | 0.0164        | 1.0383        | 0.2318        |
| -15            | -0.35%       | -0.31%        | -0.36%       | -0.1050              | 1.1361        | -1.3572        | -0.0279       | 1.0566        | -0.3878       |
| -14            | -0.23%       | -0.22%        | -0.58%       | -0.0125              | 1.0791        | -0.1700        | -0.0306       | 1.0122        | -0.4433       |
| -13            | 0.35%        | 0.10%         | -0.23%       | 0.1333               | 1.1575        | <b>1.6906</b>  | 0.0185        | 1.0736        | 0.2535        |
| -12            | -0.31%       | -0.42%        | -0.55%       | -0.0990              | 0.9287        | -1.5646        | -0.0155       | 1.0317        | -0.2208       |
| -11            | -0.32%       | -0.36%        | -0.87%       | -0.0953              | 0.9267        | -1.5090        | -0.0448       | 1.0187        | -0.6462       |
| -10            | -0.15%       | -0.47%        | -1.01%       | -0.0467              | 1.0286        | -0.6662        | -0.0568       | 1.0173        | -0.8201       |
| -9             | 0.41%        | 0.02%         | -0.60%       | 0.1137               | 1.1339        | 1.4724         | -0.0216       | 1.0422        | -0.3040       |
| -8             | -0.15%       | -0.18%        | -0.75%       | -0.0648              | 1.0735        | -0.8859        | -0.0387       | 1.0632        | -0.5344       |
| -7             | 0.35%        | -0.06%        | -0.39%       | 0.1193               | 0.9238        | <b>1.8953</b>  | -0.0054       | 1.0609        | -0.0750       |
| -6             | 0.19%        | 0.12%         | -0.20%       | 0.0784               | 1.0491        | 1.0977         | 0.0150        | 1.0818        | 0.2038        |
| -5             | 0.02%        | -0.05%        | -0.18%       | 0.0020               | 1.1036        | 0.0266         | 0.0150        | 1.0514        | 0.2100        |
| -4             | -0.20%       | -0.39%        | -0.39%       | -0.0847              | 1.0300        | -1.2071        | -0.0059       | 1.0086        | -0.0866       |
| -3             | -0.15%       | -0.30%        | -0.54%       | -0.0441              | 0.9714        | -0.6670        | -0.0162       | 1.0325        | -0.2301       |
| -2             | 0.18%        | 0.08%         | -0.36%       | 0.0319               | 0.9092        | 0.5153         | -0.0084       | 1.0102        | -0.1225       |
| -1             | 0.67%        | 0.22%         | 0.31%        | 0.1909               | 1.0660        | <b>2.6287</b>  | 0.0345        | 1.0539        | 0.4801        |
| <b>0</b>       | <b>0.12%</b> | <b>-0.08%</b> | <b>0.43%</b> | <b>0.0804</b>        | <b>1.5006</b> | <b>0.7869</b>  | <b>0.0512</b> | <b>1.1035</b> | <b>0.6810</b> |
| 1              | 0.40%        | -0.01%        | 0.83%        | 0.1243               | 1.5525        | 1.1754         | 0.0765        | 1.1149        | 1.0075        |
| 2              | 0.71%        | 0.16%         | 1.54%        | 0.2299               | 1.3719        | <b>2.4599</b>  | 0.1228        | 1.1360        | 1.5864        |
| 3              | 0.05%        | -0.10%        | 1.59%        | 0.0246               | 1.1804        | 0.3060         | 0.1252        | 1.1302        | 1.6263        |
| 4              | 0.15%        | -0.11%        | 1.74%        | 0.0173               | 0.9394        | 0.2707         | 0.1261        | 1.1262        | 1.6442        |
| 5              | -0.14%       | -0.43%        | 1.60%        | -0.0307              | 0.9348        | -0.4819        | 0.1177        | 1.1157        | 1.5483        |
| 6              | -0.31%       | -0.13%        | 1.29%        | -0.0909              | 1.0760        | -1.2397        | 0.0980        | 1.1207        | 1.2835        |
| 7              | 0.39%        | -0.10%        | 1.68%        | 0.1202               | 0.9725        | <b>1.8153</b>  | 0.1189        | 1.1390        | 1.5331        |
| 8              | 0.02%        | -0.22%        | 1.69%        | -0.0366              | 1.0425        | -0.5155        | 0.1101        | 1.1364        | 1.4220        |
| 9              | -0.13%       | -0.26%        | 1.56%        | -0.0100              | 1.0317        | -0.1417        | 0.1064        | 1.1381        | 1.3726        |
| 10             | -0.13%       | -0.39%        | 1.43%        | -0.0054              | 1.0121        | -0.0787        | 0.1037        | 1.1663        | 1.3053        |
| 11             | -0.20%       | -0.26%        | 1.23%        | -0.0263              | 0.9366        | -0.4123        | 0.0974        | 1.1913        | 1.2005        |
| 12             | 0.12%        | -0.26%        | 1.35%        | 0.0286               | 0.9718        | 0.4314         | 0.1009        | 1.2026        | 1.2318        |
| 13             | 0.48%        | 0.05%         | 1.83%        | 0.1229               | 0.9364        | <b>1.9270</b>  | 0.1205        | 1.2151        | 1.4556        |
| 14             | 0.00%        | 0.12%         | 1.83%        | -0.0192              | 0.8764        | -0.3216        | 0.1155        | 1.2037        | 1.4088        |
| 15             | -0.15%       | -0.21%        | 1.68%        | -0.0750              | 0.9737        | -1.1310        | 0.1014        | 1.2154        | 1.2247        |
| 16             | -0.14%       | -0.18%        | 1.54%        | -0.0742              | 0.9861        | -1.1042        | 0.0878        | 1.1875        | 1.0856        |
| 17             | -0.40%       | -0.26%        | 1.14%        | -0.1283              | 0.9054        | <b>-2.0807</b> | 0.0658        | 1.1685        | 0.8272        |
| 18             | -0.21%       | -0.18%        | 0.92%        | -0.0554              | 1.1339        | -0.7178        | 0.0561        | 1.1594        | 0.7105        |
| 19             | -0.36%       | -0.24%        | 0.56%        | -0.0961              | 1.0155        | -1.3897        | 0.0402        | 1.1273        | 0.5236        |
| 20             | -0.23%       | -0.10%        | 0.33%        | -0.0544              | 1.1095        | -0.7196        | 0.0312        | 1.1143        | 0.4113        |
| 21             | -0.17%       | -0.14%        | 0.16%        | -0.0531              | 1.0722        | -0.7266        | 0.0227        | 1.1170        | 0.2978        |
| 22             | -0.43%       | -0.21%        | -0.27%       | -0.1160              | 0.8646        | <b>-1.9700</b> | 0.0047        | 1.0961        | 0.0629        |
| 23             | 0.24%        | -0.13%        | -0.03%       | 0.0689               | 0.9590        | 1.0554         | 0.0150        | 1.0876        | 0.2030        |
| 24             | -0.20%       | -0.17%        | -0.23%       | -0.0324              | 1.1584        | -0.4112        | 0.0100        | 1.1027        | 0.1336        |
| 25             | -0.24%       | -0.33%        | -0.47%       | -0.0712              | 1.0891        | -0.9596        | -0.0006       | 1.0867        | -0.0077       |
| 26             | 0.07%        | -0.32%        | -0.39%       | 0.0103               | 0.9874        | 0.1538         | 0.0009        | 1.0654        | 0.0130        |
| 27             | 0.20%        | -0.08%        | -0.19%       | 0.0713               | 1.0288        | 1.0181         | 0.0112        | 1.0458        | 0.1577        |
| 28             | -0.13%       | -0.17%        | -0.32%       | -0.0077              | 0.8743        | -0.1285        | 0.0100        | 1.0539        | 0.1396        |
| 29             | -0.17%       | -0.27%        | -0.48%       | -0.0242              | 0.9079        | -0.3918        | 0.0065        | 1.0436        | 0.0914        |
| 30             | 0.48%        | 0.16%         | 0.00%        | 0.1527               | 1.0447        | <b>2.1460</b>  | 0.0278        | 1.0346        | 0.3947        |
| <b>-1 to 1</b> |              |               | <b>1.19%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04531</b> | 0.2284        | 1.4913        | <b>2.2486</b> |

**Table-A 6.29 Market returns to Domestic Acquirers; Non-BGrp; (MM, 127); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.13%        | -0.09%       | 0.13%        | 0.0430               | 1.1504        | 0.4130         | 0.0430        | 1.1504        | 0.4130        |
| -19            | 0.19%        | 0.00%        | 0.31%        | 0.0021               | 1.1937        | 0.0193         | 0.0319        | 1.1570        | 0.3045        |
| -18            | -0.23%       | -0.22%       | 0.09%        | -0.0958              | 1.3594        | -0.7790        | -0.0293       | 1.3039        | -0.2483       |
| -17            | 0.63%        | 0.25%        | 0.72%        | 0.2699               | 1.6872        | <b>1.7675</b>  | 0.1096        | 1.3814        | 0.8765        |
| -16            | 0.00%        | -0.37%       | 0.72%        | 0.0718               | 1.6351        | 0.4849         | 0.1301        | 1.6375        | 0.8779        |
| -15            | -0.26%       | -0.08%       | 0.46%        | -0.0355              | 1.4790        | -0.2653        | 0.1043        | 1.6629        | 0.6928        |
| -14            | 0.05%        | -0.05%       | 0.51%        | 0.0027               | 1.3930        | 0.0211         | 0.0975        | 1.5149        | 0.7114        |
| -13            | 0.25%        | 0.13%        | 0.76%        | 0.0900               | 1.1683        | 0.8509         | 0.1230        | 1.4096        | 0.9645        |
| -12            | -0.10%       | -0.36%       | 0.65%        | -0.0193              | 1.2247        | -0.1746        | 0.1095        | 1.3892        | 0.8714        |
| -11            | -0.16%       | -0.18%       | 0.49%        | -0.0598              | 1.2093        | -0.5463        | 0.0850        | 1.3812        | 0.6802        |
| -10            | 0.15%        | -0.05%       | 0.64%        | 0.0231               | 1.1756        | 0.2175         | 0.0880        | 1.3495        | 0.7209        |
| -9             | 0.83%        | 0.22%        | 1.48%        | 0.2522               | 1.5483        | <b>1.8000</b>  | 0.1571        | 1.3426        | 1.2930        |
| -8             | 0.03%        | -0.11%       | 1.50%        | -0.0492              | 1.7984        | -0.3023        | 0.1373        | 1.4092        | 1.0765        |
| -7             | 0.46%        | 0.21%        | 1.96%        | 0.2237               | 1.2013        | <b>2.0575</b>  | 0.1921        | 1.4266        | 1.4878        |
| -6             | 0.11%        | 0.12%        | 2.07%        | 0.0875               | 1.1828        | 0.8179         | 0.2082        | 1.3905        | 1.6542        |
| -5             | 0.38%        | 0.02%        | 2.45%        | 0.1141               | 1.3010        | 0.9694         | 0.2301        | 1.3231        | <b>1.9216</b> |
| -4             | -0.16%       | -0.08%       | 2.29%        | -0.0513              | 1.0028        | -0.5657        | 0.2108        | 1.2926        | <b>1.8018</b> |
| -3             | -0.09%       | -0.08%       | 2.20%        | 0.0603               | 1.7689        | 0.3767         | 0.2190        | 1.3371        | <b>1.8102</b> |
| -2             | 0.28%        | -0.20%       | 2.49%        | 0.0593               | 1.4542        | 0.4505         | 0.2268        | 1.2959        | <b>1.9340</b> |
| -1             | 0.80%        | 0.16%        | 3.29%        | 0.3474               | 2.2456        | <b>1.7094</b>  | 0.2987        | 1.5187        | <b>2.1736</b> |
| <b>0</b>       | <b>0.56%</b> | <b>0.24%</b> | <b>3.85%</b> | <b>0.2551</b>        | <b>1.7723</b> | <b>1.5908</b>  | <b>0.3472</b> | <b>1.5018</b> | <b>2.5547</b> |
| 1              | 0.39%        | -0.03%       | 4.24%        | 0.0463               | 1.8118        | 0.2821         | 0.3491        | 1.4933        | <b>2.5831</b> |
| 2              | 0.80%        | 0.17%        | 5.04%        | 0.5181               | 2.6144        | <b>2.1898</b>  | 0.4494        | 1.6581        | <b>2.9952</b> |
| 3              | -0.08%       | -0.22%       | 4.96%        | -0.0798              | 1.7344        | -0.5083        | 0.4237        | 1.5417        | <b>3.0369</b> |
| 4              | 0.36%        | -0.08%       | 5.32%        | 0.0634               | 1.2915        | 0.5428         | 0.4278        | 1.5319        | <b>3.0860</b> |
| 5              | 0.10%        | -0.07%       | 5.42%        | 0.0662               | 1.2635        | 0.5793         | 0.4325        | 1.5553        | <b>3.0729</b> |
| 6              | -0.27%       | 0.08%        | 5.15%        | -0.0796              | 1.4574        | -0.6035        | 0.4091        | 1.5852        | <b>2.8518</b> |
| 7              | 0.31%        | 0.03%        | 5.46%        | 0.2844               | 2.0817        | 1.5097         | 0.4555        | 1.7340        | <b>2.9026</b> |
| 8              | 0.24%        | -0.12%       | 5.70%        | 0.1167               | 1.5123        | 0.8525         | 0.4692        | 1.8190        | <b>2.8505</b> |
| 9              | -0.32%       | -0.17%       | 5.37%        | -0.1234              | 1.3854        | -0.9845        | 0.4388        | 1.7149        | <b>2.8275</b> |
| 10             | -0.21%       | -0.25%       | 5.16%        | -0.0806              | 1.3980        | -0.6372        | 0.4172        | 1.6662        | <b>2.7667</b> |
| 11             | -0.24%       | -0.04%       | 4.92%        | -0.0930              | 1.4351        | -0.7163        | 0.3942        | 1.5957        | <b>2.7297</b> |
| 12             | 0.38%        | 0.06%        | 5.30%        | 0.1282               | 1.1918        | 1.1887         | 0.4105        | 1.6183        | <b>2.8028</b> |
| 13             | 0.55%        | -0.01%       | 5.85%        | 0.1248               | 1.2116        | 1.1382         | 0.4258        | 1.5984        | <b>2.9437</b> |
| 14             | 0.06%        | 0.25%        | 5.91%        | 0.0316               | 1.1064        | 0.3160         | 0.4250        | 1.6279        | <b>2.8849</b> |
| 15             | 0.18%        | -0.09%       | 6.09%        | 0.0205               | 1.0745        | 0.2105         | 0.4225        | 1.6146        | <b>2.8913</b> |
| 16             | 0.20%        | -0.11%       | 6.29%        | 0.1029               | 1.4398        | 0.7897         | 0.4336        | 1.6545        | <b>2.8963</b> |
| 17             | -0.18%       | -0.17%       | 6.11%        | -0.0323              | 1.4814        | -0.2408        | 0.4227        | 1.7141        | <b>2.7247</b> |
| 18             | -0.06%       | 0.21%        | 6.05%        | 0.0719               | 1.6818        | 0.4725         | 0.4287        | 1.7939        | <b>2.6409</b> |
| 19             | -0.14%       | 0.04%        | 5.91%        | -0.0688              | 1.3455        | -0.5650        | 0.4124        | 1.7655        | <b>2.5815</b> |
| 20             | 0.10%        | 0.00%        | 6.02%        | 0.0826               | 1.1783        | 0.7742         | 0.4203        | 1.8048        | <b>2.5734</b> |
| 21             | 0.09%        | 0.10%        | 6.11%        | -0.0641              | 1.5780        | -0.4491        | 0.4053        | 1.8362        | <b>2.4395</b> |
| 22             | -0.02%       | 0.23%        | 6.09%        | 0.0569               | 1.0027        | 0.6271         | 0.4093        | 1.8381        | <b>2.4606</b> |
| 23             | 0.54%        | 0.15%        | 6.63%        | 0.2545               | 1.4219        | <b>1.9782</b>  | 0.4430        | 1.7805        | <b>2.7493</b> |
| 24             | -0.11%       | -0.06%       | 6.52%        | 0.0266               | 1.5548        | 0.1890         | 0.4420        | 1.8148        | <b>2.6914</b> |
| 25             | 0.22%        | -0.05%       | 6.74%        | 0.0712               | 1.5339        | 0.5133         | 0.4477        | 1.7322        | <b>2.8560</b> |
| 26             | 0.47%        | -0.05%       | 7.21%        | 0.1337               | 1.1867        | 1.2453         | 0.4624        | 1.6821        | <b>3.0377</b> |
| 27             | 0.15%        | -0.06%       | 7.36%        | 0.0192               | 1.3614        | 0.1563         | 0.4603        | 1.6495        | <b>3.0838</b> |
| 28             | 0.16%        | 0.03%        | 7.52%        | 0.0795               | 1.0896        | 0.8061         | 0.4670        | 1.6531        | <b>3.1215</b> |
| 29             | -0.08%       | -0.09%       | 7.44%        | -0.0049              | 1.2495        | -0.0436        | 0.4616        | 1.6679        | <b>3.0581</b> |
| 30             | 0.58%        | 0.05%        | 8.02%        | 0.2330               | 1.2360        | <b>2.0828</b>  | 0.4896        | 1.6946        | <b>3.1930</b> |
| <b>-1 to 1</b> |              |              | <b>1.75%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04125</b> | 0.3745        | 1.9792        | <b>2.0912</b> |

**Table-A 6.30 Market returns to Domestic Acquirers; BGrp; (MM, 64); VWI**

| Days           | AAR           | Median        | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|---------------|---------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.37%         | 0.21%         | 0.37%        | 0.7950               | 5.4614        | 1.2693         | 0.7950        | 5.4614        | 1.2693        |
| -19            | 0.15%         | -0.11%        | 0.53%        | 0.0358               | 1.2164        | 0.2569         | 0.5875        | 3.8647        | 1.3255        |
| -18            | 0.12%         | -0.16%        | 0.65%        | -0.1094              | 1.5195        | -0.6277        | 0.4166        | 2.5332        | 1.4337        |
| -17            | 0.15%         | -0.05%        | 0.80%        | 0.1121               | 1.3653        | 0.7158         | 0.4168        | 2.3809        | 1.5263        |
| -16            | 0.15%         | -0.01%        | 0.95%        | 0.0516               | 1.1498        | 0.3911         | 0.3959        | 1.9236        | <b>1.7943</b> |
| -15            | -0.05%        | -0.55%        | 0.90%        | -0.0094              | 1.1946        | -0.0686        | 0.3575        | 1.9174        | 1.6258        |
| -14            | -0.17%        | -0.40%        | 0.73%        | -0.0510              | 1.2469        | -0.3564        | 0.3117        | 1.7261        | 1.5747        |
| -13            | 0.69%         | 0.13%         | 1.42%        | 0.4016               | 1.6186        | <b>2.1634</b>  | 0.4336        | 1.8830        | <b>2.0078</b> |
| -12            | -0.28%        | -0.26%        | 1.13%        | -0.1311              | 1.3672        | -0.8362        | 0.3651        | 1.6977        | <b>1.8751</b> |
| -11            | -0.15%        | -0.21%        | 0.98%        | -0.0917              | 0.9031        | -0.8850        | 0.3174        | 1.5557        | <b>1.7788</b> |
| -10            | -0.29%        | -0.62%        | 0.69%        | 0.0668               | 2.0973        | 0.2778         | 0.3227        | 1.8620        | 1.5113        |
| -9             | 0.44%         | 0.03%         | 1.13%        | 0.0817               | 1.5192        | 0.4689         | 0.3326        | 1.5549        | <b>1.8650</b> |
| -8             | 0.02%         | 0.23%         | 1.16%        | 0.1274               | 1.7335        | 0.6410         | 0.3549        | 1.8140        | <b>1.7058</b> |
| -7             | 0.46%         | -0.14%        | 1.62%        | -0.0447              | 2.4831        | -0.1571        | 0.3300        | 1.3669        | <b>2.1051</b> |
| -6             | 0.33%         | 0.07%         | 1.95%        | 0.2044               | 1.3933        | 1.2790         | 0.3716        | 1.3736        | <b>2.3588</b> |
| -5             | -0.18%        | -0.02%        | 1.77%        | -0.0334              | 1.3679        | -0.2126        | 0.3515        | 1.3536        | <b>2.2639</b> |
| -4             | 0.19%         | -0.06%        | 1.96%        | -0.4454              | 4.5335        | -0.8567        | 0.2329        | 1.1803        | <b>1.7208</b> |
| -3             | -0.10%        | -0.28%        | 1.86%        | 0.0235               | 1.3140        | 0.1561         | 0.2319        | 1.1677        | <b>1.7316</b> |
| -2             | 0.33%         | 0.49%         | 2.19%        | -0.0426              | 1.9071        | -0.1950        | 0.2159        | 1.2474        | 1.5094        |
| -1             | 0.90%         | 0.29%         | 3.09%        | 0.5406               | 2.3749        | <b>1.9847</b>  | 0.3314        | 1.1148        | <b>2.5917</b> |
| <b>0</b>       | <b>-0.40%</b> | <b>-0.48%</b> | <b>2.70%</b> | <b>-0.3292</b>       | <b>2.6185</b> | <b>-1.0961</b> | <b>0.2515</b> | <b>1.2262</b> | <b>1.7887</b> |
| 1              | 0.73%         | 0.16%         | 3.42%        | 0.5653               | 2.8973        | <b>1.7012</b>  | 0.3663        | 1.1456        | <b>2.7877</b> |
| 2              | 0.68%         | 0.18%         | 4.10%        | 0.1055               | 2.2669        | 0.4057         | 0.3802        | 1.2413        | <b>2.6708</b> |
| 3              | 0.63%         | 0.60%         | 4.73%        | 0.4898               | 2.4168        | <b>1.7671</b>  | 0.4722        | 1.1260        | <b>3.6565</b> |
| 4              | 0.20%         | 0.11%         | 4.93%        | 0.0436               | 0.8204        | 0.4638         | 0.4714        | 1.0695        | <b>3.8430</b> |
| 5              | -0.05%        | -0.24%        | 4.87%        | 0.2207               | 2.1319        | 0.9024         | 0.5055        | 1.0971        | <b>4.0174</b> |
| 6              | -0.01%        | -0.10%        | 4.86%        | 0.1370               | 2.0283        | 0.5889         | 0.5224        | 1.2071        | <b>3.7736</b> |
| 7              | 0.49%         | 0.26%         | 5.36%        | -0.0810              | 2.9766        | -0.2373        | 0.4977        | 1.0718        | <b>4.0487</b> |
| 8              | 0.16%         | 0.04%         | 5.52%        | 0.1071               | 1.3961        | 0.6690         | 0.5089        | 1.1245        | <b>3.9462</b> |
| 9              | 0.71%         | -0.09%        | 6.23%        | 0.1768               | 1.4573        | 1.0579         | 0.5327        | 1.1326        | <b>4.1005</b> |
| 10             | 0.55%         | 0.08%         | 6.77%        | 0.4308               | 2.1738        | <b>1.7280</b>  | 0.6014        | 1.2290        | <b>4.2665</b> |
| 11             | 0.18%         | -0.15%        | 6.95%        | 0.0689               | 1.1853        | 0.5068         | 0.6041        | 1.2375        | <b>4.2562</b> |
| 12             | 0.18%         | -0.03%        | 7.13%        | 0.1479               | 1.2860        | 1.0028         | 0.6206        | 1.2776        | <b>4.2353</b> |
| 13             | 0.97%         | 1.01%         | 8.10%        | 0.4606               | 1.2252        | <b>3.2781</b>  | 0.6904        | 1.2868        | <b>4.6780</b> |
| 14             | 0.42%         | 0.39%         | 8.52%        | 0.1190               | 1.1899        | 0.8718         | 0.7006        | 1.2700        | <b>4.8100</b> |
| 15             | -0.55%        | -0.24%        | 7.97%        | -0.4950              | 2.3300        | <b>-1.8525</b> | 0.6083        | 1.1772        | <b>4.5054</b> |
| 16             | -0.20%        | -0.12%        | 7.78%        | -0.0198              | 1.2816        | -0.1349        | 0.5967        | 1.2173        | <b>4.2742</b> |
| 17             | -0.08%        | -0.10%        | 7.69%        | 0.0266               | 0.9438        | 0.2457         | 0.5932        | 1.1859        | <b>4.3612</b> |
| 18             | -0.07%        | -0.02%        | 7.62%        | -0.0418              | 1.1531        | -0.3160        | 0.5788        | 1.1852        | <b>4.2581</b> |
| 19             | -0.31%        | -0.07%        | 7.31%        | -0.3764              | 2.2676        | -1.4475        | 0.5120        | 1.0799        | <b>4.1338</b> |
| 20             | -0.11%        | 0.07%         | 7.20%        | 0.0805               | 1.9397        | 0.3617         | 0.5183        | 1.0832        | <b>4.1719</b> |
| 21             | -0.40%        | 0.12%         | 6.80%        | 0.1164               | 2.8323        | 0.3583         | 0.5300        | 1.2596        | <b>3.6691</b> |
| 22             | -0.24%        | -0.04%        | 6.57%        | 0.1796               | 2.6336        | 0.5946         | 0.5512        | 1.4461        | <b>3.3237</b> |
| 23             | 0.11%         | -0.28%        | 6.68%        | -0.0635              | 1.2823        | -0.4318        | 0.5354        | 1.3308        | <b>3.5076</b> |
| 24             | 0.18%         | -0.31%        | 6.86%        | 0.2990               | 2.4423        | 1.0673         | 0.5739        | 1.5440        | <b>3.2410</b> |
| 25             | -0.26%        | -0.22%        | 6.60%        | -0.0760              | 1.0309        | -0.6430        | 0.5565        | 1.5646        | <b>3.1009</b> |
| 26             | -0.01%        | -0.08%        | 6.58%        | 0.0147               | 1.2898        | 0.0992         | 0.5526        | 1.5693        | <b>3.0705</b> |
| 27             | 0.69%         | 0.45%         | 7.27%        | 0.4094               | 1.1570        | <b>3.0851</b>  | 0.6059        | 1.6402        | <b>3.2212</b> |
| 28             | -0.06%        | -0.22%        | 7.21%        | 0.1570               | 1.7873        | 0.7661         | 0.6222        | 1.8034        | <b>3.0081</b> |
| 29             | 0.36%         | -0.02%        | 7.57%        | -0.0330              | 1.7600        | -0.1636        | 0.6112        | 1.6442        | <b>3.2415</b> |
| 30             | 0.55%         | 0.50%         | 8.12%        | 0.3116               | 1.1350        | <b>2.3938</b>  | 0.6489        | 1.6794        | <b>3.3688</b> |
| <b>-1 to 1</b> |               |               | <b>1.23%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04588</b> | 0.4484        | 1.8779        | <b>2.0821</b> |

**Table-A 6.31 Market returns to Domestic Acquirers; Non-BGrp (OLS, 130); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats       | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|---------------|---------------|---------------|---------------|
| -20            | -0.05%       | -0.17%       | -0.05%       | 0.0017               | 0.9223        | 0.0204        | 0.0017        | 0.9223        | 0.0204        |
| -19            | 0.05%        | -0.17%       | 0.01%        | -0.0147              | 0.9374        | -0.1767       | -0.0092       | 0.9336        | -0.1112       |
| -18            | -0.32%       | -0.50%       | -0.31%       | -0.0952              | 1.1322        | -0.9451       | -0.0625       | 1.0403        | -0.6753       |
| -17            | 0.50%        | 0.16%        | 0.18%        | 0.1552               | 1.1626        | 1.5009        | 0.0235        | 1.0632        | 0.2484        |
| -16            | -0.21%       | -0.56%       | -0.02%       | -0.0444              | 1.1329        | -0.4407       | 0.0011        | 1.1842        | 0.0109        |
| -15            | -0.50%       | -0.30%       | -0.52%       | -0.1257              | 1.1947        | -1.1832       | -0.0503       | 1.1820        | -0.4783       |
| -14            | -0.16%       | -0.12%       | -0.68%       | 0.0204               | 1.0846        | 0.2110        | -0.0389       | 1.1040        | -0.3957       |
| -13            | 0.28%        | 0.07%        | -0.41%       | 0.0930               | 1.0416        | 1.0037        | -0.0035       | 1.1446        | -0.0341       |
| -12            | -0.22%       | -0.54%       | -0.62%       | -0.0911              | 0.9155        | -1.1187       | -0.0336       | 1.0607        | -0.3565       |
| -11            | -0.26%       | -0.32%       | -0.88%       | -0.0773              | 1.0286        | -0.8447       | -0.0563       | 1.0679        | -0.5932       |
| -10            | 0.10%        | -0.20%       | -0.78%       | 0.0306               | 1.0242        | 0.3362        | -0.0445       | 1.0853        | -0.4609       |
| -9             | 0.57%        | 0.21%        | -0.21%       | 0.1555               | 1.2366        | 1.4142        | 0.0023        | 1.1438        | 0.0226        |
| -8             | -0.11%       | -0.23%       | -0.32%       | -0.0492              | 1.1405        | -0.4847       | -0.0114       | 1.1596        | -0.1108       |
| -7             | 0.32%        | 0.13%        | 0.00%        | 0.1171               | 0.9283        | 1.4187        | 0.0203        | 1.1632        | 0.1962        |
| -6             | 0.15%        | 0.08%        | 0.15%        | 0.0540               | 0.9715        | 0.6249        | 0.0336        | 1.1792        | 0.3199        |
| -5             | 0.06%        | -0.13%       | 0.20%        | 0.0010               | 1.0547        | 0.0103        | 0.0327        | 1.1151        | 0.3300        |
| -4             | -0.35%       | -0.18%       | -0.14%       | -0.1118              | 0.9080        | -1.3848       | 0.0046        | 1.0589        | 0.0491        |
| -3             | -0.16%       | -0.18%       | -0.31%       | -0.0339              | 1.0232        | -0.3725       | -0.0035       | 1.0852        | -0.0362       |
| -2             | 0.18%        | -0.24%       | -0.13%       | 0.0110               | 1.0205        | 0.1211        | -0.0009       | 1.0723        | -0.0092       |
| -1             | 0.66%        | 0.07%        | 0.53%        | 0.1920               | 1.1150        | <b>1.9356</b> | 0.0421        | 1.1252        | 0.4204        |
| <b>0</b>       | <b>0.44%</b> | <b>0.18%</b> | <b>0.96%</b> | <b>0.2001</b>        | <b>1.3710</b> | <b>1.6408</b> | <b>0.0847</b> | <b>1.1778</b> | <b>0.8087</b> |
| 1              | 0.24%        | -0.13%       | 1.20%        | 0.0676               | 1.3018        | 0.5837        | 0.0972        | 1.2010        | 0.9097        |
| 2              | 0.69%        | 0.14%        | 1.89%        | 0.2177               | 1.5082        | 1.6226        | 0.1404        | 1.2494        | 1.2637        |
| 3              | -0.22%       | -0.37%       | 1.68%        | -0.0594              | 1.2070        | -0.5530       | 0.1253        | 1.2495        | 1.1279        |
| 4              | 0.25%        | -0.17%       | 1.93%        | 0.0471               | 1.0208        | 0.5186        | 0.1322        | 1.2595        | 1.1804        |
| 5              | -0.07%       | -0.24%       | 1.86%        | -0.0142              | 0.9114        | -0.1748       | 0.1269        | 1.2483        | 1.1429        |
| 6              | -0.35%       | -0.11%       | 1.51%        | -0.0867              | 1.1851        | -0.8226       | 0.1078        | 1.2678        | 0.9562        |
| 7              | 0.31%        | -0.03%       | 1.82%        | 0.0938               | 0.9214        | 1.1441        | 0.1236        | 1.2868        | 1.0800        |
| 8              | 0.03%        | -0.41%       | 1.86%        | -0.0145              | 0.9952        | -0.1641       | 0.1188        | 1.2720        | 1.0497        |
| 9              | -0.46%       | -0.50%       | 1.40%        | -0.1014              | 0.9053        | -1.2597       | 0.0982        | 1.2604        | 0.8764        |
| 10             | -0.28%       | -0.29%       | 1.11%        | -0.0534              | 0.9828        | -0.6111       | 0.0871        | 1.2913        | 0.7580        |
| 11             | -0.33%       | -0.18%       | 0.79%        | -0.0713              | 0.9134        | -0.8771       | 0.0731        | 1.3205        | 0.6223        |
| 12             | 0.22%        | -0.11%       | 1.01%        | 0.0410               | 0.9038        | 0.5100        | 0.0791        | 1.3171        | 0.6753        |
| 13             | 0.31%        | -0.15%       | 1.32%        | 0.0600               | 0.9644        | 0.7000        | 0.0882        | 1.3308        | 0.7454        |
| 14             | -0.09%       | -0.04%       | 1.22%        | -0.0456              | 0.8391        | -0.6110       | 0.0793        | 1.3244        | 0.6728        |
| 15             | 0.13%        | -0.17%       | 1.35%        | 0.0169               | 0.9456        | 0.2005        | 0.0810        | 1.3544        | 0.6720        |
| 16             | -0.05%       | -0.16%       | 1.30%        | -0.0707              | 0.9896        | -0.8034       | 0.0682        | 1.3097        | 0.5857        |
| 17             | -0.39%       | -0.24%       | 0.91%        | -0.1293              | 1.0009        | -1.4521       | 0.0464        | 1.3024        | 0.4002        |
| 18             | -0.12%       | -0.01%       | 0.79%        | 0.0126               | 1.1938        | 0.1186        | 0.0478        | 1.2864        | 0.4175        |
| 19             | -0.39%       | -0.09%       | 0.40%        | -0.0663              | 0.9736        | -0.7661       | 0.0367        | 1.2610        | 0.3271        |
| 20             | -0.21%       | -0.37%       | 0.19%        | -0.0308              | 0.9846        | -0.3515       | 0.0314        | 1.2537        | 0.2818        |
| 21             | -0.17%       | -0.11%       | 0.03%        | -0.0327              | 0.9167        | -0.4014       | 0.0260        | 1.2387        | 0.2360        |
| 22             | -0.35%       | 0.02%        | -0.32%       | -0.0867              | 0.8693        | -1.1212       | 0.0125        | 1.2192        | 0.1150        |
| 23             | 0.38%        | -0.04%       | 0.07%        | 0.1147               | 0.9925        | 1.2991        | 0.0296        | 1.2172        | 0.2736        |
| 24             | -0.27%       | -0.08%       | -0.21%       | -0.0416              | 1.1936        | -0.3921       | 0.0231        | 1.2421        | 0.2090        |
| 25             | -0.10%       | -0.24%       | -0.31%       | -0.0365              | 1.1848        | -0.3466       | 0.0174        | 1.2058        | 0.1627        |
| 26             | 0.21%        | -0.24%       | -0.10%       | 0.0401               | 0.9037        | 0.4991        | 0.0231        | 1.1802        | 0.2202        |
| 27             | -0.14%       | -0.36%       | -0.23%       | -0.0307              | 1.0968        | -0.3145       | 0.0184        | 1.1605        | 0.1787        |
| 28             | -0.11%       | -0.15%       | -0.35%       | 0.0175               | 0.9373        | 0.2099        | 0.0208        | 1.1690        | 0.1996        |
| 29             | -0.32%       | -0.33%       | -0.67%       | -0.0606              | 0.9207        | -0.7405       | 0.0120        | 1.1530        | 0.1167        |
| 30             | 0.43%        | -0.01%       | -0.24%       | 0.1087               | 1.0679        | 1.1447        | 0.0271        | 1.1457        | 0.2657        |
| <b>-1 to 1</b> |              |              | <b>1.33%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.041</b>  | 0.2654        | 1.5907        | <b>1.8756</b> |

Table-A 6.32 Market returns to Domestic Acquirers; BGrp (OLS, 65); VWI

| Days           | AAR           | Median        | CAAR          | SARa           | SD                   | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|---------------|---------------|---------------|----------------|----------------------|----------------|---------------|---------------|---------------|
| -20            | 0.06%         | 0.06%         | 0.06%         | 0.0948         | 1.0625               | 0.7842         | 0.0948        | 1.0625        | 0.7842        |
| -19            | 0.13%         | -0.17%        | 0.19%         | 0.0270         | 1.0484               | 0.2261         | 0.0861        | 0.9925        | 0.7625        |
| -18            | -0.02%        | -0.20%        | 0.17%         | -0.0103        | 0.8157               | -0.1106        | 0.0644        | 0.8843        | 0.6398        |
| -17            | 0.04%         | -0.25%        | 0.21%         | 0.0142         | 1.1221               | 0.1110         | 0.0629        | 0.8331        | 0.6629        |
| -16            | 0.05%         | -0.02%        | 0.26%         | 0.0400         | 0.7915               | 0.4442         | 0.0741        | 0.7898        | 0.8245        |
| -15            | -0.07%        | -0.68%        | 0.19%         | -0.0683        | 0.9746               | -0.6153        | 0.0398        | 0.8560        | 0.4085        |
| -14            | -0.33%        | -0.41%        | -0.14%        | -0.0813        | 1.0647               | -0.6707        | 0.0061        | 0.8307        | 0.0648        |
| -13            | 0.51%         | 0.01%         | 0.37%         | 0.2177         | 1.3440               | 1.4229         | 0.0827        | 0.9644        | 0.7533        |
| -12            | -0.43%        | -0.49%        | -0.06%        | -0.1143        | 0.9434               | -1.0643        | 0.0399        | 1.0135        | 0.3456        |
| -11            | -0.29%        | -0.38%        | -0.35%        | -0.0906        | 0.7715               | -1.0315        | 0.0092        | 0.9616        | 0.0838        |
| -10            | -0.45%        | -0.77%        | -0.80%        | -0.1331        | 1.0785               | -1.0838        | -0.0314       | 0.9365        | -0.2943       |
| -9             | 0.28%         | -0.04%        | -0.53%        | 0.0973         | 0.9062               | 0.9430         | -0.0020       | 0.8926        | -0.0193       |
| -8             | -0.14%        | 0.12%         | -0.67%        | -0.0659        | 0.9920               | -0.5835        | -0.0202       | 0.9191        | -0.1926       |
| -7             | 0.28%         | -0.17%        | -0.39%        | 0.0866         | 0.8612               | 0.8837         | 0.0037        | 0.9186        | 0.0357        |
| -6             | 0.19%         | -0.07%        | -0.21%        | 0.1085         | 1.1911               | 0.8000         | 0.0316        | 0.9366        | 0.2965        |
| -5             | -0.35%        | -0.24%        | -0.56%        | -0.0684        | 1.1513               | -0.5219        | 0.0135        | 0.9660        | 0.1228        |
| -4             | 0.03%         | -0.36%        | -0.53%        | -0.0417        | 1.2012               | -0.3053        | 0.0030        | 0.9302        | 0.0282        |
| -3             | -0.21%        | -0.34%        | -0.74%        | -0.0833        | 0.9358               | -0.7818        | -0.0167       | 0.9639        | -0.1525       |
| -2             | 0.18%         | 0.24%         | -0.56%        | 0.0710         | 0.6880               | 0.9069         | 0.0000        | 0.9341        | 0.0001        |
| -1             | 0.67%         | 0.22%         | 0.11%         | 0.1984         | 0.9736               | <b>1.7902</b>  | 0.0444        | 0.9482        | 0.4111        |
| <b>0</b>       | <b>-0.54%</b> | <b>-0.65%</b> | <b>-0.43%</b> | <b>-0.1652</b> | <b>1.6532</b>        | <b>-0.8777</b> | <b>0.0073</b> | <b>0.9546</b> | <b>0.0668</b> |
| 1              | 0.68%         | 0.02%         | 0.25%         | 0.2573         | 1.9686               | 1.1482         | 0.0619        | 0.9460        | 0.5752        |
| 2              | 0.51%         | 0.07%         | 0.76%         | 0.2239         | 1.1041               | <b>1.7818</b>  | 0.1073        | 0.9232        | 1.0208        |
| 3              | 0.45%         | 0.47%         | 1.21%         | 0.1821         | 1.0670               | 1.4995         | 0.1422        | 0.9207        | 1.3567        |
| 4              | -0.07%        | 0.00%         | 1.14%         | -0.0242        | 0.7701               | -0.2764        | 0.1345        | 0.8745        | 1.3509        |
| 5              | -0.23%        | -0.49%        | 0.92%         | -0.0430        | 0.9532               | -0.3967        | 0.1234        | 0.8669        | 1.2508        |
| 6              | -0.44%        | -0.17%        | 0.48%         | -0.1579        | 0.9198               | -1.5084        | 0.0907        | 0.8469        | 0.9411        |
| 7              | 0.48%         | 0.08%         | 0.96%         | 0.1430         | 1.0511               | 1.1955         | 0.1161        | 0.8564        | 1.1911        |
| 8              | 0.02%         | -0.12%        | 0.98%         | -0.0473        | 1.0760               | -0.3865        | 0.1053        | 0.8872        | 1.0427        |
| 9              | 0.53%         | -0.22%        | 1.51%         | 0.1566         | 1.1713               | 1.1744         | 0.1321        | 0.9309        | 1.2469        |
| 10             | 0.37%         | -0.02%        | 1.88%         | 0.1226         | 1.0145               | 1.0617         | 0.1520        | 0.9463        | 1.4110        |
| 11             | 0.00%         | -0.27%        | 1.88%         | 0.0488         | 0.9461               | 0.4530         | 0.1582        | 0.9921        | 1.4011        |
| 12             | -0.01%        | -0.22%        | 1.87%         | 0.0411         | 1.0275               | 0.3518         | 0.1630        | 1.0246        | 1.3973        |
| 13             | 0.81%         | 0.86%         | 2.68%         | 0.2746         | 0.9030               | <b>2.6715</b>  | 0.2076        | 1.0020        | <b>1.8206</b> |
| 14             | 0.23%         | 0.30%         | 2.92%         | 0.0537         | 0.9990               | 0.4720         | 0.2137        | 0.9594        | <b>1.9572</b> |
| 15             | -0.67%        | -0.37%        | 2.24%         | -0.2539        | 0.9446               | <b>-2.3613</b> | 0.1684        | 0.9509        | 1.5561        |
| 16             | -0.35%        | -0.38%        | 1.89%         | -0.0907        | 1.0918               | -0.7295        | 0.1512        | 0.9758        | 1.3615        |
| 17             | -0.21%        | -0.32%        | 1.68%         | -0.0774        | 0.6839               | -0.9943        | 0.1367        | 0.9325        | 1.2876        |
| 18             | -0.40%        | -0.19%        | 1.27%         | -0.1689        | 0.9614               | -1.5435        | 0.1079        | 0.9302        | 1.0186        |
| 19             | -0.31%        | -0.20%        | 0.97%         | -0.1555        | 1.0535               | -1.2968        | 0.0819        | 0.8650        | 0.8319        |
| 20             | -0.24%        | -0.19%        | 0.73%         | -0.0821        | 1.2749               | -0.5660        | 0.0681        | 0.8438        | 0.7089        |
| 21             | -0.41%        | -0.08%        | 0.32%         | -0.1568        | 1.2811               | -1.0753        | 0.0431        | 0.8898        | 0.4253        |
| 22             | -0.54%        | -0.49%        | -0.21%        | -0.1627        | 0.8336               | <b>-1.7151</b> | 0.0178        | 0.8732        | 0.1786        |
| 23             | 0.07%         | -0.31%        | -0.14%        | 0.0092         | 0.7765               | 0.1041         | 0.0189        | 0.8463        | 0.1966        |
| 24             | 0.05%         | -0.22%        | -0.09%        | 0.0219         | 1.0408               | 0.1845         | 0.0220        | 0.8581        | 0.2251        |
| 25             | -0.40%        | -0.35%        | -0.49%        | -0.1111        | 0.8886               | -1.0980        | 0.0054        | 0.8986        | 0.0525        |
| 26             | -0.20%        | -0.21%        | -0.69%        | -0.0484        | 1.0894               | -0.3904        | -0.0018       | 0.9088        | -0.0169       |
| 27             | 0.68%         | 0.38%         | -0.01%        | 0.2541         | 0.8041               | <b>2.7758</b>  | 0.0349        | 0.9067        | 0.3385        |
| 28             | -0.18%        | -0.22%        | -0.19%        | -0.0678        | 0.6933               | -0.8596        | 0.0249        | 0.9097        | 0.2404        |
| 29             | 0.18%         | -0.18%        | -0.01%        | 0.0438         | 0.8771               | 0.4382         | 0.0308        | 0.9209        | 0.2941        |
| 30             | 0.42%         | 0.40%         | 0.41%         | 0.1842         | 0.9066               | <b>1.7849</b>  | 0.0563        | 0.9123        | 0.5423        |
| <b>-1 to 1</b> |               |               | <b>0.82%</b>  |                | <b>StdDev(AAR-0)</b> | <b>0.04662</b> | 0.1677        | 1.3077        | 1.1267        |



**Table-A 6.33 Market returns to Domestic Acquirers; Related; (MM, 53); VWI**

| Days           | AAR           | Median        | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|---------------|---------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.73%         | 0.64%         | 0.73%        | 1.0248               | 5.9717        | 1.3139         | 1.0248        | 5.9717        | 1.3139        |
| -19            | -0.12%        | -0.07%        | 0.61%        | -0.0525              | 1.0191        | -0.3946        | 0.6875        | 4.2227        | 1.2465        |
| -18            | -0.16%        | -0.36%        | 0.45%        | -0.2397              | 1.5108        | -1.2147        | 0.4230        | 2.7652        | 1.1711        |
| -17            | 0.30%         | 0.25%         | 0.75%        | 0.2481               | 1.3973        | 1.3596         | 0.4904        | 2.6182        | 1.4339        |
| -16            | -0.07%        | -0.28%        | 0.68%        | -0.0888              | 1.0329        | -0.6579        | 0.3989        | 2.1531        | 1.4184        |
| -15            | -0.67%        | -0.01%        | 0.01%        | -0.1734              | 1.2259        | -1.0832        | 0.2933        | 2.1336        | 1.0526        |
| -14            | 0.37%         | -0.19%        | 0.38%        | 0.0578               | 1.0699        | 0.4136         | 0.2934        | 1.8742        | 1.1986        |
| -13            | 0.26%         | 0.08%         | 0.63%        | 0.1981               | 1.1619        | 1.3052         | 0.3445        | 1.9655        | 1.3420        |
| -12            | -0.37%        | -0.31%        | 0.26%        | -0.2042              | 1.3567        | -1.1526        | 0.2567        | 1.6393        | 1.1989        |
| -11            | 0.34%         | -0.02%        | 0.60%        | 0.0403               | 0.9001        | 0.3429         | 0.2563        | 1.4984        | 1.3096        |
| -10            | 0.05%         | -0.49%        | 0.65%        | 0.2390               | 2.1152        | 0.8652         | 0.3164        | 1.9433        | 1.2467        |
| -9             | 1.54%         | 0.52%         | 2.19%        | 0.3522               | 1.6306        | 1.6535         | 0.4046        | 1.6575        | <b>1.8690</b> |
| -8             | 0.73%         | 0.45%         | 2.92%        | 0.3467               | 1.8121        | 1.4647         | 0.4849        | 1.9720        | <b>1.8826</b> |
| -7             | 0.51%         | 0.19%         | 3.43%        | -0.0554              | 2.6537        | -0.1599        | 0.4524        | 1.4605        | <b>2.3718</b> |
| -6             | 0.58%         | 0.13%         | 4.00%        | 0.2997               | 1.4633        | 1.5679         | 0.5145        | 1.4848        | <b>2.6528</b> |
| -5             | 0.18%         | -0.04%        | 4.19%        | 0.0453               | 1.5820        | 0.2193         | 0.5095        | 1.4346        | <b>2.7188</b> |
| -4             | -0.18%        | 0.04%         | 4.01%        | -0.7055              | 4.8948        | -1.1035        | 0.3231        | 1.2144        | <b>2.0372</b> |
| -3             | -0.31%        | -0.29%        | 3.70%        | 0.0807               | 1.4250        | 0.4338         | 0.3331        | 1.1502        | <b>2.2171</b> |
| -2             | 0.33%         | 0.34%         | 4.03%        | -0.1705              | 2.1334        | -0.6120        | 0.2851        | 1.2420        | <b>1.7572</b> |
| -1             | 0.59%         | 0.09%         | 4.62%        | 0.4447               | 2.5567        | 1.3316         | 0.3773        | 1.1101        | <b>2.6019</b> |
| <b>0</b>       | <b>-0.25%</b> | <b>-0.32%</b> | <b>4.36%</b> | <b>-0.3678</b>       | <b>2.8121</b> | <b>-1.0014</b> | <b>0.2879</b> | <b>1.2720</b> | <b>1.7330</b> |
| 1              | 2.00%         | 0.72%         | 6.36%        | 0.8884               | 3.0868        | <b>2.2034</b>  | 0.4707        | 1.1710        | <b>3.0774</b> |
| 2              | 0.58%         | -0.18%        | 6.94%        | 0.0358               | 2.7794        | 0.0987         | 0.4678        | 1.3425        | <b>2.6680</b> |
| 3              | 0.19%         | -0.07%        | 7.13%        | 0.5404               | 2.7122        | 1.5256         | 0.5683        | 1.2584        | <b>3.4574</b> |
| 4              | 0.81%         | -0.01%        | 7.94%        | 0.2509               | 1.1570        | 1.6603         | 0.6070        | 1.2876        | <b>3.6091</b> |
| 5              | -0.22%        | -0.34%        | 7.72%        | 0.1922               | 2.3437        | 0.6279         | 0.6329        | 1.3300        | <b>3.6433</b> |
| 6              | 0.63%         | 0.01%         | 8.34%        | 0.4334               | 2.1831        | 1.5200         | 0.7045        | 1.4881        | <b>3.6243</b> |
| 7              | 0.45%         | -0.01%        | 8.79%        | -0.2664              | 3.1497        | -0.6475        | 0.6414        | 1.3683        | <b>3.5892</b> |
| 8              | -0.08%        | -0.09%        | 8.71%        | 0.0302               | 1.4356        | 0.1610         | 0.6359        | 1.3553        | <b>3.5923</b> |
| 9              | 0.06%         | -0.36%        | 8.77%        | -0.1011              | 1.2434        | -0.6223        | 0.6067        | 1.3239        | <b>3.5087</b> |
| 10             | 0.76%         | 0.38%         | 9.53%        | 0.4781               | 2.4200        | 1.5127         | 0.6828        | 1.3963        | <b>3.7437</b> |
| 11             | 0.25%         | 0.13%         | 9.79%        | 0.0494               | 1.1709        | 0.3228         | 0.6807        | 1.3593        | <b>3.8343</b> |
| 12             | 0.79%         | 0.48%         | 10.58%       | 0.3500               | 1.2274        | <b>2.1829</b>  | 0.7313        | 1.3926        | <b>4.0203</b> |
| 13             | 0.21%         | -0.12%        | 10.79%       | 0.1583               | 1.2761        | 0.9497         | 0.7476        | 1.4165        | <b>4.0407</b> |
| 14             | -0.24%        | -0.28%        | 10.55%       | -0.1411              | 1.1640        | -0.9279        | 0.7130        | 1.4402        | <b>3.7903</b> |
| 15             | 0.09%         | -0.12%        | 10.64%       | -0.3527              | 2.5652        | -1.0526        | 0.6442        | 1.3574        | <b>3.6336</b> |
| 16             | -0.19%        | -0.13%        | 10.45%       | -0.0509              | 1.1210        | -0.3474        | 0.6271        | 1.3940        | <b>3.4441</b> |
| 17             | 0.17%         | 0.15%         | 10.62%       | 0.1027               | 1.2261        | 0.6412         | 0.6354        | 1.3257        | <b>3.6698</b> |
| 18             | 0.21%         | 0.37%         | 10.82%       | 0.0992               | 1.5298        | 0.4962         | 0.6431        | 1.3088        | <b>3.7621</b> |
| 19             | -0.09%        | 0.10%         | 10.74%       | -0.2649              | 2.5326        | -0.8008        | 0.5931        | 1.2335        | <b>3.6817</b> |
| 20             | 0.03%         | 0.06%         | 10.77%       | 0.2191               | 2.1088        | 0.7954         | 0.6201        | 1.2496        | <b>3.7992</b> |
| 21             | -0.10%        | 0.45%         | 10.67%       | 0.3024               | 3.1048        | 0.7458         | 0.6593        | 1.4575        | <b>3.4634</b> |
| 22             | 0.12%         | 0.03%         | 10.79%       | 0.4105               | 2.8740        | 1.0935         | 0.7142        | 1.6556        | <b>3.3027</b> |
| 23             | 0.16%         | -0.23%        | 10.94%       | -0.0339              | 1.3999        | -0.1855        | 0.7009        | 1.5561        | <b>3.4486</b> |
| 24             | 0.63%         | -0.06%        | 11.57%       | 0.5022               | 2.6241        | 1.4651         | 0.7680        | 1.7770        | <b>3.3088</b> |
| 25             | 0.05%         | -0.28%        | 11.62%       | 0.0271               | 1.0390        | 0.1996         | 0.7636        | 1.7796        | <b>3.2850</b> |
| 26             | 0.02%         | -0.17%        | 11.64%       | 0.0330               | 1.0184        | 0.2484         | 0.7602        | 1.7676        | <b>3.2928</b> |
| 27             | 0.32%         | 0.05%         | 11.96%       | 0.1719               | 1.4960        | 0.8796         | 0.7771        | 1.8154        | <b>3.2772</b> |
| 28             | 0.35%         | 0.02%         | 12.31%       | 0.4353               | 1.9611        | <b>1.6995</b>  | 0.8313        | 1.9826        | <b>3.2101</b> |
| 29             | -0.22%        | -0.29%        | 12.09%       | -0.2373              | 1.7878        | -1.0164        | 0.7894        | 1.7964        | <b>3.3642</b> |
| 30             | 0.52%         | 0.37%         | 12.61%       | 0.2573               | 1.1416        | <b>1.7256</b>  | 0.8176        | 1.8407        | <b>3.4008</b> |
| <b>-1 to 1</b> |               |               | <b>2.33%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.05173</b> | 0.5573        | 1.9773        | <b>2.1577</b> |

**Table-A 6.34 Market returns to Domestic Acquirers; Unrelated; (MM, 138); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.01%        | -0.07%       | 0.01%        | 0.0147               | 1.1349        | 0.1611         | 0.0147        | 1.1349        | 0.1611        |
| -19            | 0.29%        | 0.00%        | 0.30%        | 0.0387               | 1.2629        | 0.3814         | 0.0378        | 1.1442        | 0.4106        |
| -18            | -0.09%       | -0.10%       | 0.21%        | -0.0469              | 1.3728        | -0.4247        | 0.0038        | 1.2748        | 0.0369        |
| -17            | 0.53%        | 0.18%        | 0.74%        | 0.2050               | 1.6557        | 1.5406         | 0.1058        | 1.3221        | 0.9955        |
| -16            | 0.09%        | -0.29%       | 0.84%        | 0.1240               | 1.6277        | 0.9480         | 0.1501        | 1.5533        | 1.2021        |
| -15            | 0.00%        | -0.29%       | 0.84%        | 0.0296               | 1.4444        | 0.2548         | 0.1491        | 1.5874        | 1.1684        |
| -14            | -0.18%       | -0.15%       | 0.66%        | -0.0434              | 1.4363        | -0.3758        | 0.1216        | 1.4675        | 1.0312        |
| -13            | 0.45%        | 0.24%        | 1.11%        | 0.1930               | 1.4064        | <b>1.7069</b>  | 0.1820        | 1.4192        | 1.5954        |
| -12            | -0.08%       | -0.35%       | 1.03%        | -0.0002              | 1.2380        | -0.0017        | 0.1715        | 1.4486        | 1.4732        |
| -11            | -0.35%       | -0.22%       | 0.68%        | -0.1130              | 1.1859        | -1.1855        | 0.1270        | 1.4239        | 1.1096        |
| -10            | -0.01%       | -0.13%       | 0.66%        | -0.0395              | 1.2548        | -0.3918        | 0.1092        | 1.3568        | 1.0010        |
| -9             | 0.38%        | 0.02%        | 1.04%        | 0.1347               | 1.5009        | 1.1168         | 0.1434        | 1.3105        | 1.3614        |
| -8             | -0.24%       | -0.17%       | 0.80%        | -0.1193              | 1.7490        | -0.8487        | 0.1047        | 1.3557        | 0.9607        |
| -7             | 0.44%        | 0.04%        | 1.24%        | 0.2064               | 1.2219        | <b>2.1012</b>  | 0.1560        | 1.3794        | 1.4073        |
| -6             | 0.03%        | 0.09%        | 1.27%        | 0.0603               | 1.1640        | 0.6440         | 0.1663        | 1.3355        | 1.5492        |
| -5             | 0.20%        | 0.04%        | 1.47%        | 0.0722               | 1.2141        | 0.7395         | 0.1791        | 1.2828        | <b>1.7366</b> |
| -4             | 0.01%        | -0.10%       | 1.48%        | 0.0171               | 1.0881        | 0.1958         | 0.1779        | 1.2695        | <b>1.7431</b> |
| -3             | -0.01%       | -0.10%       | 1.47%        | 0.0354               | 1.7032        | 0.2585         | 0.1812        | 1.3277        | <b>1.6979</b> |
| -2             | 0.29%        | 0.06%        | 1.76%        | 0.1003               | 1.3684        | 0.9116         | 0.1994        | 1.2932        | <b>1.9180</b> |
| -1             | 0.93%        | 0.64%        | 2.69%        | 0.3996               | 2.1820        | <b>2.2782</b>  | 0.2837        | 1.4909        | <b>2.3671</b> |
| <b>0</b>       | <b>0.43%</b> | <b>0.16%</b> | <b>3.12%</b> | <b>0.2234</b>        | <b>1.7460</b> | <b>1.5917</b>  | <b>0.3256</b> | <b>1.4677</b> | <b>2.7599</b> |
| 1              | -0.08%       | -0.03%       | 3.04%        | -0.0364              | 1.7628        | -0.2572        | 0.3103        | 1.4584        | <b>2.6472</b> |
| 2              | 0.83%        | 0.21%        | 3.88%        | 0.5120               | 2.3889        | <b>2.6660</b>  | 0.4103        | 1.5980        | <b>3.1939</b> |
| 3              | 0.15%        | 0.03%        | 4.02%        | -0.0538              | 1.6318        | -0.4103        | 0.3906        | 1.4696        | <b>3.3068</b> |
| 4              | 0.11%        | 0.02%        | 4.13%        | -0.0177              | 1.1469        | -0.1925        | 0.3792        | 1.4287        | <b>3.3019</b> |
| 5              | 0.15%        | -0.07%       | 4.28%        | 0.0895               | 1.2157        | 0.9155         | 0.3894        | 1.4464        | <b>3.3492</b> |
| 6              | -0.49%       | 0.00%        | 3.79%        | -0.1762              | 1.3953        | -1.5707        | 0.3482        | 1.4523        | <b>2.9828</b> |
| 7              | 0.34%        | 0.20%        | 4.13%        | 0.3265               | 2.0586        | <b>1.9728</b>  | 0.4036        | 1.6024        | <b>3.1335</b> |
| 8              | 0.32%        | -0.10%       | 4.46%        | 0.1454               | 1.4879        | 1.2161         | 0.4236        | 1.7074        | <b>3.0865</b> |
| 9              | 0.01%        | -0.12%       | 4.47%        | 0.0072               | 1.4764        | 0.0609         | 0.4178        | 1.6193        | <b>3.2099</b> |
| 10             | -0.24%       | -0.27%       | 4.23%        | -0.0580              | 1.3223        | -0.5457        | 0.4006        | 1.5799        | <b>3.1543</b> |
| 11             | -0.24%       | -0.11%       | 3.99%        | -0.0726              | 1.4226        | -0.6351        | 0.3815        | 1.5275        | <b>3.1066</b> |
| 12             | 0.12%        | -0.05%       | 4.12%        | 0.0522               | 1.2125        | 0.5352         | 0.3847        | 1.5503        | <b>3.0872</b> |
| 13             | 0.88%        | 0.21%        | 5.00%        | 0.2677               | 1.2059        | <b>2.7616</b>  | 0.4249        | 1.5304        | <b>3.4540</b> |
| 14             | 0.34%        | 0.27%        | 5.34%        | 0.1385               | 1.1150        | 1.5450         | 0.4422        | 1.5475        | <b>3.5548</b> |
| 15             | -0.12%       | -0.15%       | 5.22%        | -0.0753              | 1.0591        | -0.8844        | 0.4235        | 1.5273        | <b>3.4493</b> |
| 16             | 0.17%        | -0.11%       | 5.39%        | 0.1050               | 1.4774        | 0.8844         | 0.4350        | 1.5683        | <b>3.4505</b> |
| 17             | -0.27%       | -0.23%       | 5.12%        | -0.0568              | 1.3606        | -0.5194        | 0.4200        | 1.6365        | <b>3.1929</b> |
| 18             | -0.17%       | -0.02%       | 4.95%        | 0.0087               | 1.5252        | 0.0711         | 0.4160        | 1.7170        | <b>3.0140</b> |
| 19             | -0.24%       | -0.04%       | 4.71%        | -0.1361              | 1.2727        | -1.3308        | 0.3892        | 1.6784        | <b>2.8849</b> |
| 20             | 0.03%        | 0.05%        | 4.74%        | 0.0292               | 1.1442        | 0.3170         | 0.3890        | 1.7119        | <b>2.8268</b> |
| 21             | -0.06%       | -0.06%       | 4.68%        | -0.1212              | 1.5100        | -0.9985        | 0.3656        | 1.7335        | <b>2.6240</b> |
| 22             | -0.17%       | 0.15%        | 4.51%        | -0.0220              | 0.9651        | -0.2835        | 0.3580        | 1.7319        | <b>2.5716</b> |
| 23             | 0.49%        | 0.17%        | 5.00%        | 0.2178               | 1.3732        | <b>1.9734</b>  | 0.3868        | 1.6691        | <b>2.8825</b> |
| 24             | -0.26%       | -0.13%       | 4.73%        | -0.0297              | 1.5155        | -0.2441        | 0.3780        | 1.6999        | <b>2.7663</b> |
| 25             | 0.06%        | -0.08%       | 4.80%        | 0.0199               | 1.4998        | 0.1651         | 0.3768        | 1.6264        | <b>2.8822</b> |
| 26             | 0.42%        | 0.01%        | 5.21%        | 0.1172               | 1.2918        | 1.1284         | 0.3899        | 1.5852        | <b>3.0595</b> |
| 27             | 0.34%        | 0.01%        | 5.55%        | 0.1416               | 1.2319        | 1.4296         | 0.4062        | 1.5674        | <b>3.2240</b> |
| 28             | -0.02%       | -0.03%       | 5.53%        | -0.0212              | 1.0222        | -0.2582        | 0.3990        | 1.5723        | <b>3.1571</b> |
| 29             | 0.18%        | -0.04%       | 5.71%        | 0.0713               | 1.2730        | 0.6967         | 0.4051        | 1.5945        | <b>3.1605</b> |
| 30             | 0.59%        | 0.13%        | 6.31%        | 0.2601               | 1.2267        | <b>2.6377</b>  | 0.4375        | 1.6185        | <b>3.3629</b> |
| <b>-1 to 1</b> |              |              | <b>1.28%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.03915</b> | 0.3386        | 1.9310        | <b>2.1817</b> |

**Table-A 6.35 Market returns to Domestic Acquirers; Related; (OLS, 54); VWI**

| Days           | AAR           | Median        | CAAR         | SARa           | SD                   | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|---------------|---------------|--------------|----------------|----------------------|----------------|---------------|---------------|---------------|
| -20            | 0.54%         | 0.33%         | 0.54%        | 0.2268         | 1.0495               | 1.6605         | 0.2268        | 1.0495        | 1.6605        |
| -19            | -0.10%        | -0.18%        | 0.44%        | -0.0057        | 0.9232               | -0.0472        | 0.1563        | 1.0381        | 1.1573        |
| -18            | -0.16%        | -0.58%        | 0.29%        | -0.0631        | 0.7761               | -0.6252        | 0.0912        | 1.0074        | 0.6957        |
| -17            | 0.16%         | 0.16%         | 0.45%        | 0.1216         | 1.1163               | 0.8371         | 0.1398        | 1.0010        | 1.0732        |
| -16            | -0.26%        | -0.49%        | 0.19%        | -0.0766        | 0.7329               | -0.8031        | 0.0908        | 0.9923        | 0.7030        |
| -15            | -0.84%        | -0.33%        | -0.66%       | -0.2213        | 1.0866               | -1.5654        | -0.0075       | 1.0600        | -0.0544       |
| -14            | 0.19%         | -0.10%        | -0.47%       | 0.0164         | 0.9211               | 0.1364         | -0.0008       | 0.9711        | -0.0061       |
| -13            | 0.53%         | 0.01%         | 0.06%        | 0.1880         | 1.3147               | 1.0989         | 0.0658        | 1.1279        | 0.4480        |
| -12            | -0.56%        | -0.48%        | -0.50%       | -0.1423        | 0.9475               | -1.1544        | 0.0145        | 1.0782        | 0.1037        |
| -11            | 0.31%         | -0.32%        | -0.19%       | 0.0374         | 0.8517               | 0.3374         | 0.0256        | 1.0640        | 0.1851        |
| -10            | 0.06%         | -0.41%        | -0.13%       | 0.0219         | 1.0074               | 0.1671         | 0.0310        | 1.1579        | 0.2060        |
| -9             | 1.40%         | 0.32%         | 1.27%        | 0.3740         | 0.8861               | <b>3.2435</b>  | 0.1377        | 1.1957        | 0.8848        |
| -8             | 0.55%         | 0.25%         | 1.82%        | 0.0780         | 0.9740               | 0.6158         | 0.1539        | 1.2149        | 0.9736        |
| -7             | 0.30%         | -0.15%        | 2.12%        | 0.1569         | 0.8543               | 1.4111         | 0.1902        | 1.1819        | 1.2370        |
| -6             | 0.58%         | 0.09%         | 2.70%        | 0.2216         | 1.3058               | 1.3041         | 0.2410        | 1.2488        | 1.4831        |
| -5             | -0.15%        | -0.16%        | 2.54%        | -0.0615        | 1.3958               | -0.3387        | 0.2180        | 1.2006        | 1.3952        |
| -4             | -0.53%        | -0.23%        | 2.01%        | -0.2201        | 1.2012               | -1.4083        | 0.1581        | 1.0911        | 1.1135        |
| -3             | -0.33%        | -0.34%        | 1.68%        | -0.0252        | 1.0788               | -0.1797        | 0.1477        | 1.1114        | 1.0212        |
| -2             | 0.32%         | 0.20%         | 1.99%        | 0.0407         | 0.9420               | 0.3320         | 0.1531        | 1.1013        | 1.0682        |
| -1             | 0.55%         | -0.08%        | 2.55%        | 0.1313         | 1.0003               | 1.0089         | 0.1786        | 1.1688        | 1.1740        |
| <b>0</b>       | <b>-0.36%</b> | <b>-0.58%</b> | <b>2.19%</b> | <b>-0.1392</b> | <b>1.7253</b>        | <b>-0.6202</b> | <b>0.1439</b> | <b>1.2160</b> | <b>0.9093</b> |
| 1              | 1.75%         | 0.34%         | 3.94%        | 0.4654         | 2.0429               | <b>1.7506</b>  | 0.2398        | 1.1861        | 1.5536        |
| 2              | 0.60%         | -0.21%        | 4.53%        | 0.2518         | 1.5924               | 1.2150         | 0.2870        | 1.2363        | <b>1.7840</b> |
| 3              | 0.22%         | -0.24%        | 4.75%        | 0.2175         | 1.3493               | 1.2387         | 0.3254        | 1.2948        | <b>1.9310</b> |
| 4              | 0.72%         | 0.07%         | 5.47%        | 0.1776         | 0.9660               | 1.4132         | 0.3543        | 1.3066        | <b>2.0839</b> |
| 5              | -0.28%        | -0.64%        | 5.19%        | -0.0863        | 1.0408               | -0.6374        | 0.3305        | 1.3322        | <b>1.9066</b> |
| 6              | 0.58%         | -0.09%        | 5.76%        | 0.1433         | 0.8872               | 1.2409         | 0.3519        | 1.3753        | <b>1.9664</b> |
| 7              | 0.39%         | -0.17%        | 6.16%        | 0.0412         | 0.9074               | 0.3487         | 0.3533        | 1.4108        | <b>1.9247</b> |
| 8              | -0.23%        | -0.22%        | 5.93%        | -0.1100        | 1.0868               | -0.7776        | 0.3268        | 1.3763        | <b>1.8247</b> |
| 9              | -0.09%        | -0.50%        | 5.84%        | -0.0720        | 0.9213               | -0.6008        | 0.3081        | 1.3607        | <b>1.7402</b> |
| 10             | 0.73%         | 0.14%         | 6.57%        | 0.1928         | 1.2632               | 1.1727         | 0.3377        | 1.3909        | <b>1.8661</b> |
| 11             | 0.25%         | -0.07%        | 6.83%        | 0.0978         | 0.9846               | 0.7630         | 0.3497        | 1.4266        | <b>1.8838</b> |
| 12             | 0.62%         | 0.42%         | 7.45%        | 0.1943         | 0.9823               | 1.5200         | 0.3782        | 1.4285        | <b>2.0346</b> |
| 13             | 0.15%         | -0.13%        | 7.59%        | 0.0491         | 0.9375               | 0.4028         | 0.3810        | 1.4160        | <b>2.0679</b> |
| 14             | -0.43%        | -0.29%        | 7.17%        | -0.1667        | 0.9539               | -1.3429        | 0.3474        | 1.4114        | <b>1.8913</b> |
| 15             | 0.09%         | -0.21%        | 7.25%        | -0.0571        | 1.0896               | -0.4024        | 0.3330        | 1.4531        | <b>1.7610</b> |
| 16             | -0.49%        | -0.19%        | 6.76%        | -0.1623        | 0.9920               | -1.2573        | 0.3018        | 1.4098        | 1.6450        |
| 17             | 0.03%         | -0.03%        | 6.80%        | 0.0050         | 0.9493               | 0.0406         | 0.2986        | 1.3572        | <b>1.6907</b> |
| 18             | 0.04%         | 0.24%         | 6.83%        | -0.0088        | 1.2115               | -0.0556        | 0.2933        | 1.3296        | <b>1.6954</b> |
| 19             | -0.44%        | 0.01%         | 6.40%        | -0.1250        | 1.2120               | -0.7926        | 0.2699        | 1.2513        | 1.6574        |
| 20             | -0.28%        | -0.19%        | 6.12%        | -0.0445        | 1.4254               | -0.2398        | 0.2596        | 1.1948        | 1.6698        |
| 21             | -0.43%        | 0.22%         | 5.69%        | -0.1278        | 1.4424               | -0.6808        | 0.2368        | 1.2127        | 1.5005        |
| 22             | -0.18%        | -0.08%        | 5.50%        | -0.0389        | 0.9401               | -0.3180        | 0.2281        | 1.1664        | 1.5027        |
| 23             | 0.00%         | -0.34%        | 5.50%        | 0.0197         | 0.8187               | 0.1847         | 0.2285        | 1.1558        | 1.5190        |
| 24             | 0.41%         | -0.18%        | 5.91%        | 0.1410         | 1.0905               | 0.9934         | 0.2469        | 1.1761        | 1.6133        |
| 25             | -0.25%        | -0.32%        | 5.66%        | -0.0676        | 0.9843               | -0.5275        | 0.2343        | 1.1626        | 1.5484        |
| 26             | -0.37%        | -0.51%        | 5.29%        | -0.0911        | 0.9846               | -0.7108        | 0.2185        | 1.1246        | 1.4928        |
| 27             | 0.03%         | 0.04%         | 5.32%        | -0.0021        | 1.0375               | -0.0159        | 0.2159        | 1.0941        | 1.5162        |
| 28             | 0.18%         | -0.08%        | 5.50%        | 0.1380         | 0.8145               | 1.3016         | 0.2334        | 1.0894        | 1.6461        |
| 29             | -0.42%        | -0.42%        | 5.09%        | -0.1018        | 0.7521               | -1.0404        | 0.2166        | 1.0783        | 1.5438        |
| 30             | 0.12%         | 0.15%         | 5.21%        | 0.0503         | 1.0493               | 0.3685         | 0.2215        | 1.0536        | 1.6157        |
| <b>-1 to 1</b> |               |               | <b>1.94%</b> |                | <b>StdDev(AAR-0)</b> | <b>0.0529</b>  | 0.2641        | 1.3401        | 1.5144        |



**Table-A 6.36 Market returns to Domestic Targets; Unrelated; (OLS, 141); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.22%       | -0.29%       | -0.22%        | -0.0416              | 0.9303        | -0.5614        | -0.0416       | 0.9303        | -0.5614       |
| -19            | 0.15%        | -0.13%       | -0.07%        | 0.0010               | 0.9950        | 0.0130         | -0.0287       | 0.9159        | -0.3933       |
| -18            | -0.25%       | -0.29%       | -0.32%        | -0.0683              | 1.1223        | -0.7642        | -0.0628       | 0.9844        | -0.8018       |
| -17            | 0.42%        | 0.08%        | 0.10%         | 0.1031               | 1.1642        | 1.1116         | -0.0029       | 0.9871        | -0.0369       |
| -16            | -0.07%       | -0.42%       | 0.03%         | 0.0068               | 1.1252        | 0.0763         | 0.0005        | 1.0973        | 0.0053        |
| -15            | -0.17%       | -0.36%       | -0.14%        | -0.0626              | 1.1386        | -0.6905        | -0.0251       | 1.0951        | -0.2882       |
| -14            | -0.37%       | -0.25%       | -0.51%        | -0.0250              | 1.1330        | -0.2767        | -0.0327       | 1.0402        | -0.3949       |
| -13            | 0.29%        | 0.15%        | -0.23%        | 0.1141               | 1.0837        | 1.3220         | 0.0097        | 1.0734        | 0.1139        |
| -12            | -0.18%       | -0.57%       | -0.41%        | -0.0822              | 0.9156        | -1.1268        | -0.0182       | 1.0332        | -0.2212       |
| -11            | -0.49%       | -0.36%       | -0.90%        | -0.1273              | 0.9823        | -1.6279        | -0.0575       | 1.0220        | -0.7070       |
| -10            | -0.14%       | -0.30%       | -1.04%        | -0.0415              | 1.0589        | -0.4920        | -0.0674       | 0.9880        | -0.8563       |
| -9             | 0.12%        | -0.17%       | -0.92%        | 0.0450               | 1.2075        | 0.4681         | -0.0515       | 1.0092        | -0.6409       |
| -8             | -0.38%       | -0.25%       | -1.30%        | -0.1056              | 1.1313        | -1.1721        | -0.0788       | 1.0253        | -0.9648       |
| -7             | 0.31%        | -0.05%       | -0.99%        | 0.0879               | 0.9251        | 1.1926         | -0.0524       | 1.0428        | -0.6314       |
| -6             | 0.00%        | -0.03%       | -0.99%        | 0.0149               | 0.9283        | 0.2018         | -0.0468       | 1.0339        | -0.5684       |
| -5             | -0.05%       | -0.16%       | -1.04%        | -0.0071              | 0.9456        | -0.0940        | -0.0471       | 1.0036        | -0.5891       |
| -4             | -0.10%       | -0.30%       | -1.15%        | -0.0381              | 0.9303        | -0.5137        | -0.0549       | 0.9825        | -0.7017       |
| -3             | -0.12%       | -0.15%       | -1.27%        | -0.0600              | 0.9616        | -0.7833        | -0.0675       | 1.0146        | -0.8354       |
| -2             | 0.13%        | -0.03%       | -1.14%        | 0.0273               | 0.9172        | 0.3736         | -0.0594       | 0.9933        | -0.7514       |
| -1             | 0.70%        | 0.24%        | -0.44%        | 0.2181               | 1.0945        | <b>2.5028</b>  | -0.0091       | 1.0249        | -0.1121       |
| <b>0</b>       | <b>0.29%</b> | <b>0.11%</b> | <b>-0.15%</b> | <b>0.1617</b>        | <b>1.3677</b> | <b>1.4843</b>  | <b>0.0263</b> | <b>1.0644</b> | <b>0.3108</b> |
| 1              | -0.13%       | -0.17%       | -0.28%        | 0.0027               | 1.3056        | 0.0258         | 0.0263        | 1.0924        | 0.3025        |
| 2              | 0.64%        | 0.17%        | 0.36%         | 0.2075               | 1.3011        | <b>2.0027</b>  | 0.0690        | 1.1120        | 0.7793        |
| 3              | -0.08%       | 0.02%        | 0.29%         | -0.0541              | 1.0821        | -0.6275        | 0.0565        | 1.0823        | 0.6557        |
| 4              | -0.07%       | -0.24%       | 0.21%         | -0.0358              | 0.9311        | -0.4827        | 0.0482        | 1.0672        | 0.5673        |
| 5              | -0.06%       | -0.18%       | 0.15%         | 0.0002               | 0.8769        | 0.0022         | 0.0473        | 1.0417        | 0.5703        |
| 6              | -0.74%       | -0.15%       | -0.59%        | -0.2076              | 1.1620        | <b>-2.2437</b> | 0.0065        | 1.0294        | 0.0789        |
| 7              | 0.36%        | 0.08%        | -0.24%        | 0.1366               | 0.9868        | <b>1.7383</b>  | 0.0322        | 1.0387        | 0.3889        |
| 8              | 0.13%        | -0.16%       | -0.11%        | 0.0069               | 0.9956        | 0.0870         | 0.0329        | 1.0534        | 0.3920        |
| 9              | -0.14%       | -0.34%       | -0.25%        | 0.0062               | 1.0392        | 0.0755         | 0.0335        | 1.0669        | 0.3940        |
| 10             | -0.37%       | -0.42%       | -0.62%        | -0.0666              | 0.8644        | -0.9669        | 0.0210        | 1.0894        | 0.2418        |
| 11             | -0.40%       | -0.30%       | -1.02%        | -0.0806              | 0.8981        | -1.1276        | 0.0064        | 1.1205        | 0.0716        |
| 12             | -0.04%       | -0.28%       | -1.06%        | -0.0177              | 0.9260        | -0.2394        | 0.0032        | 1.1264        | 0.0359        |
| 13             | 0.60%        | 0.11%        | -0.46%        | 0.1631               | 0.9527        | <b>2.1502</b>  | 0.0311        | 1.1411        | 0.3428        |
| 14             | 0.18%        | 0.14%        | -0.27%        | 0.0465               | 0.8666        | 0.6744         | 0.0386        | 1.1233        | 0.4312        |
| 15             | -0.22%       | -0.27%       | -0.50%        | -0.0796              | 0.8972        | -1.1147        | 0.0248        | 1.1314        | 0.2748        |
| 16             | -0.02%       | -0.26%       | -0.52%        | -0.0448              | 1.0349        | -0.5440        | 0.0170        | 1.1149        | 0.1920        |
| 17             | -0.47%       | -0.36%       | -0.99%        | -0.1568              | 0.8884        | <b>-2.2162</b> | -0.0086       | 1.1132        | -0.0972       |
| 18             | -0.31%       | -0.14%       | -1.31%        | -0.0629              | 1.0906        | -0.7243        | -0.0186       | 1.1069        | -0.2107       |
| 19             | -0.33%       | -0.20%       | -1.63%        | -0.0850              | 0.9092        | -1.1737        | -0.0318       | 1.0908        | -0.3658       |
| 20             | -0.20%       | -0.33%       | -1.83%        | -0.0492              | 0.9316        | -0.6633        | -0.0391       | 1.0995        | -0.4463       |
| 21             | -0.17%       | -0.25%       | -2.01%        | -0.0535              | 0.8603        | -0.7811        | -0.0469       | 1.0939        | -0.5379       |
| 22             | -0.49%       | -0.11%       | -2.50%        | -0.1400              | 0.8236        | <b>-2.1353</b> | -0.0677       | 1.0857        | -0.7827       |
| 23             | 0.39%        | 0.04%        | -2.11%        | 0.1024               | 0.9649        | 1.3331         | -0.0515       | 1.0794        | -0.5986       |
| 24             | -0.39%       | -0.19%       | -2.50%        | -0.0823              | 1.1598        | -0.8910        | -0.0631       | 1.0989        | -0.7216       |
| 25             | -0.18%       | -0.27%       | -2.68%        | -0.0590              | 1.1355        | -0.6524        | -0.0712       | 1.0822        | -0.8257       |
| 26             | 0.25%        | -0.09%       | -2.43%        | 0.0495               | 0.9618        | 0.6469         | -0.0632       | 1.0771        | -0.7364       |
| 27             | 0.18%        | -0.23%       | -2.26%        | 0.0897               | 1.0096        | 1.1152         | -0.0496       | 1.0696        | -0.5819       |
| 28             | -0.26%       | -0.25%       | -2.51%        | -0.0680              | 0.8767        | -0.9737        | -0.0588       | 1.0790        | -0.6839       |
| 29             | -0.06%       | -0.21%       | -2.57%        | 0.0033               | 0.9586        | 0.0427         | -0.0577       | 1.0731        | -0.6754       |
| 30             | 0.54%        | 0.05%        | -2.03%        | 0.1659               | 1.0039        | <b>2.0750</b>  | -0.0339       | 1.0732        | -0.3969       |
| <b>-1 to 1</b> |              |              | <b>0.86%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.03874</b> | 0.2208        | 1.5607        | <b>1.7768</b> |

## Cross-Sectional – Analysis

Table-A 6.37 Post-event Regression Analysis; OLS CAARs - Targets

| CAAR<br>Windows: | (1)<br>[0,+15]                | (2)<br>[0,+10]                | (3)<br>[0,+7]                 | (4)<br>[0,+5]                 | (5)<br>[0,+2]        |
|------------------|-------------------------------|-------------------------------|-------------------------------|-------------------------------|----------------------|
| Cash             | 0.0115<br>(0.3342)            | 0.0082<br>(0.2267)            | 0.0039<br>(0.1504)            | 0.0098<br>(0.4032)            | 0.0261<br>(1.0936)   |
| <b>Pct50</b>     | 0.0618 *<br>(1.9107)          | <b>0.0576 **</b><br>(2.0037)  | <b>0.0758 ***</b><br>(2.9726) | <b>0.0642 ***</b><br>(3.0819) | 0.0310 *<br>(1.7107) |
| PctToe           | -0.1204 *<br>(-1.9010)        | -0.1045 *<br>(-1.7839)        | -0.0615<br>(-1.0977)          | -0.0128<br>(-0.2710)          | 0.0296<br>(0.6805)   |
| <b>BGroup</b>    | <b>0.0952 ***</b><br>(2.6913) | <b>0.0817 ***</b><br>(2.8214) | 0.0434 *<br>(1.7565)          | 0.0286<br>(1.2675)            | 0.0059<br>(0.2993)   |
| Related          | 0.0186<br>(0.5312)            | 0.0346<br>(1.1255)            | 0.0309<br>(1.0925)            | 0.0218<br>(0.8433)            | 0.0160<br>(0.8336)   |
| Conglomerate     | 0.0148<br>(0.4310)            | 0.0233<br>(0.7674)            | 0.0188<br>(0.7107)            | 0.0104<br>(0.4546)            | 0.0050<br>(0.2801)   |
| Intercept        | -0.0315<br>(-0.9793)          | -0.0399<br>(-1.2821)          | -0.0378<br>(-1.3602)          | -0.0269<br>(-1.2099)          | 0.0001<br>(0.0034)   |
| Observations     | 165                           | 165                           | 165                           | 165                           | 165                  |
| F-Statistics     | 2.6787                        | 2.8508                        | 2.5898                        | 2.3404                        | 1.0874               |
| p-value          | <b>0.0167 **</b>              | <b>0.0116 **</b>              | <b>0.0202 **</b>              | <b>0.0342 **</b>              | 0.3723               |
| Adj. R-Squared   | 0.0475                        | 0.0534                        | 0.0406                        | 0.0234                        | 0.0019               |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.38 Post-event Regression Analysis; MM CAARs - Targets

| CAAR<br>Windows: | (1)<br>[0,+15]               | (2)<br>[0,+10]               | (3)<br>[0,+7]                | (4)<br>[0,+5]                | (5)<br>[0,+2]      |
|------------------|------------------------------|------------------------------|------------------------------|------------------------------|--------------------|
| Cash             | -0.0029<br>(-0.0929)         | -0.0110<br>(-0.3409)         | 0.0051<br>(0.1949)           | 0.0157<br>(0.6384)           | 0.0299<br>(1.2268) |
| <b>Pct50</b>     | 0.0641 *<br>(1.8953)         | <b>0.0608 **</b><br>(2.1016) | <b>0.0575 **</b><br>(2.3032) | <b>0.0526 **</b><br>(2.5963) | 0.0254<br>(1.3814) |
| PctToe           | -0.0955<br>(-1.5442)         | -0.0826<br>(-1.4630)         | -0.0752<br>(-1.3958)         | -0.0211<br>(-0.4530)         | 0.0221<br>(0.5068) |
| <b>BGroup</b>    | <b>0.0728 **</b><br>(2.0536) | <b>0.0626 **</b><br>(2.1823) | 0.0325<br>(1.3252)           | 0.0243<br>(1.0816)           | 0.0038<br>(0.1921) |
| Related          | -0.0016<br>(-0.0454)         | 0.0132<br>(0.4516)           | 0.0238<br>(0.8426)           | 0.0205<br>(0.7860)           | 0.0163<br>(0.8640) |
| Conglomerate     | 0.0160<br>(0.4683)           | 0.0240<br>(0.8071)           | 0.0068<br>(0.2665)           | 0.0070<br>(0.3108)           | 0.0023<br>(0.1319) |
| Intercept        | 0.0131<br>(0.4014)           | -0.0057<br>(-0.1873)         | 0.0012<br>(0.0454)           | -0.0074<br>(-0.3392)         | 0.0103<br>(0.6521) |
| Observations     | 160                          | 160                          | 160                          | 160                          | 160                |
| F-Statistics     | 1.8541                       | 2.0527                       | 1.7973                       | 1.7779                       | 0.9034             |
| p-value          | 0.0922 *                     | 0.0620 *                     | 0.1031                       | 0.1071                       | 0.4942             |
| Adj. R-Squared   | 0.0239                       | 0.0312                       | 0.0179                       | 0.0093                       | -0.0041            |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.39 Regression OLS CAARS - Targets and Interactive Dummy - BGroup50

| CAAR<br>Windows: | (1)<br>[-20,+20]                | (2)<br>[-15,+15]               | (3)<br>[-10,+10]                | (4)<br>[-5,+5]               | (5)<br>[-1,+1]        |
|------------------|---------------------------------|--------------------------------|---------------------------------|------------------------------|-----------------------|
| Cash             | 0.1008<br>(1.3307)              | 0.0780<br>(1.1946)             | 0.0860<br>(1.5917)              | 0.0435<br>(1.4032)           | 0.0265<br>(1.2341)    |
| <b>Pct50</b>     | <b>0.1427 **</b><br>(2.1081)    | 0.1097 *<br>(1.7790)           | 0.0883 *<br>(1.7009)            | <b>0.0890 **</b><br>(2.1767) | 0.0297<br>(1.1706)    |
| <b>PctToe</b>    | <b>-0.3145 ***</b><br>(-2.6955) | <b>-0.2552 **</b><br>(-2.5142) | <b>-0.2436 ***</b><br>(-3.2606) | -0.0227<br>(-0.4160)         | -0.0010<br>(-0.0286)  |
| BGroup           | 0.0800<br>(1.3237)              | 0.0536<br>(1.0161)             | 0.0431<br>(0.9697)              | -0.0113<br>(-0.3760)         | -0.0211<br>(-1.0221)  |
| Related          | -0.0309<br>(-0.5884)            | -0.0028<br>(-0.0593)           | 0.0324<br>(0.8519)              | 0.0147<br>(0.5583)           | 0.0210<br>(1.1413)    |
| <i>BGroup50</i>  | 0.0130<br>(0.1072)              | 0.0499<br>(0.4297)             | 0.0080<br>(0.0909)              | 0.0387<br>(0.6264)           | 0.0049<br>(0.1277)    |
| Conglomerate     | -0.0728<br>(-1.2998)            | -0.0532<br>(-1.0364)           | -0.0329<br>(-0.7829)            | -0.0262<br>(-0.9607)         | -0.0182<br>(-1.1507)  |
| Intercept        | 0.1173 **<br>(2.0123)           | 0.1018 *<br>(1.8655)           | 0.0671<br>(1.3262)              | 0.0341<br>(1.1972)           | 0.0390 **<br>(2.5516) |
| Observations     | 165                             | 165                            | 165                             | 165                          | 165                   |
| F-Statistics     | 3.5109                          | 2.8225                         | 3.0368                          | 2.4688                       | 1.1395                |
| p-value          | <b>0.0016 ***</b>               | <b>0.0085 ***</b>              | <b>0.0051 ***</b>               | <b>0.0198 **</b>             | 0.3412                |
| Adj. R-Squared   | 0.0820                          | 0.0600                         | 0.0534                          | 0.0577                       | 0.0114                |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.40 Regression MM CAARS - Targets and Interactive Dummy - BGroup50

| CAAR<br>Windows: | (1)<br>[-20,+20]               | (2)<br>[-15,+15]               | (3)<br>[-10,+10]                | (4)<br>[-5,+5]        | (5)<br>[-1,+1]         |
|------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------|------------------------|
| Cash             | 0.0702<br>(1.0672)             | 0.0596<br>(1.0413)             | 0.0641<br>(1.3975)              | 0.0428<br>(1.3463)    | 0.0245<br>(1.0972)     |
| Pct50            | 0.1089 *<br>(1.7201)           | 0.0801<br>(1.4890)             | 0.0804<br>(1.6193)              | 0.0606<br>(1.6043)    | 0.0205<br>(0.7915)     |
| <b>PctToe</b>    | <b>-0.2459 **</b><br>(-2.2711) | <b>-0.2012 **</b><br>(-2.1430) | <b>-0.1972 ***</b><br>(-2.8743) | -0.0227<br>(-0.4190)  | -0.0044<br>(-0.1218)   |
| BGroup           | 0.0139<br>(0.2392)             | 0.0066<br>(0.1353)             | 0.0081<br>(0.2005)              | -0.0316<br>(-1.0274)  | -0.0287<br>(-1.3740)   |
| Related          | -0.0727<br>(-1.4591)           | -0.0286<br>(-0.6463)           | 0.0058<br>(0.1662)              | 0.0086<br>(0.3208)    | 0.0184<br>(1.0072)     |
| <i>BGroup50</i>  | 0.0782<br>(0.6408)             | 0.1090<br>(0.9404)             | 0.0385<br>(0.4326)              | 0.0728<br>(1.1841)    | 0.0155<br>(0.3969)     |
| Conglomerate     | -0.0574<br>(-1.0502)           | -0.0300<br>(-0.6088)           | -0.0200<br>(-0.5115)            | -0.0265<br>(-0.9672)  | -0.0210<br>(-1.3147)   |
| Intercept        | 0.2197 ***<br>(3.9726)         | 0.1644 ***<br>(3.2223)         | 0.1142 **<br>(2.5153)           | 0.0684 **<br>(2.3498) | 0.0521 ***<br>(3.4425) |
| Observations     | 160                            | 160                            | 160                             | 160                   | 160                    |
| F-Statistics     | 3.3338                         | 2.6216                         | 2.6610                          | 2.1970                | 1.0499                 |
| p-value          | <b>0.0025 ***</b>              | <b>0.0139 **</b>               | <b>0.0126 **</b>                | <b>0.0375 **</b>      | 0.3989                 |
| Adj. R-Squared   | 0.0703                         | 0.0515                         | 0.0437                          | 0.0501                | 0.0099                 |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.41 Regression OLS CAARS - Targets and Interactive Dummy - RelBGroup

| CAAR<br>Windows: | (1)<br>[-20,+20]                | (2)<br>[-15,+15]               | (3)<br>[-10,+10]                | (4)<br>[-5,+5]                | (5)<br>[-1,+1]                |
|------------------|---------------------------------|--------------------------------|---------------------------------|-------------------------------|-------------------------------|
| Cash             | 0.1085<br>(1.3837)              | 0.0810<br>(1.1949)             | 0.0905<br>(1.6197)              | 0.0506<br>(1.6121)            | 0.0306<br>(1.4000)            |
| <b>Pct50</b>     | <b>0.1526 **</b><br>(2.5725)    | <b>0.1323 **</b><br>(2.3567)   | <b>0.0942 **</b><br>(2.1883)    | <b>0.1092 ***</b><br>(3.5881) | <b>0.0341 *</b><br>(1.8279)   |
| <b>PctToe</b>    | <b>-0.3180 ***</b><br>(-2.6836) | <b>-0.2545 **</b><br>(-2.5025) | <b>-0.2457 ***</b><br>(-3.2344) | -0.0247<br>(-0.4556)          | -0.0030<br>(-0.0850)          |
| BGroup           | 0.0602<br>(0.8246)              | 0.0688<br>(1.0191)             | 0.0319<br>(0.6175)              | -0.0156<br>(-0.4460)          | -0.0326<br>(-1.3729)          |
| Related          | -0.0601<br>(-0.9255)            | -0.0034<br>(-0.0557)           | 0.0156<br>(0.3211)              | -0.0055<br>(-0.1630)          | 0.0050<br>(0.1983)            |
| <i>RelBGroup</i> | 0.0629<br>(0.5410)              | -0.0057<br>(-0.0540)           | 0.0360<br>(0.4310)              | 0.0393<br>(0.7587)            | 0.0347<br>(0.9649)            |
| Conglomerate     | -0.0749<br>(-1.2960)            | -0.0521<br>(-0.9950)           | -0.0340<br>(-0.8022)            | -0.0270<br>(-0.9825)          | -0.0194<br>(-1.2102)          |
| <b>Intercept</b> | <b>0.1226 **</b><br>(2.0262)    | <b>0.0966 *</b><br>(1.7518)    | <b>0.0701</b><br>(1.3862)       | <b>0.0346</b><br>(1.2013)     | <b>0.0421 ***</b><br>(2.7408) |
| Observations     | 165                             | 165                            | 165                             | 165                           | 165                           |
| F-Statistics     | 3.4472                          | 2.7120                         | 2.9285                          | 2.6121                        | 1.2494                        |
| p-value          | <b>0.0018 ***</b>               | <b>0.0111 **</b>               | <b>0.0066 ***</b>               | <b>0.0141 **</b>              | 0.2792                        |
| Adj. R-Squared   | 0.0835                          | 0.0589                         | 0.0543                          | 0.0581                        | 0.0173                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.42 Regression MM CAARS - Targets and Interactive Dummy - RelBGroup

| CAAR<br>Windows: | (1)<br>[-20,+20]               | (2)<br>[-15,+15]               | (3)<br>[-10,+10]                | (4)<br>[-5,+5]                | (5)<br>[-1,+1]         |
|------------------|--------------------------------|--------------------------------|---------------------------------|-------------------------------|------------------------|
| Cash             | 0.0799<br>(1.2003)             | 0.0631<br>(1.0915)             | 0.0686<br>(1.4628)              | 0.0541 *<br>(1.6568)          | 0.0302<br>(1.3119)     |
| <b>Pct50</b>     | <b>0.1476 **</b><br>(2.4709)   | <b>0.1291 **</b><br>(2.3026)   | <b>0.0993 **</b><br>(2.2942)    | <b>0.0977 ***</b><br>(3.2226) | 0.0300<br>(1.5692)     |
| <b>PctToe</b>    | <b>-0.2472 **</b><br>(-2.2883) | <b>-0.1969 **</b><br>(-2.1394) | <b>-0.1977 ***</b><br>(-2.8902) | -0.0252<br>(-0.4694)          | -0.0069<br>(-0.1913)   |
| BGroup           | 0.0226<br>(0.3005)             | 0.0502<br>(0.7461)             | 0.0132<br>(0.2570)              | -0.0304<br>(-0.8395)          | -0.0388<br>(-1.5966)   |
| Related          | -0.0917<br>(-1.3245)           | -0.0170<br>(-0.2740)           | -0.0026<br>(-0.0545)            | -0.0176<br>(-0.5337)          | 0.0003<br>(0.0103)     |
| <i>RelBGroup</i> | 0.0320<br>(0.2994)             | -0.0410<br>(-0.4304)           | 0.0134<br>(0.1830)              | 0.0486<br>(0.9235)            | 0.0386<br>(1.0548)     |
| Conglomerate     | -0.0575<br>(-1.0206)           | -0.0261<br>(-0.5248)           | -0.0199<br>(-0.5102)            | -0.0274<br>(-0.9965)          | -0.0224<br>(-1.3849)   |
| Intercept        | 0.2158 ***<br>(3.7728)         | 0.1494 ***<br>(2.9506)         | 0.1120 **<br>(2.4990)           | 0.0669 **<br>(2.2862)         | 0.0549 ***<br>(3.5735) |
| Observations     | 160                            | 160                            | 160                             | 160                           | 160                    |
| F-Statistics     | 3.2275                         | 2.4847                         | 2.5228                          | 2.3378                        | 1.1173                 |
| p-value          | <b>0.0032 ***</b>              | <b>0.0192 **</b>               | <b>0.0175 **</b>                | <b>0.0271 **</b>              | 0.3551                 |
| Adj. R-Squared   | 0.0684                         | 0.0466                         | 0.0428                          | 0.0462                        | 0.0163                 |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 6.43 Regression Analysis; OLS CAARs – Acquirers**

| <b>CAAR<br/>Windows:</b> | (1)<br>[-20,+20]     | (2)<br>[-15,+15]     | (3)<br>[-10,+10]            | (4)<br>[-5,+5]       | (5)<br>[-1,+1]       |
|--------------------------|----------------------|----------------------|-----------------------------|----------------------|----------------------|
| Cash                     | 0.0401<br>(0.8813)   | 0.0213<br>(0.4993)   | 0.0106<br>(0.2982)          | 0.0136<br>(0.4185)   | 0.0006<br>(0.0408)   |
| Pct50                    | 0.0533<br>(1.1243)   | 0.0804 *<br>(1.7417) | 0.0455<br>(1.3100)          | 0.0139<br>(0.6138)   | 0.0099<br>(0.7522)   |
| PctToe                   | -0.0009<br>(-0.0121) | -0.0200<br>(-0.2911) | -0.0696<br>(-1.2226)        | 0.0127<br>(0.2910)   | 0.0068<br>(0.2671)   |
| BGroup                   | -0.0176<br>(-0.5199) | -0.0127<br>(-0.3914) | -0.0082<br>(-0.3096)        | -0.0118<br>(-0.6196) | -0.0081<br>(-0.7490) |
| <b>Related</b>           | 0.0831 *<br>(1.7419) | 0.0863 *<br>(1.8449) | <b>0.0857**</b><br>(2.5791) | 0.0108<br>(0.5171)   | 0.0092<br>(0.7625)   |
| Conglomerate             | 0.0438<br>(1.0604)   | 0.0417<br>(1.0695)   | 0.0228<br>(0.7621)          | 0.0195<br>(1.0120)   | 0.0099<br>(0.9121)   |
| Intercept                | -0.0453<br>(-1.3197) | -0.0377<br>(-1.2088) | -0.0106<br>(-0.4055)        | 0.0023<br>(0.1465)   | 0.0049<br>(0.5168)   |
| Observations             | 191                  | 191                  | 191                         | 191                  | 191                  |
| F-Statistics             | 0.8497               | 0.8746               | 1.1952                      | 0.2708               | 0.3958               |
| p-value                  | 0.5332               | 0.5147               | 0.3107                      | 0.9500               | 0.8811               |
| Adj. R-Squared           | 0.0054               | 0.0202               | 0.0151                      | -0.0212              | -0.0212              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01



Table-A 6.44 Regression Analysis; MM CAARs – Acquirers

| CAAR<br>Windows: | (1)<br>[-20,+20]     | (2)<br>[-15,+15]     | (3)<br>[-10,+10]            | (4)<br>[-5,+5]       | (5)<br>[-1,+1]       |
|------------------|----------------------|----------------------|-----------------------------|----------------------|----------------------|
| Cash             | 0.0248<br>(0.5909)   | 0.0118<br>(0.2919)   | 0.0028<br>(0.0785)          | 0.0096<br>(0.2923)   | 0.0004<br>(0.0223)   |
| Pct50            | 0.0362<br>(0.9307)   | 0.0597 *<br>(1.6795) | 0.0340<br>(1.0866)          | 0.0073<br>(0.3487)   | 0.0094<br>(0.7082)   |
| PctToe           | 0.0281<br>(0.4014)   | 0.0127<br>(0.2050)   | -0.0466<br>(-0.8262)        | 0.0201<br>(0.4670)   | 0.0110<br>(0.4384)   |
| BGroup           | -0.0084<br>(-0.2511) | 0.0003<br>(0.0100)   | 0.0017<br>(0.0630)          | -0.0089<br>(-0.4665) | -0.0085<br>(-0.7749) |
| <b>Related</b>   | 0.0569<br>(1.5419)   | 0.0575 *<br>(1.7477) | <b>0.0691**</b><br>(2.4090) | 0.0024<br>(0.1326)   | 0.0084<br>(0.7019)   |
| Conglomerate     | 0.0317<br>(0.8219)   | 0.0275<br>(0.8063)   | 0.0161<br>(0.5553)          | 0.0151<br>(0.8078)   | 0.0097<br>(0.8633)   |
| Intercept        | 0.0261<br>(0.7171)   | 0.0163<br>(0.5093)   | 0.0236<br>(0.8412)          | 0.0231<br>(1.4603)   | 0.0090<br>(0.9023)   |
| Observations     | 187                  | 187                  | 187                         | 187                  | 187                  |
| F-Statistics     | 0.7215               | 0.9034               | 1.1327                      | 0.1645               | 0.3914               |
| p-value          | 0.6328               | 0.4937               | 0.3451                      | 0.9858               | 0.8839               |
| Adj. R-Squared   | -0.0127              | -0.0031              | -0.0047                     | -0.0274              | -0.0226              |

*t* statistics in parentheses; \*  $p < .10$ , \*\*  $p < .05$ , \*\*\*  $p < .01$

Table-A 6.45 Regression OLS CAARS - Acquirers and Interactive Dummy - BGroup50

| CAAR<br>Windows: | (1)<br>[-20,+20]     | (2)<br>[-15,+15]     | (3)<br>[-10,+10]              | (4)<br>[-5,+5]       | (5)<br>[-1,+1]       |
|------------------|----------------------|----------------------|-------------------------------|----------------------|----------------------|
| Cash             | 0.0375<br>(0.8172)   | 0.0197<br>(0.4577)   | 0.0055<br>(0.1555)            | 0.0096<br>(0.2971)   | 0.0001<br>(0.0083)   |
| Pct50            | 0.0425<br>(0.6405)   | 0.0734<br>(1.1840)   | 0.0238<br>(0.5168)            | -0.0031<br>(-0.0984) | 0.0078<br>(0.4216)   |
| PctToe           | -0.0013<br>(-0.0165) | -0.0202<br>(-0.2933) | -0.0703<br>(-1.2287)          | 0.0122<br>(0.2762)   | 0.0067<br>(0.2627)   |
| BGroup           | -0.0258<br>(-0.6485) | -0.0180<br>(-0.4913) | -0.0247<br>(-0.8236)          | -0.0247<br>(-1.1598) | -0.0098<br>(-0.7838) |
| <b>Related</b>   | 0.0845 *<br>(1.7841) | 0.0872 *<br>(1.8822) | <b>0.0885 ***</b><br>(2.6475) | 0.0130<br>(0.6243)   | 0.0095<br>(0.7704)   |
| <i>BGroup50</i>  | 0.0314<br>(0.4304)   | 0.0202<br>(0.2848)   | 0.0629<br>(1.0863)            | 0.0492<br>(1.3531)   | 0.0063<br>(0.2701)   |
| Conglomerate     | 0.0441<br>(1.0646)   | 0.0418<br>(1.0728)   | 0.0233<br>(0.7767)            | 0.0198<br>(1.0314)   | 0.0100<br>(0.9149)   |
| Intercept        | -0.0427<br>(-1.1895) | -0.0361<br>(-1.0966) | -0.0055<br>(-0.2013)          | 0.0063<br>(0.3893)   | 0.0054<br>(0.5471)   |
| Observations     | 191                  | 191                  | 191                           | 191                  | 191                  |
| F-Statistics     | 1.0236               | 1.0119               | 1.3504                        | 0.7480               | 0.3798               |
| p-value          | 0.4161               | 0.4243               | 0.2291                        | 0.6316               | 0.9133               |
| Adj. R-Squared   | 0.0007               | 0.0152               | 0.0147                        | -0.0197              | -0.0265              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.46 Regression OLS CAARS - Acquirers and Interactive Dummy - BGroup50

| CAAR<br>Windows: | (1)<br>[-20,+20]             | (2)<br>[-15,+15]             | (3)<br>[-10,+10]             | (4)<br>[-5,+5]       | (5)<br>[-1,+1]       |
|------------------|------------------------------|------------------------------|------------------------------|----------------------|----------------------|
| Cash             | 0.0379<br>(0.8538)           | 0.0215<br>(0.5193)           | 0.0023<br>(0.0669)           | 0.0137<br>(0.4353)   | 0.0042<br>(0.2647)   |
| Pct50            | 0.0345<br>(0.5274)           | 0.0704<br>(1.1571)           | 0.0286<br>(0.6313)           | -0.0054<br>(-0.1797) | 0.0036<br>(0.2027)   |
| BGroup           | -0.0249<br>(-0.6387)         | -0.0186<br>(-0.5171)         | -0.0263<br>(-0.9028)         | -0.0250<br>(-1.2432) | -0.0108<br>(-0.8820) |
| <b>Related</b>   | <b>0.0862 **</b><br>(2.1374) | <b>0.0852 **</b><br>(2.1167) | <b>0.0735 **</b><br>(2.4129) | 0.0177<br>(0.8772)   | 0.0130<br>(1.2375)   |
| <i>BGroup50</i>  | 0.0402<br>(0.5586)           | 0.0237<br>(0.3390)           | 0.0596<br>(1.0344)           | 0.0509<br>(1.4292)   | 0.0098<br>(0.4265)   |
| Conglomerate     | 0.0473<br>(1.1480)           | 0.0451<br>(1.1410)           | 0.0293<br>(0.9903)           | 0.0193<br>(1.0064)   | 0.0097<br>(0.8980)   |
| Intercept        | -0.0461<br>(-1.3248)         | -0.0404<br>(-1.2620)         | -0.0141<br>(-0.5457)         | 0.0067<br>(0.4322)   | 0.0058<br>(0.6111)   |
| Observations     | 195                          | 195                          | 195                          | 195                  | 195                  |
| F-Statistics     | 1.3036                       | 1.2483                       | 1.3436                       | 0.9155               | 0.5066               |
| p-value          | 0.2575                       | 0.2836                       | 0.2398                       | 0.4849               | 0.8029               |
| Adj. R-Squared   | 0.0082                       | 0.0226                       | 0.0153                       | -0.0117              | -0.0190              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Note: Interactive dummy equations without the PctToe variable.

**Table-A 6.47 Regression MM CAARS - Acquirers and Interactive Dummy - BGroup50**

| <b>CAAR<br/>Windows:</b> | (1)<br>[-20,+20]     | (2)<br>[-15,+15]     | (3)<br>[-10,+10]             | (4)<br>[-5,+5]       | (5)<br>[-1,+1]       |
|--------------------------|----------------------|----------------------|------------------------------|----------------------|----------------------|
| Cash                     | 0.0206<br>(0.4829)   | 0.0083<br>(0.2005)   | -0.0030<br>(-0.0844)         | 0.0052<br>(0.1604)   | -0.0004<br>(-0.0245) |
| Pct50                    | 0.0176<br>(0.3249)   | 0.0441<br>(0.9514)   | 0.0080<br>(0.1985)           | -0.0122<br>(-0.4314) | 0.0061<br>(0.3251)   |
| PctToe                   | 0.0277<br>(0.3949)   | 0.0124<br>(0.1985)   | -0.0471<br>(-0.8345)         | 0.0197<br>(0.4542)   | 0.0110<br>(0.4330)   |
| BGroup                   | -0.0224<br>(-0.5399) | -0.0115<br>(-0.3083) | -0.0179<br>(-0.5749)         | -0.0236<br>(-1.0891) | -0.0110<br>(-0.8742) |
| <b>Related</b>           | 0.0590<br>(1.5946)   | 0.0592 *<br>(1.7797) | <b>0.0721 **</b><br>(2.4849) | 0.0046<br>(0.2524)   | 0.0088<br>(0.7216)   |
| <i>BGroup50</i>          | 0.0530<br>(0.7713)   | 0.0448<br>(0.6799)   | 0.0742<br>(1.2898)           | 0.0558<br>(1.5376)   | 0.0096<br>(0.4078)   |
| Conglomerate             | 0.0319<br>(0.8258)   | 0.0277<br>(0.8085)   | 0.0164<br>(0.5647)           | 0.0153<br>(0.8213)   | 0.0097<br>(0.8651)   |
| Intercept                | 0.0306<br>(0.8084)   | 0.0201<br>(0.6040)   | 0.0298<br>(1.0260)           | 0.0278 *<br>(1.6937) | 0.0098<br>(0.9391)   |
| Observations             | 187                  | 187                  | 187                          | 187                  | 187                  |
| F-Statistics             | 0.8205               | 0.8815               | 1.2099                       | 0.5576               | 0.4026               |
| p-value                  | 0.5714               | 0.5223               | 0.2995                       | 0.7896               | 0.8998               |
| Adj. R-Squared           | -0.0162              | -0.0067              | -0.0032                      | -0.0238              | -0.0275              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.48 Regression MM CAARS - Acquirers and Interactive Dummy - BGroup50

| CAAR<br>Windows: | (1)<br>[-20,+20]            | (2)<br>[-15,+15]            | (3)<br>[-10,+10]            | (4)<br>[-5,+5]       | (5)<br>[-1,+1]       |
|------------------|-----------------------------|-----------------------------|-----------------------------|----------------------|----------------------|
| Cash             | 0.0209<br>(0.5031)          | 0.0103<br>(0.2580)          | -0.0060<br>(-0.1757)        | 0.0092<br>(0.2889)   | 0.0035<br>(0.2236)   |
| Pct50            | 0.0030<br>(0.0547)          | 0.0364<br>(0.8029)          | 0.0095<br>(0.2420)          | -0.0158<br>(-0.5773) | 0.0015<br>(0.0829)   |
| BGroup           | -0.0209<br>(-0.5179)        | -0.0112<br>(-0.3077)        | -0.0186<br>(-0.6190)        | -0.0238<br>(-1.1652) | -0.0119<br>(-0.9647) |
| <b>Related</b>   | <b>0.0663**</b><br>(1.9789) | <b>0.0636**</b><br>(2.0405) | <b>0.0615**</b><br>(2.1935) | 0.0108<br>(0.5736)   | 0.0131<br>(1.2433)   |
| <i>BGroup50</i>  | 0.0681<br>(0.9879)          | 0.0525<br>(0.8043)          | 0.0739<br>(1.2960)          | 0.0588<br>(1.6469)   | 0.0136<br>(0.5799)   |
| Conglomerate     | 0.0330<br>(0.8895)          | 0.0285<br>(0.8588)          | 0.0206<br>(0.7408)          | 0.0142<br>(0.7784)   | 0.0091<br>(0.8243)   |
| Intercept        | 0.0311<br>(0.8864)          | 0.0198<br>(0.6409)          | 0.0240<br>(0.9011)          | 0.0293*<br>(1.8864)  | 0.0108<br>(1.0868)   |
| Observations     | 191                         | 191                         | 191                         | 191                  | 191                  |
| F-Statistics     | 1.0399                      | 1.0711                      | 1.1727                      | 0.6891               | 0.5219               |
| p-value          | 0.4009                      | 0.3815                      | 0.3228                      | 0.6586               | 0.7913               |
| Adj. R-Squared   | -0.0092                     | 0.0000                      | 0.0005                      | -0.0165              | -0.0204              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Note: Interactive dummy equations without the PctToe variable.

**Table-A 6.49 Regression OLS CAARS - Acquirers and Interactive Dummy - RelBGroup**

| <b>CAAR<br/>Windows:</b> | (1)<br>[-20,+20]     | (2)<br>[-15,+15]     | (3)<br>[-10,+10]             | (4)<br>[-5,+5]       | (5)<br>[-1,+1]         |
|--------------------------|----------------------|----------------------|------------------------------|----------------------|------------------------|
| Cash                     | 0.0315<br>(0.6885)   | 0.0140<br>(0.3281)   | 0.0031<br>(0.0902)           | 0.0099<br>(0.3196)   | -0.0034<br>(-0.2195)   |
| Pct50                    | 0.0516<br>(1.1053)   | 0.0789 *<br>(1.7366) | 0.0440<br>(1.2786)           | 0.0132<br>(0.5811)   | 0.0091<br>(0.6879)     |
| PctToe                   | 0.0000<br>(0.0005)   | -0.0192<br>(-0.2819) | -0.0687<br>(-1.2213)         | 0.0131<br>(0.3006)   | 0.0072<br>(0.2878)     |
| BGroup                   | 0.0058<br>(0.1398)   | 0.0073<br>(0.1966)   | 0.0124<br>(0.4058)           | -0.0018<br>(-0.0879) | 0.0030<br>(0.2199)     |
| <b>Related</b>           | 0.1118 *<br>(1.7097) | 0.1108 *<br>(1.7599) | <b>0.1110 **</b><br>(2.5209) | 0.0231<br>(0.8090)   | 0.0228<br>(1.4704)     |
| <i>RelBGroup</i>         | -0.0727<br>(-1.0131) | -0.0621<br>(-0.8760) | -0.0641<br>(-1.1794)         | -0.0312<br>(-0.8561) | -0.0346 *<br>(-1.6585) |
| Conglomerate             | 0.0433<br>(1.0539)   | 0.0412<br>(1.0651)   | 0.0224<br>(0.7500)           | 0.0192<br>(1.0009)   | 0.0097<br>(0.8890)     |
| Intercept                | -0.0507<br>(-1.4051) | -0.0424<br>(-1.2867) | -0.0154<br>(-0.5656)         | -0.0001<br>(-0.0058) | 0.0023<br>(0.2337)     |
| Observations             | 191                  | 191                  | 191                          | 191                  | 191                    |
| F-Statistics             | 0.7399               | 0.7624               | 1.0659                       | 0.2849               | 0.7340                 |
| p-value                  | 0.6384               | 0.6196               | 0.3872                       | 0.9592               | 0.6434                 |
| Adj. R-Squared           | 0.0040               | 0.0184               | 0.0152                       | -0.0237              | -0.0162                |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 6.50 Regression OLS CAARS - Acquirers and Interactive Dummy - RelBGroup**

| <b>CAAR<br/>Windows:</b> | (1)<br>[-20,+20]     | (2)<br>[-15,+15]     | (3)<br>[-10,+10]             | (4)<br>[-5,+5]       | (5)<br>[-1,+1]         |
|--------------------------|----------------------|----------------------|------------------------------|----------------------|------------------------|
| Cash                     | 0.0317<br>(0.7104)   | 0.0153<br>(0.3681)   | -0.0008<br>(-0.0237)         | 0.0137<br>(0.4521)   | 0.0003<br>(0.0171)     |
| Pct50                    | 0.0465<br>(1.0016)   | 0.0770 *<br>(1.7108) | 0.0474<br>(1.3901)           | 0.0111<br>(0.4975)   | 0.0062<br>(0.4752)     |
| BGroup                   | 0.0102<br>(0.2516)   | 0.0088<br>(0.2398)   | 0.0101<br>(0.3412)           | -0.0006<br>(-0.0308) | 0.0040<br>(0.2976)     |
| <b>Related</b>           | 0.1142 *<br>(1.9468) | 0.1098 *<br>(1.9179) | <b>0.0961 **</b><br>(2.3166) | 0.0289<br>(1.0051)   | 0.0273 *<br>(1.9068)   |
| <i>RelBGroup</i>         | -0.0756<br>(-1.0648) | -0.0652<br>(-0.9295) | -0.0639<br>(-1.1826)         | -0.0340<br>(-0.9562) | -0.0375 *<br>(-1.8112) |
| Conglomerate             | 0.0463<br>(1.1331)   | 0.0443<br>(1.1310)   | 0.0283<br>(0.9623)           | 0.0186<br>(0.9702)   | 0.0093<br>(0.8643)     |
| Intercept                | -0.0548<br>(-1.5711) | -0.0470<br>(-1.4749) | -0.0235<br>(-0.9138)         | 0.0002<br>(0.0129)   | 0.0023<br>(0.2442)     |
| Observations             | 195                  | 195                  | 195                          | 195                  | 195                    |
| F-Statistics             | 0.9240               | 0.9551               | 1.0355                       | 0.3768               | 0.9762                 |
| p-value                  | 0.4789               | 0.4571               | 0.4037                       | 0.8932               | 0.4426                 |
| Adj. R-Squared           | 0.0114               | 0.0260               | 0.0163                       | -0.0157              | -0.0076                |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Note: Interactive dummy equations without the PctToe variable.

**Table-A 6.51 Regression MM CAARS - Acquirers and Interactive Dummy - RelBGroup**

| <b>CAAR<br/>Windows:</b> | (1)<br>[-20,+20]     | (2)<br>[-15,+15]     | (3)<br>[-10,+10]             | (4)<br>[-5,+5]       | (5)<br>[-1,+1]       |
|--------------------------|----------------------|----------------------|------------------------------|----------------------|----------------------|
| Cash                     | 0.0164<br>(0.3977)   | 0.0061<br>(0.1582)   | -0.0044<br>(-0.1311)         | 0.0071<br>(0.2260)   | -0.0035<br>(-0.2195) |
| Pct50                    | 0.0351<br>(0.9085)   | 0.0590 *<br>(1.6569) | 0.0330<br>(1.0564)           | 0.0070<br>(0.3301)   | 0.0089<br>(0.6660)   |
| PctToe                   | 0.0286<br>(0.4110)   | 0.0131<br>(0.2113)   | -0.0461<br>(-0.8242)         | 0.0202<br>(0.4696)   | 0.0113<br>(0.4505)   |
| BGroup                   | 0.0140<br>(0.3327)   | 0.0153<br>(0.4118)   | 0.0208<br>(0.6682)           | -0.0022<br>(-0.1054) | 0.0016<br>(0.1189)   |
| <b>Related</b>           | 0.0847 *<br>(1.7864) | 0.0761 *<br>(1.9562) | <b>0.0928 **</b><br>(2.5497) | 0.0108<br>(0.4335)   | 0.0210<br>(1.3437)   |
| <i>RelBGroup</i>         | -0.0690<br>(-1.0196) | -0.0462<br>(-0.7316) | -0.0589<br>(-1.1065)         | -0.0208<br>(-0.5826) | -0.0313<br>(-1.4664) |
| Conglomerate             | 0.0314<br>(0.8167)   | 0.0273<br>(0.8013)   | 0.0160<br>(0.5487)           | 0.0150<br>(0.8025)   | 0.0096<br>(0.8535)   |
| Intercept                | 0.0207<br>(0.5489)   | 0.0127<br>(0.3857)   | 0.0190<br>(0.6571)           | 0.0215<br>(1.2986)   | 0.0066<br>(0.6328)   |
| Observations             | 187                  | 187                  | 187                          | 187                  | 187                  |
| F-Statistics             | 0.7014               | 0.9181               | 1.1590                       | 0.1742               | 0.6124               |
| p-value                  | 0.6709               | 0.4937               | 0.3287                       | 0.9902               | 0.7452               |
| Adj. R-Squared           | -0.0145              | -0.0065              | -0.0056                      | -0.0318              | -0.0198              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01



**Table-A 6.52 Regression MM CAARS - Acquirers and Interactive Dummy - RelBGroup**

| <b>CAAR<br/>Windows:</b> | (1)<br>[-20,+20]            | (2)<br>[-15,+15]            | (3)<br>[-10,+10]            | (4)<br>[-5,+5]       | (5)<br>[-1,+1]       |
|--------------------------|-----------------------------|-----------------------------|-----------------------------|----------------------|----------------------|
| Cash                     | 0.0171<br>(0.4242)          | 0.0081<br>(0.2175)          | -0.0076<br>(-0.2367)        | 0.0109<br>(0.3576)   | 0.0002<br>(0.0128)   |
| Pct50                    | 0.0253<br>(0.6531)          | 0.0537<br>(1.5344)          | 0.0340<br>(1.1113)          | 0.0040<br>(0.1916)   | 0.0057<br>(0.4320)   |
| BGroup                   | 0.0205<br>(0.4915)          | 0.0187<br>(0.5083)          | 0.0198<br>(0.6547)          | -0.0006<br>(-0.0277) | 0.0028<br>(0.2059)   |
| <b>Related</b>           | <b>0.0923**</b><br>(2.0473) | <b>0.0812**</b><br>(2.1165) | <b>0.0819**</b><br>(2.2719) | 0.0180<br>(0.6804)   | 0.0262<br>(1.7977)   |
| <i>RelBGroup</i>         | -0.0718<br>(-1.0717)        | -0.0491<br>(-0.7872)        | -0.0582<br>(-1.1009)        | -0.0236<br>(-0.6789) | -0.0341<br>(-1.6134) |
| Conglomerate             | 0.0323<br>(0.8726)          | 0.0280<br>(0.8464)          | 0.0200<br>(0.7189)          | 0.0139<br>(0.7539)   | 0.0089<br>(0.8066)   |
| Intercept                | 0.0201<br>(0.5758)          | 0.0117<br>(0.3875)          | 0.0136<br>(0.5157)          | 0.0227<br>(1.4815)   | 0.0071<br>(0.7148)   |
| Observations             | 191                         | 191                         | 191                         | 191                  | 191                  |
| F-Statistics             | 0.8560                      | 1.1054                      | 1.0919                      | 0.2240               | 0.8208               |
| p-value                  | 0.5285                      | 0.3609                      | 0.3688                      | 0.9686               | 0.5551               |
| Adj. R-Squared           | -0.0086                     | -0.0002                     | -0.0020                     | -0.0252              | -0.0120              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Note: Interactive dummy equations without the PctToe variable.

Table-A 6.53 Univariate Regression Analysis; OLS CAARs [-1,+1] - Targets

| CAAR Window:   | (1)<br>[-1,+1]        | (2)<br>[-1,+1]        | (3)<br>[-1,+1]        | (4)<br>[-1,+1]        | (5)<br>[-1,+1]        | (6)<br>[-1,+1]        | (7)<br>[-1,+1]        | (8)<br>[-1,+1]        | (9)<br>[-1,+1]       | (10)<br>[-1,+1]       | (11)<br>[-1,+1]      |
|----------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|-----------------------|----------------------|
| Cash           | 0.0289<br>(1.4794)    |                       |                       |                       |                       |                       |                       |                       | 0.0269<br>(1.2595)   | 0.0306<br>(1.4000)    | 0.0265<br>(1.2341)   |
| Pct50          |                       | 0.0293<br>(1.5992)    |                       |                       |                       |                       |                       |                       | 0.0320*<br>(1.7414)  | 0.0341*<br>(1.8279)   | 0.0297<br>(1.1706)   |
| PctToe         |                       |                       | 0.1079<br>(0.5329)    |                       |                       |                       |                       |                       | -0.0010<br>(-0.0279) | -0.0030<br>(-0.0850)  | -0.0010<br>(-0.0286) |
| BGroup         |                       |                       |                       | -0.0110<br>(-0.6747)  |                       |                       |                       |                       | -0.0198<br>(-1.1356) | -0.0326<br>(-1.3729)  | -0.0211<br>(-1.0221) |
| Related        |                       |                       |                       |                       | 0.0178<br>(1.1357)    |                       |                       |                       | 0.0207<br>(1.1621)   | 0.0050<br>(0.1983)    | 0.0210<br>(1.1413)   |
| Conglomerate   |                       |                       |                       |                       |                       | -0.0279*<br>(-1.7458) |                       |                       | -0.0182<br>(-1.1494) | -0.0194<br>(-1.2102)  | -0.0182<br>(-1.1507) |
| RelBGroup      |                       |                       |                       |                       |                       |                       | 0.0095<br>(0.5580)    |                       |                      | 0.0347<br>(0.9649)    |                      |
| BGroup50       |                       |                       |                       |                       |                       |                       |                       | 0.0156<br>(0.6482)    |                      |                       | 0.0049<br>(0.1277)   |
| Intercept      | 0.0359***<br>(4.0745) | 0.0346***<br>(3.8319) | 0.0394***<br>(3.9885) | 0.0458***<br>(4.5431) | 0.0359***<br>(3.5412) | 0.0532***<br>(5.2383) | 0.0399***<br>(4.4006) | 0.0396***<br>(4.6895) | 0.0386**<br>(2.5972) | 0.0421***<br>(2.7408) | 0.0390**<br>(2.5516) |
| Observations   | 170                   | 170                   | 165                   | 170                   | 170                   | 170                   | 170                   | 170                   | 165                  | 165                   | 165                  |
| F-Statistics   | 2.1885                | 2.5573                | 0.2840                | 0.4552                | 1.2899                | 3.0477                | 0.3114                | 0.4201                | 1.3281               | 1.2494                | 1.1395               |
| p-value        | 0.1409                | 0.1117                | 0.5948                | 0.5008                | 0.2577                | 0.0827*               | 0.5776                | 0.5178                | 0.2477               | 0.2792                | 0.3412               |
| Adj. R-Squared | 0.0066                | 0.0088                | -0.0045               | -0.0032               | 0.0006                | 0.0121                | -0.0047               | -0.0034               | 0.0176               | 0.0173                | 0.0114               |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.54 Univariate Regression Analysis; OLS CAARs [-5,+5] - Targets

| CAAR Window:    | (1)<br>[-5,+5]       | (2)<br>[-5,+5]               | (3)<br>[-5,+5]        | (4)<br>[-5,+5]       | (5)<br>[-5,+5]       | (6)<br>[-5,+5]        | (7)<br>[-5,+5]        | (8)<br>[-5,+5]              | (9)<br>[-5,+5]               | (10)<br>[-5,+5]              | (11)<br>[-5,+5]             |
|-----------------|----------------------|------------------------------|-----------------------|----------------------|----------------------|-----------------------|-----------------------|-----------------------------|------------------------------|------------------------------|-----------------------------|
| Cash            | 0.0560*<br>(1.7432)  |                              |                       |                      |                      |                       |                       |                             | 0.0463<br>(1.4941)           | 0.0506<br>(1.6121)           | 0.0435<br>(1.4032)          |
| <b>Pct50</b>    |                      | <b>0.1057***</b><br>(3.2565) |                       |                      |                      |                       |                       |                             | <b>0.1068***</b><br>(3.5202) | <b>0.1092***</b><br>(3.5881) | <b>0.0890**</b><br>(2.1767) |
| PctToe          |                      |                              | -0.0002<br>(-0.0033)  |                      |                      |                       |                       |                             | -0.0225<br>(-0.4160)         | -0.0247<br>(-0.4556)         | -0.0227<br>(-0.4160)        |
| BGroup          |                      |                              |                       | 0.0138<br>(0.4776)   |                      |                       |                       |                             | -0.0012<br>(-0.0440)         | -0.0156<br>(-0.4460)         | -0.0113<br>(-0.3760)        |
| Related         |                      |                              |                       |                      | 0.0082<br>(0.3015)   |                       |                       |                             | 0.0122<br>(0.4662)           | -0.0055<br>(-0.1630)         | 0.0147<br>(0.5583)          |
| Conglomerate    |                      |                              |                       |                      |                      | -0.0502*<br>(-1.7224) |                       |                             | -0.0255<br>(-0.9352)         | -0.0270<br>(-0.9825)         | -0.0262<br>(-0.9607)        |
| RelBGroup       |                      |                              |                       |                      |                      |                       | 0.0093<br>(0.2788)    |                             |                              | 0.0393<br>(0.7587)           |                             |
| <b>BGroup50</b> |                      |                              |                       |                      |                      |                       |                       | <b>0.1013**</b><br>(2.2125) |                              |                              | 0.0387<br>(0.6264)          |
| Intercept       | 0.0403**<br>(2.4700) | 0.0263<br>(1.6508)           | 0.0538***<br>(3.0070) | 0.0458**<br>(2.4492) | 0.0486**<br>(2.5654) | 0.0721***<br>(4.0194) | 0.0496***<br>(3.0658) | 0.0387**<br>(2.6032)        | 0.0305<br>(1.1088)           | 0.0346<br>(1.2013)           | 0.0341<br>(1.1972)          |
| Observations    | 170                  | 170                          | 165                   | 170                  | 170                  | 170                   | 170                   | 170                         | 165                          | 165                          | 165                         |
| F-Statistics    | 3.0386               | 10.6048                      | 0.0000                | 0.2281               | 0.0909               | 2.9667                | 0.0777                | 4.8951                      | 2.8002                       | 2.6121                       | 2.4688                      |
| p-value         | <b>0.0831*</b>       | <b>0.0014***</b>             | 0.9974                | 0.6335               | 0.7634               | 0.0868*               | 0.7807                | <b>0.0283**</b>             | <b>0.0129**</b>              | <b>0.0141**</b>              | <b>0.0198**</b>             |
| Adj. R-Squared  | 0.0084               | 0.0529                       | -0.0061               | -0.0046              | -0.0055              | 0.0120                | -0.0056               | 0.0265                      | 0.0615                       | 0.0581                       | 0.0577                      |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.55 Univariate Regression Analysis; OLS CAARs [-10,+10] - Targets

| CAAR Window:   | (1)<br>[-10,+10]      | (2)<br>[-10,+10]            | (3)<br>[-10,+10]              | (4)<br>[-10,+10]     | (5)<br>[-10,+10]      | (6)<br>[-10,+10]      | (7)<br>[-10,+10]      | (8)<br>[-10,+10]      | (9)<br>[-10,+10]               | (10)<br>[-10,+10]              | (11)<br>[-10,+10]              |
|----------------|-----------------------|-----------------------------|-------------------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|--------------------------------|--------------------------------|--------------------------------|
| Cash           | 0.0910*<br>(1.7506)   |                             |                               |                      |                       |                       |                       |                       | 0.0866<br>(1.6544)             | 0.0905<br>(1.6197)             | 0.0860<br>(1.5917)             |
| Pct50          |                       | <b>0.1036**</b><br>(2.2679) |                               |                      |                       |                       |                       |                       | <b>0.0919**</b><br>(2.0845)    | <b>0.0942**</b><br>(2.1883)    | 0.0883*<br>(1.7009)            |
| PctToe         |                       |                             | <b>-0.1951**</b><br>(-2.5751) |                      |                       |                       |                       |                       | <b>-0.2436***</b><br>(-3.2737) | <b>-0.2457***</b><br>(-3.2344) | <b>-0.2436***</b><br>(-3.2606) |
| BGroup         |                       |                             |                               | 0.0581<br>(1.3762)   |                       |                       |                       |                       | 0.0452<br>(1.2038)             | 0.0319<br>(0.6175)             | 0.0431<br>(0.9697)             |
| Related        |                       |                             |                               |                      | 0.0008<br>(0.0200)    |                       |                       |                       | 0.0319<br>(0.8196)             | 0.0156<br>(0.3211)             | 0.0324<br>(0.8519)             |
| Conglomerate   |                       |                             |                               |                      |                       | -0.0552<br>(-1.3169)  |                       |                       | -0.0327<br>(-0.7839)           | -0.0340<br>(-0.8022)           | -0.0329<br>(-0.7829)           |
| RelBGroup      |                       |                             |                               |                      |                       |                       | 0.0225<br>(0.4269)    |                       |                                | 0.0360<br>(0.4310)             |                                |
| BGroup50       |                       |                             |                               |                      |                       |                       |                       | 0.1196*<br>(1.7785)   |                                |                                | 0.0080<br>(0.0909)             |
| Intercept      | 0.0612***<br>(2.6060) | 0.0545**<br>(2.2167)        | 0.1111***<br>(4.0101)         | 0.0564**<br>(2.0195) | 0.0786***<br>(2.8531) | 0.1020***<br>(3.5390) | 0.0751***<br>(3.1841) | 0.0641***<br>(2.8962) | 0.0664<br>(1.3781)             | 0.0701<br>(1.3862)             | 0.0671<br>(1.3262)             |
| Observations   | 170                   | 170                         | 165                           | 170                  | 170                   | 170                   | 170                   | 170                   | 165                            | 165                            | 165                            |
| F-Statistics   | 3.0645                | 5.1436                      | 6.6310                        | 1.8941               | 0.0004                | 1.7342                | 0.1822                | 3.1631                | 3.4476                         | 2.9285                         | 3.0368                         |
| p-value        | 0.0818*               | <b>0.0246**</b>             | <b>0.0109**</b>               | 0.1706               | 0.9841                | 0.1897                | 0.6700                | 0.0771*               | <b>0.0032***</b>               | <b>0.0066***</b>               | <b>0.0051***</b>               |
| Adj. R-Squared | 0.0114                | 0.0199                      | 0.0222                        | 0.0048               | -0.0060               | 0.0040                | -0.0050               | 0.0148                | 0.0594                         | 0.0543                         | 0.0534                         |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.56 Univariate Regression Analysis; OLS CAARs [-15,+15] - Targets

| CAAR Window:   | (1)<br>[-15,+15]      | (2)<br>[-15,+15]            | (3)<br>[-15,+15]              | (4)<br>[-15,+15]     | (5)<br>[-15,+15]      | (6)<br>[-15,+15]      | (7)<br>[-15,+15]      | (8)<br>[-15,+15]      | (9)<br>[-15,+15]              | (10)<br>[-15,+15]             | (11)<br>[-15,+15]             |
|----------------|-----------------------|-----------------------------|-------------------------------|----------------------|-----------------------|-----------------------|-----------------------|-----------------------|-------------------------------|-------------------------------|-------------------------------|
| Cash           | 0.0959<br>(1.5904)    |                             |                               |                      |                       |                       |                       |                       | 0.0816<br>(1.3127)            | 0.0810<br>(1.1949)            | 0.0780<br>(1.1946)            |
| Pct50          |                       | <b>0.1522**</b><br>(2.5428) |                               |                      |                       |                       |                       |                       | <b>0.1327**</b><br>(2.2854)   | <b>0.1323**</b><br>(2.3567)   | 0.1097*<br>(1.7790)           |
| PctToe         |                       |                             | <b>-0.2226**</b><br>(-2.2538) |                      |                       |                       |                       |                       | <b>-0.2549**</b><br>(-2.5275) | <b>-0.2545**</b><br>(-2.5025) | <b>-0.2552**</b><br>(-2.5142) |
| BGroup         |                       |                             |                               | 0.0799<br>(1.5172)   |                       |                       |                       |                       | 0.0667<br>(1.4061)            | 0.0688<br>(1.0191)            | 0.0536<br>(1.0161)            |
| Related        |                       |                             |                               |                      | -0.0266<br>(-0.5350)  |                       |                       |                       | -0.0060<br>(-0.1239)          | -0.0034<br>(-0.0557)          | -0.0028<br>(-0.0593)          |
| Conglomerate   |                       |                             |                               |                      |                       | -0.0795<br>(-1.4904)  |                       |                       | -0.0523<br>(-1.0160)          | -0.0521<br>(-0.9950)          | -0.0532<br>(-1.0364)          |
| RelBGroup      |                       |                             |                               |                      |                       |                       | -0.0041<br>(-0.0661)  |                       |                               | -0.0057<br>(-0.0540)          |                               |
| BGroup50       |                       |                             |                               |                      |                       |                       |                       | 0.1819*<br>(1.9639)   |                               |                               | 0.0499<br>(0.4297)            |
| Intercept      | 0.0806***<br>(2.7417) | 0.0634**<br>(2.1720)        | 0.1412***<br>(4.2023)         | 0.0682**<br>(2.0510) | 0.1077***<br>(3.1550) | 0.1325***<br>(4.1401) | 0.0999***<br>(3.4257) | 0.0768***<br>(2.9146) | 0.0971*<br>(1.8597)           | 0.0966*<br>(1.7518)           | 0.1018*<br>(1.8655)           |
| Observations   | 170                   | 170                         | 165                           | 170                  | 170                   | 170                   | 170                   | 170                   | 165                           | 165                           | 165                           |
| F-Statistics   | 2.5293                | 6.4656                      | 5.0796                        | 2.3019               | 0.2862                | 2.2212                | 0.0044                | 3.8568                | 3.1778                        | 2.7120                        | 2.8225                        |
| p-value        | 0.1136                | <b>0.0119**</b>             | <b>0.0255**</b>               | 0.1311               | 0.5934                | 0.1380                | 0.9474                | 0.0512*               | <b>0.0057***</b>              | <b>0.0111**</b>               | <b>0.0085***</b>              |
| Adj. R-Squared | 0.0068                | 0.0311                      | 0.0189                        | 0.0075               | -0.0046               | 0.0077                | -0.0059               | 0.0258                | 0.0649                        | 0.0589                        | 0.0600                        |

t statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.57 Univariate Regression Analysis; OLS CAARs [-20,+20] - Targets

| CAAR Window:   | (1)<br>[-20,+20]      | (2)<br>[-20,+20]              | (3)<br>[-20,+20]               | (4)<br>[-20,+20]     | (5)<br>[-20,+20]       | (6)<br>[-20,+20]       | (7)<br>[-20,+20]       | (8)<br>[-20,+20]       | (9)<br>[-20,+20]                | (10)<br>[-20,+20]               | (11)<br>[-20,+20]               |
|----------------|-----------------------|-------------------------------|--------------------------------|----------------------|------------------------|------------------------|------------------------|------------------------|---------------------------------|---------------------------------|---------------------------------|
| Cash           | 0.1211 *<br>(1.6562)  |                               |                                |                      |                        |                        |                        |                        | 0.1017<br>(1.3965)              | 0.1085<br>(1.3837)              | 0.1008<br>(1.3307)              |
| Pct50          |                       | <b>0.1716 ***</b><br>(2.6479) |                                |                      |                        |                        |                        |                        | <b>0.1487 **</b><br>(2.4215)    | <b>0.1526 **</b><br>(2.5725)    | <b>0.1427 **</b><br>(2.1081)    |
| PctToe         |                       |                               | <b>-0.2890 **</b><br>(-2.5734) |                      |                        |                        |                        |                        | <b>-0.3144 ***</b><br>(-2.7048) | <b>-0.3180 ***</b><br>(-2.6836) | <b>-0.3145 ***</b><br>(-2.6955) |
| BGroup         |                       |                               |                                | 0.0888<br>(1.5046)   |                        |                        |                        |                        | 0.0834<br>(1.6052)              | 0.0602<br>(0.8246)              | 0.0800<br>(1.3237)              |
| Related        |                       |                               |                                |                      | -0.0508<br>(-0.9045)   |                        |                        |                        | -0.0317<br>(-0.5893)            | -0.0601<br>(-0.9255)            | -0.0309<br>(-0.5884)            |
| Conglomerate   |                       |                               |                                |                      |                        | -0.0985 *<br>(-1.6629) |                        |                        | -0.0726<br>(-1.2921)            | -0.0749<br>(-1.2960)            | -0.0728<br>(-1.2998)            |
| RelBGroup      |                       |                               |                                |                      |                        |                        | -0.0013<br>(-0.0177)   |                        |                                 | 0.0629<br>(0.5410)              |                                 |
| BGroup50       |                       |                               |                                |                      |                        |                        |                        | 0.1897 *<br>(1.9332)   |                                 |                                 | 0.0130<br>(0.1072)              |
| Intercept      | 0.0822 **<br>(2.5823) | 0.0654 **<br>(1.9896)         | 0.1587 ***<br>(4.2635)         | 0.0713 *<br>(1.9466) | 0.1219 ***<br>(3.2484) | 0.1469 ***<br>(4.1127) | 0.1060 ***<br>(3.2994) | 0.0823 ***<br>(2.7688) | 0.1161 **<br>(2.0657)           | 0.1226 **<br>(2.0262)           | 0.1173 **<br>(2.0123)           |
| Observations   | 170                   | 170                           | 165                            | 170                  | 170                    | 170                    | 170                    | 170                    | 165                             | 165                             | 165                             |
| F-Statistics   | 2.7431                | 7.0113                        | 6.6225                         | 2.2637               | 0.8180                 | 2.7654                 | 0.0003                 | 3.7371                 | 3.9802                          | 3.4472                          | 3.5109                          |
| p-value        | 0.0995 *              | <b>0.0089 ***</b>             | <b>0.0110 **</b>               | 0.1343               | 0.3670                 | 0.0982 *               | 0.9859                 | 0.0549 *               | <b>0.0010 ***</b>               | <b>0.0018 ***</b>               | <b>0.0016 ***</b>               |
| Adj. R-Squared | 0.0105                | 0.0320                        | 0.0278                         | 0.0075               | -0.0019                | 0.0109                 | -0.0060                | 0.0220                 | 0.0878                          | 0.0835                          | 0.0820                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 6.58 Univariate Regression Analysis; MM CAARs [-1,+1] - Targets**

| <b>CAAR Window:</b> | (1)<br>[-1,+1]         | (2)<br>[-1,+1]         | (3)<br>[-1,+1]         | (4)<br>[-1,+1]         | (5)<br>[-1,+1]         | (6)<br>[-1,+1]         | (7)<br>[-1,+1]         | (8)<br>[-1,+1]         | (9)<br>[-1,+1]         | (10)<br>[-1,+1]        | (11)<br>[-1,+1]        |
|---------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
| Cash                | 0.0280<br>(1.4082)     |                        |                        |                        |                        |                        |                        |                        | 0.0257<br>(1.1573)     | 0.0302<br>(1.3119)     | 0.0245<br>(1.0972)     |
| Pct50               |                        | 0.0257<br>(1.3826)     |                        |                        |                        |                        |                        |                        | 0.0277<br>(1.4736)     | 0.0300<br>(1.5692)     | 0.0205<br>(0.7915)     |
| PctToe              |                        |                        | 0.0121<br>(0.3520)     |                        |                        |                        |                        |                        | -0.0042<br>(-0.1170)   | -0.0069<br>(-0.1913)   | -0.0044<br>(-0.1218)   |
| BGroup              |                        |                        |                        | -0.0168<br>(-1.0151)   |                        |                        |                        |                        | -0.0246<br>(-1.3951)   | -0.0388<br>(-1.5966)   | -0.0287<br>(-1.3740)   |
| Related             |                        |                        |                        |                        | 0.0136<br>(0.8577)     |                        |                        |                        | 0.0175<br>(0.9863)     | 0.0003<br>(0.0103)     | 0.0184<br>(1.0072)     |
| Conglomerate        |                        |                        |                        |                        |                        | -0.0291 *<br>(-1.8046) |                        |                        | -0.0207<br>(-1.3024)   | -0.0224<br>(-1.3849)   | -0.0210<br>(-1.3147)   |
| RelBGroup           |                        |                        |                        |                        |                        |                        | 0.0039<br>(0.2217)     |                        |                        | 0.0386<br>(1.0548)     |                        |
| BGroup50            |                        |                        |                        |                        |                        |                        |                        | 0.0147<br>(0.6054)     |                        |                        | 0.0155<br>(0.3969)     |
| Intercept           | 0.0423 ***<br>(4.7468) | 0.0416 ***<br>(4.5510) | 0.0463 ***<br>(4.6546) | 0.0543 ***<br>(5.4079) | 0.0433 ***<br>(4.2049) | 0.0602 ***<br>(5.8890) | 0.0470 ***<br>(5.1524) | 0.0458 ***<br>(5.3629) | 0.0506 ***<br>(3.4312) | 0.0549 ***<br>(3.5735) | 0.0521 ***<br>(3.4425) |
| Observations        | 165                    | 165                    | 160                    | 165                    | 165                    | 165                    | 165                    | 165                    | 160                    | 160                    | 160                    |
| F-Statistics        | 1.9829                 | 1.9116                 | 0.1239                 | 1.0304                 | 0.7357                 | 3.2564                 | 0.0491                 | 0.3666                 | 1.2053                 | 1.1173                 | 1.0499                 |
| p-value             | 0.1610                 | 0.1687                 | 0.7253                 | 0.3116                 | 0.3923                 | 0.0730 *               | 0.8249                 | 0.5457                 | 0.3065                 | 0.3551                 | 0.3989                 |
| Adj. R-Squared      | 0.0057                 | 0.0054                 | -0.0055                | 0.0003                 | -0.0023                | 0.0139                 | -0.0059                | -0.0038                | 0.0153                 | 0.0163                 | 0.0099                 |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.59 Univariate Regression Analysis; MM CAARs [-5,+5] - Targets

| CAAR Window:    | (1)<br>[-5,+5]         | (2)<br>[-5,+5]                | (3)<br>[-5,+5]         | (4)<br>[-5,+5]         | (5)<br>[-5,+5]         | (6)<br>[-5,+5]         | (7)<br>[-5,+5]         | (8)<br>[-5,+5]               | (9)<br>[-5,+5]                | (10)<br>[-5,+5]               | (11)<br>[-5,+5]       |
|-----------------|------------------------|-------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------|-------------------------------|-------------------------------|-----------------------|
| Cash            | 0.0584 *<br>(1.8408)   |                               |                        |                        |                        |                        |                        |                              | 0.0484<br>(1.5229)            | 0.0541 *<br>(1.6568)          | 0.0428<br>(1.3463)    |
| <b>Pct50</b>    |                        | <b>0.0961 ***</b><br>(2.9942) |                        |                        |                        |                        |                        |                              | <b>0.0949 ***</b><br>(3.1341) | <b>0.0977 ***</b><br>(3.2226) | 0.0606<br>(1.6043)    |
| PctToe          |                        |                               | -0.0086<br>(-0.1622)   |                        |                        |                        |                        |                              | -0.0218<br>(-0.4082)          | -0.0252<br>(-0.4694)          | -0.0227<br>(-0.4190)  |
| BGroup          |                        |                               |                        | 0.0014<br>(0.0468)     |                        |                        |                        |                              | -0.0125<br>(-0.4677)          | -0.0304<br>(-0.8395)          | -0.0316<br>(-1.0274)  |
| Related         |                        |                               |                        |                        | -0.0028<br>(-0.1039)   |                        |                        |                              | 0.0041<br>(0.1531)            | -0.0176<br>(-0.5337)          | 0.0086<br>(0.3208)    |
| Conglomerate    |                        |                               |                        |                        |                        | -0.0483 *<br>(-1.6558) |                        |                              | -0.0252<br>(-0.9212)          | -0.0274<br>(-0.9965)          | -0.0265<br>(-0.9672)  |
| RelBGroup       |                        |                               |                        |                        |                        |                        | -0.0034<br>(-0.1016)   |                              |                               | 0.0486<br>(0.9235)            |                       |
| <b>BGroup50</b> |                        |                               |                        |                        |                        |                        |                        | <b>0.1021 **</b><br>(2.2283) |                               |                               | 0.0728<br>(1.1841)    |
| Intercept       | 0.0615 ***<br>(3.7555) | 0.0501 ***<br>(3.1029)        | 0.0764 ***<br>(4.2505) | 0.0722 ***<br>(3.9076) | 0.0737 ***<br>(3.8617) | 0.0936 ***<br>(5.2687) | 0.0734 ***<br>(4.5307) | 0.0598 ***<br>(4.0317)       | 0.0614 **<br>(2.1980)         | 0.0669 **<br>(2.2862)         | 0.0684 **<br>(2.3498) |
| Observations    | 165                    | 165                           | 160                    | 165                    | 165                    | 165                    | 165                    | 165                          | 160                           | 160                           | 160                   |
| F-Statistics    | 3.3886                 | 8.9655                        | 0.0263                 | 0.0022                 | 0.0108                 | 2.7416                 | 0.0103                 | 4.9651                       | 2.4003                        | 2.3378                        | 2.1970                |
| p-value         | 0.0675 *               | <b>0.0032 ***</b>             | 0.8713                 | 0.9628                 | 0.9174                 | 0.0997 *               | 0.9192                 | <b>0.0272 **</b>             | <b>0.0303 **</b>              | <b>0.0271 **</b>              | <b>0.0375 **</b>      |
| Adj. R-Squared  | 0.0099                 | 0.0440                        | -0.0062                | -0.0061                | -0.0061                | 0.0111                 | -0.0061                | 0.0287                       | 0.0484                        | 0.0462                        | 0.0501                |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01



Table-A 6.60 Univariate Regression Analysis; MM CAARs [-10,+10] - Targets

| CAAR Window:   | (1)<br>[-10,+10]       | (2)<br>[-10,+10]             | (3)<br>[-10,+10]               | (4)<br>[-10,+10]       | (5)<br>[-10,+10]       | (6)<br>[-10,+10]       | (7)<br>[-10,+10]       | (8)<br>[-10,+10]       | (9)<br>[-10,+10]                | (10)<br>[-10,+10]               | (11)<br>[-10,+10]               |
|----------------|------------------------|------------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|---------------------------------|---------------------------------|---------------------------------|
| Cash           | 0.0759 *<br>(1.7407)   |                              |                                |                        |                        |                        |                        |                        | 0.0670<br>(1.4974)              | 0.0686<br>(1.4628)              | 0.0641<br>(1.3975)              |
| Pct50          |                        | <b>0.1108 **</b><br>(2.4044) |                                |                        |                        |                        |                        |                        | <b>0.0985 **</b><br>(2.2482)    | <b>0.0993 **</b><br>(2.2942)    | 0.0804<br>(1.6193)              |
| PctToe         |                        |                              | <b>-0.1789 **</b><br>(-2.5529) |                        |                        |                        |                        |                        | <b>-0.1967 ***</b><br>(-2.8896) | <b>-0.1977 ***</b><br>(-2.8902) | <b>-0.1972 ***</b><br>(-2.8743) |
| BGroup         |                        |                              |                                | 0.0292<br>(0.7376)     |                        |                        |                        |                        | 0.0181<br>(0.5014)              | 0.0132<br>(0.2570)              | 0.0081<br>(0.2005)              |
| Related        |                        |                              |                                |                        | -0.0304<br>(-0.8382)   |                        |                        |                        | 0.0034<br>(0.0975)              | -0.0026<br>(-0.0545)            | 0.0058<br>(0.1662)              |
| Conglomerate   |                        |                              |                                |                        |                        | -0.0416<br>(-1.0411)   |                        |                        | -0.0193<br>(-0.4976)            | -0.0199<br>(-0.5102)            | -0.0200<br>(-0.5115)            |
| RelBGroup      |                        |                              |                                |                        |                        |                        | -0.0238<br>(-0.5829)   |                        |                                 | 0.0134<br>(0.1830)              |                                 |
| BGroup50       |                        |                              |                                |                        |                        |                        |                        | 0.1243 *<br>(1.7905)   |                                 |                                 | 0.0385<br>(0.4326)              |
| Intercept      | 0.0996 ***<br>(4.3832) | 0.0881 ***<br>(3.9624)       | 0.1436 ***<br>(5.6202)         | 0.1028 ***<br>(3.8901) | 0.1240 ***<br>(4.6331) | 0.1322 ***<br>(5.0883) | 0.1183 ***<br>(5.1833) | 0.0984 ***<br>(4.8739) | 0.1105 **<br>(2.5692)           | 0.1120 **<br>(2.4990)           | 0.1142 **<br>(2.5153)           |
| Observations   | 165                    | 165                          | 160                            | 165                    | 165                    | 165                    | 165                    | 165                    | 160                             | 160                             | 160                             |
| F-Statistics   | 3.0301                 | 5.7811                       | 6.5174                         | 0.5440                 | 0.7026                 | 1.0838                 | 0.3397                 | 3.2058                 | 2.8895                          | 2.5228                          | 2.6610                          |
| p-value        | 0.0836 *               | <b>0.0173 **</b>             | <b>0.0116 **</b>               | 0.4618                 | 0.4031                 | 0.2994                 | 0.5608                 | 0.0752 *               | <b>0.0107 **</b>                | <b>0.0175 **</b>                | <b>0.0126 **</b>                |
| Adj. R-Squared | 0.0080                 | 0.0287                       | 0.0232                         | -0.0029                | -0.0030                | 0.0005                 | -0.0049                | 0.0208                 | 0.0489                          | 0.0428                          | 0.0437                          |

t statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.61 Univariate Regression Analysis; MM CAARs [-15,+15] - Targets

| CAAR Window:    | (1)<br>[-15,+15]       | (2)<br>[-15,+15]             | (3)<br>[-15,+15]               | (4)<br>[-15,+15]       | (5)<br>[-15,+15]       | (6)<br>[-15,+15]       | (7)<br>[-15,+15]       | (8)<br>[-15,+15]             | (9)<br>[-15,+15]               | (10)<br>[-15,+15]              | (11)<br>[-15,+15]              |
|-----------------|------------------------|------------------------------|--------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Cash            | 0.0863 *<br>(1.6903)   |                              |                                |                        |                        |                        |                        |                              | 0.0679<br>(1.2575)             | 0.0631<br>(1.0915)             | 0.0596<br>(1.0413)             |
| <b>Pct50</b>    |                        | <b>0.1522 **</b><br>(2.5375) |                                |                        |                        |                        |                        |                              | <b>0.1314 **</b><br>(2.2743)   | <b>0.1291 **</b><br>(2.3026)   | 0.0801<br>(1.4890)             |
| <b>PctToe</b>   |                        |                              | <b>-0.2025 **</b><br>(-2.1975) |                        |                        |                        |                        |                              | <b>-0.1998 **</b><br>(-2.1504) | <b>-0.1969 **</b><br>(-2.1394) | <b>-0.2012 **</b><br>(-2.1430) |
| BGroup          |                        |                              |                                | 0.0481<br>(0.9525)     |                        |                        |                        |                              | 0.0351<br>(0.7609)             | 0.0502<br>(0.7461)             | 0.0066<br>(0.1353)             |
| Related         |                        |                              |                                |                        | -0.0600<br>(-1.3347)   |                        |                        |                              | -0.0353<br>(-0.7874)           | -0.0170<br>(-0.2740)           | -0.0286<br>(-0.6463)           |
| Conglomerate    |                        |                              |                                |                        |                        | -0.0553<br>(-1.0688)   |                        |                              | -0.0280<br>(-0.5680)           | -0.0261<br>(-0.5248)           | -0.0300<br>(-0.6088)           |
| RelBGroup       |                        |                              |                                |                        |                        |                        | -0.0579<br>(-1.1951)   |                              |                                | -0.0410<br>(-0.4304)           |                                |
| <b>BGroup50</b> |                        |                              |                                |                        |                        |                        |                        | <b>0.1916 **</b><br>(2.0171) |                                |                                | 0.1090<br>(0.9404)             |
| Intercept       | 0.1338 ***<br>(4.6164) | 0.1146 ***<br>(4.1973)       | 0.1889 ***<br>(5.8556)         | 0.1316 ***<br>(4.0792) | 0.1698 ***<br>(5.0365) | 0.1744 ***<br>(5.9789) | 0.1604 ***<br>(5.5627) | 0.1262 ***<br>(5.1446)       | 0.1540 ***<br>(3.1802)         | 0.1494 ***<br>(2.9506)         | 0.1644 ***<br>(3.2223)         |
| Observations    | 165                    | 165                          | 160                            | 165                    | 165                    | 165                    | 165                    | 165                          | 160                            | 160                            | 160                            |
| F-Statistics    | 2.8571                 | 6.4389                       | 4.8289                         | 0.9073                 | 1.7813                 | 1.1423                 | 1.4284                 | 4.0686                       | 2.8741                         | 2.4847                         | 2.6216                         |
| p-value         | 0.0929 *               | <b>0.0121 **</b>             | <b>0.0294 **</b>               | 0.3422                 | 0.1839                 | 0.2867                 | 0.2338                 | <b>0.0453 **</b>             | <b>0.0111 **</b>               | <b>0.0192 **</b>               | <b>0.0139 **</b>               |
| Adj. R-Squared  | 0.0055                 | 0.0355                       | 0.0181                         | -0.0006                | 0.0017                 | 0.0013                 | -0.0014                | 0.0345                       | 0.0519                         | 0.0466                         | 0.0515                         |

t statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.62 Univariate Regression Analysis; MM CAARs [-20,+20] - Targets

| CAAR Window:   | (1)<br>[-20,+20]      | (2)<br>[-20,+20]             | (3)<br>[-20,+20]              | (4)<br>[-20,+20]      | (5)<br>[-20,+20]              | (6)<br>[-20,+20]      | (7)<br>[-20,+20]      | (8)<br>[-20,+20]      | (9)<br>[-20,+20]              | (10)<br>[-20,+20]             | (11)<br>[-20,+20]             |
|----------------|-----------------------|------------------------------|-------------------------------|-----------------------|-------------------------------|-----------------------|-----------------------|-----------------------|-------------------------------|-------------------------------|-------------------------------|
| Cash           | 0.1036*<br>(1.6952)   |                              |                               |                       |                               |                       |                       |                       | 0.0761<br>(1.2091)            | 0.0799<br>(1.2003)            | 0.0702<br>(1.0672)            |
| <b>Pct50</b>   |                       | <b>0.1710***</b><br>(2.6615) |                               |                       |                               |                       |                       |                       | <b>0.1458**</b><br>(2.3812)   | <b>0.1476**</b><br>(2.4709)   | 0.1089*<br>(1.7201)           |
| <b>PctToe</b>  |                       |                              | <b>-0.2673**</b><br>(-2.5507) |                       |                               |                       |                       |                       | <b>-0.2449**</b><br>(-2.2792) | <b>-0.2472**</b><br>(-2.2883) | <b>-0.2459**</b><br>(-2.2711) |
| BGroup         |                       |                              |                               | 0.0389<br>(0.6887)    |                               |                       |                       |                       | 0.0344<br>(0.6632)            | 0.0226<br>(0.3005)            | 0.0139<br>(0.2392)            |
| <b>Related</b> |                       |                              |                               |                       | <b>-0.1016**</b><br>(-2.0089) |                       |                       |                       | -0.0775<br>(-1.5407)          | -0.0917<br>(-1.3245)          | -0.0727<br>(-1.4591)          |
| Conglomerate   |                       |                              |                               |                       |                               | -0.0789<br>(-1.3562)  |                       |                       | -0.0560<br>(-1.0236)          | -0.0575<br>(-1.0206)          | -0.0574<br>(-1.0502)          |
| RelBGroup      |                       |                              |                               |                       |                               |                       | -0.0768<br>(-1.3790)  |                       |                               | 0.0320<br>(0.2994)            |                               |
| BGroup50       |                       |                              |                               |                       |                               |                       |                       | 0.1932*<br>(1.9740)   |                               |                               | 0.0782<br>(0.6408)            |
| Intercept      | 0.1602***<br>(4.9954) | 0.1399***<br>(4.4654)        | 0.2291***<br>(6.3582)         | 0.1650***<br>(4.5191) | 0.2130***<br>(5.6811)         | 0.2143***<br>(6.6759) | 0.1933***<br>(5.9993) | 0.1557***<br>(5.4895) | 0.2122***<br>(4.0018)         | 0.2158***<br>(3.7728)         | 0.2197***<br>(3.9726)         |
| Observations   | 165                   | 165                          | 160                           | 165                   | 165                           | 165                   | 165                   | 165                   | 160                           | 160                           | 160                           |
| F-Statistics   | 2.8737                | 7.0835                       | 6.5061                        | 0.4743                | 4.0357                        | 1.8393                | 1.9016                | 3.8969                | 3.7484                        | 3.2275                        | 3.3338                        |
| p-value        | 0.0919*               | <b>0.0086***</b>             | <b>0.0117**</b>               | 0.4920                | <b>0.0462**</b>               | 0.1769                | 0.1698                | 0.0501*               | <b>0.0017***</b>              | <b>0.0032***</b>              | <b>0.0025***</b>              |
| Adj. R-Squared | 0.0071                | 0.0356                       | 0.0269                        | -0.0033               | 0.0117                        | 0.0059                | 0.0004                | 0.0267                | 0.0740                        | 0.0684                        | 0.0703                        |

t statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 6.63 Univariate Regression Analysis; OLS CAARs [-1,+1] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-1,+1]      | (2)<br>[-1,+1]      | (3)<br>[-1,+1]      | (4)<br>[-1,+1]       | (5)<br>[-1,+1]     | (6)<br>[-1,+1]     | (7)<br>[-1,+1]       | (8)<br>[-1,+1]      | (9)<br>[-1,+1]       | (10)<br>[-1,+1]       | (11)<br>[-1,+1]      |
|---------------------|---------------------|---------------------|---------------------|----------------------|--------------------|--------------------|----------------------|---------------------|----------------------|-----------------------|----------------------|
| Cash                | 0.0056<br>(0.3692)  |                     |                     |                      |                    |                    |                      |                     | 0.0006<br>(0.0408)   | -0.0034<br>(-0.2195)  | 0.0001<br>(0.0083)   |
| Pct50               |                     | 0.0049<br>(0.3944)  |                     |                      |                    |                    |                      |                     | 0.0099<br>(0.7522)   | 0.0091<br>(0.6879)    | 0.0078<br>(0.4216)   |
| PctToe              |                     |                     | 0.0080<br>(0.3780)  |                      |                    |                    |                      |                     | 0.0068<br>(0.2671)   | 0.0072<br>(0.2878)    | 0.0067<br>(0.2627)   |
| BGroup              |                     |                     |                     | -0.0052<br>(-0.5204) |                    |                    |                      |                     | -0.0081<br>(-0.7490) | 0.0030<br>(0.2199)    | -0.0098<br>(-0.7838) |
| Related             |                     |                     |                     |                      | 0.0108<br>(1.0281) |                    |                      |                     | 0.0092<br>(0.7625)   | 0.0228<br>(1.4704)    | 0.0095<br>(0.7704)   |
| Conglomerate        |                     |                     |                     |                      |                    | 0.0072<br>(0.6766) |                      |                     | 0.0099<br>(0.9121)   | 0.0097<br>(0.8890)    | 0.0100<br>(0.9149)   |
| RelBGroup           |                     |                     |                     |                      |                    |                    | -0.0127<br>(-1.0504) |                     |                      | -0.0346*<br>(-1.6585) |                      |
| BGroup50            |                     |                     |                     |                      |                    |                    |                      | 0.0045<br>(0.3892)  |                      |                       | 0.0063<br>(0.2701)   |
| Intercept           | 0.0108*<br>(1.9100) | 0.0104*<br>(1.7278) | 0.0106*<br>(1.8020) | 0.0133*<br>(1.8923)  | 0.0086<br>(1.3227) | 0.0091<br>(1.3661) | 0.0131**<br>(2.2718) | 0.0112*<br>(1.9678) | 0.0049<br>(0.5168)   | 0.0023<br>(0.2337)    | 0.0054<br>(0.5471)   |
| Observations        | 195                 | 195                 | 191                 | 195                  | 195                | 195                | 195                  | 195                 | 191                  | 191                   | 191                  |
| F-Statistics        | 0.1363              | 0.1555              | 0.1429              | 0.2708               | 1.0570             | 0.4578             | 1.1034               | 0.1515              | 0.3958               | 0.7340                | 0.3798               |
| p-value             | 0.7124              | 0.6937              | 0.7058              | 0.6034               | 0.3052             | 0.4994             | 0.2948               | 0.6976              | 0.8811               | 0.6434                | 0.9133               |
| Adj. R-Squared      | -0.0045             | -0.0043             | -0.0046             | -0.0041              | -0.0007            | -0.0029            | -0.0020              | -0.0049             | -0.0212              | -0.0162               | -0.0265              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.64 Univariate Regression Analysis; OLS CAARs [-5,+5] - Acquirers

| CAAR Window:   | (1)<br>[-5,+5]     | (2)<br>[-5,+5]     | (3)<br>[-5,+5]     | (4)<br>[-5,+5]       | (5)<br>[-5,+5]     | (6)<br>[-5,+5]     | (7)<br>[-5,+5]       | (8)<br>[-5,+5]     | (9)<br>[-5,+5]       | (10)<br>[-5,+5]      | (11)<br>[-5,+5]      |
|----------------|--------------------|--------------------|--------------------|----------------------|--------------------|--------------------|----------------------|--------------------|----------------------|----------------------|----------------------|
| Cash           | 0.0184<br>(0.6040) |                    |                    |                      |                    |                    |                      |                    | 0.0136<br>(0.4185)   | 0.0099<br>(0.3196)   | 0.0096<br>(0.2971)   |
| Pct50          |                    | 0.0094<br>(0.4593) |                    |                      |                    |                    |                      |                    | 0.0139<br>(0.6138)   | 0.0132<br>(0.5811)   | -0.0031<br>(-0.0984) |
| PctToe         |                    |                    | 0.0124<br>(0.2868) |                      |                    |                    |                      |                    | 0.0127<br>(0.2910)   | 0.0131<br>(0.3006)   | 0.0122<br>(0.2762)   |
| BGroup         |                    |                    |                    | -0.0059<br>(-0.3705) |                    |                    |                      |                    | -0.0118<br>(-0.6196) | -0.0018<br>(-0.0879) | -0.0247<br>(-1.1598) |
| Related        |                    |                    |                    |                      | 0.0135<br>(0.6562) |                    |                      |                    | 0.0108<br>(0.5171)   | 0.0231<br>(0.8090)   | 0.0130<br>(0.6243)   |
| Conglomerate   |                    |                    |                    |                      |                    | 0.0150<br>(0.8090) |                      |                    | 0.0195<br>(1.0120)   | 0.0192<br>(1.0009)   | 0.0198<br>(1.0314)   |
| RelBGroup      |                    |                    |                    |                      |                    |                    | -0.0119<br>(-0.5855) |                    |                      | -0.0312<br>(-0.8561) |                      |
| BGroup50       |                    |                    |                    |                      |                    |                    |                      | 0.0294<br>(1.5460) |                      |                      | 0.0492<br>(1.3531)   |
| Intercept      | 0.0125<br>(1.3910) | 0.0128<br>(1.2642) | 0.0136<br>(1.3171) | 0.0171<br>(1.4151)   | 0.0114<br>(1.1434) | 0.0100<br>(0.9281) | 0.0166*<br>(1.7148)  | 0.0125<br>(1.3106) | 0.0023<br>(0.1465)   | -0.0001<br>(-0.0058) | 0.0063<br>(0.3893)   |
| Observations   | 195                | 195                | 191                | 195                  | 195                | 195                | 195                  | 195                | 191                  | 191                  | 191                  |
| F-Statistics   | 0.3648             | 0.2110             | 0.0823             | 0.1373               | 0.4305             | 0.6545             | 0.3428               | 2.3900             | 0.2708               | 0.2849               | 0.7480               |
| p-value        | 0.5466             | 0.6465             | 0.7746             | 0.7114               | 0.5125             | 0.4195             | 0.5589               | 0.1238             | 0.9500               | 0.9592               | 0.6316               |
| Adj. R-Squared | -0.0024            | -0.0040            | -0.0047            | -0.0047              | -0.0027            | -0.0018            | -0.0042              | -0.0003            | -0.0212              | -0.0237              | -0.0197              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.65 Univariate Regression Analysis; OLS CAARs [-10,+10] - Acquirers

| CAAR Window:   | (1)<br>[-10,+10]   | (2)<br>[-10,+10]   | (3)<br>[-10,+10]     | (4)<br>[-10,+10]   | (5)<br>[-10,+10]            | (6)<br>[-10,+10]   | (7)<br>[-10,+10]   | (8)<br>[-10,+10]   | (9)<br>[-10,+10]            | (10)<br>[-10,+10]           | (11)<br>[-10,+10]            |
|----------------|--------------------|--------------------|----------------------|--------------------|-----------------------------|--------------------|--------------------|--------------------|-----------------------------|-----------------------------|------------------------------|
| Cash           | 0.0207<br>(0.6375) |                    |                      |                    |                             |                    |                    |                    | 0.0106<br>(0.2982)          | 0.0031<br>(0.0902)          | 0.0055<br>(0.1555)           |
| Pct50          |                    | 0.0397<br>(1.2274) |                      |                    |                             |                    |                    |                    | 0.0455<br>(1.3100)          | 0.0440<br>(1.2786)          | 0.0238<br>(0.5168)           |
| PctToe         |                    |                    | -0.0117<br>(-0.2290) |                    |                             |                    |                    |                    | -0.0696<br>(-1.2226)        | -0.0687<br>(-1.2213)        | -0.0703<br>(-1.2287)         |
| BGroup         |                    |                    |                      | 0.0024<br>(0.0943) |                             |                    |                    |                    | -0.0082<br>(-0.3096)        | 0.0124<br>(0.4058)          | -0.0247<br>(-0.8236)         |
| <b>Related</b> |                    |                    |                      |                    | <b>0.0648**</b><br>(2.2081) |                    |                    |                    | <b>0.0857**</b><br>(2.5791) | <b>0.1110**</b><br>(2.5209) | <b>0.0885***</b><br>(2.6475) |
| Conglomerate   |                    |                    |                      |                    |                             | 0.0178<br>(0.6330) |                    |                    | 0.0228<br>(0.7621)          | 0.0224<br>(0.7500)          | 0.0233<br>(0.7767)           |
| RelBGroup      |                    |                    |                      |                    |                             |                    | 0.0182<br>(0.5383) |                    |                             | -0.0641<br>(-1.1794)        |                              |
| BGroup50       |                    |                    |                      |                    |                             |                    |                    | 0.0579<br>(1.6262) |                             |                             | 0.0629<br>(1.0863)           |
| Intercept      | 0.0178<br>(1.2035) | 0.0106<br>(0.7127) | 0.0234<br>(1.4002)   | 0.0200<br>(1.1077) | 0.0028<br>(0.1805)          | 0.0146<br>(0.8943) | 0.0186<br>(1.2796) | 0.0154<br>(1.0822) | -0.0106<br>(-0.4055)        | -0.0154<br>(-0.5656)        | -0.0055<br>(-0.2013)         |
| Observations   | 195                | 195                | 191                  | 195                | 195                         | 195                | 195                | 195                | 191                         | 191                         | 191                          |
| F-Statistics   | 0.4064             | 1.5066             | 0.0524               | 0.0089             | 4.8756                      | 0.4007             | 0.2898             | 2.6445             | 1.1952                      | 1.0659                      | 1.3504                       |
| p-value        | 0.5246             | 0.2212             | 0.8191               | 0.9250             | <b>0.0284**</b>             | 0.5275             | 0.5910             | 0.1055             | 0.3107                      | 0.3872                      | 0.2291                       |
| Adj. R-Squared | -0.0036            | 0.0036             | -0.0051              | -0.0051            | 0.0195                      | -0.0031            | -0.0042            | 0.0030             | 0.0151                      | 0.0152                      | 0.0147                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.66 Univariate Regression Analysis; OLS CAARs [-15,+15] - Acquirers

| CAAR Window:   | (1)<br>[-15,+15]   | (2)<br>[-15,+15]     | (3)<br>[-15,+15]   | (4)<br>[-15,+15]   | (5)<br>[-15,+15]            | (6)<br>[-15,+15]   | (7)<br>[-15,+15]   | (8)<br>[-15,+15]    | (9)<br>[-15,+15]     | (10)<br>[-15,+15]    | (11)<br>[-15,+15]    |
|----------------|--------------------|----------------------|--------------------|--------------------|-----------------------------|--------------------|--------------------|---------------------|----------------------|----------------------|----------------------|
| Cash           | 0.0420<br>(1.0722) |                      |                    |                    |                             |                    |                    |                     | 0.0213<br>(0.4993)   | 0.0140<br>(0.3281)   | 0.0197<br>(0.4577)   |
| Pct50          |                    | 0.0676<br>(1.6512)   |                    |                    |                             |                    |                    |                     | 0.0804*<br>(1.7417)  | 0.0789*<br>(1.7366)  | 0.0734<br>(1.1840)   |
| PctToe         |                    |                      | 0.0298<br>(0.5132) |                    |                             |                    |                    |                     | -0.0200<br>(-0.2911) | -0.0192<br>(-0.2819) | -0.0202<br>(-0.2933) |
| BGroup         |                    |                      |                    | 0.0061<br>(0.2003) |                             |                    |                    |                     | -0.0127<br>(-0.3914) | 0.0073<br>(0.1966)   | -0.0180<br>(-0.4913) |
| <b>Related</b> |                    |                      |                    |                    | <b>0.0759**</b><br>(2.0125) |                    |                    |                     | 0.0863*<br>(1.8449)  | 0.1108*<br>(1.7599)  | 0.0872*<br>(1.8822)  |
| Conglomerate   |                    |                      |                    |                    |                             | 0.0288<br>(0.7891) |                    |                     | 0.0417<br>(1.0695)   | 0.0412<br>(1.0651)   | 0.0418<br>(1.0728)   |
| RelBGroup      |                    |                      |                    |                    |                             |                    | 0.0242<br>(0.6189) |                     |                      | -0.0621<br>(-0.8760) |                      |
| BGroup50       |                    |                      |                    |                    |                             |                    |                    | 0.0651*<br>(1.8662) |                      |                      | 0.0202<br>(0.2848)   |
| Intercept      | 0.0098<br>(0.5408) | -0.0015<br>(-0.0877) | 0.0131<br>(0.6306) | 0.0138<br>(0.6241) | -0.0052<br>(-0.2841)        | 0.0059<br>(0.3187) | 0.0129<br>(0.7246) | 0.0098<br>(0.5555)  | -0.0377<br>(-1.2088) | -0.0424<br>(-1.2867) | -0.0361<br>(-1.0966) |
| Observations   | 195                | 195                  | 191                | 195                | 195                         | 195                | 195                | 195                 | 191                  | 191                  | 191                  |
| F-Statistics   | 1.1497             | 2.7264               | 0.2634             | 0.0401             | 4.0501                      | 0.6227             | 0.3830             | 3.4829              | 0.8746               | 0.7624               | 1.0119               |
| p-value        | 0.2850             | 0.1003               | 0.6084             | 0.8414             | <b>0.0456**</b>             | 0.4310             | 0.5367             | 0.0635*             | 0.5147               | 0.6196               | 0.4243               |
| Adj. R-Squared | -0.0009            | 0.0119               | -0.0044            | -0.0050            | 0.0174                      | -0.0015            | -0.0040            | 0.0018              | 0.0202               | 0.0184               | 0.0152               |

t statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.67 Univariate Regression Analysis; OLS CAARs [-20,+20] - Acquirers

| CAAR Window:   | (1)<br>[-20,+20]     | (2)<br>[-20,+20]     | (3)<br>[-20,+20]     | (4)<br>[-20,+20]   | (5)<br>[-20,+20]            | (6)<br>[-20,+20]     | (7)<br>[-20,+20]   | (8)<br>[-20,+20]     | (9)<br>[-20,+20]     | (10)<br>[-20,+20]    | (11)<br>[-20,+20]    |
|----------------|----------------------|----------------------|----------------------|--------------------|-----------------------------|----------------------|--------------------|----------------------|----------------------|----------------------|----------------------|
| Cash           | 0.0544<br>(1.3085)   |                      |                      |                    |                             |                      |                    |                      | 0.0401<br>(0.8813)   | 0.0315<br>(0.6885)   | 0.0375<br>(0.8172)   |
| Pct50          |                      | 0.0388<br>(0.8885)   |                      |                    |                             |                      |                    |                      | 0.0533<br>(1.1243)   | 0.0516<br>(1.1053)   | 0.0425<br>(0.6405)   |
| PctToe         |                      |                      | 0.0483<br>(0.7820)   |                    |                             |                      |                    |                      | -0.0009<br>(-0.0121) | 0.0000<br>(0.0005)   | -0.0013<br>(-0.0165) |
| BGroup         |                      |                      |                      | 0.0054<br>(0.1654) |                             |                      |                    |                      | -0.0176<br>(-0.5199) | 0.0058<br>(0.1398)   | -0.0258<br>(-0.6485) |
| <b>Related</b> |                      |                      |                      |                    | <b>0.0795**</b><br>(2.0961) |                      |                    |                      | 0.0831*<br>(1.7419)  | 0.1118*<br>(1.7097)  | 0.0845*<br>(1.7841)  |
| Conglomerate   |                      |                      |                      |                    |                             | 0.0337<br>(0.8596)   |                    |                      | 0.0438<br>(1.0604)   | 0.0433<br>(1.0539)   | 0.0441<br>(1.0646)   |
| RelBGroup      |                      |                      |                      |                    |                             |                      | 0.0211<br>(0.5968) |                      |                      | -0.0727<br>(-1.0131) |                      |
| BGroup50       |                      |                      |                      |                    |                             |                      |                    | 0.0518*<br>(1.9186)  |                      |                      | 0.0314<br>(0.4304)   |
| Intercept      | -0.0041<br>(-0.2069) | -0.0062<br>(-0.3149) | -0.0004<br>(-0.0196) | 0.0019<br>(0.0783) | -0.0183<br>(-0.8630)        | -0.0079<br>(-0.3786) | 0.0012<br>(0.0617) | -0.0011<br>(-0.0551) | -0.0453<br>(-1.3197) | -0.0507<br>(-1.4051) | -0.0427<br>(-1.1895) |
| Observations   | 195                  | 195                  | 191                  | 195                | 195                         | 195                  | 195                | 195                  | 191                  | 191                  | 191                  |
| F-Statistics   | 1.7123               | 0.7894               | 0.6116               | 0.0274             | 4.3936                      | 0.7390               | 0.3562             | 3.6811               | 0.8497               | 0.7399               | 1.0236               |
| p-value        | 0.1922               | 0.3754               | 0.4352               | 0.8688             | <b>0.0374**</b>             | 0.3911               | 0.5513             | 0.0565*              | 0.5332               | 0.6384               | 0.4161               |
| Adj. R-Squared | 0.0008               | -0.0005              | -0.0032              | -0.0051            | 0.0156                      | -0.0010              | -0.0044            | -0.0015              | 0.0054               | 0.0040               | 0.0007               |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01



**Table-A 6.68 Univariate Regression Analysis; MM CAARs [-1,+1] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-1,+1]        | (2)<br>[-1,+1]        | (3)<br>[-1,+1]        | (4)<br>[-1,+1]        | (5)<br>[-1,+1]       | (6)<br>[-1,+1]       | (7)<br>[-1,+1]         | (8)<br>[-1,+1]         | (9)<br>[-1,+1]       | (10)<br>[-1,+1]      | (11)<br>[-1,+1]      |
|---------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|----------------------|------------------------|------------------------|----------------------|----------------------|----------------------|
| Cash                | 0.0051<br>(0.3348)    |                       |                       |                       |                      |                      |                        |                        | 0.0004<br>(0.0223)   | -0.0035<br>(-0.2195) | -0.0004<br>(-0.0245) |
| Pct50               |                       | 0.0036<br>(0.2869)    |                       |                       |                      |                      |                        |                        | 0.0094<br>(0.7082)   | 0.0089<br>(0.6660)   | 0.0061<br>(0.3251)   |
| PctToe              |                       |                       | 0.0118<br>(0.5511)    |                       |                      |                      |                        |                        | 0.0110<br>(0.4384)   | 0.0113<br>(0.4505)   | 0.0110<br>(0.4330)   |
| BGroup              |                       |                       |                       | -0.0052<br>(-0.5177)  |                      |                      |                        |                        | -0.0085<br>(-0.7749) | 0.0016<br>(0.1189)   | -0.0110<br>(-0.8742) |
| Related             |                       |                       |                       |                       | 0.0105<br>(0.9811)   |                      |                        |                        | 0.0084<br>(0.7019)   | 0.0210<br>(1.3437)   | 0.0088<br>(0.7216)   |
| Conglomerate        |                       |                       |                       |                       |                      | 0.0063<br>(0.5808)   |                        |                        | 0.0097<br>(0.8633)   | 0.0096<br>(0.8535)   | 0.0097<br>(0.8651)   |
| RelBGroup           |                       |                       |                       |                       |                      |                      | -0.0110<br>(-0.8718)   |                        |                      | -0.0313<br>(-1.4664) |                      |
| BGroup50            |                       |                       |                       |                       |                      |                      |                        | 0.0055<br>(0.4632)     |                      |                      | 0.0096<br>(0.4078)   |
| Intercept           | 0.0150 **<br>(2.5822) | 0.0148 **<br>(2.3943) | 0.0142 **<br>(2.3278) | 0.0175 **<br>(2.4122) | 0.0128 *<br>(1.9194) | 0.0136 *<br>(1.9722) | 0.0171 ***<br>(2.8920) | 0.0152 ***<br>(2.6127) | 0.0090<br>(0.9023)   | 0.0066<br>(0.6328)   | 0.0098<br>(0.9391)   |
| Observations        | 191                   | 191                   | 187                   | 191                   | 191                  | 191                  | 191                    | 191                    | 187                  | 187                  | 187                  |
| F-Statistics        | 0.1121                | 0.0823                | 0.3037                | 0.2680                | 0.9625               | 0.3373               | 0.7601                 | 0.2145                 | 0.3914               | 0.6124               | 0.4026               |
| p-value             | 0.7381                | 0.7745                | 0.5822                | 0.6053                | 0.3278               | 0.5621               | 0.3844                 | 0.6438                 | 0.8839               | 0.7452               | 0.8998               |
| Adj. R-Squared      | -0.0047               | -0.0048               | -0.0040               | -0.0042               | -0.0012              | -0.0036              | -0.0029                | -0.0048                | -0.0226              | -0.0198              | -0.0275              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 6.69 Univariate Regression Analysis; MM CAARs [-5,+5] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-5,+5]         | (2)<br>[-5,+5]         | (3)<br>[-5,+5]         | (4)<br>[-5,+5]         | (5)<br>[-5,+5]         | (6)<br>[-5,+5]        | (7)<br>[-5,+5]         | (8)<br>[-5,+5]         | (9)<br>[-5,+5]       | (10)<br>[-5,+5]      | (11)<br>[-5,+5]      |
|---------------------|------------------------|------------------------|------------------------|------------------------|------------------------|-----------------------|------------------------|------------------------|----------------------|----------------------|----------------------|
| Cash                | 0.0132<br>(0.4287)     |                        |                        |                        |                        |                       |                        |                        | 0.0096<br>(0.2923)   | 0.0071<br>(0.2260)   | 0.0052<br>(0.1604)   |
| Pct50               |                        | 0.0023<br>(0.1183)     |                        |                        |                        |                       |                        |                        | 0.0073<br>(0.3487)   | 0.0070<br>(0.3301)   | -0.0122<br>(-0.4314) |
| PctToe              |                        |                        | 0.0154<br>(0.3497)     |                        |                        |                       |                        |                        | 0.0201<br>(0.4670)   | 0.0202<br>(0.4696)   | 0.0197<br>(0.4542)   |
| BGroup              |                        |                        |                        | -0.0042<br>(-0.2614)   |                        |                       |                        |                        | -0.0089<br>(-0.4665) | -0.0022<br>(-0.1054) | -0.0236<br>(-1.0891) |
| Related             |                        |                        |                        |                        | 0.0071<br>(0.3528)     |                       |                        |                        | 0.0024<br>(0.1326)   | 0.0108<br>(0.4335)   | 0.0046<br>(0.2524)   |
| Conglomerate        |                        |                        |                        |                        |                        | 0.0114<br>(0.6308)    |                        |                        | 0.0151<br>(0.8078)   | 0.0150<br>(0.8025)   | 0.0153<br>(0.8213)   |
| RelBGroup           |                        |                        |                        |                        |                        |                       | -0.0098<br>(-0.4614)   |                        |                      | -0.0208<br>(-0.5826) |                      |
| BGroup50            |                        |                        |                        |                        |                        |                       |                        | 0.0290<br>(1.3673)     |                      |                      | 0.0558<br>(1.5376)   |
| Intercept           | 0.0301 ***<br>(3.3489) | 0.0315 ***<br>(3.0113) | 0.0300 ***<br>(2.9270) | 0.0335 ***<br>(2.7651) | 0.0301 ***<br>(2.9345) | 0.0281 **<br>(2.5247) | 0.0332 ***<br>(3.4319) | 0.0293 ***<br>(3.0845) | 0.0231<br>(1.4603)   | 0.0215<br>(1.2986)   | 0.0278 *<br>(1.6937) |
| Observations        | 191                    | 191                    | 187                    | 191                    | 191                    | 191                   | 191                    | 191                    | 187                  | 187                  | 187                  |
| F-Statistics        | 0.1838                 | 0.0140                 | 0.1223                 | 0.0683                 | 0.1244                 | 0.3980                | 0.2129                 | 1.8694                 | 0.1645               | 0.1742               | 0.5576               |
| p-value             | 0.6686                 | 0.9059                 | 0.7269                 | 0.7941                 | 0.7247                 | 0.5289                | 0.6450                 | 0.1732                 | 0.9858               | 0.9902               | 0.7896               |
| Adj. R-Squared      | -0.0038                | -0.0052                | -0.0045                | -0.0050                | -0.0046                | -0.0033               | -0.0046                | -0.0004                | -0.0274              | -0.0318              | -0.0238              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 6.70 Univariate Regression Analysis; MM CAARs [-10,+10] - Acquirers

| CAAR Window:   | (1)<br>[-10,+10]       | (2)<br>[-10,+10]       | (3)<br>[-10,+10]       | (4)<br>[-10,+10]      | (5)<br>[-10,+10]      | (6)<br>[-10,+10]       | (7)<br>[-10,+10]       | (8)<br>[-10,+10]       | (9)<br>[-10,+10]             | (10)<br>[-10,+10]            | (11)<br>[-10,+10]            |
|----------------|------------------------|------------------------|------------------------|-----------------------|-----------------------|------------------------|------------------------|------------------------|------------------------------|------------------------------|------------------------------|
| Cash           | 0.0123<br>(0.3670)     |                        |                        |                       |                       |                        |                        |                        | 0.0028<br>(0.0785)           | -0.0044<br>(-0.1311)         | -0.0030<br>(-0.0844)         |
| Pct50          |                        | 0.0257<br>(0.8791)     |                        |                       |                       |                        |                        |                        | 0.0340<br>(1.0866)           | 0.0330<br>(1.0564)           | 0.0080<br>(0.1985)           |
| PctToe         |                        |                        | 0.0033<br>(0.0629)     |                       |                       |                        |                        |                        | -0.0466<br>(-0.8262)         | -0.0461<br>(-0.8242)         | -0.0471<br>(-0.8345)         |
| BGroup         |                        |                        |                        | 0.0113<br>(0.4415)    |                       |                        |                        |                        | 0.0017<br>(0.0630)           | 0.0208<br>(0.6682)           | -0.0179<br>(-0.5749)         |
| <b>Related</b> |                        |                        |                        |                       | 0.0538 *<br>(1.9238)  |                        |                        |                        | <b>0.0691 **</b><br>(2.4090) | <b>0.0928 **</b><br>(2.5497) | <b>0.0721 **</b><br>(2.4849) |
| Conglomerate   |                        |                        |                        |                       |                       | 0.0111<br>(0.4091)     |                        |                        | 0.0161<br>(0.5553)           | 0.0160<br>(0.5487)           | 0.0164<br>(0.5647)           |
| RelBGroup      |                        |                        |                        |                       |                       |                        | 0.0211<br>(0.5739)     |                        |                              | -0.0589<br>(-1.1065)         |                              |
| BGroup50       |                        |                        |                        |                       |                       |                        |                        | 0.0610<br>(1.5838)     |                              |                              | 0.0742<br>(1.2898)           |
| Intercept      | 0.0487 ***<br>(3.2763) | 0.0439 ***<br>(2.7593) | 0.0510 ***<br>(3.0487) | 0.0467 **<br>(2.5978) | 0.0355 **<br>(2.1937) | 0.0466 ***<br>(2.6908) | 0.0479 ***<br>(3.2989) | 0.0447 ***<br>(3.1336) | 0.0236<br>(0.8412)           | 0.0190<br>(0.6571)           | 0.0298<br>(1.0260)           |
| Observations   | 191                    | 191                    | 187                    | 191                   | 191                   | 191                    | 191                    | 191                    | 187                          | 187                          | 187                          |
| F-Statistics   | 0.1347                 | 0.7728                 | 0.0040                 | 0.1949                | 3.7010                | 0.1674                 | 0.3293                 | 2.5085                 | 1.1327                       | 1.1590                       | 1.2099                       |
| p-value        | 0.7140                 | 0.3805                 | 0.9499                 | 0.6594                | 0.0559 *              | 0.6829                 | 0.5667                 | 0.1149                 | 0.3451                       | 0.3287                       | 0.2995                       |
| Adj. R-Squared | -0.0047                | -0.0016                | -0.0054                | -0.0045               | 0.0119                | -0.0045                | -0.0039                | 0.0041                 | -0.0047                      | -0.0056                      | -0.0032                      |

t statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 6.71 Univariate Regression Analysis; MM CAARs [-15,+15] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-15,+15]      | (2)<br>[-15,+15]     | (3)<br>[-15,+15]      | (4)<br>[-15,+15]      | (5)<br>[-15,+15]     | (6)<br>[-15,+15]      | (7)<br>[-15,+15]      | (8)<br>[-15,+15]      | (9)<br>[-15,+15]    | (10)<br>[-15,+15]    | (11)<br>[-15,+15]    |
|---------------------|-----------------------|----------------------|-----------------------|-----------------------|----------------------|-----------------------|-----------------------|-----------------------|---------------------|----------------------|----------------------|
| Cash                | 0.0301<br>(0.7811)    |                      |                       |                       |                      |                       |                       |                       | 0.0118<br>(0.2919)  | 0.0061<br>(0.1582)   | 0.0083<br>(0.2005)   |
| Pct50               |                       | 0.0453<br>(1.3814)   |                       |                       |                      |                       |                       |                       | 0.0597*<br>(1.6795) | 0.0590*<br>(1.6569)  | 0.0441<br>(0.9514)   |
| PctToe              |                       |                      | 0.0482<br>(0.8352)    |                       |                      |                       |                       |                       | 0.0127<br>(0.2050)  | 0.0131<br>(0.2113)   | 0.0124<br>(0.1985)   |
| BGroup              |                       |                      |                       | 0.0165<br>(0.5470)    |                      |                       |                       |                       | 0.0003<br>(0.0100)  | 0.0153<br>(0.4118)   | -0.0115<br>(-0.3083) |
| Related             |                       |                      |                       |                       | 0.0557*<br>(1.7610)  |                       |                       |                       | 0.0575*<br>(1.7477) | 0.0761*<br>(1.9562)  | 0.0592*<br>(1.7797)  |
| Conglomerate        |                       |                      |                       |                       |                      | 0.0157<br>(0.4884)    |                       |                       | 0.0275<br>(0.8063)  | 0.0273<br>(0.8013)   | 0.0277<br>(0.8085)   |
| RelBGroup           |                       |                      |                       |                       |                      |                       | 0.0267<br>(0.6077)    |                       |                     | -0.0462<br>(-0.7316) |                      |
| BGroup50            |                       |                      |                       |                       |                      |                       |                       | 0.0709*<br>(1.8375)   |                     |                      | 0.0448<br>(0.6799)   |
| Intercept           | 0.0549***<br>(3.1929) | 0.0477**<br>(2.5630) | 0.0541***<br>(2.7721) | 0.0538***<br>(2.6191) | 0.0438**<br>(2.3047) | 0.0539***<br>(2.7653) | 0.0561***<br>(3.3479) | 0.0526***<br>(3.1538) | 0.0163<br>(0.5093)  | 0.0127<br>(0.3857)   | 0.0201<br>(0.6040)   |
| Observations        | 191                   | 191                  | 187                   | 191                   | 191                  | 191                   | 191                   | 191                   | 187                 | 187                  | 187                  |
| F-Statistics        | 0.6102                | 1.9083               | 0.6975                | 0.2992                | 3.1012               | 0.2386                | 0.3693                | 3.3764                | 0.9034              | 0.9181               | 0.8815               |
| p-value             | 0.4357                | 0.1688               | 0.4047                | 0.5850                | 0.0799*              | 0.6258                | 0.5441                | 0.0677*               | 0.4937              | 0.4937               | 0.5223               |
| Adj. R-Squared      | -0.0028               | 0.0033               | -0.0026               | -0.0040               | 0.0084               | -0.0041               | -0.0036               | 0.0042                | -0.0031             | -0.0065              | -0.0067              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 6.72 Univariate Regression Analysis; MM CAARs [-20,+20] - Acquirers**

| <b>CAAR Window:</b> | (1)<br>[-20,+20]       | (2)<br>[-20,+20]       | (3)<br>[-20,+20]       | (4)<br>[-20,+20]      | (5)<br>[-20,+20]      | (6)<br>[-20,+20]      | (7)<br>[-20,+20]       | (8)<br>[-20,+20]       | (9)<br>[-20,+20]     | (10)<br>[-20,+20]    | (11)<br>[-20,+20]    |
|---------------------|------------------------|------------------------|------------------------|-----------------------|-----------------------|-----------------------|------------------------|------------------------|----------------------|----------------------|----------------------|
| Cash                | 0.0364<br>(0.8968)     |                        |                        |                       |                       |                       |                        |                        | 0.0248<br>(0.5909)   | 0.0164<br>(0.3977)   | 0.0206<br>(0.4829)   |
| Pct50               |                        | 0.0174<br>(0.4610)     |                        |                       |                       |                       |                        |                        | 0.0362<br>(0.9307)   | 0.0351<br>(0.9085)   | 0.0176<br>(0.3249)   |
| PctToe              |                        |                        | 0.0625<br>(1.0249)     |                       |                       |                       |                        |                        | 0.0281<br>(0.4014)   | 0.0286<br>(0.4110)   | 0.0277<br>(0.3949)   |
| BGroup              |                        |                        |                        | 0.0118<br>(0.3583)    |                       |                       |                        |                        | -0.0084<br>(-0.2511) | 0.0140<br>(0.3327)   | -0.0224<br>(-0.5399) |
| Related             |                        |                        |                        |                       | 0.0603 *<br>(1.7709)  |                       |                        |                        | 0.0569<br>(1.5419)   | 0.0847 *<br>(1.7864) | 0.0590<br>(1.5946)   |
| Conglomerate        |                        |                        |                        |                       |                       | 0.0228<br>(0.6212)    |                        |                        | 0.0317<br>(0.8219)   | 0.0314<br>(0.8167)   | 0.0319<br>(0.8258)   |
| RelBGroup           |                        |                        |                        |                       |                       |                       | 0.0170<br>(0.4039)     |                        |                      | -0.0690<br>(-1.0196) |                      |
| BGroup50            |                        |                        |                        |                       |                       |                       |                        | 0.0543 *<br>(1.7281)   |                      |                      | 0.0530<br>(0.7713)   |
| Intercept           | 0.0588 ***<br>(2.9794) | 0.0597 ***<br>(2.8216) | 0.0582 ***<br>(2.6291) | 0.0602 **<br>(2.5104) | 0.0474 **<br>(2.1395) | 0.0562 **<br>(2.5574) | 0.0621 ***<br>(3.1999) | 0.0590 ***<br>(3.0620) | 0.0261<br>(0.7171)   | 0.0207<br>(0.5489)   | 0.0306<br>(0.8084)   |
| Observations        | 191                    | 191                    | 187                    | 191                   | 191                   | 191                   | 191                    | 191                    | 187                  | 187                  | 187                  |
| F-Statistics        | 0.8042                 | 0.2125                 | 1.0504                 | 0.1284                | 3.1360                | 0.3859                | 0.1632                 | 2.9864                 | 0.7215               | 0.7014               | 0.8205               |
| p-value             | 0.3710                 | 0.6453                 | 0.3068                 | 0.7205                | 0.0782 *              | 0.5352                | 0.6867                 | 0.0856 *               | 0.6328               | 0.6709               | 0.5714               |
| Adj. R-Squared      | -0.0025                | -0.0043                | -0.0017                | -0.0048               | 0.0071                | -0.0033               | -0.0048                | -0.0010                | -0.0127              | -0.0145              | -0.0162              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

## Appendix Chapter 7

The secondary graphs and detailed statistical findings are tabulated in Appendix Chapter 7 . These tables are labelled to provide the name of the financial model; type of firm; the type of sample set; the regression technique and the number of observations (in parenthesis) and the index used. For each day in the entire event window - days [-20, +30], these tables provide average abnormal returns - AAR, median AARs, cumulative average abnormal returns - CAARs, averaged Standardized Abnormal Returns (SARa) along with their standard deviations and t-statistics, and averaged Standardized CAARs (SCARa) along with the respective standard deviations and the t-statistics. Finally, the tables also earmark the t-statistics significant at the 5% and 10% level for SARa and SCARa. While, the t-statistics, significant at the 10% level, is provided in bold and italic numbers, that at 5% is further highlighted. Also, a 3-day analysis of the days [-1, +1] is provided. Other relevant graphs and various cross-sectional results are also presented here.

# Returns to Indian Targets

## Overall Analysis

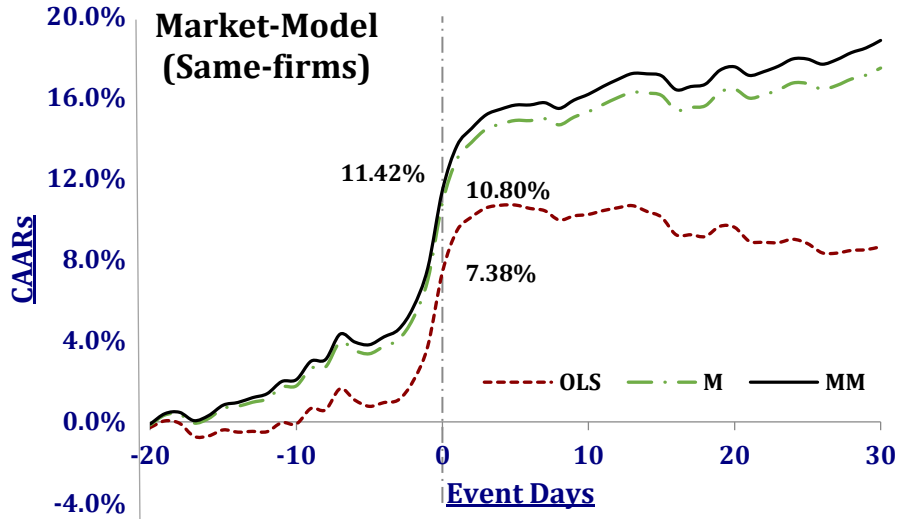


Figure A 7.1 Market returns to Domestic Targets – M-firms (All regressions)

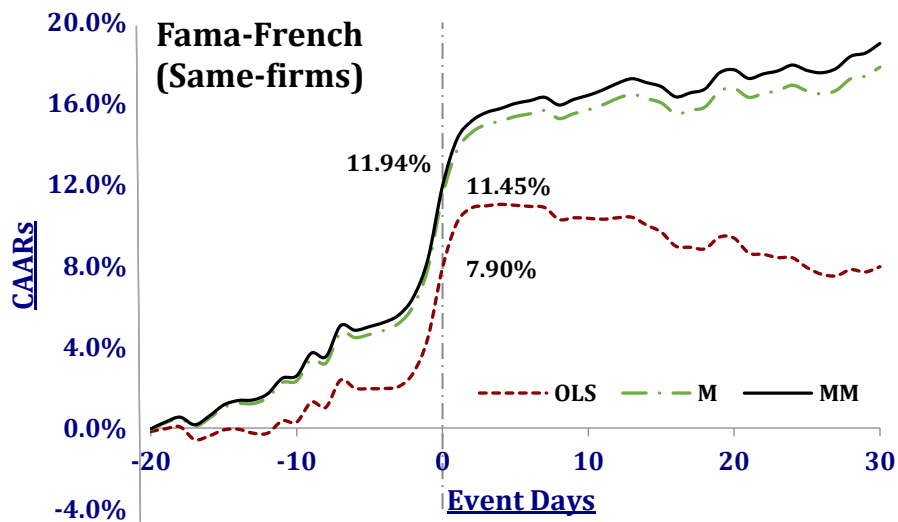


Figure A 7.2 Fama-French returns to Domestic Targets – M-firms (All-regressions)

## Corporate Governance Analysis

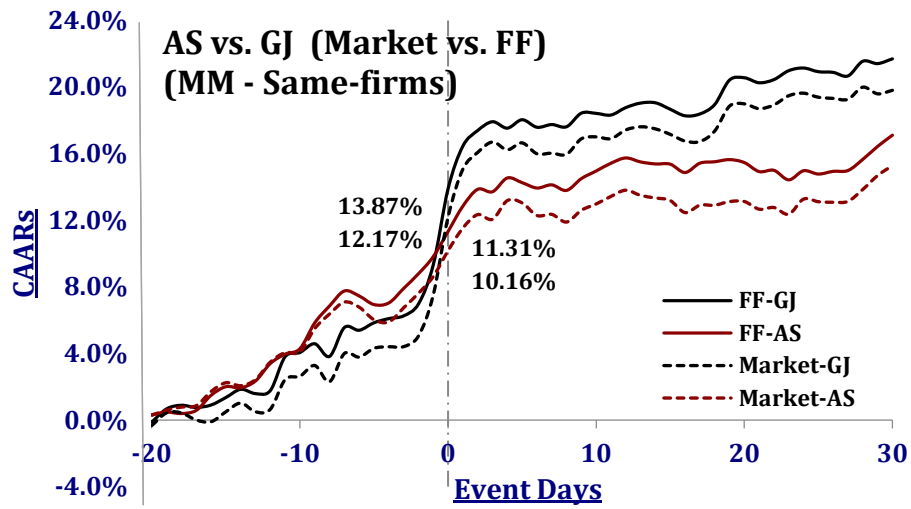


Figure A 7.3 Indian Targets; Corporate Governance Analysis; Market vs. FF (MM Same-firms)

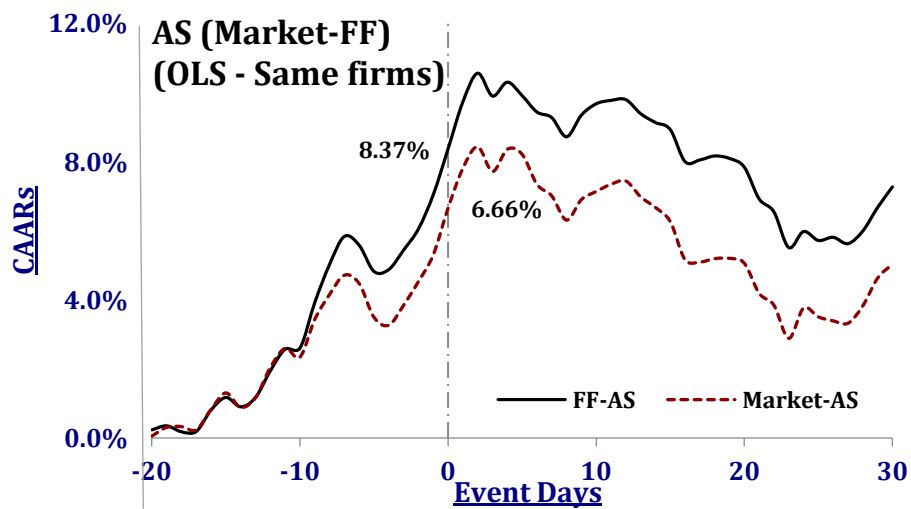


Figure A 7.4 Indian Targets; Anglo-Saxon; Market vs. FF (OLS Same-firms)



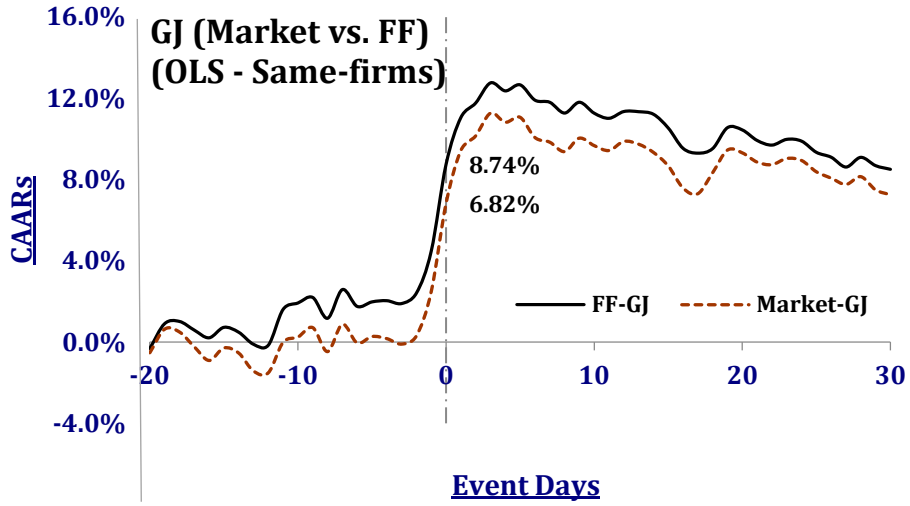


Figure A 7.5 Indian Targets; German/Japanese; Market vs. FF (OLS Same-firms)

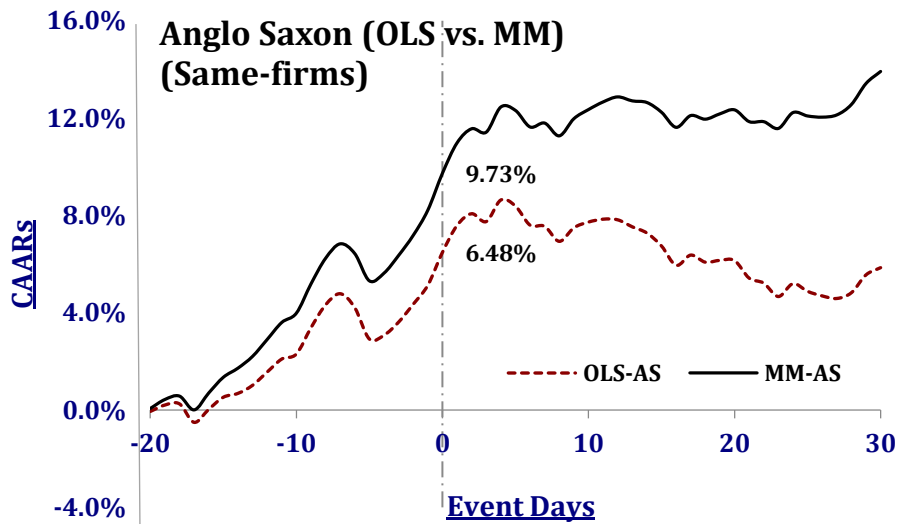


Figure A 7.6 Indian Targets and Anglo-Saxon Analysis (Same-firms)

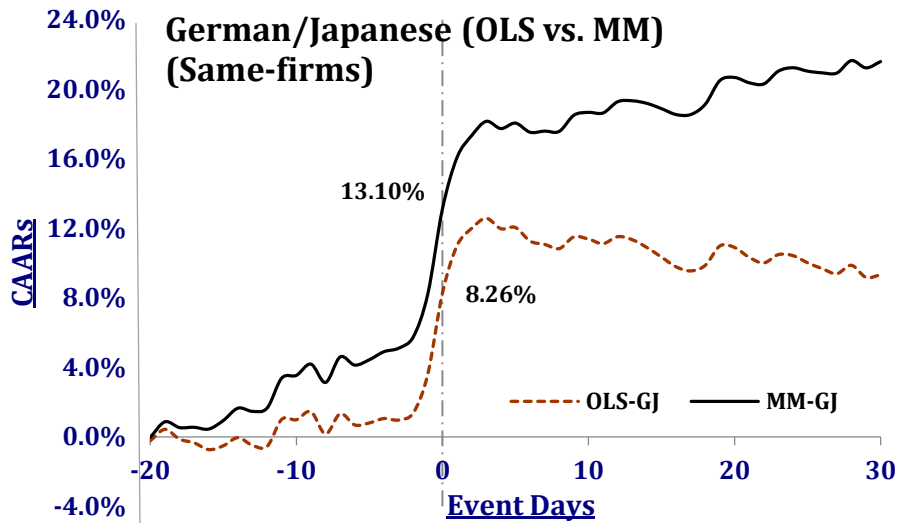


Figure A 7.7 Indian Targets and German/Japanese Analysis (Same-firms)

---

Culture Analysis – Market Model OLS (MM Firms)

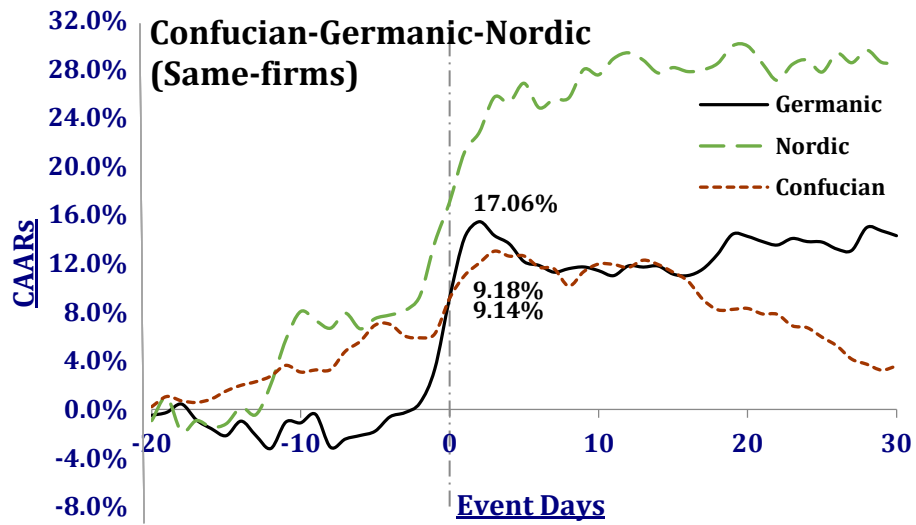


Figure A 7.8 Cultural Analysis - I; MM firms (OLS)

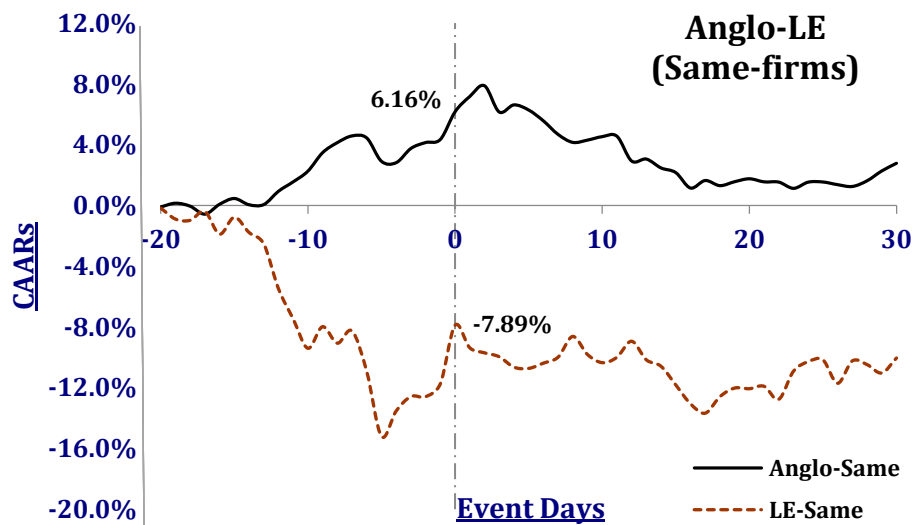


Figure A 7.9 Cultural Analysis - II; MM firms (OLS)

Culture Analysis – Fama-French Model – MM estimations

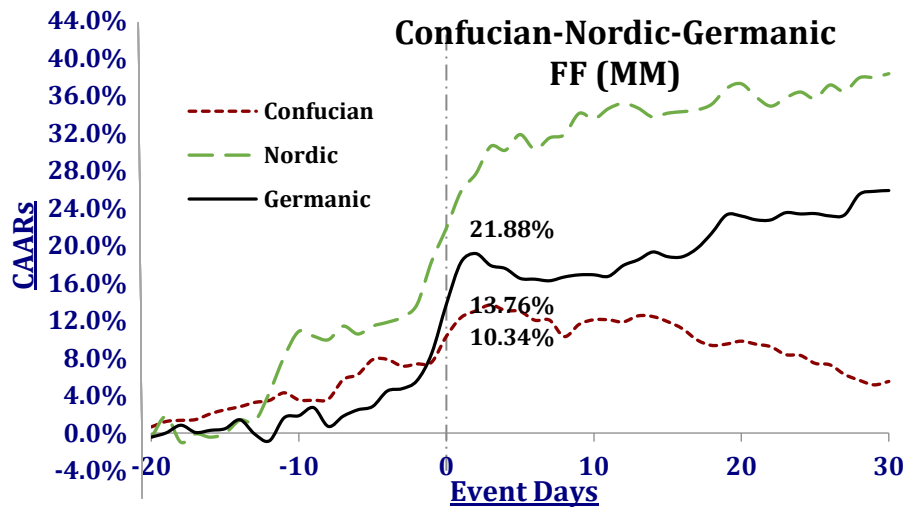


Figure A 7.10 FF returns from Confucian, Nordic and Germanic Acquirers (MM)

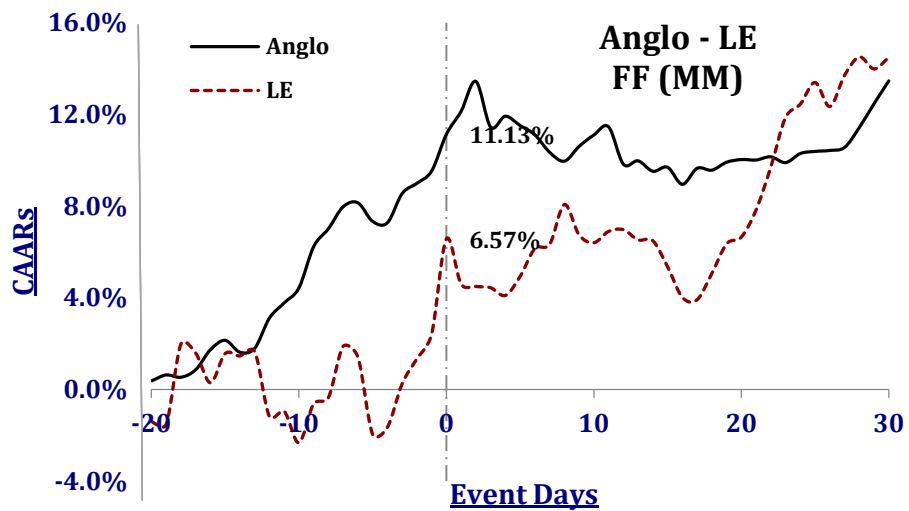


Figure A 7.11 FF returns from Anglo and LE Acquirers (MM)

Culture Analysis – Fama-French Model – OLS estimations

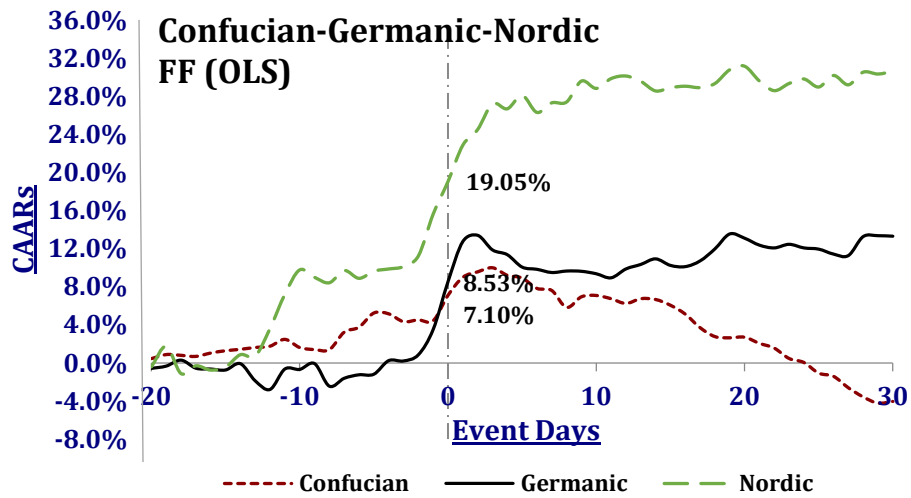


Figure A 7.12 FF returns from Confucian, Nordic and Germanic Acquirers (OLS)

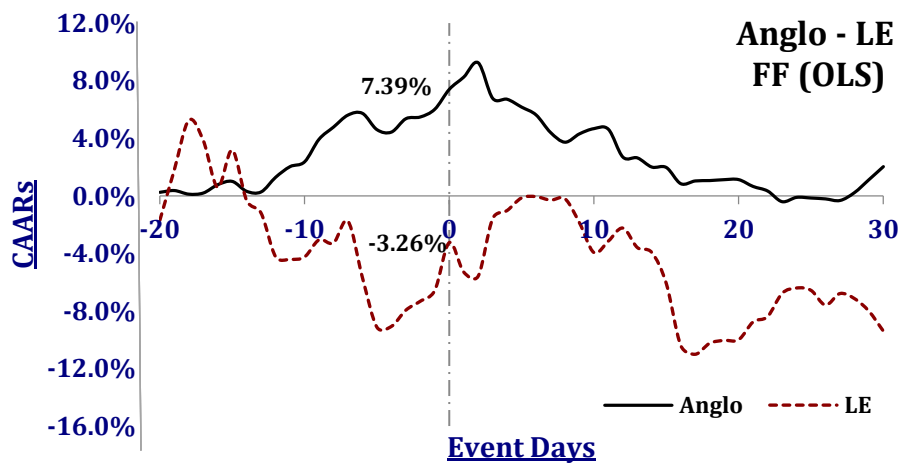


Figure A 7.13 FF returns from Anglo and LE Acquirers (OLS)

## Commonwealth Analysis

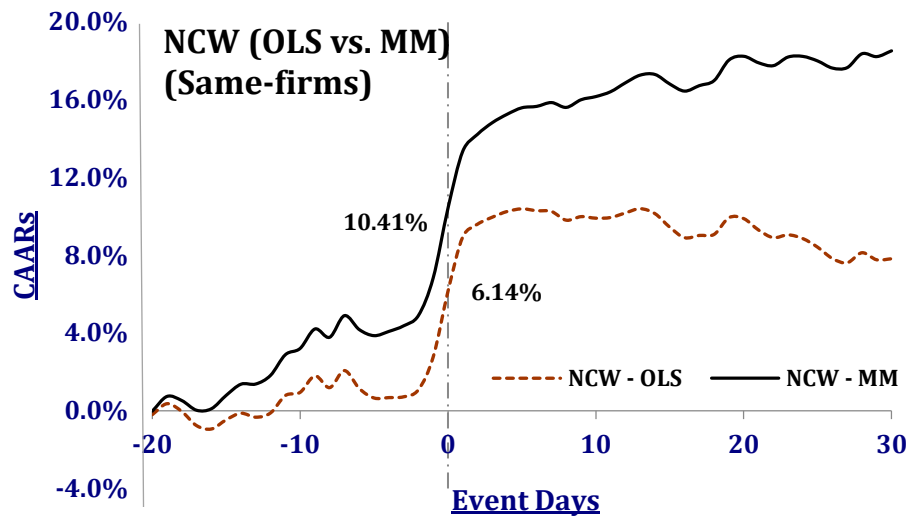


Figure A 7.14 Indian Targets and Common Wealth Analysis OLS vs. MM (MM firms)

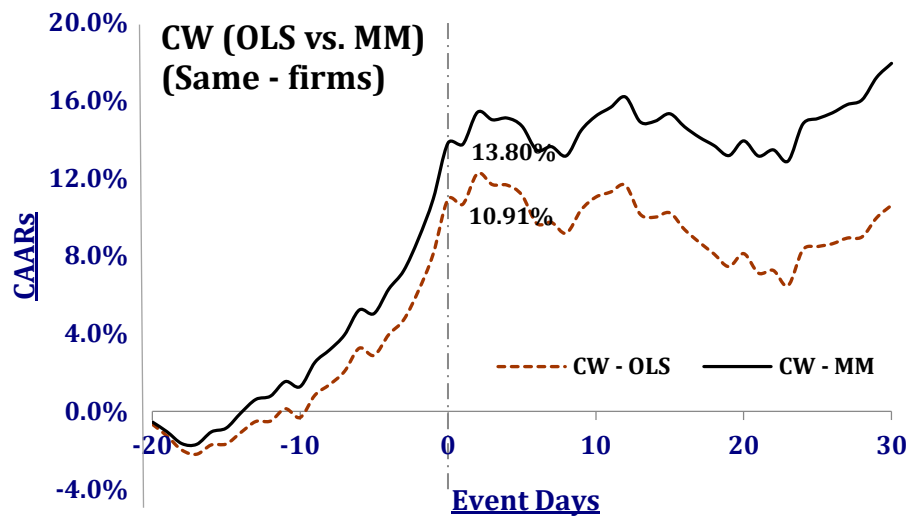


Figure A 7.15 Indian Targets and Common Wealth Analysis OLS vs. MM (MM firms)

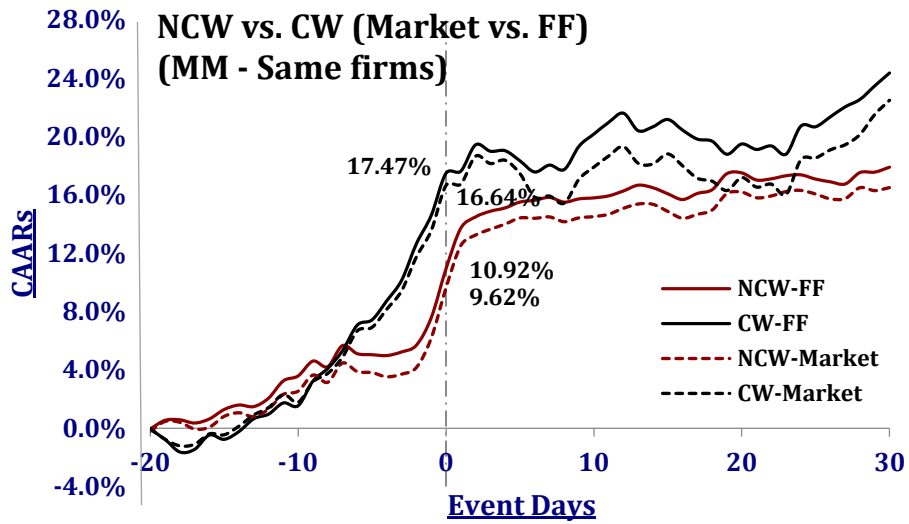


Figure A 7.16 FF returns to Targets from CW vs. NCW Acquirers (MM)

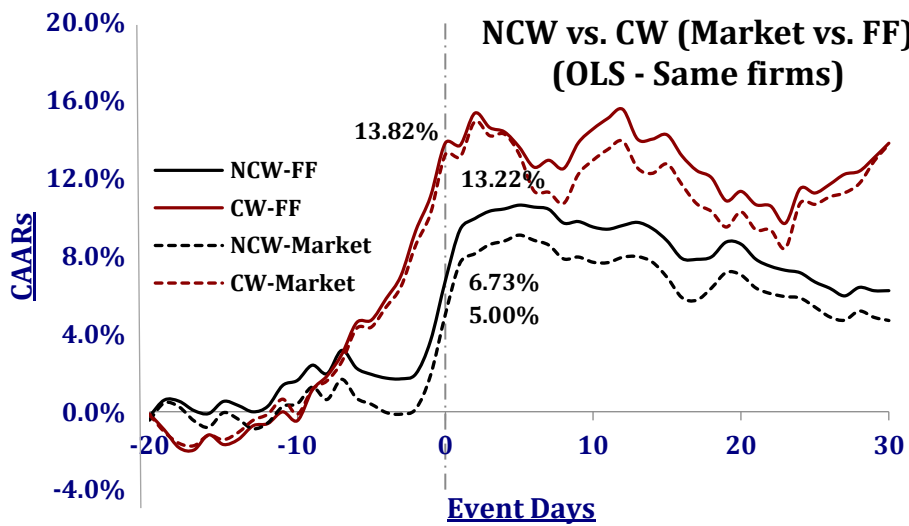


Figure A 7.17 FF returns to Targets from CW vs. NCW Acquirers (OLS)

# Returns to Indian Acquirers

## Overall Analysis

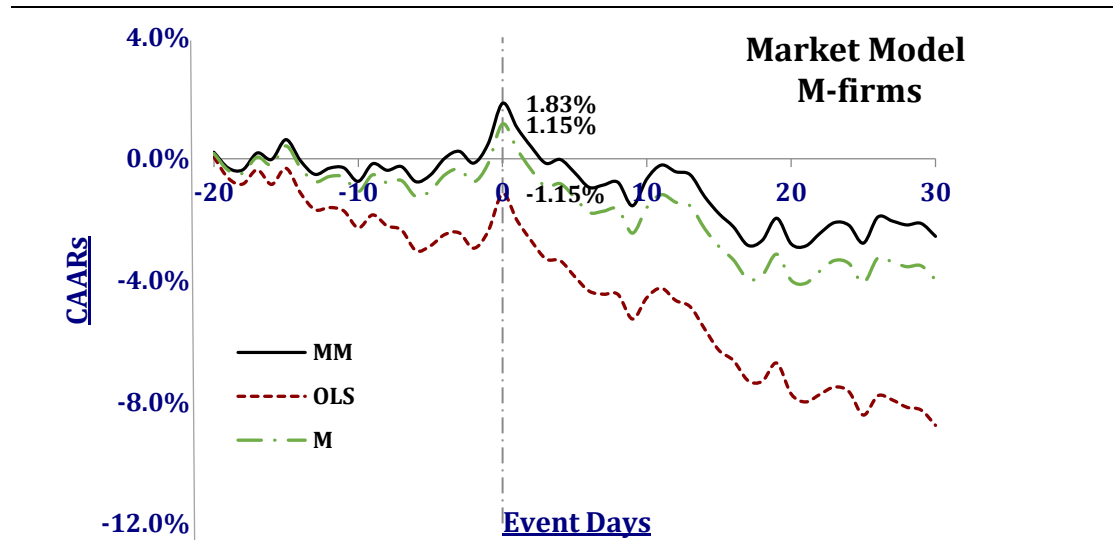


Figure A 7.18 Market Returns to Indian Acquirers – M-firms (All Regressions) 38 Firms

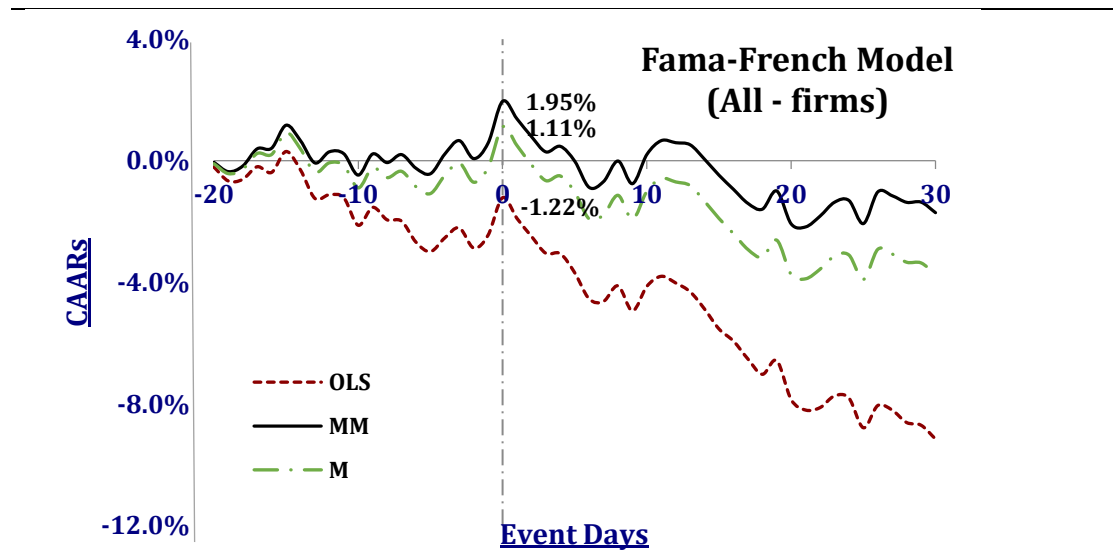


Figure A 7.19 Fama-French Returns to CB Acquirers – M-firms (All-Regressions)



**Table-A 7.1 Market Returns; Indian Targets; All-firms; (MM, 99)**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.11%       | 0.01%        | -0.11%        | -0.0310              | 1.0448        | -0.3057        | -0.0310       | 1.0448        | -0.3057       |
| -19            | 0.55%        | 0.25%        | 0.44%         | 0.2307               | 1.0688        | <b>2.2246</b>  | 0.1412        | 1.0798        | 1.3478        |
| -18            | -0.28%       | -0.11%       | 0.17%         | -0.0464              | 1.1466        | -0.4174        | 0.0885        | 1.0852        | 0.8404        |
| -17            | -0.42%       | -0.22%       | -0.26%        | -0.0778              | 1.3333        | -0.6010        | 0.0378        | 1.1438        | 0.3402        |
| -16            | 0.17%        | -0.09%       | -0.09%        | 0.1358               | 1.2613        | 1.1093         | 0.0945        | 1.1925        | 0.8166        |
| -15            | 0.61%        | 0.11%        | 0.52%         | 0.1395               | 1.0468        | 1.3734         | 0.1432        | 1.1105        | 1.3290        |
| -14            | 0.61%        | 0.00%        | 1.13%         | 0.2177               | 1.2004        | <b>1.8691</b>  | 0.2149        | 1.0896        | <b>2.0322</b> |
| -13            | 0.12%        | -0.13%       | 1.25%         | 0.0855               | 1.1574        | 0.7616         | 0.2312        | 1.1362        | <b>2.0974</b> |
| -12            | 0.40%        | 0.16%        | 1.65%         | 0.1301               | 1.1757        | 1.1407         | 0.2614        | 1.2556        | <b>2.1454</b> |
| -11            | 1.01%        | 0.72%        | 2.66%         | 0.3148               | 1.2256        | <b>2.6467</b>  | 0.3475        | 1.2510        | <b>2.8627</b> |
| -10            | 0.23%        | 0.11%        | 2.89%         | 0.0340               | 1.2783        | 0.2739         | 0.3416        | 1.2682        | <b>2.7757</b> |
| -9             | 1.04%        | 0.42%        | 3.93%         | 0.3458               | 1.5007        | <b>2.3746</b>  | 0.4269        | 1.2433        | <b>3.5382</b> |
| -8             | -0.25%       | -0.06%       | 3.68%         | 0.0804               | 1.2420        | 0.6671         | 0.4324        | 1.2930        | <b>3.4464</b> |
| -7             | 1.06%        | 0.08%        | 4.73%         | 0.2547               | 1.3170        | <b>1.9932</b>  | 0.4848        | 1.2877        | <b>3.7995</b> |
| -6             | -0.40%       | -0.38%       | 4.34%         | -0.0806              | 1.2700        | -0.6543        | 0.4475        | 1.3135        | <b>3.5109</b> |
| -5             | -0.29%       | 0.05%        | 4.05%         | -0.0524              | 1.4608        | -0.3696        | 0.4202        | 1.3131        | <b>3.2978</b> |
| -4             | 0.39%        | -0.16%       | 4.43%         | 0.0820               | 1.2734        | 0.6639         | 0.4276        | 1.2825        | <b>3.4355</b> |
| -3             | 0.39%        | 0.20%        | 4.82%         | 0.2098               | 1.4308        | 1.5108         | 0.4650        | 1.3088        | <b>3.6609</b> |
| -2             | 0.71%        | -0.09%       | 5.54%         | 0.2626               | 1.2955        | <b>2.0887</b>  | 0.5128        | 1.3339        | <b>3.9618</b> |
| -1             | 1.95%        | 0.66%        | 7.49%         | 0.7308               | 1.9276        | <b>3.9070</b>  | 0.6632        | 1.3747        | <b>4.9716</b> |
| <b>0</b>       | <b>3.47%</b> | <b>2.49%</b> | <b>10.95%</b> | <b>1.3077</b>        | <b>2.8100</b> | <b>4.7958</b>  | <b>0.9326</b> | <b>1.4792</b> | <b>6.4971</b> |
| 1              | 2.45%        | 1.36%        | 13.40%        | 0.6233               | 1.7593        | <b>3.6510</b>  | 1.0441        | 1.5092        | <b>7.1289</b> |
| 2              | 1.00%        | 0.34%        | 14.40%        | 0.3258               | 1.3981        | <b>2.4011</b>  | 1.0890        | 1.5834        | <b>7.0877</b> |
| 3              | 0.44%        | 0.09%        | 14.84%        | 0.0941               | 1.1889        | 0.8160         | 1.0853        | 1.5876        | <b>7.0447</b> |
| 4              | 0.38%        | -0.01%       | 15.21%        | 0.1169               | 1.2749        | 0.9451         | 1.0868        | 1.5611        | <b>7.1738</b> |
| 5              | 0.21%        | 0.29%        | 15.43%        | 0.0830               | 1.0933        | 0.7823         | 1.0820        | 1.5171        | <b>7.3493</b> |
| 6              | -0.14%       | -0.10%       | 15.29%        | -0.0500              | 1.2310        | -0.4184        | 1.0521        | 1.4794        | <b>7.3285</b> |
| 7              | 0.19%        | -0.01%       | 15.48%        | 0.0170               | 0.9723        | 0.1802         | 1.0364        | 1.4339        | <b>7.4480</b> |
| 8              | -0.28%       | -0.20%       | 15.19%        | -0.0880              | 0.8656        | -1.0476        | 1.0020        | 1.4211        | <b>7.2660</b> |
| 9              | 0.54%        | 0.24%        | 15.73%        | 0.1767               | 1.0355        | <b>1.7582</b>  | 1.0174        | 1.4406        | <b>7.2779</b> |
| 10             | 0.26%        | 0.15%        | 15.99%        | 0.1032               | 0.9270        | 1.1471         | 1.0194        | 1.4248        | <b>7.3729</b> |
| 11             | 0.28%        | 0.23%        | 16.27%        | 0.0453               | 1.0579        | 0.4414         | 1.0114        | 1.4101        | <b>7.3911</b> |
| 12             | 0.47%        | 0.06%        | 16.74%        | 0.0929               | 1.0156        | 0.9425         | 1.0121        | 1.4149        | <b>7.3711</b> |
| 13             | 0.12%        | 0.02%        | 16.87%        | 0.0474               | 1.1556        | 0.4229         | 1.0052        | 1.4188        | <b>7.3014</b> |
| 14             | 0.03%        | -0.08%       | 16.90%        | -0.0226              | 0.9303        | -0.2499        | 0.9869        | 1.4049        | <b>7.2392</b> |
| 15             | -0.35%       | -0.18%       | 16.55%        | -0.0423              | 0.9436        | -0.4624        | 0.9661        | 1.4120        | <b>7.0506</b> |
| 16             | -0.41%       | -0.20%       | 16.14%        | -0.1751              | 1.0612        | <b>-1.7000</b> | 0.9242        | 1.4222        | <b>6.6961</b> |
| 17             | 0.15%        | 0.05%        | 16.29%        | -0.0014              | 0.9952        | -0.0147        | 0.9117        | 1.4298        | <b>6.5707</b> |
| 18             | 0.15%        | -0.06%       | 16.44%        | 0.0192               | 1.3452        | 0.1468         | 0.9030        | 1.4316        | <b>6.5000</b> |
| 19             | 0.80%        | 0.69%        | 17.23%        | 0.2233               | 1.0524        | <b>2.1864</b>  | 0.9269        | 1.4002        | <b>6.8218</b> |
| 20             | 0.29%        | 0.09%        | 17.52%        | 0.1017               | 1.0660        | 0.9832         | 0.9314        | 1.3829        | <b>6.9411</b> |
| 21             | -0.41%       | -0.35%       | 17.12%        | -0.1560              | 1.0785        | -1.4901        | 0.8962        | 1.3739        | <b>6.7222</b> |
| 22             | -0.07%       | 0.23%        | 17.04%        | 0.0783               | 1.0013        | 0.8061         | 0.8977        | 1.3506        | <b>6.8491</b> |
| 23             | 0.28%        | 0.13%        | 17.32%        | 0.0862               | 0.9785        | 0.9079         | 0.9004        | 1.3661        | <b>6.7924</b> |
| 24             | 0.34%        | 0.24%        | 17.66%        | 0.1220               | 0.9638        | 1.3048         | 0.9086        | 1.3372        | <b>7.0019</b> |
| 25             | -0.15%       | 0.03%        | 17.51%        | 0.0404               | 1.0087        | 0.4127         | 0.9046        | 1.3304        | <b>7.0069</b> |
| 26             | -0.26%       | 0.03%        | 17.25%        | -0.0612              | 1.0231        | -0.6163        | 0.8860        | 1.3315        | <b>6.8570</b> |
| 27             | 0.09%        | 0.19%        | 17.33%        | 0.0418               | 1.0912        | 0.3945         | 0.8827        | 1.3404        | <b>6.7865</b> |
| 28             | 0.64%        | 0.28%        | 17.97%        | 0.1504               | 1.0728        | 1.4444         | 0.8952        | 1.3456        | <b>6.8552</b> |
| 29             | 0.06%        | -0.28%       | 18.04%        | 0.0718               | 1.2631        | 0.5860         | 0.8963        | 1.3573        | <b>6.8053</b> |
| 30             | 0.37%        | 0.18%        | 18.40%        | 0.1183               | 1.0574        | 1.1525         | 0.9040        | 1.3531        | <b>6.8852</b> |
| <b>-1 to 1</b> |              |              | <b>7.87%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06695</b> | 1.5368        | 2.3058        | <b>6.8682</b> |

**Table-A 7.2 Market Returns to Indian Targets All-firms (OLS, 104)**

| Days           | AAR          | Median       | CAAR         | SARa          | SD                   | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|---------------|----------------------|----------------|---------------|---------------|---------------|
| -20            | -0.30%       | -0.15%       | -0.30%       | -0.0941       | 0.8997               | -1.1288        | -0.0941       | 0.8997        | -1.1288       |
| -19            | 0.65%        | 0.09%        | 0.35%        | 0.1833        | 0.9905               | <b>1.9971</b>  | 0.0631        | 0.9286        | 0.7328        |
| -18            | -0.40%       | -0.08%       | -0.05%       | -0.0530       | 0.9249               | -0.6184        | 0.0209        | 0.9140        | 0.2467        |
| -17            | -0.62%       | -0.43%       | -0.67%       | -0.0899       | 1.0031               | -0.9672        | -0.0269       | 0.9079        | -0.3192       |
| -16            | -0.23%       | -0.28%       | -0.90%       | 0.0414        | 1.0664               | 0.4193         | -0.0055       | 0.9350        | -0.0633       |
| -15            | 0.54%        | 0.05%        | -0.35%       | 0.1017        | 0.9116               | 1.2038         | 0.0365        | 0.9166        | 0.4297        |
| -14            | 0.09%        | -0.03%       | -0.26%       | 0.0387        | 0.9751               | 0.4281         | 0.0484        | 0.8940        | 0.5844        |
| -13            | -0.08%       | -0.25%       | -0.35%       | 0.0238        | 0.9839               | 0.2614         | 0.0537        | 0.9290        | 0.6240        |
| -12            | 0.18%        | -0.08%       | -0.17%       | 0.0575        | 0.9770               | 0.6350         | 0.0698        | 1.0348        | 0.7280        |
| -11            | 0.85%        | 0.60%        | 0.68%        | 0.2306        | 1.0245               | <b>2.4287</b>  | 0.1392        | 1.0552        | 1.4230        |
| -10            | 0.14%        | -0.06%       | 0.82%        | -0.0365       | 1.0235               | -0.3843        | 0.1217        | 1.0811        | 1.2146        |
| -9             | 0.83%        | 0.23%        | 1.65%        | 0.2451        | 1.2375               | <b>2.1366</b>  | 0.1873        | 1.0418        | <b>1.9394</b> |
| -8             | -0.39%       | -0.15%       | 1.26%        | 0.0363        | 1.0312               | 0.3796         | 0.1900        | 1.0854        | <b>1.8885</b> |
| -7             | 0.80%        | -0.05%       | 2.06%        | 0.1470        | 1.0608               | 1.4946         | 0.2224        | 1.0902        | <b>2.2005</b> |
| -6             | -0.68%       | -0.43%       | 1.37%        | -0.0862       | 1.1434               | -0.8137        | 0.1925        | 1.1159        | <b>1.8616</b> |
| -5             | -0.45%       | -0.34%       | 0.92%        | -0.0469       | 1.2647               | -0.3997        | 0.1747        | 1.1098        | <b>1.6985</b> |
| -4             | 0.18%        | -0.18%       | 1.11%        | -0.0066       | 1.0470               | -0.0683        | 0.1679        | 1.1032        | 1.6420        |
| -3             | 0.14%        | -0.02%       | 1.25%        | 0.0928        | 1.1560               | 0.8662         | 0.1850        | 1.0955        | <b>1.8224</b> |
| -2             | 0.50%        | -0.16%       | 1.75%        | 0.1738        | 1.0963               | <b>1.7106</b>  | 0.2200        | 1.1107        | <b>2.1368</b> |
| -1             | 1.67%        | 0.41%        | 3.41%        | 0.5420        | 1.5215               | <b>3.8435</b>  | 0.3356        | 1.1164        | <b>3.2434</b> |
| <b>0</b>       | <b>3.16%</b> | <b>1.82%</b> | <b>6.57%</b> | <b>1.0404</b> | <b>2.3348</b>        | <b>4.8075</b>  | <b>0.5546</b> | <b>1.2014</b> | <b>4.9802</b> |
| 1              | 2.18%        | 0.83%        | 8.76%        | 0.4248        | 1.4827               | <b>3.0913</b>  | 0.6324        | 1.2418        | <b>5.4942</b> |
| 2              | 0.75%        | 0.18%        | 9.50%        | 0.1853        | 1.1822               | <b>1.6915</b>  | 0.6571        | 1.3092        | <b>5.4152</b> |
| 3              | 0.44%        | -0.27%       | 9.94%        | 0.0065        | 1.2218               | 0.0574         | 0.6446        | 1.3224        | <b>5.2590</b> |
| 4              | 0.24%        | -0.16%       | 10.18%       | 0.0240        | 1.2046               | 0.2152         | 0.6364        | 1.3356        | <b>5.1408</b> |
| 5              | 0.08%        | -0.04%       | 10.26%       | 0.0528        | 0.9911               | 0.5743         | 0.6344        | 1.3114        | <b>5.2189</b> |
| 6              | -0.22%       | -0.34%       | 10.04%       | -0.0329       | 1.1404               | -0.3117        | 0.6162        | 1.2783        | <b>5.2005</b> |
| 7              | -0.19%       | -0.20%       | 9.85%        | -0.1433       | 0.9122               | <b>-1.6952</b> | 0.5780        | 1.2514        | <b>4.9832</b> |
| 8              | -0.67%       | -0.43%       | 9.19%        | -0.1905       | 0.8464               | <b>-2.4285</b> | 0.5326        | 1.2578        | <b>4.5679</b> |
| 9              | 0.29%        | 0.05%        | 9.48%        | 0.0889        | 0.8686               | 1.1037         | 0.5398        | 1.2723        | <b>4.5776</b> |
| 10             | -0.10%       | -0.13%       | 9.38%        | 0.0132        | 0.8098               | 0.1763         | 0.5334        | 1.2683        | <b>4.5378</b> |
| 11             | 0.16%        | -0.08%       | 9.54%        | -0.0107       | 0.9263               | -0.1241        | 0.5232        | 1.2509        | <b>4.5122</b> |
| 12             | 0.31%        | 0.01%        | 9.84%        | 0.0306        | 0.8354               | 0.3951         | 0.5205        | 1.2484        | <b>4.4982</b> |
| 13             | -0.08%       | -0.18%       | 9.77%        | -0.0082       | 1.0219               | -0.0871        | 0.5114        | 1.2559        | <b>4.3929</b> |
| 14             | -0.23%       | -0.41%       | 9.53%        | -0.0704       | 0.8086               | -0.9390        | 0.4921        | 1.2446        | <b>4.2659</b> |
| 15             | -0.66%       | -0.45%       | 8.87%        | -0.1197       | 0.8156               | -1.5839        | 0.4653        | 1.2648        | <b>3.9687</b> |
| 16             | -0.88%       | -0.60%       | 7.99%        | -0.2751       | 0.9643               | <b>-3.0783</b> | 0.4137        | 1.2793        | <b>3.4889</b> |
| 17             | -0.17%       | -0.15%       | 7.82%        | -0.1357       | 1.0248               | -1.4283        | 0.3862        | 1.2982        | <b>3.2096</b> |
| 18             | 0.40%        | 0.04%        | 8.22%        | 0.0836        | 1.2815               | 0.7042         | 0.3946        | 1.2800        | <b>3.3261</b> |
| 19             | 0.49%        | 0.48%        | 8.71%        | 0.1134        | 0.9391               | 1.3027         | 0.4076        | 1.2553        | <b>3.5031</b> |
| 20             | 0.08%        | -0.04%       | 8.79%        | -0.0065       | 0.8566               | -0.0814        | 0.4016        | 1.2344        | <b>3.5097</b> |
| 21             | -0.59%       | -0.45%       | 8.20%        | -0.1688       | 1.0710               | <b>-1.7001</b> | 0.3707        | 1.2360        | <b>3.2361</b> |
| 22             | -0.46%       | 0.01%        | 7.73%        | -0.0688       | 1.0253               | -0.7241        | 0.3559        | 1.2398        | <b>3.0971</b> |
| 23             | -0.07%       | -0.13%       | 7.66%        | -0.0366       | 0.9732               | -0.4056        | 0.3463        | 1.2695        | <b>2.9433</b> |
| 24             | 0.14%        | 0.02%        | 7.81%        | 0.0815        | 0.8498               | 1.0349         | 0.3546        | 1.2422        | <b>3.0798</b> |
| 25             | -0.29%       | -0.23%       | 7.52%        | 0.0080        | 0.9274               | 0.0928         | 0.3519        | 1.2222        | <b>3.1064</b> |
| 26             | -0.40%       | -0.10%       | 7.12%        | -0.0996       | 0.8607               | -1.2480        | 0.3336        | 1.2110        | <b>2.9722</b> |
| 27             | -0.10%       | 0.06%        | 7.02%        | -0.0017       | 1.0380               | -0.0180        | 0.3299        | 1.1875        | <b>2.9971</b> |
| 28             | 0.38%        | 0.14%        | 7.40%        | 0.0653        | 0.8994               | 0.7829         | 0.3358        | 1.1877        | <b>3.0505</b> |
| 29             | -0.11%       | -0.34%       | 7.29%        | 0.0139        | 1.0912               | 0.1372         | 0.3344        | 1.1831        | <b>3.0495</b> |
| 30             | 0.05%        | 0.09%        | 7.34%        | 0.0380        | 0.9250               | 0.4433         | 0.3364        | 1.1627        | <b>3.1218</b> |
| <b>-1 to 1</b> |              |              | <b>7.01%</b> |               | <b>StdDev(AAR-0)</b> | <b>0.06614</b> | 1.1589        | 1.9323        | <b>6.4703</b> |

**Table-A 7.3 Market Returns; Indian Targets; MM firms (OLS, 99); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.28%       | -0.16%       | -0.28%       | -0.0775              | 0.8885         | -0.9048        | -0.0775       | 0.8885        | -0.9048       |
| -19            | 0.37%        | 0.08%        | 0.10%        | 0.1514               | 0.9056         | <b>1.7335</b>  | 0.0522        | 0.9026        | 0.5999        |
| -18            | -0.45%       | -0.17%       | -0.36%       | -0.0553              | 0.9423         | -0.6086        | 0.0107        | 0.8928        | 0.1243        |
| -17            | -0.64%       | -0.72%       | -1.00%       | -0.1096              | 1.0183         | -1.1161        | -0.0455       | 0.9075        | -0.5202       |
| -16            | -0.07%       | -0.26%       | -1.07%       | 0.0731               | 1.0696         | 0.7084         | -0.0080       | 0.9507        | -0.0878       |
| -15            | 0.40%        | 0.01%        | -0.66%       | 0.0729               | 0.8838         | 0.8560         | 0.0224        | 0.9163        | 0.2539        |
| -14            | 0.38%        | -0.04%       | -0.29%       | 0.0836               | 0.9310         | 0.9317         | 0.0524        | 0.9103        | 0.5968        |
| -13            | -0.08%       | -0.28%       | -0.37%       | 0.0073               | 0.9943         | 0.0762         | 0.0516        | 0.9480        | 0.5643        |
| -12            | 0.19%        | -0.07%       | -0.18%       | 0.0583               | 0.9767         | 0.6187         | 0.0680        | 1.0498        | 0.6723        |
| -11            | 0.85%        | 0.61%        | 0.67%        | 0.2112               | 1.0168         | <b>2.1545</b>  | 0.1314        | 1.0643        | 1.2801        |
| -10            | 0.07%        | -0.08%       | 0.74%        | -0.0300              | 1.0233         | -0.3037        | 0.1162        | 1.0966        | 1.0990        |
| -9             | 0.89%        | 0.31%        | 1.63%        | 0.2730               | 1.2484         | <b>2.2678</b>  | 0.1901        | 1.0600        | <b>1.8597</b> |
| -8             | -0.42%       | -0.24%       | 1.22%        | 0.0346               | 1.0555         | 0.3397         | 0.1922        | 1.1066        | <b>1.8013</b> |
| -7             | 0.84%        | -0.08%       | 2.06%        | 0.1543               | 1.0829         | 1.4776         | 0.2264        | 1.1095        | <b>2.1166</b> |
| -6             | -0.58%       | -0.53%       | 1.48%        | -0.1193              | 1.0586         | -1.1690        | 0.1880        | 1.1334        | <b>1.7199</b> |
| -5             | -0.47%       | -0.35%       | 1.01%        | -0.0414              | 1.2640         | -0.3394        | 0.1716        | 1.1312        | 1.5737        |
| -4             | 0.19%        | -0.20%       | 1.20%        | -0.0121              | 1.0488         | -0.1201        | 0.1636        | 1.1187        | 1.5165        |
| -3             | 0.16%        | -0.01%       | 1.36%        | 0.1011               | 1.1808         | 0.8876         | 0.1828        | 1.1137        | <b>1.7022</b> |
| -2             | 0.55%        | -0.17%       | 1.91%        | 0.1946               | 1.1153         | <b>1.8097</b>  | 0.2226        | 1.1299        | <b>2.0428</b> |
| -1             | 1.72%        | 0.42%        | 3.62%        | 0.5516               | 1.5561         | <b>3.6765</b>  | 0.3403        | 1.1337        | <b>3.1128</b> |
| <b>0</b>       | <b>3.28%</b> | <b>2.08%</b> | <b>6.91%</b> | <b>1.0753</b>        | <b>2.3873</b>  | <b>4.6715</b>  | <b>0.5667</b> | <b>1.2207</b> | <b>4.8151</b> |
| 1              | 2.31%        | 1.46%        | 9.21%        | 0.4571               | 1.5089         | <b>3.1416</b>  | 0.6511        | 1.2621        | <b>5.3508</b> |
| 2              | 0.80%        | 0.20%        | 10.02%       | 0.2039               | 1.2056         | <b>1.7540</b>  | 0.6793        | 1.3325        | <b>5.2876</b> |
| 3              | 0.21%        | -0.27%       | 10.22%       | 0.0270               | 1.0814         | 0.2593         | 0.6705        | 1.3459        | <b>5.1673</b> |
| 4              | 0.24%        | -0.20%       | 10.47%       | 0.0641               | 1.1385         | 0.5835         | 0.6698        | 1.3486        | <b>5.1511</b> |
| 5              | 0.03%        | -0.08%       | 10.49%       | 0.0243               | 0.9285         | 0.2709         | 0.6616        | 1.3272        | <b>5.1698</b> |
| 6              | -0.31%       | -0.34%       | 10.18%       | -0.0732              | 1.0237         | -0.7414        | 0.6351        | 1.2965        | <b>5.0807</b> |
| 7              | -0.03%       | -0.08%       | 10.15%       | -0.0618              | 0.8255         | -0.7763        | 0.6120        | 1.2580        | <b>5.0456</b> |
| 8              | -0.46%       | -0.37%       | 9.69%        | -0.1223              | 0.7385         | <b>-1.7169</b> | 0.5786        | 1.2489        | <b>4.8052</b> |
| 9              | 0.35%        | 0.03%        | 10.04%       | 0.1015               | 0.8457         | 1.2446         | 0.5874        | 1.2654        | <b>4.8148</b> |
| 10             | 0.04%        | -0.13%       | 10.08%       | 0.0380               | 0.7885         | 0.4997         | 0.5847        | 1.2563        | <b>4.8270</b> |
| 11             | 0.07%        | -0.17%       | 10.15%       | -0.0304              | 0.9277         | -0.3402        | 0.5701        | 1.2422        | <b>4.7601</b> |
| 12             | 0.25%        | 0.01%        | 10.40%       | 0.0307               | 0.8409         | 0.3789         | 0.5668        | 1.2399        | <b>4.7407</b> |
| 13             | -0.06%       | -0.21%       | 10.34%       | -0.0130              | 1.0128         | -0.1330        | 0.5561        | 1.2557        | <b>4.5933</b> |
| 14             | -0.24%       | -0.51%       | 10.11%       | -0.0733              | 0.8063         | -0.9425        | 0.5358        | 1.2482        | <b>4.4515</b> |
| 15             | -0.55%       | -0.32%       | 9.56%        | -0.0782              | 0.7899         | -1.0263        | 0.5152        | 1.2606        | <b>4.2389</b> |
| 16             | -0.59%       | -0.60%       | 8.97%        | -0.2101              | 0.8885         | <b>-2.4521</b> | 0.4737        | 1.2638        | <b>3.8872</b> |
| 17             | -0.01%       | -0.15%       | 8.96%        | -0.0578              | 0.8470         | -0.7076        | 0.4580        | 1.2641        | <b>3.7581</b> |
| 18             | -0.05%       | -0.07%       | 8.91%        | -0.0161              | 1.0467         | -0.1594        | 0.4496        | 1.2535        | <b>3.7196</b> |
| 19             | 0.61%        | 0.49%        | 9.52%        | 0.1461               | 0.9307         | 1.6283         | 0.4670        | 1.2266        | <b>3.9486</b> |
| 20             | 0.07%        | -0.01%       | 9.59%        | -0.0139              | 0.8690         | -0.1661        | 0.4591        | 1.2050        | <b>3.9514</b> |
| 21             | -0.65%       | -0.53%       | 8.94%        | -0.1884              | 0.8998         | <b>-2.1719</b> | 0.4245        | 1.1872        | <b>3.7086</b> |
| 22             | -0.31%       | 0.03%        | 8.63%        | 0.0114               | 0.8488         | 0.1393         | 0.4213        | 1.1637        | <b>3.7546</b> |
| 23             | -0.01%       | -0.13%       | 8.62%        | 0.0148               | 0.7978         | 0.1928         | 0.4187        | 1.1689        | <b>3.7151</b> |
| 24             | 0.14%        | 0.01%        | 8.76%        | 0.0690               | 0.8073         | 0.8860         | 0.4243        | 1.1453        | <b>3.8425</b> |
| 25             | -0.34%       | -0.27%       | 8.41%        | -0.0190              | 0.8848         | -0.2224        | 0.4169        | 1.1402        | <b>3.7922</b> |
| 26             | -0.46%       | -0.13%       | 7.95%        | -0.1267              | 0.8495         | -1.5466        | 0.3939        | 1.1437        | <b>3.5724</b> |
| 27             | -0.14%       | 0.04%        | 7.82%        | -0.0193              | 0.8790         | -0.2280        | 0.3870        | 1.1440        | <b>3.5089</b> |
| 28             | 0.44%        | 0.18%        | 8.26%        | 0.0684               | 0.8966         | 0.7911         | 0.3928        | 1.1416        | <b>3.5688</b> |
| 29             | -0.14%       | -0.43%       | 8.11%        | -0.0070              | 1.0537         | -0.0685        | 0.3879        | 1.1527        | <b>3.4901</b> |
| 30             | 0.15%        | 0.06%        | 8.26%        | 0.0450               | 0.9100         | 0.5125         | 0.3904        | 1.1381        | <b>3.5574</b> |
| <b>-1 to 1</b> |              |              | <b>7.31%</b> | <b>StdDev(AAR-0)</b> | <b>0.06755</b> |                | 1.2032        | 1.9674        | <b>6.3427</b> |

Table-A 7.4 Fama-French Returns to Indian Targets All-firms (OLS, 93)

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.20%       | 0.00%        | -0.20%       | -0.0323              | 0.8939        | -0.3613        | -0.0323       | 0.8939        | -0.3613       |
| -19            | 0.59%        | 0.06%        | 0.39%        | 0.1519               | 1.0003        | 1.5177         | 0.0846        | 0.9582        | 0.8819        |
| -18            | -0.18%       | -0.01%       | 0.21%        | -0.0331              | 0.9326        | -0.3553        | 0.0499        | 0.9091        | 0.5486        |
| -17            | -0.43%       | -0.35%       | -0.22%       | -0.0366              | 0.9492        | -0.3858        | 0.0249        | 0.8624        | 0.2886        |
| -16            | -0.02%       | -0.19%       | -0.24%       | 0.1105               | 1.0844        | 1.0183         | 0.0717        | 0.8944        | 0.8010        |
| -15            | 0.47%        | -0.34%       | 0.22%        | 0.0705               | 0.9476        | 0.7437         | 0.0942        | 0.8893        | 1.0590        |
| -14            | -0.15%       | -0.27%       | 0.08%        | -0.0335              | 0.9091        | -0.3687        | 0.0746        | 0.8428        | 0.8841        |
| -13            | -0.18%       | -0.34%       | -0.10%       | -0.0174              | 0.7852        | -0.2209        | 0.0636        | 0.8129        | 0.7820        |
| -12            | 0.26%        | -0.07%       | 0.16%        | 0.0912               | 1.0239        | 0.8902         | 0.0904        | 0.9361        | 0.9648        |
| -11            | 1.00%        | 0.58%        | 1.17%        | 0.2789               | 0.9967        | <b>2.7810</b>  | 0.1727        | 0.9577        | <b>1.8023</b> |
| -10            | 0.16%        | -0.31%       | 1.33%        | -0.0012              | 0.9439        | -0.0129        | 0.1641        | 0.9845        | <b>1.6660</b> |
| -9             | 0.89%        | 0.15%        | 2.22%        | 0.2640               | 1.3026        | <b>2.0255</b>  | 0.2334        | 1.0025        | <b>2.3270</b> |
| -8             | -0.27%       | -0.29%       | 1.94%        | 0.0721               | 1.0660        | <b>0.6758</b>  | 0.2443        | 1.0643        | <b>2.2941</b> |
| -7             | 1.19%        | 0.05%        | 3.13%        | 0.2418               | 1.1491        | <b>2.1032</b>  | 0.3000        | 1.0874        | <b>2.7575</b> |
| -6             | -0.56%       | -0.47%       | 2.57%        | -0.0803              | 1.1808        | -0.6801        | 0.2691        | 1.0912        | <b>2.4648</b> |
| -5             | -0.25%       | -0.71%       | 2.31%        | -0.0361              | 1.3286        | -0.2713        | 0.2516        | 1.1158        | <b>2.2540</b> |
| -4             | -0.01%       | -0.16%       | 2.30%        | -0.0310              | 1.0746        | -0.2883        | 0.2366        | 1.1069        | <b>2.1366</b> |
| -3             | 0.13%        | 0.25%        | 2.44%        | 0.1373               | 1.2654        | 1.0848         | 0.2622        | 1.1022        | <b>2.3782</b> |
| -2             | 0.54%        | 0.03%        | 2.97%        | 0.2054               | 1.1281        | <b>1.8201</b>  | 0.3024        | 1.1085        | <b>2.7264</b> |
| -1             | 1.72%        | 0.36%        | 4.69%        | 0.5326               | 1.6026        | <b>3.3215</b>  | 0.4139        | 1.1207        | <b>3.6916</b> |
| <b>0</b>       | <b>3.03%</b> | <b>1.36%</b> | <b>7.72%</b> | <b>0.9670</b>        | <b>2.1037</b> | <b>4.5943</b>  | <b>0.6149</b> | <b>1.1937</b> | <b>5.1488</b> |
| 1              | 2.26%        | 0.91%        | 9.98%        | 0.4589               | 1.5586        | <b>2.9429</b>  | 0.6986        | 1.2501        | <b>5.5855</b> |
| 2              | 0.72%        | 0.26%        | 10.69%       | 0.1767               | 1.2125        | 1.4563         | 0.7201        | 1.3011        | <b>5.5315</b> |
| 3              | 0.22%        | -0.36%       | 10.91%       | -0.0438              | 1.2860        | -0.3407        | 0.6960        | 1.3229        | <b>5.2581</b> |
| 4              | 0.07%        | -0.22%       | 10.98%       | -0.0435              | 1.2359        | -0.3521        | 0.6732        | 1.3474        | <b>4.9934</b> |
| 5              | 0.06%        | 0.01%        | 11.04%       | 0.0279               | 0.9815        | 0.2837         | 0.6657        | 1.3303        | <b>5.0013</b> |
| 6              | -0.23%       | -0.54%       | 10.81%       | -0.0274              | 1.0805        | -0.2535        | 0.6481        | 1.2960        | <b>4.9982</b> |
| 7              | -0.05%       | -0.12%       | 10.76%       | -0.0707              | 0.9199        | -0.7683        | 0.6231        | 1.2844        | <b>4.8488</b> |
| 8              | -0.67%       | -0.43%       | 10.09%       | -0.2081              | 0.8217        | <b>-2.5314</b> | 0.5736        | 1.2941        | <b>4.4298</b> |
| 9              | 0.25%        | -0.12%       | 10.35%       | 0.0909               | 0.8885        | 1.0231         | 0.5805        | 1.3016        | <b>4.4580</b> |
| 10             | -0.14%       | -0.23%       | 10.20%       | 0.0114               | 0.8449        | 0.1347         | 0.5732        | 1.2901        | <b>4.4405</b> |
| 11             | -0.02%       | -0.09%       | 10.18%       | -0.0478              | 0.9358        | -0.5111        | 0.5557        | 1.2748        | <b>4.3567</b> |
| 12             | 0.23%        | 0.02%        | 10.41%       | 0.0024               | 0.8813        | 0.0266         | 0.5475        | 1.2742        | <b>4.2942</b> |
| 13             | -0.08%       | -0.13%       | 10.34%       | -0.0067              | 1.0123        | -0.0665        | 0.5382        | 1.2832        | <b>4.1919</b> |
| 14             | -0.27%       | -0.54%       | 10.06%       | -0.0462              | 0.8642        | -0.5344        | 0.5226        | 1.2737        | <b>4.1009</b> |
| 15             | -0.51%       | -0.23%       | 9.55%        | -0.0817              | 0.7945        | -1.0275        | 0.5017        | 1.2879        | <b>3.8937</b> |
| 16             | -0.93%       | -0.70%       | 8.62%        | -0.2795              | 1.0245        | <b>-2.7266</b> | 0.4490        | 1.3066        | <b>3.4342</b> |
| 17             | -0.15%       | -0.27%       | 8.48%        | -0.1310              | 0.9974        | -1.3128        | 0.4218        | 1.3153        | <b>3.2050</b> |
| 18             | 0.06%        | 0.05%        | 8.53%        | 0.0513               | 1.2724        | 0.4008         | 0.4244        | 1.3151        | <b>3.2257</b> |
| 19             | 0.49%        | 0.45%        | 9.02%        | 0.1234               | 0.9268        | 1.3308         | 0.4386        | 1.2923        | <b>3.3922</b> |
| 20             | -0.02%       | -0.25%       | 9.00%        | -0.0401              | 0.8799        | -0.4534        | 0.4270        | 1.2641        | <b>3.3765</b> |
| 21             | -0.76%       | -0.93%       | 8.24%        | -0.2600              | 1.0490        | <b>-2.4633</b> | 0.3823        | 1.2686        | <b>3.0117</b> |
| 22             | -0.32%       | -0.15%       | 7.91%        | -0.0549              | 1.0184        | -0.5354        | 0.3695        | 1.2736        | <b>2.9000</b> |
| 23             | -0.30%       | -0.25%       | 7.61%        | -0.1064              | 0.9838        | -1.0748        | 0.3495        | 1.3138        | <b>2.6586</b> |
| 24             | 0.14%        | 0.13%        | 7.76%        | 0.0765               | 0.9246        | 0.8223         | 0.3569        | 1.2914        | <b>2.7622</b> |
| 25             | -0.44%       | -0.25%       | 7.31%        | -0.0142              | 0.9354        | -0.1511        | 0.3509        | 1.2725        | <b>2.7565</b> |
| 26             | -0.21%       | 0.02%        | 7.10%        | -0.0614              | 0.9129        | -0.6681        | 0.3384        | 1.2652        | <b>2.6731</b> |
| 27             | -0.26%       | -0.20%       | 6.84%        | -0.0335              | 1.1061        | -0.3011        | 0.3301        | 1.2401        | <b>2.6602</b> |
| 28             | 0.40%        | 0.15%        | 7.24%        | 0.0734               | 0.9178        | 0.7951         | 0.3371        | 1.2363        | <b>2.7250</b> |
| 29             | -0.05%       | -0.36%       | 7.19%        | 0.0502               | 1.0898        | 0.4580         | 0.3407        | 1.2354        | <b>2.7566</b> |
| 30             | 0.11%        | -0.10%       | 7.29%        | 0.0417               | 0.9465        | 0.4377         | 0.3432        | 1.2209        | <b>2.8092</b> |
| <b>-1 to 1</b> |              |              | <b>7.00%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06393</b> | 1.1307        | 1.8203        | <b>6.2085</b> |

**Table-A 7.5 Fama-French Returns to Indian Targets All-firms (MM, 90)**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.05%       | 0.12%        | -0.05%        | 0.0321               | 1.0147        | 0.3108         | 0.0321        | 1.0147        | 0.3108        |
| -19            | 0.40%        | 0.07%        | 0.35%         | 0.1577               | 1.0220        | 1.5160         | 0.1342        | 1.0623        | 1.2412        |
| -18            | -0.09%       | 0.00%        | 0.26%         | -0.0120              | 1.1267        | -0.1049        | 0.1026        | 1.0570        | 0.9540        |
| -17            | -0.16%       | -0.02%       | 0.10%         | 0.0245               | 1.1325        | 0.2128         | 0.1011        | 1.0220        | 0.9724        |
| -16            | 0.38%        | 0.02%        | 0.48%         | 0.2195               | 1.2552        | <b>1.7188</b>  | 0.1886        | 1.0833        | <b>1.7112</b> |
| -15            | 0.51%        | -0.13%       | 0.99%         | 0.0881               | 1.0470        | 0.8269         | 0.2082        | 1.0325        | <b>1.9813</b> |
| -14            | 0.34%        | -0.02%       | 1.33%         | 0.1162               | 1.0720        | 1.0655         | 0.2366        | 0.9981        | <b>2.3299</b> |
| -13            | 0.03%        | -0.03%       | 1.36%         | 0.0451               | 0.8493        | 0.5223         | 0.2373        | 0.9484        | <b>2.4590</b> |
| -12            | 0.54%        | 0.14%        | 1.91%         | 0.1747               | 1.1770        | 1.4589         | 0.2820        | 1.0737        | <b>2.5811</b> |
| -11            | 1.12%        | 0.71%        | 3.03%         | 0.3622               | 1.1947        | <b>2.9619</b>  | 0.3804        | 1.0933        | <b>3.4196</b> |
| -10            | 0.26%        | 0.08%        | 3.29%         | 0.0751               | 1.0545        | 0.7002         | 0.3852        | 1.1397        | <b>3.3209</b> |
| -9             | 1.12%        | 0.39%        | 4.40%         | 0.3935               | 1.5138        | <b>2.5543</b>  | 0.4824        | 1.1828        | <b>4.0082</b> |
| -8             | -0.20%       | -0.01%       | 4.20%         | 0.1181               | 1.2373        | 0.9381         | 0.4963        | 1.2575        | <b>3.8788</b> |
| -7             | 1.41%        | 0.33%        | 5.61%         | 0.3748               | 1.4004        | <b>2.6301</b>  | 0.5784        | 1.2846        | <b>4.4247</b> |
| -6             | -0.22%       | -0.26%       | 5.39%         | -0.0457              | 1.3345        | -0.3363        | 0.5470        | 1.2857        | <b>4.1808</b> |
| -5             | -0.01%       | -0.38%       | 5.39%         | 0.0188               | 1.4545        | 0.1267         | 0.5344        | 1.2992        | <b>4.0426</b> |
| -4             | 0.14%        | -0.21%       | 5.53%         | 0.0367               | 1.2531        | 0.2876         | 0.5274        | 1.2819        | <b>4.0434</b> |
| -3             | 0.41%        | 0.35%        | 5.94%         | 0.2608               | 1.5079        | <b>1.6998</b>  | 0.5740        | 1.3098        | <b>4.3063</b> |
| -2             | 0.76%        | 0.16%        | 6.70%         | 0.3071               | 1.3159        | <b>2.2932</b>  | 0.6291        | 1.3263        | <b>4.6616</b> |
| -1             | 1.88%        | 0.60%        | 8.58%         | 0.7058               | 2.0550        | <b>3.3753</b>  | 0.7711        | 1.3806        | <b>5.4890</b> |
| <b>0</b>       | <b>3.29%</b> | <b>2.36%</b> | <b>11.87%</b> | <b>1.2206</b>        | <b>2.5320</b> | <b>4.7372</b>  | <b>1.0188</b> | <b>1.4920</b> | <b>6.7106</b> |
| 1              | 2.40%        | 1.16%        | 14.27%        | 0.6148               | 1.8386        | <b>3.2860</b>  | 1.1264        | 1.5220        | <b>7.2734</b> |
| 2              | 0.93%        | 0.42%        | 15.20%        | 0.3070               | 1.4233        | <b>2.1195</b>  | 1.1657        | 1.5774        | <b>7.2622</b> |
| 3              | 0.27%        | -0.13%       | 15.47%        | 0.0474               | 1.2698        | 0.3668         | 1.1508        | 1.5901        | <b>7.1123</b> |
| 4              | 0.20%        | -0.04%       | 15.67%        | 0.0747               | 1.2472        | 0.5887         | 1.1425        | 1.5657        | <b>7.1709</b> |
| 5              | 0.24%        | 0.12%        | 15.91%        | 0.0808               | 1.1305        | 0.7024         | 1.1363        | 1.5302        | <b>7.2976</b> |
| 6              | -0.01%       | -0.19%       | 15.91%        | 0.0207               | 1.2769        | 0.1595         | 1.1192        | 1.4897        | <b>7.3833</b> |
| 7              | 0.23%        | 0.08%        | 16.14%        | 0.0563               | 1.0070        | 0.5498         | 1.1097        | 1.4657        | <b>7.4405</b> |
| 8              | -0.32%       | -0.25%       | 15.82%        | -0.1106              | 0.8688        | -1.2513        | 1.0699        | 1.4577        | <b>7.2128</b> |
| 9              | 0.42%        | 0.07%        | 16.24%        | 0.1695               | 1.1026        | 1.5109         | 1.0828        | 1.4832        | <b>7.1747</b> |
| 10             | 0.18%        | 0.05%        | 16.42%        | 0.0914               | 0.9689        | 0.9271         | 1.0817        | 1.4633        | <b>7.2644</b> |
| 11             | 0.23%        | 0.35%        | 16.65%        | 0.0457               | 1.0697        | 0.4202         | 1.0727        | 1.4482        | <b>7.2792</b> |
| 12             | 0.38%        | 0.10%        | 17.03%        | 0.0718               | 1.0342        | 0.6777         | 1.0685        | 1.4556        | <b>7.2142</b> |
| 13             | 0.17%        | 0.12%        | 17.20%        | 0.0564               | 1.0895        | 0.5087         | 1.0624        | 1.4614        | <b>7.1441</b> |
| 14             | -0.11%       | -0.34%       | 17.09%        | -0.0274              | 0.9951        | -0.2705        | 1.0424        | 1.4461        | <b>7.0839</b> |
| 15             | -0.28%       | 0.04%        | 16.81%        | -0.0099              | 0.9046        | -0.1071        | 1.0262        | 1.4474        | <b>6.9677</b> |
| 16             | -0.44%       | -0.44%       | 16.36%        | -0.1765              | 1.1275        | -1.5385        | 0.9833        | 1.4631        | <b>6.6044</b> |
| 17             | 0.27%        | -0.01%       | 16.63%        | 0.0330               | 0.9826        | 0.3298         | 0.9756        | 1.4645        | <b>6.5462</b> |
| 18             | 0.20%        | 0.07%        | 16.83%        | 0.0357               | 1.3717        | 0.2560         | 0.9687        | 1.4774        | <b>6.4434</b> |
| 19             | 0.81%        | 0.62%        | 17.64%        | 0.2418               | 1.0521        | <b>2.2586</b>  | 0.9948        | 1.4442        | <b>6.7690</b> |
| 20             | 0.15%        | -0.13%       | 17.79%        | 0.0611               | 1.0963        | 0.5441         | 0.9920        | 1.4180        | <b>6.8751</b> |
| 21             | -0.47%       | -0.60%       | 17.32%        | -0.1700              | 1.1154        | -1.4888        | 0.9542        | 1.4110        | <b>6.6459</b> |
| 22             | 0.10%        | 0.08%        | 17.42%        | 0.1060               | 0.9828        | 1.0535         | 0.9591        | 1.3802        | <b>6.8291</b> |
| 23             | 0.10%        | -0.06%       | 17.52%        | 0.0364               | 1.0032        | 0.3540         | 0.9536        | 1.4018        | <b>6.6852</b> |
| 24             | 0.33%        | 0.31%        | 17.85%        | 0.1098               | 1.0282        | 1.0431         | 0.9592        | 1.3895        | <b>6.7841</b> |
| 25             | -0.25%       | -0.16%       | 17.60%        | 0.0230               | 1.0474        | 0.2145         | 0.9521        | 1.3834        | <b>6.7637</b> |
| 26             | -0.06%       | 0.13%        | 17.54%        | -0.0050              | 1.0400        | -0.0468        | 0.9413        | 1.3867        | <b>6.6707</b> |
| 27             | -0.03%       | 0.03%        | 17.51%        | 0.0147               | 1.1454        | 0.1256         | 0.9336        | 1.3986        | <b>6.5594</b> |
| 28             | 0.74%        | 0.24%        | 18.26%        | 0.1774               | 1.0761        | 1.6107         | 0.9491        | 1.3954        | <b>6.6842</b> |
| 29             | 0.16%        | -0.25%       | 18.42%        | 0.1087               | 1.2580        | 0.8438         | 0.9548        | 1.4179        | <b>6.6174</b> |
| 30             | 0.42%        | 0.14%        | 18.84%        | 0.1322               | 1.0562        | 1.2224         | 0.9637        | 1.4241        | <b>6.6503</b> |
| <b>-1 to 1</b> |              |              | <b>7.57%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06354</b> | 1.4671        | 2.1864        | <b>6.5943</b> |



Table-A 7.6 Market Returns to Indian Targets FF-firms (OLS, 93)

| Days           | AAR          | Median       | CAAR         | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.39%       | -0.15%       | -0.39%       | -0.0918              | 0.9127         | -1.0301        | -0.0918       | 0.9127        | -1.0301       |
| -19            | 0.64%        | 0.08%        | 0.25%        | 0.1716               | 0.9834         | <b>1.7875</b>  | 0.0565        | 0.9300        | 0.6217        |
| -18            | -0.26%       | -0.08%       | -0.01%       | -0.0372              | 0.9087         | -0.4191        | 0.0246        | 0.9193        | 0.2743        |
| -17            | -0.63%       | -0.72%       | -0.64%       | -0.1024              | 0.9876         | -1.0623        | -0.0299       | 0.9030        | -0.3390       |
| -16            | -0.21%       | -0.26%       | -0.85%       | 0.0514               | 1.1062         | 0.4760         | -0.0037       | 0.9484        | -0.0404       |
| -15            | 0.61%        | 0.08%        | -0.24%       | 0.1098               | 0.8751         | 1.2853         | 0.0414        | 0.9311        | 0.4556        |
| -14            | -0.24%       | -0.38%       | -0.48%       | -0.0464              | 0.9523         | -0.4993        | 0.0208        | 0.8918        | 0.2388        |
| -13            | -0.34%       | -0.25%       | -0.81%       | -0.0546              | 0.8464         | -0.6609        | 0.0001        | 0.8852        | 0.0017        |
| -12            | 0.31%        | 0.09%        | -0.50%       | 0.0847               | 0.9919         | 0.8749         | 0.0284        | 1.0047        | 0.2893        |
| -11            | 0.83%        | 0.63%        | 0.33%        | 0.2394               | 1.0705         | <b>2.2905</b>  | 0.1026        | 1.0308        | 1.0197        |
| -10            | 0.02%        | -0.09%       | 0.34%        | -0.0478              | 0.9745         | -0.5028        | 0.0834        | 1.0812        | 0.7903        |
| -9             | 0.91%        | 0.23%        | 1.26%        | 0.2490               | 1.2725         | <b>2.0041</b>  | 0.1518        | 1.0409        | 1.4932        |
| -8             | -0.49%       | -0.24%       | 0.77%        | 0.0381               | 1.0579         | 0.3686         | 0.1564        | 1.1045        | 1.4499        |
| -7             | 1.03%        | 0.07%        | 1.80%        | 0.2011               | 1.1026         | <b>1.8680</b>  | 0.2044        | 1.1125        | <b>1.8820</b> |
| -6             | -0.60%       | -0.32%       | 1.20%        | -0.0663              | 1.1870         | -0.5723        | 0.1804        | 1.1442        | 1.6144        |
| -5             | -0.26%       | -0.35%       | 0.94%        | -0.0327              | 1.2703         | -0.2639        | 0.1665        | 1.1371        | 1.4992        |
| -4             | -0.22%       | -0.31%       | 0.72%        | -0.0696              | 1.0343         | -0.6890        | 0.1446        | 1.1375        | 1.3020        |
| -3             | 0.07%        | -0.01%       | 0.79%        | 0.0869               | 1.1982         | 0.7428         | 0.1610        | 1.1254        | 1.4654        |
| -2             | 0.53%        | -0.15%       | 1.32%        | 0.1905               | 1.1159         | <b>1.7488</b>  | 0.2004        | 1.1329        | <b>1.8120</b> |
| -1             | 1.71%        | 0.41%        | 3.03%        | 0.5223               | 1.5381         | <b>3.4778</b>  | 0.3122        | 1.1397        | <b>2.8051</b> |
| <b>0</b>       | <b>3.11%</b> | <b>2.08%</b> | <b>6.15%</b> | <b>0.9660</b>        | <b>2.1096</b>  | <b>4.6894</b>  | <b>0.5154</b> | <b>1.1785</b> | <b>4.4793</b> |
| 1              | 2.27%        | 0.85%        | 8.42%        | 0.4427               | 1.5021         | <b>3.0180</b>  | 0.5979        | 1.2134        | <b>5.0470</b> |
| 2              | 0.66%        | 0.11%        | 9.08%        | 0.1481               | 1.1778         | 1.2878         | 0.6157        | 1.2701        | <b>4.9647</b> |
| 3              | 0.30%        | -0.32%       | 9.38%        | -0.0351              | 1.2606         | -0.2855        | 0.5955        | 1.2811        | <b>4.7609</b> |
| 4              | 0.17%        | -0.41%       | 9.55%        | 0.0059               | 1.2613         | 0.0478         | 0.5847        | 1.2990        | <b>4.6098</b> |
| 5              | 0.12%        | -0.04%       | 9.66%        | 0.0359               | 0.9536         | 0.3859         | 0.5804        | 1.2740        | <b>4.6657</b> |
| 6              | -0.49%       | -0.41%       | 9.17%        | -0.1165              | 1.0387         | -1.1490        | 0.5471        | 1.2370        | <b>4.5297</b> |
| 7              | -0.22%       | -0.15%       | 8.95%        | -0.1273              | 0.8920         | -1.4613        | 0.5132        | 1.2099        | <b>4.3439</b> |
| 8              | -0.69%       | -0.42%       | 8.26%        | -0.2009              | 0.8346         | <b>-2.4650</b> | 0.4670        | 1.2048        | <b>3.9694</b> |
| 9              | 0.29%        | 0.03%        | 8.55%        | 0.0976               | 0.8624         | 1.1587         | 0.4769        | 1.2195        | <b>4.0053</b> |
| 10             | -0.13%       | -0.13%       | 8.42%        | 0.0223               | 0.8130         | 0.2808         | 0.4732        | 1.2175        | <b>3.9802</b> |
| 11             | 0.06%        | -0.21%       | 8.48%        | -0.0387              | 0.9416         | -0.4211        | 0.4589        | 1.1982        | <b>3.9222</b> |
| 12             | 0.30%        | -0.06%       | 8.78%        | 0.0227               | 0.8502         | 0.2734         | 0.4558        | 1.1938        | <b>3.9103</b> |
| 13             | -0.16%       | -0.21%       | 8.62%        | -0.0206              | 1.0381         | -0.2035        | 0.4455        | 1.2018        | <b>3.7969</b> |
| 14             | -0.28%       | -0.54%       | 8.33%        | -0.0851              | 0.8362         | -1.0423        | 0.4247        | 1.1870        | <b>3.6647</b> |
| 15             | -0.61%       | -0.47%       | 7.72%        | -0.1025              | 0.8248         | -1.2730        | 0.4017        | 1.2050        | <b>3.4143</b> |
| 16             | -1.04%       | -0.88%       | 6.68%        | -0.3274              | 1.0016         | <b>-3.3476</b> | 0.3424        | 1.2170        | <b>2.8815</b> |
| 17             | -0.25%       | -0.37%       | 6.43%        | -0.1642              | 1.0665         | -1.5771        | 0.3112        | 1.2423        | <b>2.5660</b> |
| 18             | 0.48%        | 0.03%        | 6.91%        | 0.1009               | 1.3426         | 0.7694         | 0.3234        | 1.2262        | <b>2.7010</b> |
| 19             | 0.58%        | 0.51%        | 7.49%        | 0.1355               | 0.9814         | 1.4136         | 0.3407        | 1.1993        | <b>2.9097</b> |
| 20             | 0.00%        | -0.09%       | 7.49%        | -0.0233              | 0.8996         | -0.2651        | 0.3329        | 1.1784        | <b>2.8933</b> |
| 21             | -0.70%       | -0.78%       | 6.78%        | -0.2284              | 1.0135         | <b>-2.3084</b> | 0.2937        | 1.1743        | <b>2.5613</b> |
| 22             | -0.25%       | 0.01%        | 6.53%        | -0.0284              | 1.0127         | -0.2873        | 0.2859        | 1.1813        | <b>2.4788</b> |
| 23             | -0.27%       | -0.21%       | 6.27%        | -0.0726              | 0.9709         | -0.7656        | 0.2717        | 1.2223        | <b>2.2765</b> |
| 24             | 0.26%        | 0.03%        | 6.53%        | 0.1190               | 0.8704         | 1.4000         | 0.2864        | 1.1930        | <b>2.4587</b> |
| 25             | -0.41%       | -0.31%       | 6.12%        | -0.0172              | 0.9194         | -0.1912        | 0.2807        | 1.1747        | <b>2.4476</b> |
| 26             | -0.38%       | -0.13%       | 5.74%        | -0.0966              | 0.8885         | -1.1137        | 0.2636        | 1.1680        | <b>2.3116</b> |
| 27             | -0.12%       | 0.09%        | 5.62%        | -0.0019              | 1.0903         | -0.0180        | 0.2606        | 1.1470        | <b>2.3269</b> |
| 28             | 0.47%        | 0.21%        | 6.10%        | 0.0832               | 0.9358         | 0.9107         | 0.2698        | 1.1440        | <b>2.4155</b> |
| 29             | -0.12%       | -0.43%       | 5.98%        | 0.0225               | 1.1312         | 0.2039         | 0.2703        | 1.1392        | <b>2.4299</b> |
| 30             | -0.02%       | -0.15%       | 5.96%        | 0.0298               | 0.9678         | 0.3149         | 0.2718        | 1.1160        | <b>2.4943</b> |
| <b>-1 to 1</b> |              |              | <b>7.10%</b> | <b>StdDev(AAR-0)</b> | <b>0.06461</b> |                | 1.1148        | 1.7948        | <b>6.3613</b> |

**Table-A 7.7 Market Returns to Indian Targets FF-firms (MM, 90)**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.18%       | 0.05%        | -0.18%        | -0.0203              | 1.0323        | -0.1964        | -0.0203       | 1.0323        | -0.1964       |
| -19            | 0.47%        | 0.20%        | 0.29%         | 0.1884               | 1.0355        | <b>1.8127</b>  | 0.1188        | 1.0564        | 1.1208        |
| -18            | -0.12%       | 0.01%        | 0.18%         | -0.0151              | 1.1029        | -0.1360        | 0.0883        | 1.0629        | 0.8280        |
| -17            | -0.38%       | -0.22%       | -0.20%        | -0.0528              | 1.1966        | -0.4395        | 0.0501        | 1.0788        | 0.4628        |
| -16            | 0.21%        | -0.08%       | 0.01%         | 0.1495               | 1.3001        | 1.1460         | 0.1117        | 1.1612        | 0.9584        |
| -15            | 0.63%        | 0.13%        | 0.63%         | 0.1275               | 0.9766        | 1.3005         | 0.1540        | 1.0852        | 1.4139        |
| -14            | 0.29%        | -0.09%       | 0.93%         | 0.1020               | 1.1267        | 0.9022         | 0.1811        | 1.0585        | <b>1.7050</b> |
| -13            | -0.11%       | -0.11%       | 0.81%         | -0.0056              | 0.9395        | -0.0597        | 0.1674        | 1.0394        | 1.6052        |
| -12            | 0.52%        | 0.19%        | 1.33%         | 0.1642               | 1.1596        | 1.4109         | 0.2126        | 1.1660        | <b>1.8168</b> |
| -11            | 0.99%        | 0.74%        | 2.32%         | 0.3060               | 1.2580        | <b>2.4240</b>  | 0.2985        | 1.1744        | <b>2.5323</b> |
| -10            | 0.11%        | 0.12%        | 2.43%         | 0.0073               | 1.1004        | 0.0657         | 0.2868        | 1.2328        | <b>2.3178</b> |
| -9             | 1.14%        | 0.40%        | 3.58%         | 0.3666               | 1.5049        | <b>2.4271</b>  | 0.3804        | 1.2052        | <b>3.1447</b> |
| -8             | -0.34%       | -0.08%       | 3.24%         | 0.0751               | 1.2440        | 0.6016         | 0.3863        | 1.2842        | <b>2.9972</b> |
| -7             | 1.29%        | 0.30%        | 4.53%         | 0.3171               | 1.3601        | <b>2.3231</b>  | 0.4570        | 1.2842        | <b>3.5457</b> |
| -6             | -0.24%       | -0.24%       | 4.29%         | -0.0355              | 1.3004        | -0.2719        | 0.4323        | 1.3117        | <b>3.2841</b> |
| -5             | -0.03%       | 0.06%        | 4.26%         | 0.0094               | 1.4183        | 0.0658         | 0.4210        | 1.3033        | <b>3.2183</b> |
| -4             | -0.06%       | -0.27%       | 4.20%         | -0.0244              | 1.2118        | -0.2004        | 0.4025        | 1.2889        | <b>3.1113</b> |
| -3             | 0.33%        | 0.34%        | 4.53%         | 0.2064               | 1.4679        | 1.4008         | 0.4398        | 1.3123        | <b>3.3390</b> |
| -2             | 0.73%        | 0.03%        | 5.26%         | 0.2780               | 1.3032        | <b>2.1253</b>  | 0.4918        | 1.3254        | <b>3.6973</b> |
| -1             | 1.98%        | 0.57%        | 7.24%         | 0.7048               | 1.9540        | <b>3.5940</b>  | 0.6370        | 1.3693        | <b>4.6350</b> |
| <b>0</b>       | <b>3.39%</b> | <b>2.52%</b> | <b>10.63%</b> | <b>1.2232</b>        | <b>2.5699</b> | <b>4.7426</b>  | <b>0.8885</b> | <b>1.4205</b> | <b>6.2326</b> |
| 1              | 2.49%        | 1.27%        | 13.12%        | 0.6178               | 1.7705        | <b>3.4771</b>  | 0.9998        | 1.4321        | <b>6.9563</b> |
| 2              | 0.90%        | 0.34%        | 14.02%        | 0.2863               | 1.3670        | <b>2.0871</b>  | 1.0376        | 1.4893        | <b>6.9416</b> |
| 3              | 0.27%        | -0.11%       | 14.29%        | 0.0363               | 1.2042        | 0.3004         | 1.0231        | 1.4862        | <b>6.8593</b> |
| 4              | 0.33%        | -0.02%       | 14.62%        | 0.1088               | 1.3187        | 0.8219         | 1.0242        | 1.4604        | <b>6.9880</b> |
| 5              | 0.23%        | 0.21%        | 14.85%        | 0.0753               | 1.1167        | 0.6721         | 1.0191        | 1.4170        | <b>7.1661</b> |
| 6              | -0.26%       | -0.13%       | 14.60%        | -0.0879              | 1.2712        | -0.6887        | 0.9831        | 1.3700        | <b>7.1502</b> |
| 7              | 0.09%        | -0.02%       | 14.69%        | -0.0067              | 0.9894        | -0.0671        | 0.9642        | 1.3272        | <b>7.2387</b> |
| 8              | -0.35%       | -0.25%       | 14.34%        | -0.1162              | 0.8662        | -1.3364        | 0.9258        | 1.2980        | <b>7.1068</b> |
| 9              | 0.47%        | 0.19%        | 14.81%        | 0.1606               | 1.0699        | 1.4952         | 0.9396        | 1.3251        | <b>7.0648</b> |
| 10             | 0.19%        | 0.12%        | 15.00%        | 0.0943               | 0.9384        | 1.0017         | 0.9412        | 1.3162        | <b>7.1253</b> |
| 11             | 0.25%        | 0.26%        | 15.25%        | 0.0409               | 1.0904        | 0.3733         | 0.9336        | 1.2964        | <b>7.1759</b> |
| 12             | 0.44%        | 0.01%        | 15.69%        | 0.0853               | 1.0150        | 0.8373         | 0.9342        | 1.3021        | <b>7.1487</b> |
| 13             | 0.09%        | 0.04%        | 15.77%        | 0.0450               | 1.1297        | 0.3968         | 0.9281        | 1.3085        | <b>7.0674</b> |
| 14             | -0.03%       | -0.13%       | 15.75%        | -0.0460              | 0.9571        | -0.4790        | 0.9070        | 1.2933        | <b>6.9874</b> |
| 15             | -0.31%       | -0.22%       | 15.43%        | -0.0215              | 0.9535        | -0.2243        | 0.8907        | 1.2980        | <b>6.8374</b> |
| 16             | -0.52%       | -0.42%       | 14.91%        | -0.2155              | 1.0982        | <b>-1.9549</b> | 0.8432        | 1.3059        | <b>6.4331</b> |
| 17             | 0.11%        | 0.05%        | 15.02%        | -0.0189              | 1.0118        | -0.1861        | 0.8289        | 1.3198        | <b>6.2582</b> |
| 18             | 0.22%        | -0.02%       | 15.24%        | 0.0449               | 1.3992        | 0.3200         | 0.8254        | 1.3252        | <b>6.2062</b> |
| 19             | 0.87%        | 0.73%        | 16.11%        | 0.2419               | 1.0939        | <b>2.2036</b>  | 0.8533        | 1.2916        | <b>6.5829</b> |
| 20             | 0.21%        | -0.03%       | 16.33%        | 0.0813               | 1.1057        | 0.7330         | 0.8555        | 1.2770        | <b>6.6756</b> |
| 21             | -0.42%       | -0.37%       | 15.90%        | -0.1603              | 1.1094        | -1.4396        | 0.8206        | 1.2603        | <b>6.4875</b> |
| 22             | 0.14%        | 0.18%        | 16.04%        | 0.1156               | 0.9686        | 1.1887         | 0.8286        | 1.2277        | <b>6.7246</b> |
| 23             | 0.16%        | 0.02%        | 16.20%        | 0.0621               | 1.0066        | 0.6145         | 0.8285        | 1.2524        | <b>6.5909</b> |
| 24             | 0.41%        | 0.25%        | 16.61%        | 0.1482               | 0.9947        | 1.4842         | 0.8413        | 1.2223        | <b>6.8579</b> |
| 25             | -0.20%       | -0.05%       | 16.41%        | 0.0291               | 1.0356        | 0.2802         | 0.8364        | 1.2172        | <b>6.8465</b> |
| 26             | -0.20%       | 0.03%        | 16.21%        | -0.0436              | 1.0482        | -0.4141        | 0.8211        | 1.2227        | <b>6.6912</b> |
| 27             | 0.07%        | 0.34%        | 16.28%        | 0.0383               | 1.1301        | 0.3377         | 0.8180        | 1.2439        | <b>6.5527</b> |
| 28             | 0.74%        | 0.31%        | 17.02%        | 0.1819               | 1.1019        | 1.6452         | 0.8356        | 1.2440        | <b>6.6928</b> |
| 29             | 0.02%        | -0.35%       | 17.04%        | 0.0634               | 1.3108        | 0.4823         | 0.8362        | 1.2620        | <b>6.6021</b> |
| 30             | 0.32%        | 0.09%        | 17.36%        | 0.1142               | 1.0904        | 1.0432         | 0.8440        | 1.2575        | <b>6.6873</b> |
| <b>-1 to 1</b> |              |              | <b>7.86%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.06483</b> | 1.4699        | 2.1492        | <b>6.8145</b> |

Table-A 7.8 SW-1 Returns to Indian Targets All-firms (OLS, 104)

| Days           | AAR          | Median       | CAAR         | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.27%       | -0.13%       | -0.27%       | -0.0867              | 0.8992         | -1.0458        | -0.0867       | 0.8992        | -1.0458       |
| -19            | 0.67%        | 0.19%        | 0.40%        | 0.1950               | 0.9939         | <b>2.1273</b>  | 0.0766        | 0.9261        | 0.8964        |
| -18            | -0.38%       | -0.07%       | 0.02%        | -0.0395              | 0.9267         | -0.4619        | 0.0397        | 0.9137        | 0.4714        |
| -17            | -0.63%       | -0.42%       | -0.60%       | -0.0910              | 1.0195         | -0.9671        | -0.0111       | 0.9108        | -0.1318       |
| -16            | -0.24%       | -0.33%       | -0.84%       | 0.0383               | 1.0612         | 0.3917         | 0.0072        | 0.9282        | 0.0847        |
| -15            | 0.49%        | 0.00%        | -0.36%       | 0.0843               | 0.9129         | 1.0016         | 0.0411        | 0.9180        | 0.4847        |
| -14            | 0.12%        | -0.01%       | -0.23%       | 0.0472               | 0.9739         | 0.5251         | 0.0558        | 0.8939        | 0.6771        |
| -13            | -0.10%       | -0.29%       | -0.34%       | 0.0135               | 0.9876         | 0.1481         | 0.0570        | 0.9253        | 0.6678        |
| -12            | 0.16%        | -0.05%       | -0.18%       | 0.0531               | 0.9714         | 0.5929         | 0.0714        | 1.0328        | 0.7499        |
| -11            | 0.83%        | 0.65%        | 0.65%        | 0.2224               | 1.0486         | <b>2.2986</b>  | 0.1381        | 1.0526        | 1.4222        |
| -10            | 0.15%        | -0.07%       | 0.80%        | -0.0322              | 1.0283         | -0.3397        | 0.1220        | 1.0811        | 1.2228        |
| -9             | 0.89%        | 0.34%        | 1.69%        | 0.2607               | 1.2405         | <b>2.2786</b>  | 0.1920        | 1.0382        | <b>2.0051</b> |
| -8             | -0.39%       | -0.15%       | 1.30%        | 0.0382               | 1.0332         | 0.4009         | 0.1951        | 1.0905        | <b>1.9393</b> |
| -7             | 0.76%        | -0.03%       | 2.05%        | 0.1405               | 1.0687         | 1.4248         | 0.2255        | 1.0913        | <b>2.2404</b> |
| -6             | -0.67%       | -0.37%       | 1.39%        | -0.0795              | 1.1369         | -0.7585        | 0.1973        | 1.1162        | <b>1.9166</b> |
| -5             | -0.43%       | -0.34%       | 0.95%        | -0.0358              | 1.2726         | -0.3053        | 0.1821        | 1.1108        | <b>1.7773</b> |
| -4             | 0.13%        | -0.30%       | 1.09%        | -0.0128              | 1.0376         | -0.1338        | 0.1736        | 1.1066        | <b>1.7003</b> |
| -3             | 0.11%        | -0.04%       | 1.19%        | 0.0868               | 1.1432         | 0.8230         | 0.1891        | 1.0930        | <b>1.8759</b> |
| -2             | 0.51%        | 0.06%        | 1.70%        | 0.1755               | 1.0876         | <b>1.7489</b>  | 0.2244        | 1.1068        | <b>2.1974</b> |
| -1             | 1.74%        | 0.41%        | 3.44%        | 0.5503               | 1.5051         | <b>3.9634</b>  | 0.3417        | 1.1070        | <b>3.3465</b> |
| <b>0</b>       | <b>3.21%</b> | <b>1.88%</b> | <b>6.64%</b> | <b>1.0449</b>        | <b>2.3181</b>  | <b>4.8864</b>  | <b>0.5615</b> | <b>1.1920</b> | <b>5.1067</b> |
| 1              | 2.24%        | 0.94%        | 8.89%        | 0.4352               | 1.4726         | <b>3.2040</b>  | 0.6414        | 1.2272        | <b>5.6656</b> |
| 2              | 0.73%        | 0.15%        | 9.62%        | 0.1809               | 1.1856         | 1.6541         | 0.6650        | 1.2937        | <b>5.5724</b> |
| 3              | 0.41%        | -0.20%       | 10.03%       | 0.0017               | 1.2375         | 0.0149         | 0.6514        | 1.3110        | <b>5.3861</b> |
| 4              | 0.25%        | -0.20%       | 10.28%       | 0.0273               | 1.2174         | 0.2428         | 0.6437        | 1.3301        | <b>5.2460</b> |
| 5              | 0.10%        | -0.04%       | 10.38%       | 0.0582               | 0.9900         | 0.6372         | 0.6426        | 1.3080        | <b>5.3254</b> |
| 6              | -0.20%       | -0.34%       | 10.18%       | -0.0328              | 1.1414         | -0.3115        | 0.6242        | 1.2740        | <b>5.3117</b> |
| 7              | -0.20%       | -0.35%       | 9.98%        | -0.1502              | 0.9258         | <b>-1.7591</b> | 0.5846        | 1.2466        | <b>5.0839</b> |
| 8              | -0.72%       | -0.42%       | 9.25%        | -0.2073              | 0.8410         | <b>-2.6725</b> | 0.5359        | 1.2558        | <b>4.6265</b> |
| 9              | 0.30%        | 0.08%        | 9.56%        | 0.0945               | 0.8801         | 1.1646         | 0.5442        | 1.2684        | <b>4.6508</b> |
| 10             | -0.13%       | -0.25%       | 9.43%        | 0.0099               | 0.8162         | 0.1313         | 0.5371        | 1.2684        | <b>4.5904</b> |
| 11             | 0.13%        | -0.19%       | 9.56%        | -0.0145              | 0.9450         | -0.1664        | 0.5261        | 1.2517        | <b>4.5564</b> |
| 12             | 0.31%        | -0.05%       | 9.87%        | 0.0250               | 0.8531         | 0.3172         | 0.5224        | 1.2508        | <b>4.5277</b> |
| 13             | -0.05%       | -0.16%       | 9.81%        | 0.0030               | 1.0174         | 0.0319         | 0.5152        | 1.2584        | <b>4.4379</b> |
| 14             | -0.27%       | -0.41%       | 9.54%        | -0.0767              | 0.8125         | -1.0231        | 0.4948        | 1.2457        | <b>4.3058</b> |
| 15             | -0.69%       | -0.52%       | 8.85%        | -0.1290              | 0.8244         | <b>-1.6969</b> | 0.4664        | 1.2678        | <b>3.9877</b> |
| 16             | -0.85%       | -0.58%       | 8.00%        | -0.2694              | 0.9613         | <b>-3.0378</b> | 0.4157        | 1.2835        | <b>3.5114</b> |
| 17             | -0.17%       | -0.15%       | 7.84%        | -0.1338              | 1.0498         | -1.3814        | 0.3885        | 1.3032        | <b>3.2320</b> |
| 18             | 0.43%        | 0.01%        | 8.27%        | 0.0914               | 1.2767         | 0.7763         | 0.3982        | 1.2859        | <b>3.3565</b> |
| 19             | 0.45%        | 0.46%        | 8.72%        | 0.1014               | 0.9184         | 1.1964         | 0.4092        | 1.2604        | <b>3.5194</b> |
| 20             | 0.03%        | 0.00%        | 8.75%        | -0.0207              | 0.8518         | -0.2635        | 0.4009        | 1.2378        | <b>3.5113</b> |
| 21             | -0.63%       | -0.42%       | 8.12%        | -0.1776              | 1.0603         | <b>-1.8162</b> | 0.3687        | 1.2375        | <b>3.2299</b> |
| 22             | -0.55%       | -0.10%       | 7.56%        | -0.0974              | 1.0273         | -1.0280        | 0.3495        | 1.2378        | <b>3.0612</b> |
| 23             | -0.10%       | -0.24%       | 7.47%        | -0.0407              | 0.9955         | -0.4428        | 0.3394        | 1.2676        | <b>2.9027</b> |
| 24             | 0.11%        | 0.04%        | 7.58%        | 0.0724               | 0.8589         | 0.9133         | 0.3464        | 1.2391        | <b>3.0306</b> |
| 25             | -0.22%       | -0.17%       | 7.36%        | 0.0214               | 0.9608         | 0.2418         | 0.3458        | 1.2165        | <b>3.0814</b> |
| 26             | -0.40%       | -0.19%       | 6.95%        | -0.1010              | 0.8608         | -1.2717        | 0.3274        | 1.2042        | <b>2.9470</b> |
| 27             | -0.15%       | 0.03%        | 6.80%        | -0.0265              | 1.0302         | -0.2784        | 0.3201        | 1.1795        | <b>2.9421</b> |
| 28             | 0.38%        | 0.15%        | 7.18%        | 0.0626               | 0.8822         | 0.7689         | 0.3258        | 1.1770        | <b>3.0004</b> |
| 29             | -0.16%       | -0.49%       | 7.03%        | 0.0056               | 1.0985         | 0.0553         | 0.3233        | 1.1692        | <b>2.9974</b> |
| 30             | 0.02%        | 0.08%        | 7.04%        | 0.0349               | 0.9361         | 0.4039         | 0.3250        | 1.1505        | <b>3.0622</b> |
| <b>-1 to 1</b> |              |              | <b>7.19%</b> | <b>StdDev(AAR-0)</b> | <b>0.06636</b> |                | 1.1723        | 1.9246        | <b>6.6029</b> |



**Table-A 7.9 SW-2 Returns; Indian Targets; All-firms (OLS, 104); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.30%       | -0.24%       | -0.30%       | -0.0880              | 0.8895         | -1.0700        | -0.0880       | 0.8895        | -1.0700       |
| -19            | 0.67%        | 0.16%        | 0.37%        | 0.1941               | 0.9973         | <b>2.1055</b>  | 0.0750        | 0.9220        | 0.8805        |
| -18            | -0.41%       | -0.05%       | -0.04%       | -0.0428              | 0.9173         | -0.5045        | 0.0366        | 0.9072        | 0.4362        |
| -17            | -0.66%       | -0.45%       | -0.70%       | -0.0919              | 1.0257         | -0.9692        | -0.0143       | 0.9104        | -0.1696       |
| -16            | -0.20%       | -0.17%       | -0.90%       | 0.0466               | 1.0724         | 0.4701         | 0.0081        | 0.9322        | 0.0937        |
| -15            | 0.45%        | 0.00%        | -0.45%       | 0.0785               | 0.9110         | 0.9317         | 0.0394        | 0.9162        | 0.4653        |
| -14            | 0.09%        | -0.02%       | -0.36%       | 0.0380               | 0.9602         | 0.4278         | 0.0508        | 0.8856        | 0.6210        |
| -13            | -0.15%       | -0.32%       | -0.51%       | 0.0027               | 0.9837         | 0.0301         | 0.0485        | 0.9044        | 0.5804        |
| -12            | 0.18%        | -0.05%       | -0.33%       | 0.0558               | 0.9667         | 0.6244         | 0.0644        | 1.0107        | 0.6887        |
| -11            | 0.78%        | 0.46%        | 0.45%        | 0.2206               | 1.0522         | <b>2.2680</b>  | 0.1308        | 1.0257        | 1.3795        |
| -10            | 0.12%        | -0.15%       | 0.57%        | -0.0397              | 1.0208         | -0.4207        | 0.1128        | 1.0527        | 1.1586        |
| -9             | 0.92%        | 0.41%        | 1.49%        | 0.2600               | 1.2287         | <b>2.2893</b>  | 0.1830        | 1.0165        | <b>1.9477</b> |
| -8             | -0.37%       | -0.12%       | 1.11%        | 0.0511               | 1.0314         | 0.5362         | 0.1900        | 1.0728        | <b>1.9159</b> |
| -7             | 0.70%        | -0.02%       | 1.81%        | 0.1303               | 1.0607         | 1.3291         | 0.2179        | 1.0760        | <b>2.1910</b> |
| -6             | -0.66%       | -0.39%       | 1.16%        | -0.0799              | 1.1787         | -0.7336        | 0.1899        | 1.0958        | <b>1.8747</b> |
| -5             | -0.46%       | -0.36%       | 0.69%        | -0.0448              | 1.2342         | -0.3924        | 0.1727        | 1.0908        | <b>1.7124</b> |
| -4             | 0.07%        | -0.30%       | 0.77%        | -0.0184              | 1.0483         | -0.1893        | 0.1631        | 1.0836        | 1.6280        |
| -3             | 0.13%        | 0.00%        | 0.90%        | 0.0928               | 1.1416         | 0.8795         | 0.1804        | 1.0688        | <b>1.8255</b> |
| -2             | 0.50%        | -0.05%       | 1.39%        | 0.1760               | 1.0805         | <b>1.7624</b>  | 0.2159        | 1.0817        | <b>2.1595</b> |
| -1             | 1.80%        | 0.53%        | 3.19%        | 0.5444               | 1.5021         | <b>3.9202</b>  | 0.3322        | 1.0847        | <b>3.3127</b> |
| <b>0</b>       | <b>3.21%</b> | <b>1.40%</b> | <b>6.40%</b> | <b>1.0371</b>        | <b>2.3293</b>  | <b>4.8161</b>  | <b>0.5505</b> | <b>1.1709</b> | <b>5.0858</b> |
| 1              | 2.26%        | 0.87%        | 8.66%        | 0.4335               | 1.4722         | <b>3.1853</b>  | 0.6303        | 1.2009        | <b>5.6771</b> |
| 2              | 0.72%        | 0.11%        | 9.38%        | 0.1780               | 1.1966         | 1.6092         | 0.6535        | 1.2719        | <b>5.5582</b> |
| 3              | 0.36%        | -0.19%       | 9.75%        | -0.0046              | 1.2661         | -0.0390        | 0.6388        | 1.2849        | <b>5.3780</b> |
| 4              | 0.24%        | -0.19%       | 9.99%        | 0.0202               | 1.2206         | 0.1791         | 0.6300        | 1.3020        | <b>5.2338</b> |
| 5              | 0.08%        | -0.02%       | 10.07%       | 0.0584               | 0.9957         | 0.6347         | 0.6292        | 1.2803        | <b>5.3159</b> |
| 6              | -0.23%       | -0.31%       | 9.84%        | -0.0388              | 1.1245         | -0.3735        | 0.6100        | 1.2460        | <b>5.2955</b> |
| 7              | -0.22%       | -0.38%       | 9.61%        | -0.1548              | 0.9216         | <b>-1.8164</b> | 0.5697        | 1.2221        | <b>5.0427</b> |
| 8              | -0.72%       | -0.37%       | 8.90%        | -0.2014              | 0.8453         | <b>-2.5775</b> | 0.5224        | 1.2344        | <b>4.5780</b> |
| 9              | 0.33%        | -0.01%       | 9.22%        | 0.0993               | 0.8868         | 1.2109         | 0.5318        | 1.2473        | <b>4.6116</b> |
| 10             | -0.16%       | -0.31%       | 9.06%        | 0.0024               | 0.8347         | 0.0311         | 0.5236        | 1.2501        | <b>4.5303</b> |
| 11             | 0.10%        | -0.13%       | 9.16%        | -0.0159              | 0.9394         | -0.1828        | 0.5125        | 1.2370        | <b>4.4814</b> |
| 12             | 0.33%        | -0.03%       | 9.49%        | 0.0233               | 0.8586         | 0.2930         | 0.5087        | 1.2335        | <b>4.4611</b> |
| 13             | -0.05%       | -0.09%       | 9.44%        | 0.0054               | 1.0231         | 0.0572         | 0.5021        | 1.2401        | <b>4.3798</b> |
| 14             | -0.23%       | -0.25%       | 9.21%        | -0.0641              | 0.8169         | -0.8492        | 0.4840        | 1.2227        | <b>4.2824</b> |
| 15             | -0.70%       | -0.48%       | 8.51%        | -0.1366              | 0.8194         | <b>-1.8031</b> | 0.4545        | 1.2448        | <b>3.9497</b> |
| 16             | -0.81%       | -0.57%       | 7.70%        | -0.2547              | 0.9552         | <b>-2.8844</b> | 0.4065        | 1.2627        | <b>3.4820</b> |
| 17             | -0.16%       | -0.07%       | 7.54%        | -0.1189              | 1.0245         | -1.2555        | 0.3818        | 1.2830        | <b>3.2187</b> |
| 18             | 0.42%        | 0.08%        | 7.96%        | 0.0902               | 1.2656         | 0.7711         | 0.3913        | 1.2646        | <b>3.3470</b> |
| 19             | 0.37%        | 0.44%        | 8.33%        | 0.0852               | 0.9192         | 1.0029         | 0.3999        | 1.2391        | <b>3.4907</b> |
| 20             | 0.03%        | 0.07%        | 8.36%        | -0.0233              | 0.8574         | -0.2944        | 0.3913        | 1.2138        | <b>3.4872</b> |
| 21             | -0.60%       | -0.44%       | 7.76%        | -0.1696              | 1.0611         | <b>-1.7286</b> | 0.3605        | 1.2137        | <b>3.2126</b> |
| 22             | -0.53%       | -0.16%       | 7.23%        | -0.0972              | 1.0318         | -1.0195        | 0.3414        | 1.2106        | <b>3.0506</b> |
| 23             | -0.05%       | -0.23%       | 7.18%        | -0.0379              | 1.0020         | -0.4093        | 0.3318        | 1.2410        | <b>2.8921</b> |
| 24             | 0.10%        | 0.05%        | 7.28%        | 0.0672               | 0.8542         | 0.8509         | 0.3381        | 1.2157        | <b>3.0083</b> |
| 25             | -0.25%       | -0.09%       | 7.03%        | 0.0137               | 0.9288         | 0.1596         | 0.3364        | 1.1898        | <b>3.0585</b> |
| 26             | -0.44%       | -0.19%       | 6.59%        | -0.1116              | 0.8593         | -1.4049        | 0.3165        | 1.1784        | <b>2.9058</b> |
| 27             | -0.11%       | 0.09%        | 6.47%        | -0.0186              | 1.0453         | -0.1923        | 0.3105        | 1.1528        | <b>2.9141</b> |
| 28             | 0.38%        | 0.12%        | 6.85%        | 0.0603               | 0.8838         | 0.7384         | 0.3160        | 1.1520        | <b>2.9669</b> |
| 29             | -0.24%       | -0.33%       | 6.62%        | -0.0114              | 1.1076         | -0.1111        | 0.3112        | 1.1458        | <b>2.9380</b> |
| 30             | 0.02%        | 0.12%        | 6.64%        | 0.0371               | 0.9411         | 0.4270         | 0.3133        | 1.1294        | <b>3.0011</b> |
| <b>-1 to 1</b> |              |              | <b>7.27%</b> | <b>StdDev(AAR-0)</b> | <b>0.06709</b> |                | 1.1634        | 1.9292        | <b>6.5228</b> |

**Table-A 7.10 SW-3 Returns to Indian Targets All-firms (OLS, 104)**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.34%       | -0.11%       | -0.34%       | -0.1012              | 0.8961         | -1.2163        | -0.1012       | 0.8961        | -1.2163       |
| -19            | 0.67%        | 0.05%        | 0.33%        | 0.1977               | 0.9889         | <b>2.1540</b>  | 0.0683        | 0.9205        | 0.7990        |
| -18            | -0.38%       | -0.12%       | -0.05%       | -0.0424              | 0.9129         | -0.5002        | 0.0313        | 0.8950        | 0.3764        |
| -17            | -0.61%       | -0.53%       | -0.66%       | -0.0877              | 1.0272         | -0.9198        | -0.0168       | 0.9056        | -0.1995       |
| -16            | -0.21%       | -0.19%       | -0.87%       | 0.0361               | 1.0790         | 0.3602         | 0.0011        | 0.9313        | 0.0131        |
| -15            | 0.46%        | -0.04%       | -0.41%       | 0.0780               | 0.8931         | 0.9406         | 0.0329        | 0.9178        | 0.3858        |
| -14            | 0.13%        | 0.08%        | -0.28%       | 0.0469               | 0.9561         | 0.5284         | 0.0481        | 0.8840        | 0.5869        |
| -13            | -0.17%       | -0.29%       | -0.45%       | -0.0102              | 0.9822         | -0.1116        | 0.0414        | 0.8973        | 0.4977        |
| -12            | 0.17%        | 0.02%        | -0.28%       | 0.0452               | 0.9688         | 0.5033         | 0.0542        | 1.0087        | 0.5785        |
| -11            | 0.80%        | 0.52%        | 0.52%        | 0.2205               | 1.0590         | <b>2.2435</b>  | 0.1211        | 1.0281        | 1.2693        |
| -10            | 0.06%        | -0.06%       | 0.58%        | -0.0535              | 1.0207         | -0.5653        | 0.0993        | 1.0613        | 1.0084        |
| -9             | 0.93%        | 0.42%        | 1.51%        | 0.2654               | 1.2435         | <b>2.2998</b>  | 0.1717        | 1.0183        | <b>1.8170</b> |
| -8             | -0.39%       | -0.27%       | 1.12%        | 0.0393               | 1.0268         | 0.4128         | 0.1759        | 1.0780        | <b>1.7581</b> |
| -7             | 0.67%        | -0.08%       | 1.79%        | 0.1145               | 1.0752         | 1.1479         | 0.2001        | 1.0818        | <b>1.9930</b> |
| -6             | -0.65%       | -0.43%       | 1.15%        | -0.0771              | 1.1546         | -0.7199        | 0.1734        | 1.1093        | <b>1.6843</b> |
| -5             | -0.44%       | -0.25%       | 0.70%        | -0.0379              | 1.2583         | -0.3244        | 0.1584        | 1.0971        | 1.5559        |
| -4             | 0.14%        | -0.31%       | 0.85%        | -0.0098              | 1.0401         | -0.1016        | 0.1513        | 1.0879        | 1.4987        |
| -3             | 0.16%        | -0.03%       | 1.01%        | 0.0953               | 1.1362         | 0.9037         | 0.1695        | 1.0768        | <b>1.6961</b> |
| -2             | 0.52%        | -0.03%       | 1.53%        | 0.1744               | 1.0839         | <b>1.7337</b>  | 0.2050        | 1.0890        | <b>2.0285</b> |
| -1             | 1.77%        | 0.44%        | 3.30%        | 0.5474               | 1.4981         | <b>3.9373</b>  | 0.3222        | 1.0910        | <b>3.1823</b> |
| <b>0</b>       | <b>3.21%</b> | <b>1.45%</b> | <b>6.51%</b> | <b>1.0394</b>        | <b>2.3181</b>  | <b>4.8313</b>  | <b>0.5413</b> | <b>1.1714</b> | <b>4.9789</b> |
| 1              | 2.24%        | 0.87%        | 8.75%        | 0.4363               | 1.4778         | <b>3.1813</b>  | 0.6219        | 1.2039        | <b>5.5658</b> |
| 2              | 0.73%        | 0.19%        | 9.48%        | 0.1735               | 1.1925         | 1.5680         | 0.6444        | 1.2705        | <b>5.4647</b> |
| 3              | 0.42%        | -0.28%       | 9.89%        | 0.0024               | 1.2391         | 0.0206         | 0.6313        | 1.2870        | <b>5.2851</b> |
| 4              | 0.23%        | -0.10%       | 10.13%       | 0.0303               | 1.2018         | 0.2714         | 0.6246        | 1.3058        | <b>5.1537</b> |
| 5              | 0.11%        | -0.11%       | 10.24%       | 0.0677               | 1.0025         | 0.7282         | 0.6257        | 1.2804        | <b>5.2657</b> |
| 6              | -0.20%       | -0.25%       | 10.04%       | -0.0311              | 1.1227         | -0.2984        | 0.6081        | 1.2472        | <b>5.2531</b> |
| 7              | -0.22%       | -0.26%       | 9.83%        | -0.1505              | 0.9152         | <b>-1.7721</b> | 0.5687        | 1.2205        | <b>5.0201</b> |
| 8              | -0.67%       | -0.34%       | 9.15%        | -0.1945              | 0.8360         | <b>-2.5065</b> | 0.5227        | 1.2339        | <b>4.5641</b> |
| 9              | 0.31%        | 0.03%        | 9.46%        | 0.0941               | 0.8879         | 1.1421         | 0.5311        | 1.2437        | <b>4.6009</b> |
| 10             | -0.18%       | -0.24%       | 9.28%        | -0.0065              | 0.8389         | -0.0839        | 0.5212        | 1.2438        | <b>4.5156</b> |
| 11             | 0.13%        | -0.16%       | 9.41%        | -0.0175              | 0.9514         | -0.1976        | 0.5100        | 1.2319        | <b>4.4602</b> |
| 12             | 0.34%        | -0.08%       | 9.75%        | 0.0320               | 0.8670         | 0.3980         | 0.5077        | 1.2296        | <b>4.4492</b> |
| 13             | -0.05%       | -0.04%       | 9.70%        | 0.0064               | 1.0024         | 0.0684         | 0.5013        | 1.2378        | <b>4.3639</b> |
| 14             | -0.18%       | -0.34%       | 9.52%        | -0.0554              | 0.8286         | -0.7201        | 0.4847        | 1.2244        | <b>4.2656</b> |
| 15             | -0.68%       | -0.52%       | 8.85%        | -0.1299              | 0.8189         | <b>-1.7096</b> | 0.4563        | 1.2464        | <b>3.9447</b> |
| 16             | -0.80%       | -0.60%       | 8.04%        | -0.2467              | 0.9422         | <b>-2.8209</b> | 0.4095        | 1.2611        | <b>3.4991</b> |
| 17             | -0.08%       | -0.05%       | 7.96%        | -0.0950              | 0.9777         | -1.0466        | 0.3887        | 1.2778        | <b>3.2778</b> |
| 18             | 0.35%        | 0.02%        | 8.31%        | 0.0654               | 1.2364         | 0.5700         | 0.3942        | 1.2616        | <b>3.3663</b> |
| 19             | 0.37%        | 0.34%        | 8.69%        | 0.0779               | 0.9187         | 0.9142         | 0.4015        | 1.2353        | <b>3.5023</b> |
| 20             | 0.02%        | 0.08%        | 8.71%        | -0.0198              | 0.8497         | -0.2512        | 0.3935        | 1.2111        | <b>3.5010</b> |
| 21             | -0.57%       | -0.44%       | 8.14%        | -0.1598              | 1.0610         | -1.6230        | 0.3641        | 1.2074        | <b>3.2496</b> |
| 22             | -0.58%       | -0.17%       | 7.56%        | -0.1095              | 1.0123         | -1.1660        | 0.3432        | 1.2010        | <b>3.0789</b> |
| 23             | -0.01%       | -0.26%       | 7.54%        | -0.0258              | 1.0039         | -0.2772        | 0.3354        | 1.2294        | <b>2.9392</b> |
| 24             | 0.10%        | 0.07%        | 7.64%        | 0.0651               | 0.8641         | 0.8123         | 0.3413        | 1.2088        | <b>3.0424</b> |
| 25             | -0.27%       | -0.22%       | 7.37%        | 0.0121               | 0.9502         | 0.1368         | 0.3394        | 1.1819        | <b>3.0938</b> |
| 26             | -0.46%       | -0.26%       | 6.90%        | -0.1171              | 0.8612         | -1.4651        | 0.3187        | 1.1745        | <b>2.9235</b> |
| 27             | -0.15%       | 0.05%        | 6.75%        | -0.0243              | 1.0498         | -0.2490        | 0.3118        | 1.1509        | <b>2.9194</b> |
| 28             | 0.38%        | 0.13%        | 7.13%        | 0.0604               | 0.8763         | 0.7428         | 0.3172        | 1.1466        | <b>2.9812</b> |
| 29             | -0.20%       | -0.39%       | 6.93%        | -0.0096              | 1.1068         | -0.0938        | 0.3127        | 1.1415        | <b>2.9516</b> |
| 30             | -0.01%       | 0.04%        | 6.92%        | 0.0338               | 0.9571         | 0.3803         | 0.3143        | 1.1255        | <b>3.0094</b> |
| <b>-1 to 1</b> |              |              | <b>7.22%</b> | <b>StdDev(AAR-0)</b> | <b>0.06637</b> |                | 1.1681        | 1.9230        | <b>6.5449</b> |

**Table-A 7.11 Market Model; Indian Targets; German/Japanese (MM, 51); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.03%       | 0.23%        | -0.03%        | -0.0447              | 0.9483        | -0.3271        | -0.0447       | 0.9483        | -0.3271       |
| -19            | 0.89%        | 0.25%        | 0.86%         | 0.3073               | 1.1058        | <b>1.9277</b>  | 0.1857        | 1.0258        | 1.2556        |
| -18            | -0.33%       | -0.19%       | 0.53%         | -0.0322              | 1.2197        | -0.1829        | 0.1330        | 0.9933        | 0.9290        |
| -17            | 0.02%        | -0.05%       | 0.55%         | 0.0241               | 1.2988        | 0.1285         | 0.1272        | 1.1210        | 0.7873        |
| -16            | -0.10%       | -0.45%       | 0.45%         | 0.0576               | 1.2440        | 0.3214         | 0.1396        | 1.1806        | 0.8201        |
| -15            | 0.49%        | 0.15%        | 0.94%         | 0.1051               | 0.9833        | 0.7415         | 0.1703        | 1.0943        | 1.0797        |
| -14            | 0.71%        | -0.08%       | 1.65%         | 0.1363               | 1.0647        | 0.8882         | 0.2092        | 1.0731        | 1.3524        |
| -13            | -0.18%       | -0.29%       | 1.47%         | 0.0072               | 1.2506        | 0.0397         | 0.1983        | 1.1531        | 1.1925        |
| -12            | 0.19%        | 0.19%        | 1.66%         | 0.0194               | 1.0602        | 0.1267         | 0.1934        | 1.2223        | 1.0973        |
| -11            | 1.72%        | 0.89%        | 3.38%         | 0.4469               | 1.3240        | <b>2.3410</b>  | 0.3248        | 1.2119        | <b>1.8587</b> |
| -10            | 0.16%        | 0.24%        | 3.54%         | -0.0011              | 1.3029        | -0.0058        | 0.3093        | 1.2474        | <b>1.7199</b> |
| -9             | 0.65%        | 0.61%        | 4.19%         | 0.1861               | 1.0867        | 1.1881         | 0.3499        | 1.1518        | <b>2.1070</b> |
| -8             | -1.06%       | -0.47%       | 3.13%         | -0.1416              | 1.0317        | -0.9519        | 0.2969        | 1.1112        | <b>1.8532</b> |
| -7             | 1.47%        | 0.31%        | 4.60%         | 0.4252               | 1.4047        | <b>2.0996</b>  | 0.3997        | 1.0510        | <b>2.6379</b> |
| -6             | -0.47%       | -0.20%       | 4.13%         | -0.1073              | 1.0956        | -0.6791        | 0.3585        | 1.0816        | <b>2.2988</b> |
| -5             | 0.31%        | 0.08%        | 4.44%         | 0.1758               | 1.6475        | 0.7402         | 0.3910        | 1.1212        | <b>2.4192</b> |
| -4             | 0.46%        | -0.16%       | 4.90%         | 0.0903               | 1.1644        | 0.5377         | 0.4013        | 1.1427        | <b>2.4356</b> |
| -3             | 0.20%        | -0.15%       | 5.10%         | 0.1213               | 1.6816        | 0.5003         | 0.4186        | 1.1596        | <b>2.5036</b> |
| -2             | 0.64%        | 0.06%        | 5.74%         | 0.2742               | 1.1798        | 1.6119         | 0.4703        | 1.1341        | <b>2.8762</b> |
| -1             | 2.48%        | 0.66%        | 8.22%         | 0.7917               | 1.6766        | <b>3.2751</b>  | 0.6354        | 1.1980        | <b>3.6788</b> |
| <b>0</b>       | <b>4.88%</b> | <b>4.01%</b> | <b>13.10%</b> | <b>1.8095</b>        | <b>2.8042</b> | <b>4.4756</b>  | <b>1.0150</b> | <b>1.2572</b> | <b>5.5997</b> |
| 1              | 2.97%        | 2.17%        | 16.07%        | 0.7972               | 2.0580        | <b>2.6867</b>  | 1.1616        | 1.4233        | <b>5.6606</b> |
| 2              | 1.26%        | 0.16%        | 17.33%        | 0.4092               | 1.5890        | <b>1.7861</b>  | 1.2214        | 1.5432        | <b>5.4897</b> |
| 3              | 0.82%        | 0.26%        | 18.15%        | 0.2170               | 1.3504        | 1.1148         | 1.2399        | 1.5809        | <b>5.4401</b> |
| 4              | -0.42%       | -0.02%       | 17.74%        | -0.1063              | 0.8796        | -0.8380        | 1.1936        | 1.5698        | <b>5.2742</b> |
| 5              | 0.32%        | 0.13%        | 18.05%        | 0.0990               | 1.0677        | 0.6432         | 1.1899        | 1.5155        | <b>5.4458</b> |
| 6              | -0.53%       | 0.49%        | 17.53%        | 0.0027               | 1.2489        | 0.0149         | 1.1682        | 1.5275        | <b>5.3043</b> |
| 7              | 0.07%        | -0.25%       | 17.59%        | -0.0652              | 0.8966        | -0.5045        | 1.1348        | 1.4910        | <b>5.2790</b> |
| 8              | -0.02%       | -0.14%       | 17.58%        | -0.0122              | 0.8339        | -0.1018        | 1.1128        | 1.4698        | <b>5.2512</b> |
| 9              | 0.93%        | 0.18%        | 18.51%        | 0.1466               | 0.8528        | 1.1922         | 1.1208        | 1.4583        | <b>5.3311</b> |
| 10             | 0.16%        | 0.10%        | 18.67%        | 0.0610               | 0.9129        | 0.4635         | 1.1136        | 1.4250        | <b>5.4202</b> |
| 11             | -0.03%       | 0.29%        | 18.64%        | -0.0428              | 0.9040        | -0.3286        | 1.0885        | 1.4172        | <b>5.3273</b> |
| 12             | 0.65%        | 0.04%        | 19.28%        | 0.0842               | 0.8842        | 0.6603         | 1.0865        | 1.3960        | <b>5.3982</b> |
| 13             | 0.05%        | 0.02%        | 19.34%        | 0.0711               | 1.0594        | 0.4658         | 1.0826        | 1.3894        | <b>5.4043</b> |
| 14             | -0.15%       | -0.24%       | 19.19%        | -0.0700              | 0.9044        | -0.5366        | 1.0552        | 1.3775        | <b>5.3133</b> |
| 15             | -0.30%       | -0.17%       | 18.88%        | -0.0105              | 0.9699        | -0.0753        | 1.0387        | 1.3871        | <b>5.1937</b> |
| 16             | -0.34%       | -0.20%       | 18.54%        | -0.2009              | 1.1247        | -1.2388        | 0.9915        | 1.4101        | <b>4.8773</b> |
| 17             | 0.00%        | 0.05%        | 18.55%        | -0.1231              | 0.9603        | -0.8889        | 0.9584        | 1.4373        | <b>4.6251</b> |
| 18             | 0.60%        | 0.08%        | 19.14%        | 0.1147               | 1.7387        | 0.4576         | 0.9644        | 1.4672        | <b>4.5594</b> |
| 19             | 1.36%        | 0.69%        | 20.51%        | 0.3561               | 1.1351        | <b>2.1756</b>  | 1.0086        | 1.4278        | <b>4.8997</b> |
| 20             | 0.17%        | -0.11%       | 20.68%        | 0.1108               | 1.1206        | 0.6860         | 1.0135        | 1.3885        | <b>5.0630</b> |
| 21             | -0.30%       | -0.32%       | 20.38%        | -0.1053              | 1.2205        | -0.5984        | 0.9851        | 1.3931        | <b>4.9047</b> |
| 22             | -0.07%       | 0.20%        | 20.31%        | 0.1235               | 1.0329        | 0.8290         | 0.9924        | 1.3516        | <b>5.0930</b> |
| 23             | 0.74%        | 0.13%        | 21.04%        | 0.1782               | 0.9672        | 1.2777         | 1.0080        | 1.3671        | <b>5.1139</b> |
| 24             | 0.20%        | 0.24%        | 21.24%        | 0.0428               | 0.8015        | 0.3703         | 1.0031        | 1.3533        | <b>5.1412</b> |
| 25             | -0.20%       | 0.05%        | 21.04%        | 0.0442               | 1.1635        | 0.2634         | 0.9986        | 1.3767        | <b>5.0312</b> |
| 26             | -0.10%       | 0.18%        | 20.95%        | -0.0273              | 0.6885        | -0.2748        | 0.9840        | 1.3672        | <b>4.9918</b> |
| 27             | -0.01%       | 0.33%        | 20.93%        | 0.0687               | 0.9274        | 0.5137         | 0.9836        | 1.3691        | <b>4.9831</b> |
| 28             | 0.72%        | 0.40%        | 21.65%        | 0.1025               | 1.1943        | 0.5951         | 0.9881        | 1.3807        | <b>4.9641</b> |
| 29             | -0.42%       | -0.66%       | 21.23%        | -0.1509              | 1.1616        | -0.9012        | 0.9568        | 1.3913        | <b>4.7702</b> |
| 30             | 0.36%        | 0.18%        | 21.59%        | 0.1822               | 0.9431        | 1.3401         | 0.9729        | 1.3946        | <b>4.8390</b> |
| <b>-1 to 1</b> |              |              | <b>10.33%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06817</b> | 1.9620        | 2.4205        | <b>5.6223</b> |

**Table-A 7.12 Market Model; Indian Targets; Anglo-Saxon (MM, 44); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.06%        | 0.05%        | 0.06%        | 0.0508               | 1.1612        | 0.3037         | 0.0508        | 1.1612        | 0.3037        |
| -19            | 0.37%        | 0.35%        | 0.43%        | 0.1615               | 1.0630        | 1.0542         | 0.1501        | 1.1687        | 0.8914        |
| -18            | 0.14%        | 0.14%        | 0.57%        | -0.0105              | 1.0896        | -0.0668        | 0.1165        | 1.1829        | 0.6835        |
| -17            | -0.57%       | -0.59%       | 0.01%        | -0.1238              | 1.4101        | -0.6091        | 0.0390        | 1.1417        | 0.2372        |
| -16            | 0.69%        | -0.08%       | 0.70%        | 0.2500               | 1.3362        | 1.2982         | 0.1467        | 1.1876        | 0.8572        |
| -15            | 0.64%        | 0.09%        | 1.35%        | 0.1434               | 1.1315        | 0.8796         | 0.1925        | 1.1437        | 1.1678        |
| -14            | 0.38%        | 0.38%        | 1.72%        | 0.2410               | 1.1846        | 1.4117         | 0.2693        | 1.1329        | 1.6494        |
| -13            | 0.48%        | -0.11%       | 2.20%        | 0.1561               | 1.0675        | 1.0146         | 0.3071        | 1.1409        | <b>1.8677</b> |
| -12            | 0.69%        | 0.13%        | 2.90%        | 0.2290               | 1.3091        | 1.2139         | 0.3659        | 1.3108        | <b>1.9368</b> |
| -11            | 0.70%        | 0.64%        | 3.60%        | 0.2733               | 1.0879        | <b>1.7433</b>  | 0.4335        | 1.3149        | <b>2.2877</b> |
| -10            | 0.38%        | 0.01%        | 3.98%        | 0.0972               | 1.3117        | 0.5144         | 0.4427        | 1.3175        | <b>2.3313</b> |
| -9             | 1.20%        | 0.18%        | 5.18%        | 0.5276               | 1.9154        | <b>1.9114</b>  | 0.5761        | 1.3677        | <b>2.9230</b> |
| -8             | 1.05%        | 0.69%        | 6.23%        | 0.3724               | 1.4412        | <b>1.7928</b>  | 0.6568        | 1.4800        | <b>3.0794</b> |
| -7             | 0.60%        | 0.01%        | 6.83%        | 0.1126               | 1.2230        | 0.6391         | 0.6630        | 1.5322        | <b>3.0026</b> |
| -6             | -0.40%       | -0.57%       | 6.43%        | -0.0610              | 1.5067        | -0.2808        | 0.6248        | 1.5622        | <b>2.7751</b> |
| -5             | -1.12%       | -0.60%       | 5.31%        | -0.3489              | 1.2377        | <b>-1.9560</b> | 0.5177        | 1.5439        | <b>2.3269</b> |
| -4             | 0.32%        | -0.19%       | 5.63%        | 0.0883               | 1.4180        | 0.4319         | 0.5237        | 1.4635        | <b>2.4830</b> |
| -3             | 0.73%        | 0.52%        | 6.35%        | 0.3301               | 1.1578        | <b>1.9782</b>  | 0.5867        | 1.4955        | <b>2.7224</b> |
| -2             | 0.83%        | -0.23%       | 7.18%        | 0.2755               | 1.4363        | 1.3310         | 0.6343        | 1.5592        | <b>2.8227</b> |
| -1             | 1.03%        | 0.24%        | 8.21%        | 0.6185               | 2.2559        | <b>1.9024</b>  | 0.7565        | 1.5896        | <b>3.3024</b> |
| <b>0</b>       | <b>1.52%</b> | <b>0.44%</b> | <b>9.73%</b> | <b>0.7739</b>        | <b>2.8523</b> | <b>1.8827</b>  | <b>0.9072</b> | <b>1.7440</b> | <b>3.6094</b> |
| 1              | 1.25%        | 0.53%        | 10.98%       | 0.3801               | 1.3882        | <b>1.9000</b>  | 0.9674        | 1.6587        | <b>4.0468</b> |
| 2              | 0.58%        | 0.41%        | 11.56%       | 0.2177               | 1.1959        | 1.2630         | 0.9915        | 1.6881        | <b>4.0756</b> |
| 3              | -0.14%       | -0.33%       | 11.42%       | -0.0446              | 0.9786        | -0.3161        | 0.9615        | 1.6473        | <b>4.0500</b> |
| 4              | 1.03%        | 0.06%        | 12.45%       | 0.3173               | 1.6158        | 1.3624         | 1.0055        | 1.6158        | <b>4.3183</b> |
| 5              | -0.14%       | 0.18%        | 12.31%       | -0.0055              | 1.1354        | -0.0335        | 0.9849        | 1.5819        | <b>4.3203</b> |
| 6              | -0.68%       | -0.44%       | 11.63%       | -0.2994              | 0.9237        | <b>-2.2493</b> | 0.9089        | 1.4752        | <b>4.2752</b> |
| 7              | 0.16%        | 0.12%        | 11.79%       | 0.0194               | 0.9341        | 0.1441         | 0.8962        | 1.3994        | <b>4.4436</b> |
| 8              | -0.53%       | -0.38%       | 11.27%       | -0.2061              | 0.8892        | -1.6080        | 0.8423        | 1.3833        | <b>4.2254</b> |
| 9              | 0.71%        | 0.26%        | 11.97%       | 0.2711               | 1.1695        | 1.6084         | 0.8777        | 1.4286        | <b>4.2628</b> |
| 10             | 0.37%        | 0.16%        | 12.35%       | 0.0999               | 0.8796        | 0.7880         | 0.8813        | 1.4112        | <b>4.3335</b> |
| 11             | 0.31%        | -0.28%       | 12.66%       | 0.0819               | 1.2277        | 0.4630         | 0.8819        | 1.3783        | <b>4.4398</b> |
| 12             | 0.21%        | 0.42%        | 12.87%       | 0.0788               | 1.1882        | 0.4603         | 0.8822        | 1.4070        | <b>4.3507</b> |
| 13             | -0.16%       | -0.58%       | 12.71%       | -0.0644              | 1.2594        | -0.3545        | 0.8581        | 1.4032        | <b>4.2432</b> |
| 14             | -0.07%       | -0.08%       | 12.64%       | -0.0117              | 0.9858        | -0.0823        | 0.8438        | 1.3834        | <b>4.2320</b> |
| 15             | -0.40%       | -0.24%       | 12.24%       | -0.1053              | 0.9359        | -0.7806        | 0.8144        | 1.3758        | <b>4.1075</b> |
| 16             | -0.62%       | -0.34%       | 11.62%       | -0.2179              | 0.9680        | -1.5620        | 0.7675        | 1.3510        | <b>3.9420</b> |
| 17             | 0.49%        | 0.10%        | 12.10%       | 0.1659               | 1.0612        | 1.0846         | 0.7843        | 1.3489        | <b>4.0342</b> |
| 18             | -0.15%       | -0.20%       | 11.95%       | -0.0595              | 0.7408        | -0.5575        | 0.7646        | 1.3217        | <b>4.0140</b> |
| 19             | 0.22%        | 0.70%        | 12.18%       | 0.0901               | 0.9840        | 0.6354         | 0.7692        | 1.2993        | <b>4.1080</b> |
| 20             | 0.16%        | 0.20%        | 12.34%       | 0.0131               | 0.9341        | 0.0976         | 0.7619        | 1.3117        | <b>4.0303</b> |
| 21             | -0.48%       | -0.36%       | 11.85%       | -0.2122              | 0.8024        | <b>-1.8352</b> | 0.7200        | 1.2969        | <b>3.8520</b> |
| 22             | 0.00%        | 0.24%        | 11.85%       | 0.0577               | 0.9975        | 0.4014         | 0.7204        | 1.2947        | <b>3.8608</b> |
| 23             | -0.28%       | 0.15%        | 11.57%       | -0.0323              | 1.0164        | -0.2209        | 0.7072        | 1.3154        | <b>3.7307</b> |
| 24             | 0.65%        | 0.34%        | 12.23%       | 0.2583               | 1.1298        | 1.5861         | 0.7378        | 1.2690        | <b>4.0344</b> |
| 25             | -0.14%       | -0.16%       | 12.09%       | 0.0228               | 0.8519        | 0.1856         | 0.7331        | 1.2177        | <b>4.1776</b> |
| 26             | -0.05%       | 0.03%        | 12.04%       | -0.0088              | 1.3079        | -0.0469        | 0.7240        | 1.2452        | <b>4.0345</b> |
| 27             | 0.09%        | 0.06%        | 12.13%       | -0.0278              | 1.2781        | -0.1510        | 0.7124        | 1.2668        | <b>3.9021</b> |
| 28             | 0.43%        | 0.18%        | 12.56%       | 0.1711               | 0.9637        | 1.2319         | 0.7296        | 1.2584        | <b>4.0227</b> |
| 29             | 0.86%        | 0.18%        | 13.42%       | 0.3911               | 1.3297        | <b>2.0410</b>  | 0.7775        | 1.2917        | <b>4.1769</b> |
| 30             | 0.49%        | 0.16%        | 13.92%       | 0.0845               | 1.2014        | 0.4883         | 0.7817        | 1.2841        | <b>4.2241</b> |
| <b>-1 to 1</b> |              |              | <b>3.80%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.05706</b> | 1.0234        | 2.1857        | <b>3.2488</b> |

**Table-A 7.13 Market Model; Indian Targets; German/Japanese (OLS, 54); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.22%       | -0.08%       | -0.22%       | -0.0989              | 0.8177         | -0.8808        | -0.0989       | 0.8177        | -0.8808       |
| -19            | 1.13%        | 0.09%        | 0.92%        | 0.2393               | 1.0677         | 1.6322         | 0.0993        | 0.9409        | 0.7685        |
| -18            | -0.44%       | -0.14%       | 0.48%        | -0.0356              | 0.9590         | -0.2702        | 0.0605        | 0.8935        | 0.4933        |
| -17            | -0.24%       | -0.08%       | 0.23%        | -0.0569              | 1.0414         | -0.3981        | 0.0239        | 0.9627        | 0.1812        |
| -16            | -0.67%       | -0.67%       | -0.44%       | -0.0493              | 1.0599         | -0.3390        | -0.0006       | 0.9697        | -0.0048       |
| -15            | 0.43%        | -0.05%       | -0.01%       | 0.0483               | 0.8575         | 0.4100         | 0.0191        | 0.9465        | 0.1471        |
| -14            | -0.03%       | -0.05%       | -0.04%       | -0.0289              | 0.9678         | -0.2175        | 0.0068        | 0.8828        | 0.0559        |
| -13            | -0.49%       | -0.52%       | -0.53%       | -0.0589              | 1.0422         | -0.4116        | -0.0145       | 0.9373        | -0.1125       |
| -12            | -0.09%       | 0.00%        | -0.62%       | -0.0572              | 0.8743         | -0.4766        | -0.0327       | 1.0108        | -0.2358       |
| -11            | 1.43%        | 0.86%        | 0.81%        | 0.2977               | 1.0606         | <b>2.0440</b>  | 0.0631        | 1.0238        | 0.4487        |
| -10            | 0.21%        | 0.18%        | 1.02%        | 0.0039               | 1.1302         | 0.0254         | 0.0613        | 1.0727        | 0.4164        |
| -9             | 0.48%        | 0.53%        | 1.50%        | 0.1185               | 0.8897         | 0.9697         | 0.0929        | 0.9733        | 0.6953        |
| -8             | -1.21%       | -0.63%       | 0.29%        | -0.1676              | 0.8759         | -1.3937        | 0.0428        | 0.9574        | 0.3255        |
| -7             | 1.07%        | 0.08%        | 1.36%        | 0.2741               | 1.1719         | <b>1.7037</b>  | 0.1145        | 0.9209        | 0.9055        |
| -6             | -1.03%       | -0.27%       | 0.33%        | -0.1586              | 1.0021         | -1.1525        | 0.0697        | 0.9461        | 0.5363        |
| -5             | 0.20%        | -0.06%       | 0.52%        | 0.1513               | 1.4579         | 0.7558         | 0.1053        | 0.9792        | 0.7830        |
| -4             | 0.20%        | -0.18%       | 0.72%        | -0.0031              | 0.9601         | -0.0238        | 0.1014        | 1.0084        | 0.7321        |
| -3             | -0.08%       | -0.33%       | 0.64%        | 0.0079               | 1.3779         | 0.0417         | 0.1004        | 0.9948        | 0.7349        |
| -2             | 0.39%        | -0.07%       | 1.03%        | 0.1978               | 1.0042         | 1.4348         | 0.1431        | 0.9839        | 1.0591        |
| -1             | 2.12%        | 0.27%        | 3.15%        | 0.5982               | 1.4046         | <b>3.1019</b>  | 0.2732        | 1.0314        | <b>1.9294</b> |
| <b>0</b>       | <b>4.43%</b> | <b>3.69%</b> | <b>7.58%</b> | <b>1.4349</b>        | <b>2.3317</b>  | <b>4.4817</b>  | <b>0.5798</b> | <b>1.1052</b> | <b>3.8202</b> |
| 1              | 2.56%        | 1.76%        | 10.14%       | 0.5699               | 1.7763         | <b>2.3367</b>  | 0.6879        | 1.2301        | <b>4.0731</b> |
| 2              | 0.95%        | 0.02%        | 11.08%       | 0.2774               | 1.3751         | 1.4693         | 0.7307        | 1.3266        | <b>4.0113</b> |
| 3              | 1.22%        | 0.19%        | 12.30%       | 0.1999               | 1.3363         | 1.0892         | 0.7561        | 1.3661        | <b>4.0307</b> |
| 4              | -0.35%       | -0.31%       | 11.95%       | -0.0978              | 0.8080         | -0.8813        | 0.7212        | 1.3700        | <b>3.8341</b> |
| 5              | 0.10%        | -0.21%       | 12.05%       | 0.0396               | 1.0524         | 0.2743         | 0.7150        | 1.3411        | <b>3.8829</b> |
| 6              | -0.57%       | -0.08%       | 11.47%       | 0.0383               | 1.2591         | 0.2218         | 0.7090        | 1.3434        | <b>3.8438</b> |
| 7              | -0.34%       | -0.48%       | 11.13%       | -0.2063              | 0.8426         | <b>-1.7832</b> | 0.6573        | 1.3140        | <b>3.6428</b> |
| 8              | -0.54%       | -0.40%       | 10.60%       | -0.1441              | 0.8045         | -1.3043        | 0.6191        | 1.2952        | <b>3.4810</b> |
| 9              | 0.52%        | -0.24%       | 11.12%       | 0.0183               | 0.7965         | 0.1675         | 0.6120        | 1.3103        | <b>3.4016</b> |
| 10             | -0.40%       | -0.14%       | 10.72%       | -0.0691              | 0.8014         | -0.6276        | 0.5897        | 1.2962        | <b>3.3129</b> |
| 11             | -0.06%       | 0.11%        | 10.66%       | -0.0469              | 0.8098         | -0.4220        | 0.5721        | 1.2825        | <b>3.2485</b> |
| 12             | 0.52%        | -0.11%       | 11.18%       | 0.0239               | 0.7615         | 0.2285         | 0.5675        | 1.2694        | <b>3.2559</b> |
| 13             | -0.20%       | -0.19%       | 10.98%       | 0.0379               | 0.9537         | 0.2898         | 0.5656        | 1.2761        | <b>3.2280</b> |
| 14             | -0.46%       | -0.53%       | 10.51%       | -0.1337              | 0.7933         | -1.2275        | 0.5349        | 1.2637        | <b>3.0823</b> |
| 15             | -0.70%       | -0.49%       | 9.81%        | -0.1053              | 0.8533         | -0.8988        | 0.5098        | 1.2860        | <b>2.8873</b> |
| 16             | -0.96%       | -0.47%       | 8.85%        | -0.2606              | 0.9876         | <b>-1.9215</b> | 0.4601        | 1.3053        | <b>2.5668</b> |
| 17             | -0.22%       | -0.40%       | 8.63%        | -0.1449              | 0.7949         | -1.3278        | 0.4304        | 1.3280        | <b>2.3606</b> |
| 18             | 0.98%        | 0.13%        | 9.61%        | 0.1621               | 1.3920         | 0.8480         | 0.4508        | 1.3187        | <b>2.4900</b> |
| 19             | 0.92%        | 0.39%        | 10.53%       | 0.2133               | 1.0041         | 1.5470         | 0.4789        | 1.2889        | <b>2.7060</b> |
| 20             | -0.08%       | -0.16%       | 10.45%       | 0.0079               | 0.9523         | 0.0604         | 0.4743        | 1.2528        | <b>2.7569</b> |
| 21             | -0.34%       | -0.33%       | 10.11%       | -0.0326              | 1.1605         | -0.2045        | 0.4635        | 1.2369        | <b>2.7294</b> |
| 22             | -0.47%       | 0.02%        | 9.64%        | -0.0268              | 0.9498         | -0.2055        | 0.4540        | 1.2001        | <b>2.7554</b> |
| 23             | 0.55%        | 0.03%        | 10.19%       | 0.1237               | 0.8605         | 1.0473         | 0.4675        | 1.1963        | <b>2.8460</b> |
| 24             | -0.14%       | -0.12%       | 10.05%       | -0.0668              | 0.7144         | -0.6806        | 0.4523        | 1.1948        | <b>2.7571</b> |
| 25             | -0.39%       | -0.29%       | 9.66%        | -0.0061              | 1.0899         | -0.0406        | 0.4465        | 1.2066        | <b>2.6949</b> |
| 26             | -0.27%       | 0.03%        | 9.39%        | -0.0786              | 0.5691         | -1.0059        | 0.4302        | 1.2022        | <b>2.6065</b> |
| 27             | -0.27%       | 0.01%        | 9.11%        | 0.0114               | 0.7774         | 0.1066         | 0.4274        | 1.2047        | <b>2.5837</b> |
| 28             | 0.35%        | 0.04%        | 9.47%        | 0.0082               | 0.9741         | 0.0613         | 0.4242        | 1.2055        | <b>2.5625</b> |
| 29             | -0.74%       | -0.94%       | 8.73%        | -0.2154              | 0.9915         | -1.5821        | 0.3895        | 1.2126        | <b>2.3391</b> |
| 30             | -0.07%       | 0.14%        | 8.66%        | 0.0683               | 0.8155         | 0.6103         | 0.3952        | 1.2072        | <b>2.3841</b> |
| <b>-1 to 1</b> |              |              | <b>9.11%</b> | <b>StdDev(AAR-0)</b> | <b>0.06743</b> |                | 1.5029        | 2.0715        | <b>5.2836</b> |



**Table-A 7.14 Market Model; Indian Targets; Anglo-Saxon (OLS, 46); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.14%       | -0.02%       | -0.14%       | -0.0493              | 1.0161        | -0.3473        | -0.0493       | 1.0161        | -0.3473       |
| -19            | 0.32%        | 0.23%        | 0.17%        | 0.1360               | 0.9358        | 1.0410         | 0.0613        | 0.9513        | 0.4619        |
| -18            | 0.01%        | -0.05%       | 0.19%        | -0.0413              | 0.9215        | -0.3210        | 0.0262        | 0.9610        | 0.1956        |
| -17            | -0.68%       | -0.43%       | -0.49%       | -0.0824              | 0.9961        | -0.5926        | -0.0185       | 0.8485        | -0.1560       |
| -16            | 0.49%        | -0.05%       | -0.01%       | 0.1632               | 1.1155        | 1.0479         | 0.0564        | 0.9025        | 0.4481        |
| -15            | 0.57%        | 0.15%        | 0.56%        | 0.1502               | 1.0019        | 1.0741         | 0.1129        | 0.9022        | 0.8962        |
| -14            | 0.10%        | 0.41%        | 0.67%        | 0.0849               | 0.9538        | 0.6377         | 0.1366        | 0.9252        | 1.0576        |
| -13            | 0.38%        | -0.12%       | 1.05%        | 0.1031               | 0.9376        | 0.7876         | 0.1642        | 0.9392        | 1.2524        |
| -12            | 0.55%        | -0.11%       | 1.60%        | 0.1693               | 1.0942        | 1.1082         | 0.2112        | 1.0770        | 1.4051        |
| -11            | 0.66%        | 0.56%        | 2.26%        | 0.2297               | 0.9874        | 1.6663         | 0.2730        | 1.1086        | <b>1.7643</b> |
| -10            | 0.10%        | -0.12%       | 2.36%        | -0.0692              | 0.9332        | -0.5312        | 0.2395        | 1.1165        | 1.5365        |
| -9             | 0.93%        | 0.15%        | 3.29%        | 0.3917               | 1.5857        | <b>1.7697</b>  | 0.3423        | 1.1374        | <b>2.1562</b> |
| -8             | 0.91%        | 0.64%        | 4.20%        | 0.3002               | 1.1760        | <b>1.8286</b>  | 0.4122        | 1.2192        | <b>2.4218</b> |
| -7             | 0.47%        | -0.07%       | 4.67%        | 0.0318               | 0.9369        | 0.2430         | 0.4057        | 1.2742        | <b>2.2807</b> |
| -6             | -0.35%       | -0.60%       | 4.32%        | -0.0076              | 1.3379        | -0.0409        | 0.3899        | 1.3022        | <b>2.1453</b> |
| -5             | -1.34%       | -0.72%       | 2.98%        | -0.3038              | 1.0111        | <b>-2.1527</b> | 0.3016        | 1.2773        | <b>1.6916</b> |
| -4             | 0.19%        | -0.11%       | 3.17%        | -0.0160              | 1.1680        | -0.0979        | 0.2887        | 1.2367        | 1.6725        |
| -3             | 0.49%        | 0.24%        | 3.67%        | 0.2020               | 0.8931        | 1.6206         | 0.3282        | 1.2297        | <b>1.9120</b> |
| -2             | 0.65%        | -0.49%       | 4.32%        | 0.1537               | 1.2305        | 0.8949         | 0.3547        | 1.2726        | <b>1.9969</b> |
| -1             | 0.81%        | 0.24%        | 5.13%        | 0.4527               | 1.7101        | <b>1.8964</b>  | 0.4470        | 1.2450        | <b>2.5718</b> |
| <b>0</b>       | <b>1.33%</b> | <b>0.33%</b> | <b>6.45%</b> | <b>0.6112</b>        | <b>2.3672</b> | <b>1.8495</b>  | <b>0.5696</b> | <b>1.3511</b> | <b>3.0200</b> |
| 1              | 1.06%        | 0.37%        | 7.51%        | 0.2231               | 1.0825        | 1.4767         | 0.6040        | 1.3093        | <b>3.3050</b> |
| 2              | 0.42%        | 0.30%        | 7.93%        | 0.0613               | 0.9388        | 0.4678         | 0.6035        | 1.3426        | <b>3.2204</b> |
| 3              | -0.55%       | -0.62%       | 7.38%        | -0.2307              | 1.0835        | -1.5251        | 0.5438        | 1.3177        | <b>2.9563</b> |
| 4              | 0.61%        | -0.23%       | 7.99%        | 0.1222               | 1.5731        | 0.5566         | 0.5572        | 1.3470        | <b>2.9634</b> |
| 5              | -0.16%       | -0.01%       | 7.83%        | 0.0226               | 0.9448        | 0.1717         | 0.5508        | 1.3253        | <b>2.9776</b> |
| 6              | -0.76%       | -0.40%       | 7.08%        | -0.2630              | 0.7825        | <b>-2.4080</b> | 0.4899        | 1.2417        | <b>2.8265</b> |
| 7              | -0.22%       | -0.10%       | 6.85%        | -0.1573              | 0.9168        | -1.2293        | 0.4514        | 1.2072        | <b>2.6784</b> |
| 8              | -0.73%       | -0.51%       | 6.12%        | -0.2786              | 0.8910        | <b>-2.2396</b> | 0.3918        | 1.2342        | <b>2.2740</b> |
| 9              | 0.58%        | 0.24%        | 6.70%        | 0.1990               | 0.9256        | 1.5405         | 0.4215        | 1.2428        | <b>2.4299</b> |
| 10             | 0.25%        | 0.08%        | 6.95%        | 0.0616               | 0.7764        | 0.5682         | 0.4257        | 1.2399        | <b>2.4599</b> |
| 11             | 0.09%        | -0.47%       | 7.03%        | -0.0248              | 1.0593        | -0.1675        | 0.4147        | 1.2052        | <b>2.4649</b> |
| 12             | -0.04%       | 0.26%        | 7.00%        | 0.0128               | 0.9433        | 0.0975         | 0.4106        | 1.2086        | <b>2.4336</b> |
| 13             | -0.28%       | -0.66%       | 6.71%        | -0.1326              | 1.0974        | -0.8654        | 0.3817        | 1.2005        | <b>2.2781</b> |
| 14             | -0.22%       | -0.21%       | 6.50%        | -0.0301              | 0.8447        | -0.2555        | 0.3712        | 1.1839        | <b>2.2459</b> |
| 15             | -0.61%       | -0.37%       | 5.89%        | -0.1644              | 0.7870        | -1.4966        | 0.3386        | 1.1927        | <b>2.0336</b> |
| 16             | -0.97%       | -0.75%       | 4.92%        | -0.3627              | 0.9300        | <b>-2.7937</b> | 0.2743        | 1.1868        | 1.6560        |
| 17             | 0.03%        | 0.03%        | 4.95%        | -0.1118              | 1.2853        | -0.6229        | 0.2526        | 1.2107        | 1.4946        |
| 18             | -0.06%       | -0.16%       | 4.89%        | 0.0217               | 1.1944        | 0.1304         | 0.2528        | 1.1811        | 1.5334        |
| 19             | 0.02%        | 0.54%        | 4.92%        | 0.0075               | 0.8903        | 0.0603         | 0.2508        | 1.1597        | 1.5494        |
| 20             | 0.01%        | 0.15%        | 4.93%        | -0.0680              | 0.7308        | -0.6667        | 0.2371        | 1.1570        | 1.4681        |
| 21             | -0.85%       | -0.62%       | 4.08%        | -0.3198              | 0.9088        | <b>-2.5206</b> | 0.1849        | 1.1778        | 1.1248        |
| 22             | -0.40%       | -0.07%       | 3.69%        | -0.1070              | 1.1533        | -0.6645        | 0.1664        | 1.2345        | 0.9659        |
| 23             | -0.79%       | -0.17%       | 2.89%        | -0.2274              | 1.1030        | -1.4767        | 0.1303        | 1.3028        | 0.7163        |
| 24             | 0.64%        | 0.38%        | 3.53%        | 0.2840               | 0.9811        | <b>2.0738</b>  | 0.1712        | 1.2537        | 0.9780        |
| 25             | -0.21%       | 0.07%        | 3.31%        | 0.0134               | 0.7484        | 0.1286         | 0.1713        | 1.1927        | 1.0287        |
| 26             | -0.13%       | -0.09%       | 3.19%        | -0.0575              | 1.1170        | -0.3687        | 0.1610        | 1.1853        | 0.9733        |
| 27             | -0.03%       | 0.10%        | 3.16%        | -0.0378              | 1.3154        | -0.2061        | 0.1539        | 1.1297        | 0.9759        |
| 28             | 0.25%        | 0.08%        | 3.41%        | 0.0974               | 0.8376        | 0.8330         | 0.1662        | 1.1240        | 1.0595        |
| 29             | 0.85%        | 0.21%        | 4.26%        | 0.3299               | 1.1413        | <b>2.0704</b>  | 0.2112        | 1.1165        | 1.3552        |
| 30             | 0.31%        | 0.13%        | 4.57%        | 0.0342               | 1.0594        | 0.2316         | 0.2139        | 1.0763        | 1.4238        |
| <b>-1 to 1</b> |              |              | <b>3.20%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.05569</b> | 0.7430        | 1.7696        | <b>3.0081</b> |

**Table-A 7.15 Market Returns; Indian Targets; Confucian Acq; (MM, 22)**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | 0.41%        | 0.26%        | 0.41%         | 0.1220               | 0.7049         | 0.8496         | 0.1220        | 0.7049        | 0.8496        |
| -19            | 1.02%        | 0.16%        | 1.43%         | 0.3513               | 1.2186         | 1.4146         | 0.3347        | 0.9557        | 1.7184        |
| -18            | -0.15%       | -0.04%       | 1.28%         | -0.1379              | 0.7066         | -0.9579        | 0.1936        | 0.8106        | 1.1722        |
| -17            | 0.10%        | -0.09%       | 1.37%         | 0.0351               | 0.8478         | 0.2033         | 0.1853        | 0.9567        | 0.9502        |
| -16            | 0.53%        | 0.39%        | 1.90%         | 0.1220               | 1.0757         | 0.5566         | 0.2203        | 0.8866        | 1.2192        |
| -15            | 0.81%        | 0.15%        | 2.71%         | 0.2135               | 0.9958         | 1.0521         | 0.2882        | 0.9684        | 1.4606        |
| -14            | 0.67%        | 0.89%        | 3.38%         | 0.2826               | 0.9125         | 1.5196         | 0.3737        | 1.0829        | 1.6931        |
| -13            | 0.50%        | 0.12%        | 3.87%         | 0.1581               | 0.6295         | 1.2327         | 0.4055        | 1.0628        | <b>1.8719</b> |
| -12            | 0.63%        | 0.50%        | 4.50%         | 0.2202               | 0.8936         | 1.2093         | 0.4557        | 1.1473        | <b>1.9488</b> |
| -11            | 1.02%        | 0.82%        | 5.52%         | 0.4145               | 0.8333         | <b>2.4405</b>  | 0.5634        | 1.1471        | <b>2.4098</b> |
| -10            | -0.42%       | -0.65%       | 5.11%         | -0.1185              | 1.0065         | -0.5778        | 0.5014        | 1.1132        | <b>2.2101</b> |
| -9             | 0.27%        | 0.37%        | 5.38%         | 0.1485               | 0.9312         | 0.7824         | 0.5229        | 1.0404        | <b>2.4662</b> |
| -8             | 0.20%        | 0.29%        | 5.58%         | 0.0554               | 0.8590         | 0.3166         | 0.5178        | 1.0076        | <b>2.5215</b> |
| -7             | 1.75%        | 1.38%        | 7.33%         | 0.6332               | 1.2367         | <b>2.5125</b>  | 0.6682        | 1.0328        | <b>3.1745</b> |
| -6             | 0.94%        | 0.06%        | 8.26%         | 0.2255               | 0.9296         | 1.1902         | 0.7037        | 1.0405        | <b>3.3188</b> |
| -5             | 1.46%        | 0.23%        | 9.72%         | 0.5579               | 1.9960         | 1.3715         | 0.8209        | 1.0901        | <b>3.6949</b> |
| -4             | 0.14%        | -0.23%       | 9.86%         | 0.0304               | 0.8529         | 0.1750         | 0.8037        | 1.0871        | <b>3.6278</b> |
| -3             | -0.79%       | -0.15%       | 9.07%         | -0.1616              | 1.0882         | -0.7285        | 0.7430        | 1.0057        | <b>3.6252</b> |
| -2             | -0.04%       | -0.80%       | 9.03%         | -0.0228              | 1.0195         | -0.1096        | 0.7180        | 0.9941        | <b>3.5440</b> |
| -1             | 0.52%        | 0.27%        | 9.54%         | 0.2165               | 1.2895         | 0.8240         | 0.7482        | 1.0802        | <b>3.3987</b> |
| <b>0</b>       | <b>3.05%</b> | <b>1.11%</b> | <b>12.59%</b> | <b>1.0421</b>        | <b>1.9171</b>  | <b>2.6672</b>  | <b>0.9576</b> | <b>1.0489</b> | <b>4.4797</b> |
| 1              | 2.08%        | 2.85%        | 14.67%        | 0.6023               | 1.4144         | <b>2.0896</b>  | 1.0640        | 1.0598        | <b>4.9260</b> |
| 2              | 1.19%        | 0.48%        | 15.85%        | 0.3409               | 1.2453         | 1.3434         | 1.1117        | 1.1073        | <b>4.9263</b> |
| 3              | 1.20%        | 0.65%        | 17.05%        | 0.2486               | 1.1425         | 1.0679         | 1.1390        | 1.1521        | <b>4.8512</b> |
| 4              | -0.25%       | -0.17%       | 16.80%        | -0.1507              | 0.9681         | -0.7636        | 1.0859        | 1.1345        | <b>4.6966</b> |
| 5              | 0.20%        | 0.21%        | 17.00%        | 0.1092               | 0.9280         | 0.5772         | 1.0862        | 1.1638        | <b>4.5796</b> |
| 6              | -0.71%       | -0.85%       | 16.30%        | -0.2327              | 1.0693         | -1.0680        | 1.0211        | 1.2413        | <b>4.0366</b> |
| 7              | 0.03%        | -0.49%       | 16.32%        | -0.1289              | 1.1959         | -0.5288        | 0.9784        | 1.1804        | <b>4.0671</b> |
| 8              | -1.32%       | -1.55%       | 15.01%        | -0.4338              | 1.0789         | <b>-1.9731</b> | 0.8808        | 1.2326        | <b>3.5064</b> |
| 9              | 1.35%        | 0.39%        | 16.36%        | 0.3345               | 1.0907         | 1.5046         | 0.9270        | 1.2195        | <b>3.7300</b> |
| 10             | 0.85%        | 0.41%        | 17.21%        | 0.2147               | 0.9340         | 1.1276         | 0.9505        | 1.2126        | <b>3.8462</b> |
| 11             | 0.16%        | -0.06%       | 17.37%        | -0.0996              | 1.2009         | -0.4070        | 0.9179        | 1.2048        | <b>3.7385</b> |
| 12             | -0.01%       | -0.68%       | 17.36%        | -0.0642              | 0.7961         | -0.3956        | 0.8927        | 1.2156        | <b>3.6035</b> |
| 13             | 0.76%        | 0.51%        | 18.13%        | 0.1826               | 1.2641         | 0.7088         | 0.9108        | 1.2681        | <b>3.5244</b> |
| 14             | -0.18%       | -0.16%       | 17.95%        | -0.1100              | 0.8901         | -0.6062        | 0.8791        | 1.2955        | <b>3.3299</b> |
| 15             | -0.45%       | -0.62%       | 17.50%        | -0.0921              | 0.9787         | -0.4617        | 0.8515        | 1.3264        | <b>3.1501</b> |
| 16             | -0.58%       | -0.71%       | 16.92%        | -0.3400              | 1.2813         | -1.3021        | 0.7840        | 1.3144        | <b>2.9268</b> |
| 17             | -1.36%       | -0.40%       | 15.56%        | -0.4177              | 0.8947         | <b>-2.2910</b> | 0.7059        | 1.3456        | <b>2.5739</b> |
| 18             | -0.61%       | -0.67%       | 14.95%        | -0.4451              | 2.2085         | -0.9889        | 0.6255        | 1.4295        | <b>2.1470</b> |
| 19             | 0.24%        | 0.21%        | 15.20%        | -0.0584              | 1.0566         | -0.2714        | 0.6084        | 1.4427        | <b>2.0691</b> |
| 20             | 0.36%        | -0.05%       | 15.56%        | 0.0971               | 0.9133         | 0.5215         | 0.6161        | 1.4260        | <b>2.1198</b> |
| 21             | -0.26%       | -0.25%       | 15.30%        | -0.1929              | 1.5339         | -0.6171        | 0.5789        | 1.5010        | <b>1.8925</b> |
| 22             | 0.14%        | 0.16%        | 15.44%        | 0.0545               | 0.8057         | 0.3317         | 0.5805        | 1.4522        | <b>1.9613</b> |
| 23             | -0.76%       | -0.54%       | 14.69%        | -0.3148              | 1.0251         | -1.5070        | 0.5264        | 1.4914        | <b>1.7317</b> |
| 24             | 0.05%        | 0.04%        | 14.73%        | -0.0030              | 0.9548         | -0.0155        | 0.5200        | 1.4451        | <b>1.7658</b> |
| 25             | -0.59%       | -0.25%       | 14.14%        | -0.1875              | 0.6951         | -1.3238        | 0.4867        | 1.4619        | 1.6336        |
| 26             | -0.49%       | -0.17%       | 13.65%        | -0.1106              | 0.6808         | -0.7970        | 0.4654        | 1.4354        | 1.5909        |
| 27             | -0.84%       | -0.77%       | 12.81%        | -0.3011              | 0.7974         | <b>-1.8529</b> | 0.4170        | 1.4245        | 1.4365        |
| 28             | -0.26%       | 0.29%        | 12.55%        | -0.0985              | 0.8149         | -0.5934        | 0.3987        | 1.4517        | 1.3475        |
| 29             | -0.32%       | -0.47%       | 12.23%        | -0.1265              | 0.8581         | -0.7233        | 0.3768        | 1.5031        | 1.2300        |
| 30             | 0.49%        | 0.31%        | 12.71%        | 0.1034               | 0.9922         | 0.5111         | 0.3875        | 1.5231        | 1.2485        |
| <b>-1 to 1</b> |              |              | <b>5.64%</b>  | <b>StdDev(AAR-0)</b> | <b>0.05351</b> |                | 1.0744        | 1.5634        | <b>3.3721</b> |

**Table-A 7.16 Market Returns; Indian Targets; Germanic Acq; (MM, 18)**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.22%       | -0.06%       | -0.22%        | -0.0713              | 0.9308         | -0.3408        | -0.0713       | 0.9308        | -0.3408       |
| -19            | 0.48%        | 0.70%        | 0.26%         | 0.2494               | 0.5946         | <b>1.8654</b>  | 0.1259        | 0.6446        | 0.8689        |
| -18            | 0.86%        | -0.23%       | 1.12%         | 0.2027               | 1.0476         | 0.8607         | 0.2198        | 0.8512        | 1.1488        |
| -17            | -1.13%       | -0.28%       | -0.01%        | -0.1853              | 1.3911         | -0.5925        | 0.0977        | 1.2861        | 0.3380        |
| -16            | -0.43%       | -0.30%       | -0.44%        | -0.0445              | 1.4208         | -0.1394        | 0.0675        | 1.5658        | 0.1918        |
| -15            | -0.26%       | -0.21%       | -0.70%        | -0.1165              | 1.0517         | -0.4926        | 0.0141        | 1.3320        | 0.0470        |
| -14            | 1.45%        | 0.65%        | 0.74%         | 0.3496               | 1.2702         | 1.2245         | 0.1452        | 1.2040        | 0.5364        |
| -13            | -0.89%       | -0.86%       | -0.15%        | -0.1709              | 1.9459         | -0.3907        | 0.0754        | 1.4643        | 0.2290        |
| -12            | -0.81%       | -0.51%       | -0.96%        | -0.2132              | 0.9928         | -0.9552        | 0.0000        | 1.4885        | 0.0001        |
| -11            | 2.51%        | 0.93%        | 1.54%         | 0.8319               | 1.0489         | <b>3.5283</b>  | 0.2631        | 1.3227        | 0.8848        |
| -10            | 0.16%        | 0.20%        | 1.70%         | 0.1456               | 0.8996         | 0.7201         | 0.2948        | 1.2688        | 1.0334        |
| -9             | 0.89%        | 0.14%        | 2.59%         | 0.2002               | 1.0196         | 0.8735         | 0.3400        | 1.2735        | 1.1877        |
| -8             | -2.50%       | -1.21%       | 0.09%         | -0.4861              | 1.1611         | <b>-1.8624</b> | 0.1918        | 1.1866        | 0.7192        |
| -7             | 0.99%        | 0.20%        | 1.08%         | 0.3181               | 1.0018         | 1.4125         | 0.2699        | 1.1485        | 1.0453        |
| -6             | 0.54%        | 0.06%        | 1.62%         | 0.1270               | 1.1037         | 0.5118         | 0.2935        | 1.2051        | 1.0835        |
| -5             | 0.63%        | -0.33%       | 2.25%         | 0.1540               | 0.9920         | 0.6904         | 0.3227        | 1.1772        | 1.2194        |
| -4             | 1.37%        | 0.33%        | 3.63%         | 0.3668               | 1.4279         | 1.1428         | 0.4020        | 1.2668        | 1.4117        |
| -3             | 0.67%        | -0.04%       | 4.29%         | 0.4407               | 2.3679         | 0.8280         | 0.4946        | 1.3646        | 1.6123        |
| -2             | 1.08%        | 0.43%        | 5.37%         | 0.5158               | 1.2368         | <b>1.8553</b>  | 0.5997        | 1.3881        | <b>1.9219</b> |
| -1             | 3.04%        | 1.40%        | 8.41%         | 1.1197               | 2.0765         | <b>2.3988</b>  | 0.8349        | 1.4190        | <b>2.6173</b> |
| <b>0</b>       | <b>6.15%</b> | <b>3.39%</b> | <b>14.55%</b> | <b>2.5693</b>        | <b>3.6617</b>  | <b>3.1213</b>  | <b>1.3755</b> | <b>1.5798</b> | <b>3.8732</b> |
| 1              | 5.24%        | 3.77%        | 19.79%        | 1.5193               | 2.2045         | <b>3.0659</b>  | 1.6678        | 1.7743        | <b>4.1814</b> |
| 2              | 1.60%        | 0.45%        | 21.39%        | 0.4258               | 1.8495         | 1.0241         | 1.7199        | 1.9592        | <b>3.9052</b> |
| 3              | -0.98%       | -0.11%       | 20.41%        | -0.3097              | 1.0598         | -1.2998        | 1.6205        | 1.9565        | <b>3.6845</b> |
| 4              | -0.51%       | 0.04%        | 19.89%        | -0.1137              | 0.6936         | -0.7295        | 1.5650        | 1.9551        | <b>3.5609</b> |
| 5              | -1.23%       | -0.73%       | 18.67%        | -0.3930              | 0.8865         | <b>-1.9719</b> | 1.4575        | 1.9010        | <b>3.4106</b> |
| 6              | -0.10%       | -0.08%       | 18.57%        | 0.1047               | 1.2832         | 0.3631         | 1.4504        | 1.9003        | <b>3.3953</b> |
| 7              | -0.30%       | 0.34%        | 18.27%        | -0.0423              | 0.6250         | -0.3012        | 1.4163        | 1.8617        | <b>3.3842</b> |
| 8              | 0.53%        | -0.07%       | 18.80%        | 0.1634               | 0.6031         | 1.2048         | 1.4220        | 1.8512        | <b>3.4170</b> |
| 9              | 0.42%        | 0.20%        | 19.22%        | 0.1120               | 0.5847         | 0.8524         | 1.4185        | 1.8126        | <b>3.4813</b> |
| 10             | -0.01%       | 0.32%        | 19.22%        | -0.0969              | 0.8126         | -0.5305        | 1.3781        | 1.7462        | <b>3.5107</b> |
| 11             | -0.16%       | 0.45%        | 19.06%        | 0.0640               | 0.7726         | 0.3685         | 1.3677        | 1.7401        | <b>3.4963</b> |
| 12             | 1.13%        | 0.24%        | 20.19%        | 0.1414               | 0.7905         | 0.7955         | 1.3714        | 1.6626        | <b>3.6693</b> |
| 13             | 0.14%        | -0.09%       | 20.33%        | 0.1741               | 1.1050         | 0.7010         | 1.3810        | 1.5854        | <b>3.8748</b> |
| 14             | 0.47%        | 0.20%        | 20.80%        | 0.1940               | 1.0426         | 0.8279         | 1.3939        | 1.5549        | <b>3.9877</b> |
| 15             | -0.37%       | -0.40%       | 20.43%        | 0.0228               | 0.9182         | 0.1104         | 1.3782        | 1.5440        | <b>3.9706</b> |
| 16             | 0.10%        | -0.38%       | 20.53%        | -0.0482              | 0.9282         | -0.2309        | 1.3515        | 1.5483        | <b>3.8830</b> |
| 17             | 0.81%        | 0.21%        | 21.33%        | 0.0881               | 1.0387         | 0.3774         | 1.3479        | 1.5222        | <b>3.9391</b> |
| 18             | 1.56%        | 1.21%        | 22.89%        | 0.6590               | 1.1407         | <b>2.5699</b>  | 1.4360        | 1.5189        | <b>4.2059</b> |
| 19             | 1.87%        | 0.86%        | 24.77%        | 0.5414               | 1.0328         | <b>2.3320</b>  | 1.5036        | 1.4616        | <b>4.5761</b> |
| 20             | 0.06%        | 0.22%        | 24.83%        | 0.0078               | 0.7186         | 0.0481         | 1.4863        | 1.4516        | <b>4.5549</b> |
| 21             | -0.13%       | -0.34%       | 24.70%        | 0.0157               | 1.0193         | 0.0686         | 1.4710        | 1.3961        | <b>4.6871</b> |
| 22             | -0.04%       | 0.35%        | 24.66%        | 0.1284               | 1.0168         | 0.5617         | 1.4733        | 1.3690        | <b>4.7874</b> |
| 23             | 0.87%        | 0.14%        | 25.53%        | 0.2501               | 0.7270         | 1.5302         | 1.4942        | 1.3445        | <b>4.9438</b> |
| 24             | -0.01%       | 0.00%        | 25.52%        | 0.0105               | 0.8492         | 0.0549         | 1.4791        | 1.3620        | <b>4.8309</b> |
| 25             | 0.11%        | 0.30%        | 25.63%        | 0.3150               | 1.6626         | 0.8428         | 1.5093        | 1.4228        | <b>4.7190</b> |
| 26             | -0.31%       | 0.22%        | 25.33%        | -0.0808              | 0.5674         | -0.6339        | 1.4814        | 1.3977        | <b>4.7148</b> |
| 27             | 0.17%        | 0.43%        | 25.49%        | 0.1761               | 1.0730         | 0.7302         | 1.4913        | 1.3908        | <b>4.7701</b> |
| 28             | 2.11%        | 0.99%        | 27.61%        | 0.5719               | 0.7116         | <b>3.5750</b>  | 1.5577        | 1.3515        | <b>5.1271</b> |
| 29             | 0.01%        | -0.72%       | 27.62%        | 0.1905               | 1.5603         | 0.5432         | 1.5690        | 1.3183        | <b>5.2943</b> |
| 30             | -0.21%       | 0.21%        | 27.41%        | -0.0064              | 0.8872         | -0.0319        | 1.5527        | 1.3553        | <b>5.0961</b> |
| <b>-1 to 1</b> |              |              | <b>14.42%</b> | <b>StdDev(AAR-0)</b> | <b>0.07124</b> |                | 3.0070        | 3.0073        | <b>4.4480</b> |



Table-A 7.17 Market Returns; Indian Targets; Nordic Acq; (MM, 11)

| Days           | AAR          | Median       | CAAR          | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.89%       | -0.39%       | -0.89%        | -0.3122              | 0.6671         | -1.4857        | -0.3122       | 0.6671        | -1.4857       |
| -19            | 2.07%        | 0.26%        | 1.18%         | 0.4095               | 1.1804         | 1.1014         | 0.0688        | 1.0275        | 0.2126        |
| -18            | -2.71%       | -0.43%       | -1.53%        | -0.3914              | 1.2656         | -0.9819        | -0.1698       | 1.0022        | -0.5379       |
| -17            | 1.01%        | -0.05%       | -0.52%        | 0.2398               | 1.7538         | 0.4342         | -0.0271       | 0.6333        | -0.1361       |
| -16            | -0.40%       | 0.66%        | -0.91%        | 0.1984               | 1.3482         | 0.4672         | 0.0644        | 0.9328        | 0.2193        |
| -15            | 0.49%        | 0.15%        | -0.43%        | 0.1397               | 0.7987         | 0.5551         | 0.1158        | 1.0167        | 0.3617        |
| -14            | 1.43%        | 0.37%        | 1.00%         | 0.1600               | 0.9173         | 0.5539         | 0.1677        | 0.9980        | 0.5336        |
| -13            | -0.50%       | -0.29%       | 0.50%         | -0.1520              | 0.7631         | -0.6324        | 0.1032        | 0.8302        | 0.3945        |
| -12            | 2.69%        | 0.56%        | 3.19%         | 0.4181               | 1.0428         | 1.2728         | 0.2366        | 0.9404        | 0.7988        |
| -11            | 3.70%        | 1.18%        | 6.89%         | 0.5758               | 1.4311         | 1.2773         | 0.4066        | 0.9409        | 1.3718        |
| -10            | 2.44%        | 1.08%        | 9.33%         | 0.4806               | 1.4992         | 1.0177         | 0.5325        | 0.9721        | 1.7393        |
| -9             | -0.61%       | 0.73%        | 8.73%         | -0.1949              | 0.8738         | -0.7082        | 0.4536        | 0.9860        | 1.4606        |
| -8             | -0.51%       | -0.18%       | 8.22%         | -0.0129              | 0.7173         | -0.0571        | 0.4322        | 0.9030        | 1.5196        |
| -7             | 1.43%        | 0.46%        | 9.65%         | 0.2251               | 1.0714         | 0.6672         | 0.4767        | 0.8659        | 1.7477        |
| -6             | -1.20%       | -0.24%       | 8.45%         | -0.2568              | 0.8896         | -0.9167        | 0.3942        | 0.8706        | 1.4375        |
| -5             | 0.92%        | 0.94%        | 9.37%         | 0.4628               | 1.1915         | 1.2333         | 0.4974        | 0.7227        | <b>2.1850</b> |
| -4             | 0.43%        | -0.13%       | 9.80%         | 0.1543               | 1.0628         | 0.4610         | 0.5200        | 0.8207        | <b>2.0115</b> |
| -3             | 0.54%        | -0.15%       | 10.33%        | 0.3255               | 1.2362         | 0.8361         | 0.5820        | 0.9264        | <b>1.9948</b> |
| -2             | 1.34%        | 0.01%        | 11.67%        | 0.3935               | 0.8690         | 1.4375         | 0.6568        | 0.8911        | <b>2.3401</b> |
| -1             | 4.55%        | 3.31%        | 16.22%        | 1.2386               | 1.5531         | <b>2.5318</b>  | 0.9171        | 0.9403        | <b>3.0966</b> |
| <b>0</b>       | <b>3.57%</b> | <b>5.11%</b> | <b>19.79%</b> | <b>1.1001</b>        | <b>2.7404</b>  | <b>1.2745</b>  | <b>1.1351</b> | <b>0.7250</b> | <b>4.9708</b> |
| 1              | 4.12%        | 0.91%        | 23.92%        | 1.1133               | 2.4118         | 1.4655         | 1.3463        | 0.9090        | <b>4.7023</b> |
| 2              | 1.90%        | -0.10%       | 25.81%        | 0.6932               | 2.1966         | 1.0020         | 1.4613        | 1.1005        | <b>4.2158</b> |
| 3              | 3.05%        | 0.90%        | 28.87%        | 1.0526               | 1.8320         | <b>1.8241</b>  | 1.6454        | 1.3667        | <b>3.8222</b> |
| 4              | -0.46%       | -0.69%       | 28.41%        | -0.0855              | 1.1277         | -0.2407        | 1.5950        | 1.3834        | <b>3.6605</b> |
| 5              | 1.74%        | 0.95%        | 30.15%        | 0.4749               | 1.7295         | 0.8718         | 1.6572        | 1.2669        | <b>4.1530</b> |
| 6              | -1.83%       | -0.06%       | 28.32%        | 0.0346               | 1.5662         | 0.0702         | 1.6329        | 1.2157        | <b>4.2645</b> |
| 7              | 0.98%        | 0.14%        | 29.29%        | 0.1265               | 0.8411         | 0.4776         | 1.6274        | 1.1812        | <b>4.3739</b> |
| 8              | 0.29%        | -0.01%       | 29.59%        | 0.0097               | 0.7892         | 0.0392         | 1.6009        | 1.1449        | <b>4.4391</b> |
| 9              | 2.41%        | 0.81%        | 32.00%        | 0.4080               | 0.8039         | 1.6113         | 1.6485        | 1.1059        | <b>4.7326</b> |
| 10             | -0.30%       | 0.70%        | 31.70%        | 0.1740               | 0.9403         | 0.5875         | 1.6529        | 1.1239        | <b>4.6693</b> |
| 11             | 1.39%        | 0.95%        | 33.09%        | 0.2747               | 0.7199         | 1.2114         | 1.6754        | 1.1429        | <b>4.6541</b> |
| 12             | 0.70%        | 0.04%        | 33.79%        | 0.1454               | 0.7489         | 0.6165         | 1.6752        | 1.2040        | <b>4.4172</b> |
| 13             | -0.55%       | 0.22%        | 33.24%        | 0.0343               | 0.7271         | 0.1498         | 1.6562        | 1.2553        | <b>4.1890</b> |
| 14             | -0.82%       | -0.62%       | 32.42%        | -0.2962              | 0.5668         | -1.6592        | 1.5823        | 1.2088        | <b>4.1559</b> |
| 15             | 0.60%        | 0.45%        | 33.02%        | 0.3179               | 0.6857         | 1.4718         | 1.6132        | 1.1816        | <b>4.3343</b> |
| 16             | -0.20%       | 0.37%        | 32.82%        | 0.1225               | 1.1627         | 0.3345         | 1.6114        | 1.1997        | <b>4.2642</b> |
| 17             | 0.41%        | 0.05%        | 33.24%        | 0.0199               | 1.0068         | 0.0628         | 1.5933        | 1.2597        | <b>4.0155</b> |
| 18             | 0.62%        | -0.02%       | 33.85%        | 0.1212               | 0.8638         | 0.4456         | 1.5921        | 1.2281        | <b>4.1160</b> |
| 19             | 1.55%        | 0.63%        | 35.40%        | 0.2896               | 0.7236         | 1.2706         | 1.6179        | 1.2178        | <b>4.2178</b> |
| 20             | 0.09%        | -0.13%       | 35.49%        | 0.0700               | 1.2226         | 0.1819         | 1.6090        | 1.1688        | <b>4.3706</b> |
| 21             | -1.26%       | -0.79%       | 34.23%        | -0.3108              | 0.7923         | -1.2453        | 1.5417        | 1.1874        | <b>4.1222</b> |
| 22             | -1.22%       | -0.20%       | 33.02%        | -0.3698              | 0.5400         | <b>-2.1743</b> | 1.4673        | 1.1619        | <b>4.0094</b> |
| 23             | 1.36%        | 0.59%        | 34.38%        | 0.4645               | 0.6071         | <b>2.4290</b>  | 1.5206        | 1.1353        | <b>4.2523</b> |
| 24             | 0.56%        | 0.44%        | 34.93%        | 0.0887               | 0.4265         | 0.6605         | 1.5168        | 1.1335        | <b>4.2486</b> |
| 25             | -0.86%       | -0.60%       | 34.07%        | -0.2091              | 0.6774         | -0.9800        | 1.4694        | 1.1139        | <b>4.1880</b> |
| 26             | 1.66%        | 1.34%        | 35.74%        | 0.3885               | 0.7041         | 1.7520         | 1.5103        | 1.0579        | <b>4.5325</b> |
| 27             | -0.67%       | 0.24%        | 35.06%        | 0.0526               | 0.7628         | 0.2191         | 1.5021        | 1.0941        | <b>4.3589</b> |
| 28             | 1.14%        | -0.19%       | 36.20%        | 0.0681               | 2.1958         | 0.0984         | 1.4964        | 1.1015        | <b>4.3133</b> |
| 29             | -0.80%       | -0.87%       | 35.40%        | -0.4710              | 1.6771         | -0.8916        | 1.4148        | 1.1696        | <b>3.8405</b> |
| 30             | 0.16%        | -0.35%       | 35.57%        | 0.2319               | 1.2877         | 0.5718         | 1.4333        | 1.0976        | <b>4.1460</b> |
| <b>-1 to 1</b> |              |              | <b>12.24%</b> | <b>StdDev(AAR-0)</b> | <b>0.09353</b> |                | 1.9930        | 2.3488        | <b>2.6939</b> |

Table-A 7.18 Market Returns; Indian Targets; Anglo Acq; (MM, 44)

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.03%        | -0.01%       | 0.03%        | 0.0279               | 1.1598        | 0.1706         | 0.0279        | 1.1598        | 0.1706        |
| -19            | 0.38%        | 0.41%        | 0.42%        | 0.2271               | 1.0894        | 1.4799         | 0.1803        | 1.1993        | 1.0672        |
| -18            | -0.08%       | -0.03%       | 0.34%        | -0.0450              | 1.1607        | -0.2749        | 0.1213        | 1.2517        | 0.6877        |
| -17            | -0.30%       | -0.01%       | 0.04%        | -0.0168              | 1.4239        | -0.0838        | 0.0966        | 1.1758        | 0.5833        |
| -16            | 0.82%        | 0.09%        | 0.86%        | 0.2623               | 1.4320        | 1.3002         | 0.2037        | 1.2101        | 1.1950        |
| -15            | 0.55%        | 0.09%        | 1.41%        | 0.1140               | 1.2265        | 0.6600         | 0.2325        | 1.2005        | 1.3749        |
| -14            | -0.18%       | -0.05%       | 1.22%        | 0.0375               | 1.3266        | 0.2005         | 0.2294        | 1.1939        | 1.3641        |
| -13            | 0.19%        | -0.11%       | 1.41%        | 0.0922               | 1.0420        | 0.6281         | 0.2472        | 1.2178        | 1.4410        |
| -12            | 1.05%        | 0.13%        | 2.46%        | 0.3443               | 1.2479        | <b>1.9585</b>  | 0.3479        | 1.3576        | <b>1.8187</b> |
| -11            | 0.80%        | 0.64%        | 3.26%        | 0.2741               | 1.0551        | <b>1.8440</b>  | 0.4167        | 1.3716        | <b>2.1564</b> |
| -10            | 0.90%        | 0.25%        | 4.17%        | 0.2491               | 1.3748        | 1.2859         | 0.4724        | 1.3664        | <b>2.4540</b> |
| -9             | 1.38%        | 0.02%        | 5.55%        | 0.6528               | 2.0818        | <b>2.2257</b>  | 0.6407        | 1.4565        | <b>3.1225</b> |
| -8             | 0.80%        | 0.29%        | 6.35%        | 0.3354               | 1.4243        | 1.6715         | 0.7086        | 1.5665        | <b>3.2108</b> |
| -7             | 0.60%        | 0.10%        | 6.95%        | 0.1326               | 1.2622        | 0.7459         | 0.7183        | 1.6280        | <b>3.1317</b> |
| -6             | 0.06%        | -0.24%       | 7.01%        | 0.2436               | 2.0370        | 0.8490         | 0.7568        | 1.6201        | <b>3.3159</b> |
| -5             | -1.42%       | -0.67%       | 5.59%        | -0.4128              | 1.5927        | <b>-1.8398</b> | 0.6296        | 1.6978        | <b>2.6322</b> |
| -4             | 0.09%        | -0.30%       | 5.68%        | 0.0485               | 1.5006        | 0.2295         | 0.6226        | 1.6182        | <b>2.7309</b> |
| -3             | 1.14%        | 0.65%        | 6.82%        | 0.4919               | 1.3630        | <b>2.5616</b>  | 0.7210        | 1.6757        | <b>3.0539</b> |
| -2             | 0.51%        | -0.23%       | 7.33%        | 0.1820               | 1.3770        | 0.9381         | 0.7435        | 1.7750        | <b>2.9732</b> |
| -1             | 0.46%        | -0.06%       | 7.79%        | 0.3916               | 2.5520        | 1.0892         | 0.8122        | 1.7754        | <b>3.2473</b> |
| <b>0</b>       | <b>2.00%</b> | <b>0.50%</b> | <b>9.79%</b> | <b>0.7904</b>        | <b>3.1000</b> | <b>1.8098</b>  | <b>0.9651</b> | <b>1.8702</b> | <b>3.6631</b> |
| 1              | 1.18%        | 0.22%        | 10.97%       | 0.2560               | 1.6289        | 1.1154         | 0.9975        | 1.7603        | <b>4.0224</b> |
| 2              | 0.85%        | 0.47%        | 11.83%       | 0.3039               | 1.1416        | <b>1.8895</b>  | 1.0389        | 1.7485        | <b>4.2178</b> |
| 3              | -1.51%       | -0.38%       | 10.31%       | -0.4055              | 2.4051        | -1.1968        | 0.9343        | 1.8494        | <b>3.5860</b> |
| 4              | 0.66%        | 0.15%        | 10.97%       | 0.2740               | 1.6020        | 1.2140         | 0.9702        | 1.7820        | <b>3.8647</b> |
| 5              | -0.20%       | 0.06%        | 10.77%       | -0.0739              | 1.1666        | -0.4498        | 0.9369        | 1.7355        | <b>3.8319</b> |
| 6              | -0.60%       | -0.40%       | 10.17%       | -0.3344              | 0.9438        | <b>-2.5148</b> | 0.8550        | 1.6119        | <b>3.7653</b> |
| 7              | -0.66%       | -0.07%       | 9.52%        | -0.1531              | 1.6305        | -0.6664        | 0.8107        | 1.6362        | <b>3.5169</b> |
| 8              | -0.44%       | -0.31%       | 9.07%        | -0.1878              | 0.7967        | -1.6731        | 0.7617        | 1.5855        | <b>3.4102</b> |
| 9              | 0.30%        | 0.22%        | 9.37%        | 0.1645               | 1.3973        | 0.8357         | 0.7789        | 1.6164        | <b>3.4206</b> |
| 10             | 0.35%        | 0.18%        | 9.73%        | 0.1052               | 0.8690        | 0.8594         | 0.7852        | 1.5932        | <b>3.4983</b> |
| 11             | 0.22%        | -0.49%       | 9.95%        | 0.0465               | 1.1513        | 0.2867         | 0.7810        | 1.5619        | <b>3.5494</b> |
| 12             | -1.36%       | -0.07%       | 8.59%        | -0.3954              | 2.9200        | -0.9612        | 0.7003        | 1.8352        | <b>2.7085</b> |
| 13             | 0.26%        | -0.65%       | 8.85%        | 0.0300               | 1.3193        | 0.1612         | 0.6950        | 1.7475        | <b>2.8232</b> |
| 14             | -0.34%       | -0.29%       | 8.51%        | -0.1238              | 1.1176        | -0.7865        | 0.6641        | 1.7610        | <b>2.6769</b> |
| 15             | -0.15%       | -0.19%       | 8.36%        | -0.0284              | 1.1261        | -0.1792        | 0.6501        | 1.6802        | <b>2.7463</b> |
| 16             | -0.79%       | -0.25%       | 7.58%        | -0.3402              | 1.3081        | <b>-1.8460</b> | 0.5853        | 1.7148        | <b>2.4228</b> |
| 17             | 0.56%        | 0.10%        | 8.14%        | 0.1024               | 1.1573        | 0.6279         | 0.5942        | 1.7070        | <b>2.4707</b> |
| 18             | -0.21%       | -0.16%       | 7.93%        | -0.1588              | 1.0237        | -1.1012        | 0.5611        | 1.7206        | <b>2.3146</b> |
| 19             | 0.43%        | 0.59%        | 8.36%        | 0.2052               | 1.0255        | 1.4201         | 0.5864        | 1.7137        | <b>2.4291</b> |
| 20             | 0.43%        | 0.53%        | 8.79%        | 0.1605               | 0.9485        | 1.2008         | 0.6043        | 1.7145        | <b>2.5019</b> |
| 21             | 0.08%        | -0.04%       | 8.87%        | 0.0286               | 0.9009        | 0.2256         | 0.6015        | 1.6960        | <b>2.5174</b> |
| 22             | 0.19%        | 0.29%        | 9.06%        | 0.1116               | 1.0222        | 0.7748         | 0.6115        | 1.6959        | <b>2.5593</b> |
| 23             | -0.14%       | 0.17%        | 8.92%        | 0.0938               | 1.0370        | 0.6419         | 0.6186        | 1.7102        | <b>2.5676</b> |
| 24             | 0.59%        | 0.28%        | 9.51%        | 0.2900               | 1.0864        | <b>1.8950</b>  | 0.6549        | 1.6721        | <b>2.7803</b> |
| 25             | 0.22%        | 0.40%        | 9.74%        | 0.1513               | 0.8876        | 1.2098         | 0.6701        | 1.6196        | <b>2.9368</b> |
| 26             | -0.02%       | 0.03%        | 9.71%        | -0.0304              | 1.3207        | -0.1633        | 0.6585        | 1.6217        | <b>2.8822</b> |
| 27             | 0.09%        | 0.07%        | 9.80%        | -0.0667              | 1.3458        | -0.3518        | 0.6420        | 1.6483        | <b>2.7646</b> |
| 28             | 0.59%        | 0.26%        | 10.39%       | 0.1921               | 0.9364        | 1.4562         | 0.6628        | 1.6407        | <b>2.8675</b> |
| 29             | 0.81%        | 0.23%        | 11.20%       | 0.3688               | 1.2806        | <b>2.0441</b>  | 0.7083        | 1.6588        | <b>3.0309</b> |
| 30             | 0.71%        | 0.16%        | 11.91%       | 0.1972               | 1.0856        | 1.2896         | 0.7290        | 1.6317        | <b>3.1711</b> |
| <b>-1 to 1</b> |              |              | <b>3.65%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06285</b> | 0.8302        | 2.5686        | <b>2.2942</b> |

**Table-A 7.19 Market Returns; Indian Targets; LE Acq; (MM, 8)**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats        |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|----------------|
| -20            | 0.01%        | -1.55%       | 0.01%        | -0.0679              | 1.5474        | -0.1249        | -0.0679       | 1.5474        | -0.1249        |
| -19            | -0.40%       | -1.27%       | -0.39%       | -0.0029              | 1.2615        | -0.0066        | -0.0501       | 1.5372        | -0.0927        |
| -18            | 0.39%        | 1.58%        | 0.00%        | 0.3479               | 1.9625        | 0.5048         | 0.1600        | 1.3883        | 0.3281         |
| -17            | 1.06%        | -0.24%       | 1.06%        | 0.0879               | 1.2997        | 0.1925         | 0.1825        | 1.4469        | 0.3591         |
| -16            | -0.98%       | -0.84%       | 0.08%        | -0.3082              | 0.7426        | -1.1817        | 0.0254        | 1.0797        | 0.0669         |
| -15            | 1.53%        | 0.31%        | 1.61%        | 0.3131               | 0.9544        | 0.9340         | 0.1510        | 0.7904        | 0.5439         |
| -14            | -0.55%       | -1.44%       | 1.06%        | -0.2181              | 0.9811        | -0.6330        | 0.0573        | 0.7903        | 0.2066         |
| -13            | -0.37%       | -0.37%       | 0.69%        | -0.0272              | 0.4832        | -0.1601        | 0.0440        | 0.6823        | 0.1838         |
| -12            | -2.56%       | -1.22%       | -1.86%       | -0.6947              | 1.0038        | <b>-1.9705</b> | -0.1901       | 0.4841        | -1.1177        |
| -11            | -2.04%       | -0.42%       | -3.90%       | -0.5799              | 2.0289        | -0.8138        | -0.3637       | 0.9616        | -1.0768        |
| -10            | -1.73%       | 0.07%        | -5.63%       | -0.5836              | 1.9680        | -0.8443        | -0.5227       | 1.4286        | -1.0417        |
| -9             | 1.77%        | 0.85%        | -3.86%       | 0.5322               | 1.5642        | 0.9687         | -0.3468       | 1.0164        | -0.9716        |
| -8             | -0.68%       | -0.59%       | -4.54%       | 0.0301               | 1.4377        | 0.0597         | -0.3249       | 1.0580        | -0.8743        |
| -7             | 1.19%        | -0.59%       | -3.34%       | 0.2408               | 2.3706        | 0.2892         | -0.2487       | 0.5290        | -1.3384        |
| -6             | -2.36%       | -0.80%       | -5.70%       | -0.4151              | 1.8455        | -0.6404        | -0.3474       | 0.5426        | -1.8231        |
| -5             | -3.95%       | -4.65%       | -9.65%       | -1.0851              | 1.4547        | <b>-2.1238</b> | -0.6077       | 0.5377        | <b>-3.2174</b> |
| -4             | 2.20%        | 0.22%        | -7.46%       | 0.3767               | 1.6369        | 0.6552         | -0.4982       | 0.5788        | <b>-2.4504</b> |
| -3             | 1.49%        | 0.99%        | -5.97%       | 0.0990               | 1.2812        | 0.2199         | -0.4608       | 0.7257        | -1.8078        |
| -2             | 0.54%        | 0.46%        | -5.43%       | 0.3062               | 1.6342        | 0.5335         | -0.3783       | 0.6522        | -1.6513        |
| -1             | 1.28%        | -0.06%       | -4.16%       | 0.3027               | 0.9195        | 0.9373         | -0.3010       | 0.5968        | -1.4359        |
| <b>0</b>       | <b>4.26%</b> | <b>4.05%</b> | <b>0.10%</b> | <b>1.3531</b>        | <b>1.6286</b> | <b>2.3655</b>  | <b>0.0015</b> | <b>0.7468</b> | <b>0.0058</b>  |
| 1              | -1.10%       | -1.70%       | -1.00%       | -0.5819              | 1.9178        | -0.8639        | -0.1226       | 0.8945        | -0.3901        |
| 2              | 0.08%        | -0.04%       | -0.92%       | 0.0212               | 0.3896        | 0.1549         | -0.1155       | 0.8392        | -0.3917        |
| 3              | 0.18%        | -0.97%       | -0.75%       | 0.0899               | 0.9097        | 0.2813         | -0.0947       | 0.7411        | -0.3637        |
| 4              | -0.22%       | -0.46%       | -0.96%       | 0.0037               | 0.6945        | 0.0152         | -0.0920       | 0.7284        | -0.3597        |
| 5              | 0.22%        | -0.15%       | -0.74%       | 0.0650               | 0.5966        | 0.3100         | -0.0775       | 0.6706        | -0.3290        |
| 6              | 0.77%        | 0.73%        | 0.03%        | 0.1791               | 1.0930        | 0.4664         | -0.0416       | 0.6454        | -0.1835        |
| 7              | 0.78%        | 0.12%        | 0.82%        | 0.1044               | 0.8458        | 0.3514         | -0.0211       | 0.6580        | -0.0913        |
| 8              | 1.83%        | 2.16%        | 2.64%        | 0.5245               | 0.9750        | 1.5318         | 0.0767        | 0.6361        | 0.3431         |
| 9              | -0.63%       | -0.80%       | 2.01%        | -0.2703              | 0.5499        | -1.3997        | 0.0260        | 0.6106        | 0.1213         |
| 10             | 0.02%        | -0.10%       | 2.03%        | -0.0509              | 0.8779        | -0.1651        | 0.0165        | 0.6337        | 0.0739         |
| 11             | 0.73%        | 0.48%        | 2.77%        | 0.3652               | 0.8019        | 1.2967         | 0.0808        | 0.5274        | 0.4359         |
| 12             | 1.16%        | -0.02%       | 3.93%        | 0.3306               | 1.4166        | 0.6645         | 0.1371        | 0.6100        | 0.6398         |
| 13             | -0.69%       | -0.15%       | 3.24%        | -0.3120              | 1.0122        | -0.8775        | 0.0815        | 0.6308        | 0.3681         |
| 14             | 0.01%        | 0.22%        | 3.24%        | -0.0861              | 0.8437        | -0.2904        | 0.0658        | 0.7378        | 0.2540         |
| 15             | -0.81%       | -0.09%       | 2.43%        | -0.4345              | 1.1917        | -1.0382        | -0.0075       | 0.8592        | -0.0249        |
| 16             | -0.87%       | -0.86%       | 1.57%        | -0.4295              | 0.7712        | -1.5855        | -0.0780       | 0.9242        | -0.2404        |
| 17             | -0.35%       | -0.37%       | 1.22%        | -0.3615              | 0.9923        | -1.0373        | -0.1356       | 0.9987        | -0.3867        |
| 18             | 1.44%        | 0.94%        | 2.67%        | 0.4923               | 1.1699        | 1.1981         | -0.0551       | 0.8989        | -0.1744        |
| 19             | 0.89%        | 0.80%        | 3.55%        | 0.6255               | 1.8527        | 0.9613         | 0.0445        | 0.6306        | 0.2011         |
| 20             | 0.28%        | 0.01%        | 3.83%        | 0.3559               | 1.8686        | 0.5422         | 0.0996        | 0.4393        | 0.6453         |
| 21             | 0.42%        | 0.83%        | 4.24%        | 0.1833               | 0.5794        | 0.9005         | 0.1267        | 0.4379        | 0.8235         |
| 22             | -0.39%       | 0.50%        | 3.86%        | 0.3246               | 1.8027        | 0.5127         | 0.1747        | 0.4770        | 1.0425         |
| 23             | 2.49%        | 2.28%        | 6.35%        | 0.6145               | 1.1633        | 1.5041         | 0.2653        | 0.4563        | 1.6555         |
| 24             | 1.01%        | 0.61%        | 7.36%        | 0.1388               | 0.9477        | 0.4169         | 0.2830        | 0.4564        | 1.7659         |
| 25             | 0.56%        | 0.21%        | 7.91%        | 0.2181               | 0.9073        | 0.6845         | 0.3121        | 0.4368        | <b>2.0345</b>  |
| 26             | -1.20%       | -1.30%       | 6.71%        | -0.3724              | 0.7140        | -1.4850        | 0.2545        | 0.5063        | 1.4309         |
| 27             | 2.00%        | 3.01%        | 8.71%        | 0.5864               | 0.7780        | <b>2.1460</b>  | 0.3364        | 0.4904        | <b>1.9534</b>  |
| 28             | 0.33%        | 0.35%        | 9.05%        | 0.0930               | 0.5022        | 0.5272         | 0.3463        | 0.4530        | <b>2.1761</b>  |
| 29             | -0.10%       | -0.51%       | 8.95%        | -0.0246              | 0.5026        | -0.1395        | 0.3393        | 0.4470        | <b>2.1611</b>  |
| 30             | 1.46%        | 0.85%        | 10.40%       | 0.4142               | 0.7667        | 1.5381         | 0.3940        | 0.3680        | <b>3.0479</b>  |
| <b>-1 to 1</b> |              |              | <b>4.43%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.04336</b> | 0.6200        | 1.3215        | 1.3358         |

**Table-A 7.20 Market Returns; Indian Targets; Ohers Acq; (MM,3)**

| Days           | AAR          | Median       | CAAR          | SARa          | SD                   | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|---------------|----------------------|----------------|----------------|---------------|----------------|
| -20            | -3.69%       | -2.75%       | -3.69%        | -0.9190       | 0.8114               | -1.9022        | -0.9190        | 0.8114        | -1.9022        |
| -19            | -2.23%       | -0.24%       | -5.92%        | 0.0471        | 0.8705               | 0.0908         | -0.6165        | 0.6922        | -1.4960        |
| -18            | -5.69%       | -6.14%       | -11.61%       | -0.8584       | 0.8233               | -1.7512        | -0.9990        | 1.0404        | -1.6128        |
| -17            | -5.67%       | -6.40%       | -17.28%       | -1.0791       | 0.5981               | <b>-3.0304</b> | -1.4047        | 1.1376        | -2.0739        |
| -16            | -3.06%       | -0.67%       | -20.34%       | -0.2339       | 0.4726               | -0.8313        | -1.3610        | 1.0930        | -2.0914        |
| -15            | 2.43%        | 0.82%        | -17.91%       | 0.7496        | 1.1737               | 1.0726         | -0.9364        | 0.7007        | -2.2446        |
| -14            | 2.70%        | 0.13%        | -15.21%       | 1.4005        | 3.1191               | 0.7541         | -0.3376        | 1.0815        | -0.5243        |
| -13            | 0.19%        | -0.05%       | -15.02%       | 0.4743        | 1.2283               | 0.6486         | -0.1481        | 1.2341        | -0.2016        |
| -12            | -0.45%       | 0.96%        | -15.47%       | 0.5379        | 1.4160               | 0.6381         | 0.0397         | 1.5563        | 0.0428         |
| -11            | -6.28%       | -5.25%       | -21.75%       | -1.2264       | 0.4896               | <b>-4.2066</b> | -0.3502        | 1.3218        | -0.4450        |
| -10            | -0.41%       | 0.71%        | -22.16%       | -0.2171       | 0.6231               | -0.5852        | -0.3993        | 1.1584        | -0.5790        |
| -9             | 5.74%        | 0.67%        | -16.42%       | 0.5259        | 0.6649               | 1.3285         | -0.2305        | 0.9202        | -0.4208        |
| -8             | -5.96%       | 0.17%        | -22.38%       | -0.4367       | 0.8855               | -0.8283        | -0.3426        | 1.1291        | -0.5096        |
| -7             | 2.22%        | -0.38%       | -20.16%       | -0.1827       | 1.1811               | -0.2599        | -0.3790        | 0.8610        | -0.7393        |
| -6             | 0.33%        | -0.65%       | -19.84%       | -0.0793       | 0.2406               | -0.5538        | -0.3866        | 0.7746        | -0.8382        |
| -5             | 0.42%        | 0.36%        | -19.41%       | 0.0937        | 0.1160               | 1.3561         | -0.3509        | 0.7553        | -0.7804        |
| -4             | -1.49%       | -1.03%       | -20.91%       | -0.5762       | 0.9255               | -1.0458        | -0.4802        | 0.6571        | -1.2273        |
| -3             | -1.07%       | -0.18%       | -21.98%       | 0.0278        | 0.4443               | 0.1050         | -0.4601        | 0.7432        | -1.0398        |
| -2             | 0.39%        | 3.11%        | -21.59%       | -0.0417       | 1.7060               | -0.0410        | -0.4574        | 0.9673        | -0.7942        |
| -1             | 6.81%        | 6.53%        | -14.78%       | 1.5359        | 0.9323               | 2.7668         | -0.1024        | 1.1100        | -0.1549        |
| <b>0</b>       | <b>6.91%</b> | <b>0.37%</b> | <b>-7.87%</b> | <b>0.4347</b> | <b>1.1943</b>        | <b>0.6113</b>  | <b>-0.0051</b> | <b>0.8786</b> | <b>-0.0097</b> |
| 1              | 10.78%       | 5.98%        | 2.92%         | 1.1278        | 1.3553               | 1.3976         | 0.2355         | 0.5763        | 0.6863         |
| 2              | 0.53%        | 0.14%        | 3.45%         | -0.0271       | 0.2635               | -0.1730        | 0.2247         | 0.5130        | 0.7355         |
| 3              | 1.62%        | 1.71%        | 5.07%         | -0.1657       | 1.4054               | -0.1981        | 0.1861         | 0.6972        | 0.4483         |
| 4              | 2.95%        | 2.43%        | 8.01%         | 0.6453        | 1.0568               | 1.0256         | 0.3114         | 0.4989        | 1.0484         |
| 5              | 2.02%        | 1.78%        | 10.04%        | 0.6890        | 0.9112               | 1.2700         | 0.4405         | 0.4447        | 1.6635         |
| 6              | 12.59%       | 16.44%       | 22.63%        | 2.2397        | 2.5693               | 1.4641         | 0.8633         | 0.9108        | 1.5920         |
| 7              | 1.36%        | 0.00%        | 23.99%        | 0.9919        | 2.2782               | 0.7312         | 1.0352         | 1.3135        | 1.3237         |
| 8              | -3.51%       | -0.20%       | 20.48%        | -0.2165       | 0.6144               | -0.5919        | 0.9770         | 1.3721        | 1.1959         |
| 9              | -10.03%      | -5.91%       | 10.45%        | -1.0886       | 1.2790               | -1.4296        | 0.7618         | 1.5804        | 0.8096         |
| 10             | -1.08%       | -0.62%       | 9.37%         | 0.5614        | 1.9624               | 0.4805         | 0.8502         | 1.9032        | 0.7503         |
| 11             | 3.24%        | 3.20%        | 12.61%        | 0.4852        | 0.5127               | 1.5896         | 0.9226         | 1.9455        | 0.7965         |
| 12             | 0.08%        | -0.46%       | 12.69%        | 0.1243        | 0.4114               | 0.5073         | 0.9302         | 1.9872        | 0.7861         |
| 13             | 3.65%        | 4.35%        | 16.34%        | 0.7876        | 1.0307               | 1.2834         | 1.0515         | 2.1322        | 0.8282         |
| 14             | 3.19%        | 0.10%        | 19.53%        | 0.2345        | 0.4756               | 0.8281         | 1.0760         | 2.0722        | 0.8721         |
| 15             | -2.17%       | -0.65%       | 17.37%        | -0.1113       | 0.4970               | -0.3761        | 1.0424         | 2.1187        | 0.8263         |
| 16             | 0.26%        | 0.41%        | 17.63%        | 0.5932        | 1.4376               | 0.6931         | 1.1257         | 2.3204        | 0.8148         |
| 17             | -2.05%       | -2.15%       | 15.58%        | -0.3551       | 0.2750               | -2.1689        | 1.0532         | 2.2472        | 0.7871         |
| 18             | -3.55%       | -3.81%       | 12.03%        | -0.5633       | 0.5972               | -1.5841        | 0.9494         | 2.1362        | 0.7464         |
| 19             | -0.46%       | -0.37%       | 11.57%        | -0.1249       | 0.4608               | -0.4551        | 0.9177         | 2.0421        | 0.7548         |
| 20             | 4.12%        | 2.10%        | 15.69%        | 1.2721        | 1.8171               | 1.1758         | 1.1051         | 1.9678        | 0.9432         |
| 21             | -2.16%       | -2.90%       | 13.54%        | -0.5052       | 2.2713               | -0.3735        | 1.0139         | 1.6713        | 1.0189         |
| 22             | -0.77%       | 0.74%        | 12.77%        | -0.2421       | 0.8650               | -0.4701        | 0.9652         | 1.7096        | 0.9482         |
| 23             | 1.04%        | -0.40%       | 13.81%        | 0.3557        | 0.8043               | 0.7428         | 1.0078         | 1.6595        | 1.0200         |
| 24             | -1.86%       | -0.18%       | 11.94%        | -0.4951       | 0.9309               | -0.8933        | 0.9227         | 1.6821        | 0.9213         |
| 25             | 0.00%        | -0.95%       | 11.95%        | 0.1400        | 0.5868               | 0.4007         | 0.9332         | 1.7453        | 0.8981         |
| 26             | -4.53%       | -4.32%       | 7.41%         | -0.9912       | 0.7098               | -2.3453        | 0.7787         | 1.7204        | 0.7602         |
| 27             | 2.22%        | 2.33%        | 9.63%         | 0.7403        | 0.8864               | 1.4027         | 0.8774         | 1.7246        | 0.8544         |
| 28             | 1.32%        | 0.64%        | 10.95%        | 0.3968        | 0.5437               | 1.2258         | 0.9251         | 1.7844        | 0.8707         |
| 29             | -3.73%       | -3.19%       | 7.22%         | -0.8885       | 1.2311               | -1.2122        | 0.7901         | 1.6008        | 0.8290         |
| 30             | -1.65%       | 0.04%        | 5.57%         | -0.5022       | 0.8978               | -0.9394        | 0.7120         | 1.4639        | 0.8169         |
| <b>-1 to 1</b> |              |              | <b>24.51%</b> |               | <b>StdDev(AAR-0)</b> | <b>0.1327</b>  | 1.7889         | 0.9113        | <b>3.2970</b>  |

**Table-A 7.21 Market Returns; Indian Targets; SA Acq (MM, 3)**

| Days           | AAR           | Median        | CAAR          | SARa           | SD                   | t-Stats         | SCARa         | SD            | t-Stats        |
|----------------|---------------|---------------|---------------|----------------|----------------------|-----------------|---------------|---------------|----------------|
| -20            | -0.76%        | 0.75%         | -0.76%        | -0.1509        | 0.7925               | -0.3541         | -0.1509       | 0.7925        | -0.3541        |
| -19            | -0.17%        | 0.44%         | -0.94%        | 0.0051         | 1.0163               | 0.0093          | -0.1031       | 0.8913        | -0.2151        |
| -18            | 0.61%         | 0.51%         | -0.32%        | 0.2144         | 0.0418               | <b>9.5320</b>   | 0.0396        | 0.7377        | 0.0998         |
| -17            | 0.83%         | 1.18%         | 0.51%         | 0.1876         | 1.1076               | 0.3148          | 0.1281        | 0.2700        | 0.8818         |
| -16            | 0.26%         | -0.01%        | 0.77%         | 0.1541         | 0.4179               | 0.6854          | 0.1835        | 0.3888        | 0.8772         |
| -15            | 2.50%         | 2.97%         | 3.27%         | 0.9749         | 1.0653               | 1.7012          | 0.5655        | 0.6758        | 1.5554         |
| -14            | -3.16%        | -3.78%        | 0.11%         | -1.0823        | 0.2646               | <b>-7.6020</b>  | 0.1145        | 0.7159        | 0.2973         |
| -13            | 2.96%         | 3.98%         | 3.07%         | 0.9129         | 0.8883               | 1.9104          | 0.4299        | 0.3556        | 2.2468         |
| -12            | -0.99%        | 0.58%         | 2.09%         | -0.3627        | 1.2687               | -0.5314         | 0.2844        | 0.6427        | 0.8225         |
| -11            | -0.59%        | 0.37%         | 1.50%         | -0.1120        | 0.6978               | -0.2985         | 0.2344        | 0.5891        | 0.7395         |
| -10            | -0.54%        | -0.14%        | 0.96%         | -0.1534        | 0.2325               | -1.2264         | 0.1772        | 0.5916        | 0.5568         |
| -9             | 1.98%         | 1.12%         | 2.95%         | 0.6351         | 0.5385               | 2.1924          | 0.3530        | 0.5819        | 1.1276         |
| -8             | 2.18%         | 1.87%         | 5.13%         | 0.7628         | 0.1682               | <b>8.4281</b>   | 0.5507        | 0.5972        | 1.7140         |
| -7             | -2.17%        | -1.15%        | 2.96%         | -0.6786        | 0.7716               | -1.6350         | 0.3493        | 0.5504        | 1.1797         |
| -6             | -1.28%        | -1.56%        | 1.68%         | -0.4234        | 0.1753               | <b>-4.4884</b>  | 0.2281        | 0.5770        | 0.7350         |
| -5             | 1.42%         | 1.62%         | 3.10%         | 0.4685         | 0.3570               | 2.4389          | 0.3380        | 0.4798        | 1.3094         |
| -4             | -2.12%        | -1.10%        | 0.98%         | -0.7765        | 0.8286               | -1.7420         | 0.1396        | 0.5611        | 0.4624         |
| -3             | -2.44%        | -3.74%        | -1.46%        | -0.9215        | 1.0758               | -1.5923         | -0.0815       | 0.3065        | -0.4945        |
| -2             | 5.75%         | 6.58%         | 4.29%         | 2.2301         | 2.2406               | 1.8502          | 0.4322        | 0.8084        | 0.9940         |
| -1             | -1.11%        | 0.11%         | 3.18%         | -0.2619        | 0.7796               | -0.6244         | 0.3627        | 0.8721        | 0.7732         |
| <b>0</b>       | <b>-0.55%</b> | <b>-1.15%</b> | <b>2.63%</b>  | <b>-0.0842</b> | <b>2.0059</b>        | <b>-0.0781</b>  | <b>0.3356</b> | <b>0.8320</b> | <b>0.7499</b>  |
| 1              | 1.15%         | 1.19%         | 3.78%         | 0.3650         | 0.5081               | 1.3354          | 0.4057        | 0.7587        | 0.9941         |
| 2              | -3.88%        | -3.27%        | -0.10%        | -1.1145        | 1.3567               | -1.5270         | 0.1644        | 1.0248        | 0.2982         |
| 3              | 4.53%         | 1.86%         | 4.44%         | 1.3761         | 1.5540               | 1.6460          | 0.4419        | 0.8013        | 1.0251         |
| 4              | 5.45%         | 0.40%         | 9.89%         | 1.5202         | 2.9950               | 0.9435          | 0.7370        | 0.6387        | 2.1449         |
| 5              | -0.19%        | -0.51%        | 9.69%         | -0.1052        | 0.2734               | -0.7155         | 0.7020        | 0.6379        | 2.0456         |
| 6              | -1.80%        | -2.13%        | 7.89%         | -0.6249        | 0.6542               | -1.7757         | 0.5686        | 0.5127        | 2.0618         |
| 7              | 2.96%         | 1.83%         | 10.85%        | 0.9468         | 0.8486               | 2.0742          | 0.7373        | 0.5941        | 2.3072         |
| 8              | 0.47%         | -1.40%        | 11.33%        | -0.0547        | 1.4148               | -0.0719         | 0.7143        | 0.6512        | 2.0392         |
| 9              | -0.44%        | 0.10%         | 10.88%        | -0.0570        | 0.6134               | -0.1726         | 0.6919        | 0.6144        | 2.0934         |
| 10             | 0.17%         | -1.10%        | 11.06%        | 0.0230         | 1.0535               | 0.0405          | 0.6848        | 0.4247        | <b>2.9975</b>  |
| 11             | -4.25%        | -3.40%        | 6.81%         | -1.4271        | 0.7979               | <b>-3.3248</b>  | 0.4217        | 0.2835        | 2.7648         |
| 12             | 1.50%         | 2.05%         | 8.32%         | 0.5567         | 0.5681               | 1.8216          | 0.5122        | 0.3675        | 2.5910         |
| 13             | -3.56%        | -2.85%        | 4.75%         | -1.1689        | 1.1289               | -1.9247         | 0.3041        | 0.2218        | 2.5494         |
| 14             | -1.29%        | -1.26%        | 3.46%         | -0.5049        | 0.5631               | -1.6668         | 0.2144        | 0.2652        | 1.5028         |
| 15             | 1.48%         | 1.57%         | 4.95%         | 0.4181         | 0.6386               | 1.2171          | 0.2811        | 0.2364        | 2.2103         |
| 16             | -4.30%        | -4.00%        | 0.65%         | -1.4725        | 0.9105               | <b>-3.0062</b>  | 0.0352        | 0.3782        | 0.1730         |
| 17             | 1.74%         | 3.24%         | 2.38%         | 0.4627         | 1.1724               | 0.7336          | 0.1098        | 0.2925        | 0.6978         |
| 18             | -1.43%        | -0.93%        | 0.95%         | -0.4673        | 0.3187               | -2.7257         | 0.0335        | 0.2378        | 0.2623         |
| 19             | 1.89%         | 1.48%         | 2.84%         | 0.6608         | 0.4287               | 2.8649          | 0.1376        | 0.1806        | 1.4166         |
| 20             | -1.60%        | -1.93%        | 1.24%         | -0.5871        | 0.2855               | <b>-3.8224</b>  | 0.0442        | 0.1770        | 0.4644         |
| 21             | -3.62%        | -3.38%        | -2.38%        | -1.2897        | 0.2041               | <b>-11.7447</b> | -0.1553       | 0.1931        | -1.4956        |
| 22             | 1.41%         | 1.63%         | -0.97%        | 0.5066         | 0.2688               | <b>3.5031</b>   | -0.0763       | 0.1966        | -0.7211        |
| 23             | 0.03%         | -1.66%        | -0.94%        | -0.1944        | 1.2561               | -0.2876         | -0.1047       | 0.3770        | -0.5161        |
| 24             | 2.39%         | 2.43%         | 1.46%         | 0.7977         | 0.2239               | <b>6.6214</b>   | 0.0154        | 0.3996        | 0.0716         |
| 25             | -0.48%        | -0.57%        | 0.97%         | -0.0240        | 0.9144               | -0.0487         | 0.0117        | 0.2914        | 0.0746         |
| 26             | -2.12%        | -4.18%        | -1.15%        | -0.5437        | 1.4787               | -0.6835         | -0.0677       | 0.2976        | -0.4231        |
| 27             | 0.03%         | -0.51%        | -1.12%        | 0.0457         | 0.8429               | 0.1007          | -0.0604       | 0.1735        | -0.6474        |
| 28             | -2.60%        | -2.99%        | -3.72%        | -0.9048        | 0.8458               | -1.9887         | -0.1891       | 0.0523        | <b>-6.7256</b> |
| 29             | 3.14%         | 4.02%         | -0.57%        | 1.1195         | 0.9810               | 2.1214          | -0.0289       | 0.1866        | -0.2874        |
| 30             | -1.78%        | 0.70%         | -2.35%        | -0.4166        | 1.4597               | -0.5306         | -0.0869       | 0.1911        | -0.8454        |
| <b>-1 to 1</b> |               |               | <b>-0.51%</b> |                | <b>StdDev(AAR-0)</b> | <b>0.0627</b>   | 0.0109        | 1.6481        | 0.0123         |



Table-A 7.22 Market Returns; Indian Targets; Confucian Acq (OLS, 24);VWI

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.20%        | 0.04%        | 0.20%        | 0.0309               | 0.6138        | 0.2622         | 0.0309        | 0.6138        | 0.2622        |
| -19            | 0.59%        | 0.00%        | 0.79%        | 0.1802               | 1.0235        | 0.9165         | 0.1493        | 0.8022        | 0.9687        |
| -18            | -0.30%       | -0.05%       | 0.49%        | -0.1171              | 0.6541        | -0.9319        | 0.0543        | 0.7231        | 0.3908        |
| -17            | -0.03%       | -0.04%       | 0.47%        | -0.0156              | 0.7525        | -0.1080        | 0.0392        | 0.8232        | 0.2479        |
| -16            | 0.19%        | 0.16%        | 0.65%        | 0.0198               | 0.9059        | 0.1136         | 0.0439        | 0.8220        | 0.2780        |
| -15            | 0.50%        | 0.11%        | 1.16%        | 0.1090               | 0.8507        | 0.6669         | 0.0846        | 0.9279        | 0.4745        |
| -14            | 0.43%        | 0.40%        | 1.59%        | 0.1705               | 0.7649        | 1.1604         | 0.1427        | 1.0075        | 0.7375        |
| -13            | 0.38%        | -0.03%       | 1.96%        | 0.1138               | 0.5963        | 0.9936         | 0.1738        | 0.9833        | 0.9199        |
| -12            | 0.34%        | 0.26%        | 2.30%        | 0.0805               | 0.7716        | 0.5427         | 0.1906        | 1.0435        | 0.9510        |
| -11            | 0.73%        | 0.74%        | 3.03%        | 0.2836               | 0.7798        | <b>1.8929</b>  | 0.2705        | 1.0577        | 1.3314        |
| -10            | -0.49%       | -0.64%       | 2.54%        | -0.1271              | 0.8647        | -0.7649        | 0.2196        | 1.0287        | 1.1114        |
| -9             | 0.26%        | 0.44%        | 2.80%        | 0.1390               | 0.7711        | 0.9381         | 0.2504        | 0.9391        | 1.3879        |
| -8             | 0.03%        | 0.08%        | 2.83%        | 0.0251               | 0.7460        | 0.1751         | 0.2475        | 0.9040        | 1.4254        |
| -7             | 1.30%        | 0.77%        | 4.13%        | 0.4196               | 1.0896        | <b>2.0045</b>  | 0.3507        | 0.9750        | <b>1.8721</b> |
| -6             | 0.86%        | 0.08%        | 4.99%        | 0.2208               | 0.8322        | 1.3813         | 0.3958        | 0.9871        | <b>2.0873</b> |
| -5             | 1.42%        | 0.35%        | 6.41%        | 0.5298               | 1.8067        | 1.5266         | 0.5157        | 1.0298        | <b>2.6067</b> |
| -4             | -0.03%       | -0.12%       | 6.38%        | -0.0001              | 0.7820        | -0.0008        | 0.5003        | 1.0354        | <b>2.5150</b> |
| -3             | -0.87%       | -0.48%       | 5.51%        | -0.1736              | 0.9206        | -0.9816        | 0.4453        | 0.9379        | <b>2.4713</b> |
| -2             | -0.12%       | -0.16%       | 5.39%        | -0.0312              | 0.8452        | -0.1924        | 0.4262        | 0.9325        | <b>2.3793</b> |
| -1             | 0.31%        | 0.15%        | 5.70%        | 0.1127               | 1.0217        | 0.5744         | 0.4406        | 0.9641        | <b>2.3790</b> |
| <b>0</b>       | <b>2.78%</b> | <b>0.97%</b> | <b>8.48%</b> | <b>0.8031</b>        | <b>1.5079</b> | <b>2.7725</b>  | <b>0.6053</b> | <b>0.9876</b> | <b>3.1901</b> |
| 1              | 1.64%        | 1.80%        | 10.12%       | 0.3662               | 1.2331        | 1.5460         | 0.6694        | 1.0127        | <b>3.4409</b> |
| 2              | 0.97%        | 0.17%        | 11.09%       | 0.2586               | 1.0493        | 1.2829         | 0.7086        | 1.0589        | <b>3.4837</b> |
| 3              | 0.91%        | 0.62%        | 12.00%       | 0.1537               | 1.0294        | 0.7772         | 0.7251        | 1.1035        | <b>3.4205</b> |
| 4              | -0.28%       | -0.05%       | 11.72%       | -0.1068              | 0.8604        | -0.6464        | 0.6891        | 1.1120        | <b>3.2257</b> |
| 5              | -0.10%       | -0.08%       | 11.62%       | 0.0698               | 1.1301        | 0.3213         | 0.6894        | 1.1522        | <b>3.1145</b> |
| 6              | -0.28%       | -0.76%       | 11.34%       | -0.0092              | 1.4422        | -0.0334        | 0.6747        | 1.1909        | <b>2.9491</b> |
| 7              | -0.48%       | -1.58%       | 10.87%       | -0.3126              | 1.1689        | -1.3923        | 0.6035        | 1.1531        | <b>2.7243</b> |
| 8              | -1.61%       | -1.68%       | 9.26%        | -0.5162              | 1.0364        | <b>-2.5928</b> | 0.4971        | 1.2039        | <b>2.1494</b> |
| 9              | 0.83%        | 0.03%        | 10.09%       | 0.1775               | 1.0720        | 0.8618         | 0.5211        | 1.2282        | <b>2.2088</b> |
| 10             | 0.39%        | -0.13%       | 10.47%       | 0.0527               | 0.8217        | 0.3341         | 0.5221        | 1.2355        | <b>2.2000</b> |
| 11             | 0.17%        | 0.19%        | 10.65%       | -0.0184              | 1.0817        | -0.0884        | 0.5107        | 1.2208        | <b>2.1775</b> |
| 12             | -0.32%       | -0.92%       | 10.33%       | -0.1125              | 0.7010        | -0.8353        | 0.4833        | 1.2454        | <b>2.0201</b> |
| 13             | 0.66%        | 0.45%        | 11.00%       | 0.1897               | 1.1317        | 0.8726         | 0.5087        | 1.3061        | <b>2.0274</b> |
| 14             | -0.42%       | -0.53%       | 10.58%       | -0.1439              | 0.7845        | -0.9549        | 0.4770        | 1.3384        | <b>1.8553</b> |
| 15             | -0.77%       | -0.75%       | 9.80%        | -0.1814              | 0.8703        | -1.0851        | 0.4401        | 1.3836        | 1.6559        |
| 16             | -0.66%       | -0.43%       | 9.14%        | -0.2799              | 1.0066        | -1.4476        | 0.3881        | 1.3642        | 1.4810        |
| 17             | -1.38%       | -0.71%       | 7.76%        | -0.3718              | 0.7752        | <b>-2.4967</b> | 0.3227        | 1.3777        | 1.2191        |
| 18             | -0.67%       | -0.31%       | 7.10%        | -0.2987              | 1.5450        | -1.0065        | 0.2707        | 1.3882        | 1.0149        |
| 19             | -0.06%       | -0.13%       | 7.03%        | -0.1549              | 0.9086        | -0.8876        | 0.2428        | 1.3925        | 0.9075        |
| 20             | 0.07%        | -0.09%       | 7.11%        | -0.0061              | 0.7538        | -0.0421        | 0.2388        | 1.3685        | 0.9084        |
| 21             | -0.19%       | -0.32%       | 6.92%        | 0.0122               | 1.4962        | 0.0425         | 0.2379        | 1.3995        | 0.8847        |
| 22             | -0.19%       | 0.00%        | 6.73%        | -0.1542              | 0.9092        | -0.8826        | 0.2116        | 1.3529        | 0.8140        |
| 23             | -0.63%       | -1.00%       | 6.10%        | -0.2339              | 1.0262        | -1.1866        | 0.1739        | 1.3438        | 0.6735        |
| 24             | -0.34%       | -0.17%       | 5.77%        | -0.1367              | 0.8708        | -0.8173        | 0.1516        | 1.3265        | 0.5948        |
| 25             | -0.50%       | -0.56%       | 5.27%        | -0.1472              | 0.8672        | -0.8836        | 0.1282        | 1.3251        | 0.5036        |
| 26             | -0.57%       | -0.16%       | 4.70%        | -0.1222              | 0.5993        | -1.0614        | 0.1090        | 1.3056        | 0.4346        |
| 27             | -1.00%       | -0.60%       | 3.70%        | -0.2976              | 0.6661        | <b>-2.3257</b> | 0.0649        | 1.2977        | 0.2604        |
| 28             | -0.38%       | -0.14%       | 3.32%        | -0.1055              | 0.6456        | -0.8503        | 0.0492        | 1.3064        | 0.1959        |
| 29             | -0.63%       | -0.62%       | 2.70%        | -0.2006              | 0.8034        | -1.2997        | 0.0203        | 1.3519        | 0.0782        |
| 30             | 0.32%        | 0.19%        | 3.02%        | 0.0604               | 0.8623        | 0.3645         | 0.0286        | 1.3555        | 0.1097        |
| <b>-1 to 1</b> |              |              | <b>4.73%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.05335</b> | 0.7402        | 1.3032        | <b>2.9566</b> |

Table-A 7.23 Market Returns; Indian Targets; Germanic Acq (OLS, 18);VWI

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.49%       | -0.28%       | -0.49%        | -0.1366              | 0.8515        | -0.7186        | -0.1366       | 0.8515        | -0.7186       |
| -19            | 0.23%        | 0.45%        | -0.26%        | 0.1465               | 0.5247        | 1.2503         | 0.0070        | 0.5826        | 0.0535        |
| -18            | 0.69%        | -0.26%       | 0.43%         | 0.1158               | 0.8724        | 0.5944         | 0.0725        | 0.7320        | 0.4437        |
| -17            | -1.31%       | -0.35%       | -0.87%        | -0.2084              | 1.1543        | -0.8087        | -0.0414       | 1.0840        | -0.1711       |
| -16            | -0.72%       | -0.58%       | -1.59%        | -0.0875              | 1.2340        | -0.3175        | -0.0762       | 1.2987        | -0.2627       |
| -15            | -0.58%       | -0.22%       | -2.17%        | -0.1878              | 0.8544        | -0.9846        | -0.1462       | 1.1447        | -0.5721       |
| -14            | 1.20%        | 0.41%        | -0.97%        | 0.2356               | 1.0665        | 0.9895         | -0.0463       | 0.9935        | -0.2087       |
| -13            | -1.20%       | -1.25%       | -2.17%        | -0.2459              | 1.6108        | -0.6837        | -0.1302       | 1.1732        | -0.4972       |
| -12            | -1.05%       | -0.76%       | -3.22%        | -0.2305              | 0.9191        | -1.1234        | -0.1996       | 1.2125        | -0.7375       |
| -11            | 2.17%        | 0.93%        | -1.05%        | 0.6215               | 0.8229        | <b>3.3834</b>  | 0.0072        | 1.0913        | 0.0294        |
| -10            | -0.06%       | 0.07%        | -1.11%        | 0.0718               | 0.7582        | 0.4243         | 0.0285        | 1.0684        | 0.1195        |
| -9             | 0.70%        | 0.08%        | -0.42%        | 0.1229               | 0.8892        | 0.6190         | 0.0628        | 1.0769        | 0.2610        |
| -8             | -2.70%       | -1.26%       | -3.12%        | -0.4914              | 1.0478        | <b>-2.1008</b> | -0.0760       | 1.0103        | -0.3370       |
| -7             | 0.67%        | 0.07%        | -2.45%        | 0.2096               | 0.8888        | 1.0563         | -0.0172       | 0.9828        | -0.0785       |
| -6             | 0.29%        | 0.01%        | -2.15%        | 0.0762               | 0.9767        | 0.3495         | 0.0030        | 1.0270        | 0.0133        |
| -5             | 0.35%        | -0.38%       | -1.80%        | 0.0572               | 0.8592        | 0.2983         | 0.0172        | 0.9874        | 0.0782        |
| -4             | 1.19%        | 0.27%        | -0.61%        | 0.2600               | 1.2333        | 0.9442         | 0.0798        | 1.0624        | 0.3364        |
| -3             | 0.34%        | -0.67%       | -0.27%        | 0.2418               | 1.9843        | 0.5458         | 0.1345        | 1.1197        | 0.5381        |
| -2             | 0.79%        | 0.15%        | 0.52%         | 0.3698               | 1.1192        | 1.4798         | 0.2158        | 1.1422        | 0.8461        |
| -1             | 2.78%        | 1.22%        | 3.30%         | 0.9323               | 1.8535        | <b>2.2531</b>  | 0.4188        | 1.1822        | 1.5867        |
| <b>0</b>       | <b>5.88%</b> | <b>3.40%</b> | <b>9.18%</b>  | <b>2.1569</b>        | <b>3.1824</b> | <b>3.0359</b>  | <b>0.8794</b> | <b>1.3243</b> | <b>2.9743</b> |
| 1              | 4.94%        | 3.18%        | 14.11%        | 1.2424               | 1.9384        | <b>2.8709</b>  | 1.1240        | 1.4617        | <b>3.4445</b> |
| 2              | 1.32%        | 0.15%        | 15.44%        | 0.2770               | 1.5958        | 0.7776         | 1.1571        | 1.6031        | <b>3.2331</b> |
| 3              | -1.14%       | -0.28%       | 14.30%        | -0.3472              | 0.9684        | -1.6058        | 1.0618        | 1.5899        | <b>2.9915</b> |
| 4              | -0.68%       | -0.43%       | 13.62%        | -0.1510              | 0.6563        | -1.0309        | 1.0102        | 1.5935        | <b>2.8396</b> |
| 5              | -1.47%       | -0.95%       | 12.14%        | -0.4253              | 0.8114        | <b>-2.3478</b> | 0.9072        | 1.5514        | <b>2.6192</b> |
| 6              | -0.30%       | -0.59%       | 11.84%        | 0.0544               | 1.1153        | 0.2187         | 0.9007        | 1.5433        | <b>2.6141</b> |
| 7              | -0.56%       | -0.14%       | 11.28%        | -0.1183              | 0.5609        | -0.9447        | 0.8621        | 1.5095        | <b>2.5581</b> |
| 8              | 0.29%        | -0.33%       | 11.57%        | 0.0706               | 0.5446        | 0.5807         | 0.8602        | 1.4971        | <b>2.5737</b> |
| 9              | 0.14%        | -0.11%       | 11.71%        | 0.0143               | 0.5361        | 0.1197         | 0.8484        | 1.4660        | <b>2.5920</b> |
| 10             | -0.30%       | -0.30%       | 11.41%        | -0.1692              | 0.7735        | -0.9800        | 0.8042        | 1.4131        | <b>2.5491</b> |
| 11             | -0.41%       | 0.23%        | 10.99%        | -0.0116              | 0.7380        | -0.0705        | 0.7895        | 1.4089        | <b>2.5099</b> |
| 12             | 0.80%        | -0.02%       | 11.80%        | 0.0549               | 0.7588        | 0.3242         | 0.7870        | 1.3379        | <b>2.6346</b> |
| 13             | -0.10%       | -0.34%       | 11.70%        | 0.1049               | 1.0566        | 0.4447         | 0.7933        | 1.2821        | <b>2.7715</b> |
| 14             | 0.09%        | -0.18%       | 11.79%        | 0.0810               | 0.9840        | 0.3689         | 0.7956        | 1.2574        | <b>2.8340</b> |
| 15             | -0.67%       | -0.74%       | 11.12%        | -0.0629              | 0.8742        | -0.3221        | 0.7740        | 1.2663        | <b>2.7378</b> |
| 16             | -0.12%       | -0.67%       | 11.00%        | -0.1173              | 0.8609        | -0.6104        | 0.7442        | 1.2699        | <b>2.6249</b> |
| 17             | 0.54%        | -0.13%       | 11.54%        | 0.0084               | 0.8639        | 0.0433         | 0.7357        | 1.2479        | <b>2.6406</b> |
| 18             | 1.23%        | 1.04%        | 12.77%        | 0.4939               | 0.9853        | <b>2.2454</b>  | 0.8053        | 1.2457        | <b>2.8954</b> |
| 19             | 1.63%        | 0.50%        | 14.41%        | 0.4012               | 0.8987        | <b>1.9998</b>  | 0.8586        | 1.1978        | <b>3.2108</b> |
| 20             | -0.18%       | -0.05%       | 14.23%        | -0.0664              | 0.6407        | -0.4642        | 0.8377        | 1.1939        | <b>3.1427</b> |
| 21             | -0.43%       | -0.63%       | 13.80%        | -0.0745              | 0.9132        | -0.3654        | 0.8161        | 1.1315        | <b>3.2309</b> |
| 22             | -0.29%       | 0.04%        | 13.51%        | 0.0340               | 0.8723        | 0.1746         | 0.8118        | 1.1015        | <b>3.3011</b> |
| 23             | 0.54%        | 0.04%        | 14.05%        | 0.1339               | 0.6680        | 0.8977         | 0.8227        | 1.0831        | <b>3.4022</b> |
| 24             | -0.26%       | -0.28%       | 13.80%        | -0.0560              | 0.7757        | -0.3235        | 0.8051        | 1.0967        | <b>3.2883</b> |
| 25             | -0.04%       | 0.17%        | 13.76%        | 0.2329               | 1.5089        | 0.6913         | 0.8307        | 1.1452        | <b>3.2489</b> |
| 26             | -0.58%       | -0.22%       | 13.18%        | -0.1447              | 0.5460        | -1.1871        | 0.8007        | 1.1268        | <b>3.1828</b> |
| 27             | -0.11%       | 0.16%        | 13.08%        | 0.0897               | 0.9999        | 0.4019         | 0.8052        | 1.1268        | <b>3.2010</b> |
| 28             | 1.88%        | 0.87%        | 14.96%        | 0.4193               | 0.6337        | <b>2.9635</b>  | 0.8569        | 1.0838        | <b>3.5416</b> |
| 29             | -0.27%       | -1.18%       | 14.69%        | 0.0551               | 1.3432        | 0.1839         | 0.8561        | 1.0459        | <b>3.6662</b> |
| 30             | -0.40%       | 0.00%        | 14.28%        | -0.0702              | 0.8110        | -0.3877        | 0.8378        | 1.0775        | <b>3.4827</b> |
| <b>-1 to 1</b> |              |              | <b>13.60%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.07068</b> | 2.5009        | 2.6218        | <b>4.2727</b> |

**Table-A 7.24 Market Returns; Indian Targets; Nordic Acq (OLS, 11);VWI**

| Days          | AAR          | Median       | CAAR          | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|---------------|--------------|--------------|---------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20           | -0.93%       | -0.55%       | -0.93%        | -0.2906              | 0.6404         | -1.4412        | -0.2906       | 0.6404        | -1.4412       |
| -19           | 1.91%        | 0.16%        | 0.98%         | 0.3418               | 1.0854         | 1.0002         | 0.0362        | 0.9106        | 0.1263        |
| -18           | -2.82%       | -0.64%       | -1.84%        | -0.2867              | 0.9169         | -0.9930        | -0.1359       | 0.8037        | -0.5371       |
| -17           | 0.91%        | -0.12%       | -0.93%        | 0.1159               | 1.4431         | 0.2551         | -0.0598       | 0.5276        | -0.3598       |
| -16           | -0.54%       | 0.49%        | -1.46%        | 0.1411               | 1.1151         | 0.4019         | 0.0097        | 0.6990        | 0.0439        |
| -15           | 0.27%        | -0.16%       | -1.19%        | 0.1017               | 0.7181         | 0.4499         | 0.0503        | 0.7805        | 0.2048        |
| -14           | 1.34%        | 0.20%        | 0.14%         | 0.0675               | 0.7155         | 0.2994         | 0.0721        | 0.7712        | 0.2969        |
| -13           | -0.58%       | -0.51%       | -0.44%        | -0.1652              | 0.7172         | -0.7317        | 0.0090        | 0.6420        | 0.0447        |
| -12           | 2.50%        | 0.90%        | 2.07%         | 0.2741               | 0.7667         | 1.1353         | 0.0999        | 0.7041        | 0.4505        |
| -11           | 3.65%        | 1.14%        | 5.72%         | 0.4048               | 1.0846         | 1.1852         | 0.2227        | 0.6606        | 1.0709        |
| -10           | 2.33%        | 1.54%        | 8.05%         | 0.4448               | 1.3492         | 1.0472         | 0.3465        | 0.7197        | 1.5291        |
| -9            | -0.73%       | 0.48%        | 7.32%         | -0.2258              | 0.7082         | -1.0127        | 0.2666        | 0.6830        | 1.2396        |
| -8            | -0.64%       | -0.10%       | 6.67%         | 0.0050               | 0.6704         | 0.0238         | 0.2575        | 0.6629        | 1.2337        |
| -7            | 1.24%        | 0.35%        | 7.91%         | 0.1624               | 0.9147         | 0.5640         | 0.2915        | 0.6271        | 1.4765        |
| -6            | -1.29%       | -0.30%       | 6.62%         | -0.2640              | 0.7364         | -1.1384        | 0.2135        | 0.6249        | 1.0851        |
| -5            | 0.85%        | 0.68%        | 7.47%         | 0.3884               | 1.0473         | 1.1779         | 0.3038        | 0.5055        | <b>1.9090</b> |
| -4            | 0.29%        | -0.20%       | 7.76%         | 0.1016               | 0.9604         | 0.3359         | 0.3194        | 0.6001        | 1.6904        |
| -3            | 0.36%        | -0.23%       | 8.12%         | 0.2422               | 1.0694         | 0.7193         | 0.3675        | 0.6888        | 1.6944        |
| -2            | 1.19%        | -0.05%       | 9.31%         | 0.3574               | 0.8000         | 1.4187         | 0.4397        | 0.6803        | <b>2.0527</b> |
| -1            | 4.40%        | 3.29%        | 13.71%        | 1.0351               | 1.2934         | <b>2.5418</b>  | 0.6600        | 0.7071        | <b>2.9643</b> |
| <b>0</b>      | <b>3.35%</b> | <b>5.10%</b> | <b>17.06%</b> | <b>0.9652</b>        | <b>2.2911</b>  | <b>1.3380</b>  | <b>0.8547</b> | <b>0.5701</b> | <b>4.7619</b> |
| 1             | 4.10%        | 1.69%        | 21.16%        | 1.0125               | 2.1925         | 1.4668         | 1.0509        | 0.7282        | <b>4.5839</b> |
| 2             | 1.65%        | -0.12%       | 22.80%        | 0.5992               | 2.0578         | 0.9248         | 1.1528        | 0.9524        | <b>3.8443</b> |
| 3             | 2.88%        | 0.92%        | 25.68%        | 0.9481               | 1.6835         | 1.7886         | 1.3220        | 1.2295        | <b>3.4150</b> |
| 4             | -0.44%       | -0.77%       | 25.24%        | -0.0483              | 1.0723         | -0.1431        | 1.2857        | 1.2721        | <b>3.2099</b> |
| 5             | 1.58%        | 0.95%        | 26.82%        | 0.3660               | 1.5019         | 0.7740         | 1.3325        | 1.2137        | <b>3.4869</b> |
| 6             | -2.01%       | -0.33%       | 24.81%        | 0.0262               | 1.2177         | 0.0684         | 1.3126        | 1.1876        | <b>3.5104</b> |
| 7             | 0.71%        | -0.01%       | 25.52%        | 0.0032               | 0.6835         | 0.0150         | 1.2896        | 1.1461        | <b>3.5735</b> |
| 8             | 0.10%        | -0.06%       | 25.61%        | -0.0531              | 0.6781         | -0.2486        | 1.2573        | 1.1321        | <b>3.5273</b> |
| 9             | 2.35%        | 0.89%        | 27.96%        | 0.2870               | 0.6096         | 1.4953         | 1.2886        | 1.1224        | <b>3.6461</b> |
| 10            | -0.44%       | 0.70%        | 27.52%        | 0.1477               | 0.7875         | 0.5957         | 1.2941        | 1.1516        | <b>3.5693</b> |
| 11            | 1.33%        | 0.94%        | 28.85%        | 0.2185               | 0.6158         | 1.1268         | 1.3124        | 1.1698        | <b>3.5632</b> |
| 12            | 0.48%        | 0.03%        | 29.33%        | 0.1012               | 0.6525         | 0.4924         | 1.3099        | 1.2126        | <b>3.4309</b> |
| 13            | -0.61%       | 0.25%        | 28.72%        | 0.0312               | 0.6544         | 0.1514         | 1.2959        | 1.2709        | <b>3.2384</b> |
| 14            | -1.06%       | -1.01%       | 27.67%        | -0.3130              | 0.4984         | <b>-1.9945</b> | 1.2243        | 1.2283        | <b>3.1657</b> |
| 15            | 0.45%        | 0.73%        | 28.11%        | 0.2452               | 0.5745         | 1.3553         | 1.2481        | 1.2074        | <b>3.2831</b> |
| 16            | -0.33%       | 0.58%        | 27.78%        | 0.0639               | 0.9778         | 0.2077         | 1.2416        | 1.2245        | <b>3.2204</b> |
| 17            | 0.15%        | 0.11%        | 27.93%        | -0.0288              | 0.8741         | -0.1045        | 1.2205        | 1.2860        | <b>3.0142</b> |
| 18            | 0.53%        | 0.05%        | 28.46%        | 0.0822               | 0.7374         | 0.3540         | 1.2179        | 1.2401        | <b>3.1192</b> |
| 19            | 1.44%        | 0.75%        | 29.90%        | 0.2160               | 0.6648         | 1.0320         | 1.2367        | 1.2464        | <b>3.1513</b> |
| 20            | -0.01%       | -0.28%       | 29.90%        | -0.0094              | 1.0194         | -0.0294        | 1.2201        | 1.1950        | <b>3.2427</b> |
| 21            | -1.46%       | -1.00%       | 28.44%        | -0.2852              | 0.6894         | -1.3139        | 1.1615        | 1.2238        | <b>3.0143</b> |
| 22            | -1.38%       | -0.25%       | 27.06%        | -0.3724              | 0.4989         | <b>-2.3710</b> | 1.0911        | 1.2149        | <b>2.8524</b> |
| 23            | 1.31%        | 0.45%        | 28.37%        | 0.3921               | 0.5294         | <b>2.3520</b>  | 1.1377        | 1.1819        | <b>3.0574</b> |
| 24            | 0.37%        | 0.48%        | 28.74%        | 0.0151               | 0.3518         | 0.1360         | 1.1273        | 1.1785        | <b>3.0378</b> |
| 25            | -0.99%       | -0.80%       | 27.74%        | -0.2156              | 0.6259         | -1.0940        | 1.0832        | 1.1791        | <b>2.9175</b> |
| 26            | 1.54%        | 0.76%        | 29.28%        | 0.2434               | 0.5239         | 1.4757         | 1.1071        | 1.1307        | <b>3.1098</b> |
| 27            | -0.77%       | -0.13%       | 28.51%        | 0.0417               | 0.5620         | 0.2356         | 1.1015        | 1.1607        | <b>3.0140</b> |
| 28            | 1.03%        | -0.25%       | 29.55%        | -0.0217              | 1.8445         | -0.0374        | 1.0871        | 1.1716        | <b>2.9470</b> |
| 29            | -1.01%       | -0.98%       | 28.54%        | -0.4431              | 1.4190         | -0.9918        | 1.0135        | 1.2212        | <b>2.6358</b> |
| 30            | 0.00%        | -0.36%       | 28.55%        | 0.1609               | 1.0822         | 0.4721         | 1.0261        | 1.1389        | <b>2.8615</b> |
| <b>1 to 1</b> |              |              | <b>11.85%</b> | <b>StdDev(AAR-0)</b> | <b>0.09412</b> |                | 1.7395        | 2.0331        | <b>2.7174</b> |



**Table-A 7.25 Market Returns; Indian Targets; Anglo Acq (OLS, 46);VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.19%       | -0.09%       | -0.19%       | -0.0538              | 0.9981         | -0.3896        | -0.0538       | 0.9981        | -0.3896       |
| -19            | 0.30%        | 0.31%        | 0.11%        | 0.1498               | 0.9321         | 1.1613         | 0.0679        | 0.9622        | 0.5097        |
| -18            | -0.22%       | -0.13%       | -0.11%       | -0.0837              | 0.9631         | -0.6281        | 0.0071        | 0.9960        | 0.0514        |
| -17            | -0.45%       | -0.14%       | -0.56%       | 0.0097               | 0.9600         | 0.0731         | 0.0110        | 0.8517        | 0.0933        |
| -16            | 0.60%        | 0.24%        | 0.03%        | 0.2135               | 1.1023         | 1.3990         | 0.1053        | 0.8658        | 0.8787        |
| -15            | 0.46%        | 0.06%        | 0.49%        | 0.1157               | 1.0664         | 0.7839         | 0.1434        | 0.8891        | 1.1648        |
| -14            | -0.44%       | -0.08%       | 0.05%        | -0.0422              | 0.9737         | -0.3130        | 0.1168        | 0.8645        | 0.9759        |
| -13            | 0.07%        | -0.24%       | 0.12%        | 0.0434               | 0.8964         | 0.3499         | 0.1246        | 0.9065        | 0.9930        |
| -12            | 0.87%        | -0.05%       | 1.00%        | 0.2628               | 1.0292         | <b>1.8444</b>  | 0.2051        | 1.0438        | 1.4191        |
| -11            | 0.74%        | 0.62%        | 1.74%        | 0.2306               | 0.9489         | <b>1.7552</b>  | 0.2675        | 1.0971        | <b>1.7610</b> |
| -10            | 0.57%        | -0.08%       | 2.31%        | 0.0512               | 0.9912         | 0.3728         | 0.2704        | 1.1080        | <b>1.7630</b> |
| -9             | 1.06%        | 0.01%        | 3.38%        | 0.4693               | 1.7070         | <b>1.9859</b>  | 0.3944        | 1.1618        | <b>2.4521</b> |
| -8             | 0.64%        | 0.13%        | 4.02%        | 0.2553               | 1.1444         | 1.6112         | 0.4497        | 1.2437        | <b>2.6120</b> |
| -7             | 0.45%        | -0.05%       | 4.47%        | 0.0423               | 0.9586         | 0.3189         | 0.4447        | 1.3086        | <b>2.4545</b> |
| -6             | 0.07%        | -0.16%       | 4.53%        | 0.0843               | 1.3357         | 0.4557         | 0.4514        | 1.3322        | <b>2.4473</b> |
| -5             | -1.57%       | -0.87%       | 2.96%        | -0.3266              | 1.2490         | <b>-1.8885</b> | 0.3554        | 1.3723        | <b>1.8706</b> |
| -4             | -0.04%       | -0.52%       | 2.92%        | -0.0286              | 1.1698         | -0.1765        | 0.3378        | 1.3192        | <b>1.8499</b> |
| -3             | 0.88%        | 0.31%        | 3.80%        | 0.3585               | 0.9449         | <b>2.7404</b>  | 0.4128        | 1.3257        | <b>2.2494</b> |
| -2             | 0.32%        | -0.49%       | 4.11%        | 0.0903               | 1.0478         | 0.6225         | 0.4225        | 1.3821        | <b>2.2082</b> |
| -1             | 0.26%        | 0.08%        | 4.37%        | 0.3060               | 1.9486         | 1.1344         | 0.4803        | 1.3226        | <b>2.6229</b> |
| <b>0</b>       | <b>1.78%</b> | <b>0.37%</b> | <b>6.14%</b> | <b>0.6647</b>        | <b>2.5104</b>  | <b>1.9126</b>  | <b>0.6137</b> | <b>1.3911</b> | <b>3.1868</b> |
| 1              | 0.97%        | 0.18%        | 7.11%        | 0.1066               | 1.2639         | 0.6094         | 0.6224        | 1.3354        | <b>3.3664</b> |
| 2              | 0.63%        | 0.35%        | 7.75%        | 0.1135               | 0.8628         | 0.9499         | 0.6323        | 1.3395        | <b>3.4098</b> |
| 3              | -1.89%       | -0.81%       | 5.85%        | -0.5671              | 2.0855         | <b>-1.9642</b> | 0.5033        | 1.4182        | <b>2.5632</b> |
| 4              | 0.21%        | -0.10%       | 6.06%        | -0.0050              | 1.3991         | -0.0260        | 0.4921        | 1.4244        | <b>2.4954</b> |
| 5              | -0.24%       | -0.04%       | 5.82%        | -0.0064              | 0.9389         | -0.0495        | 0.4813        | 1.3860        | <b>2.5082</b> |
| 6              | -0.69%       | -0.40%       | 5.13%        | -0.2784              | 0.7926         | <b>-2.5372</b> | 0.4187        | 1.2911        | <b>2.3425</b> |
| 7              | -1.04%       | -0.26%       | 4.10%        | -0.3594              | 1.3556         | <b>-1.9148</b> | 0.3432        | 1.3382        | <b>1.8527</b> |
| 8              | -0.65%       | -0.51%       | 3.45%        | -0.2382              | 0.7835         | <b>-2.1956</b> | 0.2930        | 1.3317        | 1.5894        |
| 9              | 0.19%        | 0.16%        | 3.64%        | 0.0874               | 1.0492         | 0.6019         | 0.3041        | 1.3348        | 1.6455        |
| 10             | 0.24%        | 0.15%        | 3.88%        | 0.0683               | 0.7381         | 0.6684         | 0.3114        | 1.3265        | <b>1.6957</b> |
| 11             | 0.00%        | -0.72%       | 3.88%        | -0.0673              | 0.9176         | -0.5297        | 0.2946        | 1.2966        | 1.6412        |
| 12             | -1.57%       | -0.27%       | 2.31%        | -0.3922              | 2.4467         | -1.1580        | 0.2218        | 1.4883        | 1.0765        |
| 13             | 0.12%        | -0.66%       | 2.43%        | -0.0275              | 1.0656         | -0.1865        | 0.2138        | 1.4125        | 1.0934        |
| 14             | -0.53%       | -0.78%       | 1.89%        | -0.0967              | 0.8921         | -0.7829        | 0.1944        | 1.4187        | 0.9897        |
| 15             | -0.39%       | -0.43%       | 1.50%        | -0.0973              | 0.9285         | -0.7566        | 0.1755        | 1.3598        | 0.9321        |
| 16             | -1.18%       | -0.75%       | 0.32%        | -0.4156              | 0.9887         | <b>-3.0365</b> | 0.1047        | 1.3956        | 0.5421        |
| 17             | 0.11%        | 0.03%        | 0.43%        | -0.1089              | 1.2562         | -0.6263        | 0.0857        | 1.4019        | 0.4415        |
| 18             | -0.11%       | -0.13%       | 0.32%        | 0.0073               | 1.2247         | 0.0428         | 0.0857        | 1.3967        | 0.4435        |
| 19             | 0.20%        | 0.51%        | 0.52%        | 0.0948               | 0.8823         | 0.7765         | 0.0997        | 1.3963        | 0.5156        |
| 20             | 0.21%        | 0.34%        | 0.73%        | 0.0363               | 0.7244         | 0.3620         | 0.1041        | 1.3913        | 0.5405        |
| 21             | -0.35%       | -0.30%       | 0.37%        | -0.1290              | 0.9635         | -0.9668        | 0.0830        | 1.4086        | 0.4255        |
| 22             | -0.21%       | 0.09%        | 0.16%        | -0.0229              | 1.1340         | -0.1458        | 0.0785        | 1.4547        | 0.3898        |
| 23             | -0.66%       | -0.07%       | -0.50%       | -0.1435              | 1.0674         | -0.9710        | 0.0560        | 1.5186        | 0.2663        |
| 24             | 0.52%        | 0.34%        | 0.02%        | 0.2714               | 0.9135         | <b>2.1462</b>  | 0.0958        | 1.4778        | 0.4683        |
| 25             | 0.10%        | 0.44%        | 0.12%        | 0.0879               | 0.7221         | 0.8790         | 0.1077        | 1.4248        | 0.5461        |
| 26             | -0.12%       | -0.09%       | 0.00%        | -0.0873              | 1.0908         | -0.5784        | 0.0938        | 1.4037        | 0.4828        |
| 27             | -0.04%       | 0.06%        | -0.04%       | -0.0404              | 1.3052         | -0.2235        | 0.0870        | 1.3563        | 0.4634        |
| 28             | 0.38%        | 0.19%        | 0.34%        | 0.1432               | 0.7725         | 1.3395         | 0.1066        | 1.3516        | 0.5696        |
| 29             | 0.77%        | 0.21%        | 1.11%        | 0.3053               | 1.0919         | <b>2.0196</b>  | 0.1487        | 1.3346        | 0.8048        |
| 30             | 0.52%        | 0.13%        | 1.63%        | 0.1139               | 0.9096         | 0.9046         | 0.1632        | 1.2889        | 0.9145        |
| <b>-1 to 1</b> |              |              | <b>3.00%</b> | <b>StdDev(AAR-0)</b> | <b>0.06248</b> |                | 0.6220        | 2.0327        | <b>2.2103</b> |

Table-A 7.26 Market Returns; Indian Targets; LE Acq (OLS, 9);VWI

| Days           | AAR          | Median       | CAAR          | SARa                 | SD             | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|----------------------|----------------|----------------|----------------|---------------|----------------|
| -20            | -0.16%       | -0.07%       | -0.16%        | -0.1271              | 1.2226         | -0.3076        | -0.1271        | 1.2226        | -0.3076        |
| -19            | 2.88%        | -0.97%       | 2.72%         | 0.3611               | 1.6434         | 0.6501         | 0.1655         | 1.5680        | 0.3122         |
| -18            | 0.41%        | 1.59%        | 3.13%         | 0.2987               | 1.4573         | 0.6064         | 0.3076         | 1.4057        | 0.6473         |
| -17            | 0.01%        | -0.88%       | 3.14%         | -0.1224              | 0.9430         | -0.3839        | 0.2052         | 1.3484        | 0.4502         |
| -16            | -2.96%       | -1.55%       | 0.18%         | -0.5280              | 0.7485         | <b>-2.0865</b> | -0.0526        | 0.9393        | -0.1656        |
| -15            | 2.62%        | -0.08%       | 2.80%         | 0.3832               | 0.9936         | 1.1409         | 0.1084         | 0.8282        | 0.3873         |
| -14            | -3.76%       | -2.55%       | -0.96%        | -0.6345              | 1.2412         | -1.5121        | -0.1394        | 0.6343        | -0.6501        |
| -13            | -1.34%       | -0.99%       | -2.30%        | -0.1820              | 0.3952         | -1.3622        | -0.1947        | 0.5268        | -1.0934        |
| -12            | -2.63%       | -1.25%       | -4.94%        | -0.5721              | 0.7875         | <b>-2.1492</b> | -0.3743        | 0.4753        | <b>-2.3296</b> |
| -11            | -1.77%       | -0.04%       | -6.71%        | -0.4512              | 1.5981         | -0.8352        | -0.4978        | 0.8537        | -1.7249        |
| -10            | -0.41%       | 0.28%        | -7.11%        | -0.3146              | 1.7108         | -0.5439        | -0.5695        | 1.2641        | -1.3326        |
| -9             | 1.27%        | 0.23%        | -5.85%        | 0.2977               | 1.2156         | 0.7245         | -0.4593        | 0.9317        | -1.4582        |
| -8             | -0.96%       | -0.93%       | -6.81%        | -0.1167              | 1.0720         | -0.3220        | -0.4736        | 0.9950        | -1.4080        |
| -7             | 0.72%        | -0.99%       | -6.09%        | 0.1518               | 1.8045         | 0.2489         | -0.4158        | 0.5832        | <b>-2.1091</b> |
| -6             | -5.18%       | -1.61%       | -11.28%       | -0.7306              | 1.6240         | -1.3308        | -0.5904        | 0.5009        | <b>-3.4866</b> |
| -5             | -3.80%       | -3.92%       | -15.07%       | -0.8571              | 1.1276         | <b>-2.2484</b> | -0.7859        | 0.4386        | <b>-5.2998</b> |
| -4             | 1.47%        | -0.15%       | -13.61%       | 0.0955               | 1.2160         | 0.2322         | -0.7393        | 0.6070        | <b>-3.6030</b> |
| -3             | 0.83%        | -0.11%       | -12.77%       | -0.0589              | 1.0484         | -0.1661        | -0.7323        | 0.6930        | <b>-3.1258</b> |
| -2             | -0.01%       | -0.03%       | -12.79%       | 0.1686               | 1.2940         | 0.3855         | -0.6741        | 0.6282        | <b>-3.1742</b> |
| -1             | 0.75%        | -0.17%       | -12.04%       | 0.1266               | 0.6840         | 0.5475         | -0.6287        | 0.5610        | <b>-3.3153</b> |
| <b>0</b>       | <b>3.42%</b> | <b>2.08%</b> | <b>-8.62%</b> | <b>0.9232</b>        | <b>1.3103</b>  | <b>2.0841</b>  | <b>-0.4121</b> | <b>0.6329</b> | <b>-1.9263</b> |
| 1              | -1.31%       | -0.55%       | -9.93%        | -0.5325              | 1.5213         | -1.0354        | -0.5162        | 0.7060        | <b>-2.1627</b> |
| 2              | -0.30%       | -0.29%       | -10.23%       | -0.0724              | 0.2915         | -0.7351        | -0.5199        | 0.6723        | <b>-2.2875</b> |
| 3              | 3.72%        | -1.00%       | -6.51%        | 0.4369               | 1.6103         | 0.8026         | -0.4198        | 0.7331        | -1.6939        |
| 4              | 0.44%        | -0.47%       | -6.07%        | -0.0119              | 0.7008         | -0.0502        | -0.4137        | 0.7765        | -1.5760        |
| 5              | 0.40%        | 0.26%        | -5.67%        | 0.0586               | 0.4248         | 0.4083         | -0.3942        | 0.7377        | -1.5807        |
| 6              | -0.20%       | 0.45%        | -5.87%        | -0.0496              | 0.9160         | -0.1601        | -0.3963        | 0.7033        | -1.6671        |
| 7              | 0.34%        | -0.06%       | -5.53%        | -0.0259              | 0.6527         | -0.1174        | -0.3941        | 0.6841        | -1.7041        |
| 8              | 0.16%        | 1.06%        | -5.37%        | 0.2243               | 0.9825         | 0.6752         | -0.3456        | 0.5723        | -1.7863        |
| 9              | -1.07%       | -1.30%       | -6.44%        | -0.3432              | 0.4791         | <b>-2.1188</b> | -0.4024        | 0.5928        | <b>-2.0082</b> |
| 10             | -1.66%       | -0.96%       | -8.09%        | -0.2862              | 0.7341         | -1.1532        | -0.4473        | 0.5878        | <b>-2.2509</b> |
| 11             | 0.90%        | 0.07%        | -7.19%        | 0.2475               | 0.6823         | 1.0732         | -0.3965        | 0.5492        | <b>-2.1356</b> |
| 12             | 2.03%        | 0.01%        | -5.16%        | 0.3033               | 1.1055         | 0.8117         | -0.3376        | 0.6506        | -1.5352        |
| 13             | -1.63%       | -2.47%       | -6.78%        | -0.3881              | 0.7884         | -1.4561        | -0.3992        | 0.6138        | <b>-1.9238</b> |
| 14             | -0.38%       | -0.12%       | -7.16%        | -0.1500              | 0.6376         | -0.6957        | -0.4188        | 0.6621        | <b>-1.8712</b> |
| 15             | -1.65%       | -0.51%       | -8.81%        | -0.4657              | 0.9243         | -1.4904        | -0.4906        | 0.7405        | <b>-1.9595</b> |
| 16             | -3.73%       | -1.52%       | -12.54%       | -0.7322              | 1.0442         | <b>-2.0743</b> | -0.6043        | 0.7578        | <b>-2.3586</b> |
| 17             | -0.55%       | -0.55%       | -13.09%       | -0.3112              | 0.8444         | -1.0901        | -0.6467        | 0.8336        | <b>-2.2951</b> |
| 18             | 4.72%        | 0.89%        | -8.37%        | 0.7670               | 1.5764         | 1.4392         | -0.5156        | 0.8077        | <b>-1.8882</b> |
| 19             | -0.04%       | 0.33%        | -8.41%        | 0.4024               | 1.6492         | 0.7218         | -0.4455        | 0.5716        | <b>-2.3053</b> |
| 20             | -0.05%       | -0.08%       | -8.46%        | 0.2058               | 1.6113         | 0.3778         | -0.4078        | 0.4797        | <b>-2.5152</b> |
| 21             | 0.68%        | 0.47%        | -7.78%        | 0.1721               | 0.5498         | 0.9259         | -0.3764        | 0.4959        | <b>-2.2453</b> |
| 22             | -1.30%       | -0.73%       | -9.08%        | 0.1542               | 1.4388         | 0.3171         | -0.3485        | 0.4771        | <b>-2.1605</b> |
| 23             | 1.64%        | 0.47%        | -7.44%        | 0.3377               | 0.9050         | 1.1040         | -0.2936        | 0.4774        | -1.8191        |
| 24             | 0.56%        | -0.01%       | -6.88%        | 0.0523               | 0.7567         | 0.2043         | -0.2825        | 0.4851        | -1.7227        |
| 25             | -0.47%       | -0.27%       | -7.35%        | -0.0090              | 0.7354         | -0.0364        | -0.2808        | 0.4995        | -1.6627        |
| 26             | -1.36%       | -1.09%       | -8.71%        | -0.3234              | 0.5627         | -1.7000        | -0.3249        | 0.5581        | -1.7223        |
| 27             | 1.32%        | 1.92%        | -7.39%        | 0.3608               | 0.6335         | 1.6847         | -0.2694        | 0.5298        | -1.5046        |
| 28             | -0.83%       | -1.17%       | -8.22%        | -0.1262              | 0.4545         | -0.8215        | -0.2847        | 0.5028        | -1.6750        |
| 29             | -0.49%       | -0.09%       | -8.71%        | -0.1059              | 0.3865         | -0.8102        | -0.2968        | 0.4890        | -1.7957        |
| 30             | -0.42%       | 0.31%        | -9.13%        | 0.0317               | 0.8041         | 0.1167         | -0.2895        | 0.4595        | <b>-1.8634</b> |
| <b>-1 to 1</b> |              |              | <b>2.86%</b>  | <b>StdDev(AAR-0)</b> | <b>0.04321</b> |                | 0.2986         | 0.9892        | 0.8930         |

**Table-A 7.27 Market Returns; Indian Targets; Others Acq (OLS, 3);VWI**

| Days           | AAR          | Median       | CAAR           | SARa          | SD            | t-Stats              | SCARa          | SD            | t-Stats        |        |
|----------------|--------------|--------------|----------------|---------------|---------------|----------------------|----------------|---------------|----------------|--------|
| -20            | -4.13%       | -3.44%       | -4.13%         | -0.6564       | 0.4595        | -2.4068              | -0.6564        | 0.4595        | -2.4068        |        |
| -19            | -2.69%       | -0.48%       | -6.82%         | -0.0176       | 0.6169        | -0.0480              | -0.4766        | 0.2893        | -2.7755        |        |
| -18            | -6.17%       | -5.99%       | -12.99%        | -0.5895       | 0.3477        | -2.8560              | -0.7295        | 0.4356        | -2.8216        |        |
| -17            | -6.26%       | -6.13%       | -19.25%        | -0.7646       | 0.1828        | <b>-7.0480</b>       | -1.0140        | 0.3761        | <b>-4.5417</b> |        |
| -16            | -3.61%       | -1.22%       | -22.86%        | -0.2368       | 0.3302        | -1.2083              | -1.0129        | 0.4087        | <b>-4.1751</b> |        |
| -15            | 2.43%        | 0.15%        | -20.43%        | 0.3814        | 0.6784        | 0.9472               | -0.7689        | 0.2979        | <b>-4.3479</b> |        |
| -14            | 2.41%        | -0.53%       | -18.03%        | 0.6140        | 1.7301        | 0.5979               | -0.4798        | 0.7656        | -1.0559        |        |
| -13            | 0.23%        | -0.15%       | -17.79%        | 0.3554        | 0.8843        | 0.6770               | -0.3232        | 0.8151        | -0.6680        |        |
| -12            | -0.99%       | 1.56%        | -18.78%        | 0.3680        | 1.0829        | 0.5724               | -0.1821        | 1.0530        | -0.2913        |        |
| -11            | -6.34%       | -5.97%       | -25.12%        | -0.8945       | 0.5192        | -2.9026              | -0.4556        | 0.8835        | -0.8687        |        |
| -10            | -0.25%       | 1.14%        | -25.36%        | -0.2186       | 0.6174        | -0.5964              | -0.5003        | 0.7803        | -1.0801        |        |
| -9             | 5.83%        | 0.44%        | -19.53%        | 0.3689        | 0.5683        | 1.0934               | -0.3725        | 0.5917        | -1.0605        |        |
| -8             | -5.82%       | -0.24%       | -25.35%        | -0.3601       | 0.5998        | -1.0116              | -0.4578        | 0.7306        | -1.0555        |        |
| -7             | 2.35%        | -1.04%       | -23.00%        | -0.0496       | 0.7276        | -0.1148              | -0.4544        | 0.5096        | -1.5020        |        |
| -6             | -0.13%       | -1.33%       | -23.13%        | -0.1353       | 0.2531        | -0.9004              | -0.4739        | 0.4360        | -1.8310        |        |
| -5             | 0.21%        | -0.17%       | -22.92%        | 0.0156        | 0.1659        | 0.1582               | -0.4549        | 0.4429        | -1.7306        |        |
| -4             | -2.11%       | -1.59%       | -25.02%        | -0.3815       | 0.4212        | -1.5259              | -0.5339        | 0.3277        | -2.7443        |        |
| -3             | -1.24%       | -0.38%       | -26.26%        | -0.0179       | 0.2683        | -0.1122              | -0.5230        | 0.3541        | -2.4887        |        |
| -2             | 0.39%        | 3.78%        | -25.87%        | 0.1011        | 1.0334        | 0.1649               | -0.4859        | 0.3426        | -2.3896        |        |
| -1             | 6.98%        | 6.95%        | -18.89%        | 1.0343        | 0.6469        | 2.6936               | -0.2423        | 0.4750        | -0.8594        |        |
| <b>0</b>       | <b>7.13%</b> | <b>0.55%</b> | <b>-11.76%</b> | <b>0.2904</b> | <b>1.0257</b> | <b>0.4770</b>        | <b>-0.1731</b> | <b>0.2471</b> | <b>-1.1803</b> |        |
| 1              | 12.22%       | 5.58%        | 0.46%          | 0.7507        | 1.2100        | 1.0452               | -0.0091        | 0.0380        | -0.4022        |        |
| 2              | 0.08%        | 0.16%        | 0.55%          | -0.0971       | 0.2843        | -0.5754              | -0.0291        | 0.0754        | -0.6510        |        |
| 3              | 0.82%        | 1.14%        | 1.37%          | -0.0645       | 0.7759        | -0.1401              | -0.0417        | 0.1908        | -0.3681        |        |
| 4              | 3.72%        | 5.23%        | 5.08%          | 0.3539        | 0.6217        | 0.9589               | 0.0299         | 0.1559        | 0.3235         |        |
| 5              | 1.70%        | 1.09%        | 6.78%          | 0.3387        | 0.4961        | 1.1501               | 0.0958         | 0.1122        | 1.4385         |        |
| 6              | 12.76%       | 15.80%       | 19.54%         | 1.7652        | 2.0194        | 1.4727               | 0.4337         | 0.2988        | 2.4452         |        |
| 7              | 1.49%        | -0.08%       | 21.03%         | 0.7771        | 1.7098        | 0.7657               | 0.5728         | 0.5843        | 1.6515         |        |
| 8              | -4.18%       | -0.42%       | 16.85%         | -0.2435       | 0.4415        | -0.9294              | 0.5176         | 0.6165        | 1.4143         |        |
| 9              | -9.89%       | -5.89%       | 6.96%          | -0.7251       | 0.8122        | -1.5040              | 0.3765         | 0.7414        | 0.8555         |        |
| 10             | -1.29%       | -1.13%       | 5.67%          | 0.4268        | 1.4886        | 0.4830               | 0.4470         | 0.9942        | 0.7575         |        |
| 11             | 3.06%        | 2.70%        | 8.73%          | 0.3431        | 0.3677        | 1.5716               | 0.5006         | 1.0271        | 0.8211         |        |
| 12             | 0.55%        | 1.13%        | 9.28%          | 0.0960        | 0.2362        | 0.6851               | 0.5097         | 1.0489        | 0.8186         |        |
| 13             | 3.39%        | 4.15%        | 12.67%         | 0.5776        | 0.7608        | 1.2791               | 0.6012         | 1.1628        | 0.8711         |        |
| 14             | 2.11%        | -0.54%       | 14.78%         | 0.0714        | 0.3328        | 0.3613               | 0.6046         | 1.1178        | 0.9112         |        |
| 15             | -2.50%       | -1.18%       | 12.28%         | -0.1375       | 0.3056        | -0.7582              | 0.5732         | 1.1473        | 0.8418         |        |
| 16             | 0.70%        | 0.61%        | 12.98%         | 0.4761        | 1.0326        | 0.7768               | 0.6437         | 1.2974        | 0.8359         |        |
| 17             | -2.35%       | -2.77%       | 10.63%         | -0.3406       | 0.3078        | -1.8646              | 0.5799         | 1.2307        | 0.7939         |        |
| 18             | -3.40%       | -4.47%       | 7.23%          | -0.4857       | 0.5781        | -1.4154              | 0.4947         | 1.1272        | 0.7394         |        |
| 19             | -0.37%       | -0.15%       | 6.86%          | -0.1413       | 0.4620        | -0.5152              | 0.4661         | 1.0432        | 0.7527         |        |
| 20             | 4.07%        | 1.48%        | 10.93%         | 0.6826        | 0.9695        | 1.1861               | 0.5670         | 1.0049        | 0.9505         |        |
| 21             | -2.43%       | -3.35%       | 8.51%          | -0.6139       | 1.7458        | -0.5925              | 0.4655         | 0.7681        | 1.0209         |        |
| 22             | -1.02%       | 0.03%        | 7.49%          | -0.1202       | 0.3882        | -0.5217              | 0.4417         | 0.7849        | 0.9480         |        |
| 23             | -0.06%       | -1.10%       | 7.43%          | 0.0422        | 0.4783        | 0.1485               | 0.4430         | 0.7562        | 0.9870         |        |
| 24             | -2.21%       | -0.33%       | 5.21%          | -0.3196       | 0.4754        | -1.1324              | 0.3904         | 0.7576        | 0.8683         |        |
| 25             | -0.16%       | -0.79%       | 5.06%          | 0.0703        | 0.3853        | 0.3074               | 0.3965         | 0.7985        | 0.8366         |        |
| 26             | -5.09%       | -4.71%       | -0.03%         | -0.7279       | 0.3877        | <b>-3.1634</b>       | 0.2861         | 0.7574        | 0.6364         |        |
| 27             | 2.35%        | 1.62%        | 2.32%          | 0.4143        | 0.4597        | 1.5185               | 0.3429         | 0.7634        | 0.7567         |        |
| 28             | 1.57%        | 1.04%        | 3.89%          | 0.2902        | 0.3249        | 1.5047               | 0.3808         | 0.8015        | 0.8005         |        |
| 29             | -4.13%       | -3.28%       | -0.24%         | -0.7926       | 1.1118        | -1.2011              | 0.2649         | 0.6454        | 0.6915         |        |
| 30             | -2.14%       | -0.19%       | -2.38%         | -0.4968       | 0.8493        | -0.9856              | 0.1927         | 0.5287        | 0.6142         |        |
| <b>-1 to 1</b> |              |              | <b>26.34%</b>  |               |               | <b>StdDev(AAR-0)</b> | <b>0.14082</b> | 1.1982        | 0.9264         | 2.1791 |

Table-A 7.28 Market Returns; Indian Targets; SA Acq (OLS, 3);VWI

| Days           | AAR           | Median        | CAAR          | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|---------------|---------------|---------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.79%        | 0.63%         | -0.79%        | -0.1997              | 0.8213        | -0.4514        | -0.1997       | 0.8213        | -0.4514       |
| -19            | -0.26%        | 0.42%         | -1.04%        | -0.0087              | 0.9031        | -0.0179        | -0.1474       | 0.8494        | -0.3221       |
| -18            | 0.56%         | 0.48%         | -0.49%        | 0.1858               | 0.0773        | <b>4.4593</b>  | -0.0131       | 0.6980        | -0.0348       |
| -17            | 0.73%         | 1.19%         | 0.24%         | 0.1385               | 1.0071        | 0.2552         | 0.0579        | 0.2274        | 0.4727        |
| -16            | 0.18%         | -0.19%        | 0.42%         | 0.1022               | 0.3801        | 0.4989         | 0.0975        | 0.3428        | 0.5279        |
| -15            | 2.40%         | 2.98%         | 2.82%         | 0.8841               | 0.9489        | 1.7294         | 0.4499        | 0.5941        | 1.4057        |
| -14            | -3.25%        | -3.97%        | -0.44%        | -1.0522              | 0.2617        | <b>-7.4624</b> | 0.0189        | 0.6489        | 0.0539        |
| -13            | 2.97%         | 3.83%         | 2.53%         | 0.8951               | 0.8167        | 2.0343         | 0.3341        | 0.3354        | 1.8490        |
| -12            | -1.07%        | 0.48%         | 1.46%         | -0.3173              | 1.1517        | -0.5113        | 0.2092        | 0.6279        | 0.6185        |
| -11            | -0.64%        | 0.50%         | 0.82%         | -0.1635              | 0.7134        | -0.4254        | 0.1468        | 0.5722        | 0.4761        |
| -10            | -0.65%        | -0.30%        | 0.17%         | -0.2014              | 0.2182        | -1.7127        | 0.0792        | 0.5643        | 0.2606        |
| -9             | 1.91%         | 1.04%         | 2.08%         | 0.6104               | 0.6188        | 1.8308         | 0.2521        | 0.5699        | 0.8210        |
| -8             | 2.03%         | 1.61%         | 4.11%         | 0.6705               | 0.2328        | <b>5.3451</b>  | 0.4281        | 0.5842        | 1.3603        |
| -7             | -2.19%        | -1.02%        | 1.92%         | -0.6934              | 0.8132        | -1.5825        | 0.2273        | 0.5223        | 0.8075        |
| -6             | -1.33%        | -1.67%        | 0.59%         | -0.4198              | 0.1734        | <b>-4.4948</b> | 0.1111        | 0.5473        | 0.3769        |
| -5             | 1.26%         | 1.64%         | 1.85%         | 0.3783               | 0.3544        | 1.9811         | 0.2022        | 0.4414        | 0.8503        |
| -4             | -2.23%        | -1.21%        | -0.38%        | -0.7259              | 0.7284        | -1.8498        | 0.0201        | 0.5382        | 0.0693        |
| -3             | -2.43%        | -3.78%        | -2.81%        | -0.8767              | 0.9241        | -1.7610        | -0.1871       | 0.3142        | -1.1053       |
| -2             | 5.73%         | 6.60%         | 2.92%         | 2.0983               | 2.0286        | 1.9199         | 0.2993        | 0.7707        | 0.7208        |
| -1             | -1.17%        | -0.06%        | 1.75%         | -0.3170              | 0.7821        | -0.7524        | 0.2208        | 0.8165        | 0.5020        |
| <b>0</b>       | <b>-0.57%</b> | <b>-1.02%</b> | <b>1.18%</b>  | <b>-0.1947</b>       | <b>1.8745</b> | <b>-0.1928</b> | <b>0.1730</b> | <b>0.7682</b> | <b>0.4180</b> |
| 1              | 1.16%         | 1.20%         | 2.34%         | 0.3488               | 0.3825        | 1.6924         | 0.2434        | 0.6966        | 0.6485        |
| 2              | -3.95%        | -3.42%        | -1.62%        | -1.1551              | 1.3860        | -1.5469        | -0.0028       | 0.9662        | -0.0054       |
| 3              | 4.39%         | 1.67%         | 2.77%         | 1.3535               | 1.7048        | 1.4736         | 0.2735        | 0.7403        | 0.6857        |
| 4              | 5.29%         | 0.13%         | 8.06%         | 1.5775               | 3.1819        | 0.9202         | 0.5835        | 0.6770        | 1.5997        |
| 5              | -0.29%        | -0.67%        | 7.77%         | -0.1158              | 0.3024        | -0.7109        | 0.5494        | 0.6867        | 1.4851        |
| 6              | -1.89%        | -2.22%        | 5.88%         | -0.6491              | 0.6191        | -1.9459        | 0.4142        | 0.5599        | 1.3733        |
| 7              | 2.97%         | 1.95%         | 8.84%         | 0.9545               | 0.9444        | 1.8760         | 0.5872        | 0.6809        | 1.6007        |
| 8              | 0.46%         | -1.55%        | 9.30%         | 0.0360               | 1.3865        | 0.0481         | 0.5836        | 0.7912        | 1.3693        |
| 9              | -0.65%        | -0.07%        | 8.65%         | -0.1669              | 0.5472        | -0.5661        | 0.5433        | 0.7308        | 1.3800        |
| 10             | 0.05%         | -1.08%        | 8.69%         | -0.0526              | 0.9445        | -0.1033        | 0.5251        | 0.5737        | 1.6989        |
| 11             | -4.42%        | -3.77%        | 4.28%         | -1.4602              | 0.8647        | <b>-3.1344</b> | 0.2587        | 0.4128        | 1.1633        |
| 12             | 1.64%         | 2.13%         | 5.92%         | 0.5894               | 0.6341        | 1.7254         | 0.3573        | 0.4899        | 1.3540        |
| 13             | -3.74%        | -3.22%        | 2.18%         | -1.2367              | 1.1687        | -1.9641        | 0.1399        | 0.2991        | 0.8686        |
| 14             | -1.29%        | -0.99%        | 0.89%         | -0.4308              | 0.5166        | -1.5480        | 0.0651        | 0.3716        | 0.3252        |
| 15             | 1.44%         | 1.43%         | 2.33%         | 0.4107               | 0.6335        | 1.2034         | 0.1326        | 0.3825        | 0.6437        |
| 16             | -4.42%        | -4.10%        | -2.09%        | -1.4024              | 0.7625        | <b>-3.4140</b> | -0.0997       | 0.4849        | -0.3817       |
| 17             | 1.79%         | 3.16%         | -0.30%        | 0.4845               | 0.9522        | 0.9444         | -0.0198       | 0.4340        | -0.0847       |
| 18             | -1.49%        | -0.92%        | -1.79%        | -0.4796              | 0.3519        | -2.5299        | -0.0963       | 0.3742        | -0.4779       |
| 19             | 1.76%         | 1.50%         | -0.03%        | 0.5598               | 0.3618        | 2.8718         | -0.0066       | 0.3283        | -0.0374       |
| 20             | -1.67%        | -1.91%        | -1.69%        | -0.5785              | 0.2548        | <b>-4.2137</b> | -0.0969       | 0.3100        | -0.5801       |
| 21             | -3.84%        | -3.83%        | -5.53%        | -1.2963              | 0.2445        | <b>-9.8416</b> | -0.2957       | 0.3030        | -1.8116       |
| 22             | 1.32%         | 1.61%         | -4.21%        | 0.4557               | 0.2755        | <b>3.0703</b>  | -0.2228       | 0.3233        | -1.2792       |
| 23             | 0.14%         | -1.78%        | -4.07%        | -0.0570              | 1.1893        | -0.0890        | -0.2288       | 0.4850        | -0.8758       |
| 24             | 2.45%         | 2.23%         | -1.62%        | 0.7942               | 0.2296        | <b>6.4190</b>  | -0.1079       | 0.5128        | -0.3906       |
| 25             | -0.48%        | -0.70%        | -2.10%        | -0.0581              | 0.9228        | -0.1169        | -0.1153       | 0.4254        | -0.5030       |
| 26             | -2.12%        | -4.33%        | -4.22%        | -0.5419              | 1.4287        | -0.7040        | -0.1931       | 0.4363        | -0.8214       |
| 27             | 0.18%         | 0.11%         | -4.03%        | 0.0671               | 0.7369        | 0.1691         | -0.1814       | 0.3324        | -1.0128       |
| 28             | -2.68%        | -3.08%        | -6.72%        | -0.9191              | 0.8139        | -2.0959        | -0.3108       | 0.2130        | -2.7090       |
| 29             | 2.99%         | 3.71%         | -3.73%        | 1.0302               | 0.9387        | 2.0370         | -0.1620       | 0.3436        | -0.8753       |
| 30             | -1.85%        | 0.70%         | -5.58%        | -0.5148              | 1.5013        | -0.6365        | -0.2325       | 0.2787        | -1.5487       |
| <b>-1 to 1</b> |               |               | <b>-0.58%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.06172</b> | -0.0941       | 1.5255        | -0.1145       |

**Table-A 7.29 Market Returns; Indian Targets; NCW Acq (MM, 83);VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD             | t-Stats       | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|----------------|---------------|---------------|---------------|---------------|
| -20            | -0.03%       | 0.21%        | -0.03%        | 0.0180               | 0.9710         | 0.1685        | 0.0180        | 0.9710        | 0.1685        |
| -19            | 0.76%        | 0.26%        | 0.73%         | 0.3263               | 1.0392         | <b>2.8489</b> | 0.2434        | 1.0434        | <b>2.1174</b> |
| -18            | -0.21%       | -0.03%       | 0.52%         | 0.0008               | 1.1170         | 0.0068        | 0.1993        | 0.9957        | <b>1.8160</b> |
| -17            | -0.50%       | -0.26%       | 0.02%         | -0.0823              | 1.4136         | -0.5281       | 0.1314        | 1.1326        | 1.0531        |
| -16            | 0.08%        | -0.09%       | 0.10%         | 0.1124               | 1.2145         | 0.8397        | 0.1678        | 1.1939        | 1.2755        |
| -15            | 0.69%        | 0.15%        | 0.79%         | 0.1497               | 1.0022         | 1.3556        | 0.2143        | 1.0798        | <b>1.8011</b> |
| -14            | 0.57%        | -0.08%       | 1.36%         | 0.2026               | 1.2612         | 1.4578        | 0.2750        | 1.0678        | <b>2.3369</b> |
| -13            | 0.01%        | -0.10%       | 1.37%         | 0.0541               | 1.1684         | 0.4200        | 0.2763        | 1.1640        | <b>2.1544</b> |
| -12            | 0.45%        | 0.14%        | 1.82%         | 0.1404               | 1.2565         | 1.0142        | 0.3074        | 1.3199        | <b>2.1130</b> |
| -11            | 1.06%        | 0.76%        | 2.88%         | 0.3115               | 1.2882         | <b>2.1945</b> | 0.3901        | 1.3136        | <b>2.6948</b> |
| -10            | 0.32%        | 0.11%        | 3.20%         | 0.0367               | 1.3433         | 0.2479        | 0.3830        | 1.3363        | <b>2.6010</b> |
| -9             | 1.00%        | 0.42%        | 4.20%         | 0.3143               | 1.3862         | <b>2.0573</b> | 0.4574        | 1.2843        | <b>3.2320</b> |
| -8             | -0.43%       | -0.17%       | 3.77%         | 0.0486               | 1.3018         | 0.3390        | 0.4530        | 1.3515        | <b>3.0413</b> |
| -7             | 1.11%        | 0.08%        | 4.89%         | 0.2618               | 1.3810         | <b>1.7199</b> | 0.5064        | 1.3318        | <b>3.4507</b> |
| -6             | -0.72%       | -0.33%       | 4.17%         | -0.2004              | 1.1148         | -1.6312       | 0.4375        | 1.3640        | <b>2.9108</b> |
| -5             | -0.31%       | -0.18%       | 3.86%         | -0.0334              | 1.5548         | -0.1950       | 0.4153        | 1.3601        | <b>2.7707</b> |
| -4             | 0.22%        | -0.16%       | 4.07%         | 0.0386               | 1.1907         | 0.2939        | 0.4122        | 1.3143        | <b>2.8462</b> |
| -3             | 0.29%        | 0.30%        | 4.36%         | 0.1862               | 1.4195         | 1.1901        | 0.4445        | 1.3407        | <b>3.0086</b> |
| -2             | 0.53%        | -0.09%       | 4.89%         | 0.1817               | 1.1298         | 1.4595        | 0.4743        | 1.3323        | <b>3.2307</b> |
| -1             | 1.93%        | 0.59%        | 6.83%         | 0.6381               | 1.6454         | <b>3.5194</b> | 0.6050        | 1.3643        | <b>4.0242</b> |
| <b>0</b>       | <b>3.58%</b> | <b>2.74%</b> | <b>10.41%</b> | <b>1.2259</b>        | <b>2.5495</b>  | <b>4.3635</b> | <b>0.8580</b> | <b>1.3705</b> | <b>5.6808</b> |
| 1              | 2.93%        | 1.78%        | 13.34%        | 0.7822               | 1.7946         | <b>3.9553</b> | 1.0050        | 1.4456        | <b>6.3088</b> |
| 2              | 0.87%        | 0.14%        | 14.21%        | 0.2647               | 1.4734         | 1.6301        | 1.0381        | 1.5098        | <b>6.2393</b> |
| 3              | 0.60%        | 0.26%        | 14.81%        | 0.1502               | 1.2533         | 1.0873        | 1.0469        | 1.5370        | <b>6.1811</b> |
| 4              | 0.43%        | -0.01%       | 15.24%        | 0.1439               | 1.3496         | 0.9677        | 1.0545        | 1.5076        | <b>6.3475</b> |
| 5              | 0.33%        | 0.13%        | 15.57%        | 0.1256               | 1.0560         | 1.0794        | 1.0587        | 1.4833        | <b>6.4768</b> |
| 6              | 0.07%        | 0.33%        | 15.64%        | 0.0375               | 1.2874         | 0.2642        | 1.0461        | 1.4665        | <b>6.4733</b> |
| 7              | 0.20%        | -0.01%       | 15.84%        | 0.0105               | 0.9816         | 0.0973        | 1.0292        | 1.4305        | <b>6.5289</b> |
| 8              | -0.25%       | -0.18%       | 15.59%        | -0.0660              | 0.8648         | -0.6925       | 0.9991        | 1.4287        | <b>6.3458</b> |
| 9              | 0.39%        | 0.21%        | 15.98%        | 0.1015               | 0.9199         | 1.0016        | 1.0008        | 1.4176        | <b>6.4066</b> |
| 10             | 0.16%        | 0.10%        | 16.15%        | 0.0873               | 0.9129         | 0.8678        | 1.0002        | 1.4009        | <b>6.4791</b> |
| 11             | 0.25%        | 0.29%        | 16.40%        | 0.0318               | 1.0616         | 0.2718        | 0.9901        | 1.3960        | <b>6.4362</b> |
| 12             | 0.46%        | -0.02%       | 16.85%        | 0.0631               | 0.9990         | 0.5733        | 0.9860        | 1.4053        | <b>6.3668</b> |
| 13             | 0.40%        | 0.19%        | 17.25%        | 0.1577               | 1.1482         | 1.2464        | 0.9984        | 1.4095        | <b>6.4279</b> |
| 14             | 0.03%        | 0.01%        | 17.28%        | -0.0174              | 0.9614         | -0.1646       | 0.9811        | 1.4062        | <b>6.3314</b> |
| 15             | -0.49%       | -0.28%       | 16.79%        | -0.0803              | 0.9731         | -0.7487       | 0.9540        | 1.4069        | <b>6.1532</b> |
| 16             | -0.37%       | -0.20%       | 16.43%        | -0.1746              | 1.1378         | -1.3925       | 0.9123        | 1.4233        | <b>5.8165</b> |
| 17             | 0.28%        | 0.09%        | 16.71%        | 0.0185               | 0.9557         | 0.1760        | 0.9032        | 1.4247        | <b>5.7531</b> |
| 18             | 0.26%        | 0.06%        | 16.97%        | 0.0564               | 1.4117         | 0.3626        | 0.9006        | 1.4298        | <b>5.7159</b> |
| 19             | 1.05%        | 0.72%        | 18.02%        | 0.3034               | 1.0426         | <b>2.6404</b> | 0.9372        | 1.3973        | <b>6.0866</b> |
| 20             | 0.20%        | -0.07%       | 18.22%        | 0.0621               | 1.1216         | 0.5022        | 0.9354        | 1.3758        | <b>6.1702</b> |
| 21             | -0.33%       | -0.32%       | 17.88%        | -0.1344              | 1.1105         | -1.0979       | 0.9035        | 1.3694        | <b>5.9874</b> |
| 22             | -0.15%       | 0.20%        | 17.73%        | 0.0625               | 1.0374         | 0.5464        | 0.9025        | 1.3405        | <b>6.1095</b> |
| 23             | 0.44%        | 0.13%        | 18.18%        | 0.1351               | 0.9915         | 1.2361        | 0.9125        | 1.3541        | <b>6.1155</b> |
| 24             | 0.03%        | 0.20%        | 18.21%        | 0.0000               | 0.8232         | 0.0000        | 0.9023        | 1.3366        | <b>6.1262</b> |
| 25             | -0.23%       | 0.05%        | 17.98%        | 0.0196               | 1.0114         | 0.1756        | 0.8953        | 1.3473        | <b>6.0304</b> |
| 26             | -0.37%       | -0.09%       | 17.61%        | -0.0785              | 1.0039         | -0.7100       | 0.8743        | 1.3358        | <b>5.9395</b> |
| 27             | 0.02%        | 0.04%        | 17.64%        | -0.0049              | 1.0904         | -0.0404       | 0.8645        | 1.3373        | <b>5.8658</b> |
| 28             | 0.71%        | 0.33%        | 18.35%        | 0.1526               | 1.0771         | 1.2860        | 0.8774        | 1.3410        | <b>5.9375</b> |
| 29             | -0.15%       | -0.38%       | 18.20%        | -0.0219              | 1.2190         | -0.1629       | 0.8655        | 1.3279        | <b>5.9146</b> |
| 30             | 0.30%        | 0.04%        | 18.50%        | 0.0770               | 0.9779         | 0.7145        | 0.8677        | 1.3230        | <b>5.9517</b> |
| <b>-1 to 1</b> |              |              | <b>8.45%</b>  | <b>StdDev(AAR-0)</b> | <b>0.06626</b> |               | 1.5278        | 2.1053        | <b>6.5854</b> |



Table-A 7.30 Market Returns; Indian Targets; CW Acq (MM, 16);VWI

| Days           | AAR          | Median       | CAAR          | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.54%       | -1.46%       | -0.54%        | -0.2853              | 1.3769         | -0.7692        | -0.2853       | 1.3769        | -0.7692       |
| -19            | -0.50%       | -0.21%       | -1.05%        | -0.2648              | 1.1167         | -0.8803        | -0.3890       | 1.1443        | -1.2619       |
| -18            | -0.61%       | -0.30%       | -1.66%        | -0.2917              | 1.3010         | -0.8322        | -0.4860       | 1.3617        | -1.3249       |
| -17            | -0.04%       | -0.10%       | -1.69%        | -0.0544              | 0.8305         | -0.2432        | -0.4481       | 1.1112        | -1.4970       |
| -16            | 0.64%        | 0.31%        | -1.05%        | 0.2571               | 1.5204         | 0.6277         | -0.2859       | 1.1465        | -0.9255       |
| -15            | 0.20%        | -0.13%       | -0.86%        | 0.0866               | 1.2904         | 0.2491         | -0.2256       | 1.2287        | -0.6815       |
| -14            | 0.79%        | 0.78%        | -0.07%        | 0.2962               | 0.8435         | 1.3034         | -0.0969       | 1.1832        | -0.3040       |
| -13            | 0.69%        | -0.29%       | 0.62%         | 0.2487               | 1.1206         | 0.8239         | -0.0027       | 0.9783        | -0.0103       |
| -12            | 0.17%        | 0.21%        | 0.79%         | 0.0767               | 0.6291         | 0.4527         | 0.0230        | 0.8388        | 0.1019        |
| -11            | 0.75%        | 0.36%        | 1.53%         | 0.3316               | 0.8606         | 1.4301         | 0.1267        | 0.8541        | 0.5506        |
| -10            | -0.26%       | 0.12%        | 1.27%         | 0.0199               | 0.9005         | 0.0819         | 0.1268        | 0.8291        | 0.5676        |
| -9             | 1.25%        | 0.14%        | 2.52%         | 0.5094               | 2.0432         | 0.9254         | 0.2684        | 1.0246        | 0.9724        |
| -8             | 0.64%        | 0.92%        | 3.17%         | 0.2452               | 0.8828         | 1.0311         | 0.3259        | 0.9606        | 1.2594        |
| -7             | 0.77%        | 0.10%        | 3.93%         | 0.2184               | 0.9509         | 0.8524         | 0.3724        | 1.0589        | 1.3054        |
| -6             | 1.28%        | -0.57%       | 5.21%         | 0.5406               | 1.8031         | 1.1130         | 0.4994        | 1.0480        | <b>1.7688</b> |
| -5             | -0.18%       | 0.18%        | 5.03%         | -0.1509              | 0.8457         | -0.6622        | 0.4458        | 1.0730        | 1.5421        |
| -4             | 1.26%        | 0.21%        | 6.29%         | 0.3076               | 1.6669         | 0.6850         | 0.5071        | 1.1379        | 1.6542        |
| -3             | 0.93%        | 0.09%        | 7.23%         | 0.3322               | 1.5296         | 0.8061         | 0.5711        | 1.1626        | <b>1.8234</b> |
| -2             | 1.64%        | 0.70%        | 8.87%         | 0.6820               | 1.9398         | 1.3051         | 0.7123        | 1.3672        | <b>1.9340</b> |
| -1             | 2.05%        | 0.88%        | 10.92%        | 1.2116               | 3.0300         | 1.4842         | 0.9652        | 1.4338        | <b>2.4988</b> |
| <b>0</b>       | <b>2.88%</b> | <b>1.74%</b> | <b>13.80%</b> | <b>1.7320</b>        | <b>3.9780</b>  | <b>1.6161</b>  | <b>1.3199</b> | <b>1.9587</b> | <b>2.5013</b> |
| 1              | -0.07%       | -0.66%       | 13.73%        | -0.2011              | 1.3227         | -0.5644        | 1.2467        | 1.8453        | <b>2.5077</b> |
| 2              | 1.66%        | 0.59%        | 15.38%        | 0.6427               | 0.8803         | <b>2.7099</b>  | 1.3533        | 1.9568        | <b>2.5671</b> |
| 3              | -0.39%       | -0.37%       | 14.99%        | -0.1965              | 0.7351         | -0.9921        | 1.2847        | 1.8718        | <b>2.5477</b> |
| 4              | 0.09%        | 0.09%        | 15.08%        | -0.0231              | 0.7983         | -0.1075        | 1.2541        | 1.8608        | <b>2.5017</b> |
| 5              | -0.41%       | 0.59%        | 14.67%        | -0.1380              | 1.2851         | -0.3986        | 1.2027        | 1.7294        | <b>2.5813</b> |
| 6              | -1.23%       | -0.59%       | 13.44%        | -0.5037              | 0.7603         | <b>-2.4592</b> | 1.0833        | 1.5944        | <b>2.5219</b> |
| 7              | 0.17%        | -0.01%       | 13.61%        | 0.0506               | 0.9527         | 0.1972         | 1.0733        | 1.4981        | <b>2.6594</b> |
| 8              | -0.47%       | -0.52%       | 13.14%        | -0.2022              | 0.8893         | -0.8438        | 1.0171        | 1.4266        | <b>2.6463</b> |
| 9              | 1.30%        | 0.28%        | 14.44%        | 0.5665               | 1.4786         | 1.4221         | 1.1034        | 1.6010        | <b>2.5582</b> |
| 10             | 0.75%        | 0.59%        | 15.18%        | 0.1856               | 1.0243         | 0.6726         | 1.1188        | 1.5881        | <b>2.6150</b> |
| 11             | 0.45%        | -0.28%       | 15.63%        | 0.1154               | 1.0699         | 0.4003         | 1.1216        | 1.5238        | <b>2.7322</b> |
| 12             | 0.54%        | 1.00%        | 16.17%        | 0.2473               | 1.1193         | 0.8202         | 1.1475        | 1.5035        | <b>2.8330</b> |
| 13             | -1.28%       | -0.93%       | 14.89%        | -0.5247              | 1.0497         | <b>-1.8552</b> | 1.0405        | 1.5127        | <b>2.5533</b> |
| 14             | 0.03%        | -0.51%       | 14.92%        | -0.0491              | 0.7753         | -0.2352        | 1.0173        | 1.4440        | <b>2.6150</b> |
| 15             | 0.38%        | 0.40%        | 15.30%        | 0.1545               | 0.7693         | 0.7454         | 1.0288        | 1.4833        | <b>2.5745</b> |
| 16             | -0.67%       | -0.44%       | 14.63%        | -0.1776              | 0.5300         | -1.2435        | 0.9856        | 1.4614        | <b>2.5033</b> |
| 17             | -0.54%       | -0.50%       | 14.09%        | -0.1049              | 1.2100         | -0.3219        | 0.9555        | 1.5027        | <b>2.3602</b> |
| 18             | -0.43%       | -0.57%       | 13.67%        | -0.1740              | 0.9388         | -0.6879        | 0.9153        | 1.4880        | <b>2.2834</b> |
| 19             | -0.51%       | -0.12%       | 13.15%        | -0.1922              | 1.0364         | -0.6882        | 0.8734        | 1.4602        | <b>2.2204</b> |
| 20             | 0.76%        | 0.76%        | 13.91%        | 0.3073               | 0.7026         | 1.6236         | 0.9107        | 1.4651        | <b>2.3074</b> |
| 21             | -0.78%       | -0.40%       | 13.13%        | -0.2680              | 0.9177         | -1.0840        | 0.8584        | 1.4422        | <b>2.2094</b> |
| 22             | 0.32%        | 0.47%        | 13.45%        | 0.1606               | 0.8110         | 0.7349         | 0.8729        | 1.4474        | <b>2.2385</b> |
| 23             | -0.58%       | -0.24%       | 12.87%        | -0.1673              | 0.8940         | -0.6944        | 0.8377        | 1.4712        | <b>2.1136</b> |
| 24             | 1.90%        | 0.74%        | 14.77%        | 0.7551               | 1.3615         | <b>2.0585</b>  | 0.9409        | 1.3836        | <b>2.5242</b> |
| 25             | 0.28%        | -0.16%       | 15.05%        | 0.1484               | 1.0197         | 0.5402         | 0.9525        | 1.2795        | <b>2.7633</b> |
| 26             | 0.29%        | 0.31%        | 15.35%        | 0.0288               | 1.1485         | 0.0932         | 0.9465        | 1.3504        | <b>2.6017</b> |
| 27             | 0.42%        | 0.52%        | 15.77%        | 0.2836               | 1.0980         | 0.9589         | 0.9775        | 1.3963        | <b>2.5987</b> |
| 28             | 0.24%        | 0.14%        | 16.01%        | 0.1386               | 1.0849         | 0.4741         | 0.9873        | 1.4105        | <b>2.5983</b> |
| 29             | 1.17%        | 1.14%        | 17.18%        | 0.5579               | 1.4141         | 1.4646         | 1.0563        | 1.5375        | <b>2.5502</b> |
| 30             | 0.71%        | 0.84%        | 17.89%        | 0.3323               | 1.4206         | 0.8683         | 1.0924        | 1.5321        | <b>2.6466</b> |
| <b>-1 to 1</b> |              |              | <b>4.86%</b>  | <b>StdDev(AAR-0)</b> | <b>0.07239</b> |                | 1.5833        | 3.2409        | <b>1.8134</b> |

**Table-A 7.31 Market Returns; Indian Targets; NCW Acq (OLS, 88);VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.24%       | -0.08%       | -0.24%       | -0.0696              | 0.8510         | -0.7870        | -0.0696       | 0.8510        | -0.7870       |
| -19            | 0.88%        | 0.21%        | 0.64%        | 0.2582               | 0.9805         | <b>2.5350</b>  | 0.1334        | 0.9120        | 1.4079        |
| -18            | -0.34%       | -0.07%       | 0.30%        | -0.0197              | 0.8967         | -0.2114        | 0.0975        | 0.8564        | 1.0964        |
| -17            | -0.69%       | -0.73%       | -0.39%       | -0.0848              | 1.0422         | -0.7833        | 0.0421        | 0.8898        | 0.4551        |
| -16            | -0.36%       | -0.31%       | -0.75%       | 0.0164               | 1.0286         | 0.1538         | 0.0450        | 0.9183        | 0.4715        |
| -15            | 0.63%        | 0.09%        | -0.11%       | 0.1121               | 0.8825         | 1.2226         | 0.0868        | 0.8751        | 0.9550        |
| -14            | 0.00%        | -0.10%       | -0.11%       | 0.0122               | 1.0125         | 0.1164         | 0.0850        | 0.8490        | 0.9638        |
| -13            | -0.20%       | -0.25%       | -0.32%       | 0.0021               | 0.9870         | 0.0206         | 0.0803        | 0.9233        | 0.8367        |
| -12            | 0.20%        | 0.01%        | -0.11%       | 0.0671               | 1.0366         | 0.6233         | 0.0981        | 1.0659        | 0.8854        |
| -11            | 0.90%        | 0.73%        | 0.78%        | 0.2319               | 1.0729         | <b>2.0808</b>  | 0.1664        | 1.0872        | 1.4729        |
| -10            | 0.24%        | 0.04%        | 1.03%        | -0.0306              | 1.0658         | -0.2768        | 0.1494        | 1.1199        | 1.2839        |
| -9             | 0.77%        | 0.23%        | 1.80%        | 0.2222               | 1.1476         | <b>1.8636</b>  | 0.2072        | 1.0532        | <b>1.8932</b> |
| -8             | -0.56%       | -0.28%       | 1.24%        | 0.0055               | 1.0739         | 0.0492         | 0.2006        | 1.1103        | <b>1.7386</b> |
| -7             | 0.82%        | 0.02%        | 2.05%        | 0.1467               | 1.1016         | 1.2823         | 0.2325        | 1.1016        | <b>2.0314</b> |
| -6             | -1.02%       | -0.33%       | 1.03%        | -0.1757              | 1.0909         | -1.5507        | 0.1792        | 1.1378        | 1.5162        |
| -5             | -0.46%       | -0.38%       | 0.57%        | -0.0291              | 1.3424         | -0.2089        | 0.1662        | 1.1239        | 1.4238        |
| -4             | 0.02%        | -0.18%       | 0.59%        | -0.0422              | 0.9865         | -0.4120        | 0.1510        | 1.1046        | 1.3162        |
| -3             | 0.03%        | -0.01%       | 0.62%        | 0.0767               | 1.1631         | 0.6349         | 0.1649        | 1.1015        | 1.4407        |
| -2             | 0.32%        | -0.16%       | 0.94%        | 0.1097               | 0.9560         | 1.1040         | 0.1856        | 1.0926        | 1.6353        |
| -1             | 1.63%        | 0.34%        | 2.56%        | 0.4865               | 1.3226         | <b>3.5408</b>  | 0.2897        | 1.1070        | <b>2.5190</b> |
| <b>0</b>       | <b>3.22%</b> | <b>1.82%</b> | <b>5.79%</b> | <b>0.9638</b>        | <b>2.1030</b>  | <b>4.4114</b>  | <b>0.4931</b> | <b>1.1285</b> | <b>4.2055</b> |
| 1              | 2.63%        | 1.64%        | 8.41%        | 0.5329               | 1.5037         | <b>3.4114</b>  | 0.5953        | 1.1996        | <b>4.7769</b> |
| 2              | 0.59%        | -0.07%       | 9.01%        | 0.1253               | 1.2396         | 0.9729         | 0.6084        | 1.2604        | <b>4.6460</b> |
| 3              | 0.62%        | -0.01%       | 9.63%        | 0.0470               | 1.2922         | 0.3503         | 0.6052        | 1.2926        | <b>4.5065</b> |
| 4              | 0.28%        | -0.16%       | 9.91%        | 0.0293               | 1.2794         | 0.2203         | 0.5988        | 1.3037        | <b>4.4210</b> |
| 5              | 0.19%        | -0.06%       | 10.10%       | 0.0852               | 0.9861         | 0.8319         | 0.6039        | 1.2904        | <b>4.5044</b> |
| 6              | 0.01%        | -0.06%       | 10.11%       | 0.0540               | 1.1905         | 0.4364         | 0.6030        | 1.2707        | <b>4.5675</b> |
| 7              | -0.23%       | -0.20%       | 9.88%        | -0.1699              | 0.9310         | <b>-1.7568</b> | 0.5600        | 1.2515        | <b>4.3072</b> |
| 8              | -0.69%       | -0.43%       | 9.19%        | -0.1942              | 0.8701         | <b>-2.1482</b> | 0.5142        | 1.2645        | <b>3.9141</b> |
| 9              | 0.13%        | -0.04%       | 9.32%        | 0.0279               | 0.8057         | 0.3328         | 0.5107        | 1.2636        | <b>3.8899</b> |
| 10             | -0.24%       | -0.14%       | 9.08%        | -0.0021              | 0.7985         | -0.0251        | 0.5020        | 1.2578        | <b>3.8414</b> |
| 11             | 0.14%        | 0.04%        | 9.22%        | -0.0250              | 0.9260         | -0.2600        | 0.4896        | 1.2461        | <b>3.7824</b> |
| 12             | 0.30%        | -0.10%       | 9.52%        | 0.0072               | 0.8042         | 0.0859         | 0.4834        | 1.2497        | <b>3.7233</b> |
| 13             | 0.18%        | 0.06%        | 9.70%        | 0.0775               | 1.0115         | 0.7377         | 0.4896        | 1.2576        | <b>3.7470</b> |
| 14             | -0.25%       | -0.25%       | 9.45%        | -0.0674              | 0.8321         | -0.7800        | 0.4711        | 1.2503        | <b>3.6268</b> |
| 15             | -0.82%       | -0.55%       | 8.63%        | -0.1573              | 0.8408         | <b>-1.8005</b> | 0.4383        | 1.2701        | <b>3.3217</b> |
| 16             | -0.88%       | -0.47%       | 7.75%        | -0.2815              | 1.0264         | <b>-2.6400</b> | 0.3861        | 1.2923        | <b>2.8755</b> |
| 17             | -0.08%       | -0.12%       | 7.66%        | -0.1239              | 1.0447         | -1.1412        | 0.3609        | 1.3181        | <b>2.6352</b> |
| 18             | 0.58%        | 0.09%        | 8.24%        | 0.1342               | 1.3406         | 0.9636         | 0.3777        | 1.2970        | <b>2.8029</b> |
| 19             | 0.70%        | 0.49%        | 8.94%        | 0.1782               | 0.9303         | <b>1.8438</b>  | 0.4011        | 1.2694        | <b>3.0416</b> |
| 20             | -0.03%       | -0.13%       | 8.91%        | -0.0463              | 0.8901         | -0.5010        | 0.3890        | 1.2437        | <b>3.0104</b> |
| 21             | -0.52%       | -0.40%       | 8.40%        | -0.1467              | 1.1203         | -1.2609        | 0.3617        | 1.2510        | <b>2.7827</b> |
| 22             | -0.57%       | 0.01%        | 7.82%        | -0.0942              | 1.0702         | -0.8469        | 0.3431        | 1.2526        | <b>2.6362</b> |
| 23             | 0.06%        | -0.07%       | 7.88%        | 0.0032               | 1.0079         | 0.0301         | 0.3396        | 1.2883        | <b>2.5375</b> |
| 24             | -0.16%       | -0.09%       | 7.72%        | -0.0197              | 0.7632         | -0.2483        | 0.3329        | 1.2679        | <b>2.5271</b> |
| 25             | -0.37%       | -0.23%       | 7.34%        | -0.0045              | 0.9484         | -0.0457        | 0.3286        | 1.2568        | <b>2.5165</b> |
| 26             | -0.49%       | -0.13%       | 6.85%        | -0.1176              | 0.8360         | -1.3544        | 0.3079        | 1.2332        | <b>2.4033</b> |
| 27             | -0.17%       | -0.05%       | 6.68%        | -0.0354              | 1.0518         | -0.3237        | 0.2996        | 1.1992        | <b>2.4045</b> |
| 28             | 0.44%        | 0.22%        | 7.12%        | 0.0722               | 0.9104         | 0.7631         | 0.3068        | 1.2030        | <b>2.4550</b> |
| 29             | -0.31%       | -0.48%       | 6.80%        | -0.0541              | 1.0808         | -0.4821        | 0.2961        | 1.1797        | <b>2.4158</b> |
| 30             | -0.06%       | -0.19%       | 6.74%        | -0.0106              | 0.8719         | -0.1167        | 0.2917        | 1.1583        | <b>2.4239</b> |
| <b>-1 to 1</b> |              |              | <b>7.48%</b> | <b>StdDev(AAR-0)</b> | <b>0.06528</b> |                | 1.1450        | 1.7921        | <b>6.1501</b> |

Table-A 7.32 Market Returns; Indian Targets; CW Acq (OLS, 16);VWI

| Days           | AAR          | Median       | CAAR          | SARa                 | SD             | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|---------------|----------------------|----------------|----------------|---------------|---------------|---------------|
| -20            | -0.66%       | -1.42%       | -0.66%        | -0.2292              | 1.1553         | -0.7395        | -0.2292       | 1.1553        | -0.7395       |
| -19            | -0.61%       | -0.42%       | -1.26%        | -0.2286              | 0.9729         | -0.8758        | -0.3237       | 0.9533        | -1.2657       |
| -18            | -0.72%       | -0.39%       | -1.99%        | -0.2363              | 1.0806         | -0.8152        | -0.4007       | 1.1218        | -1.3316       |
| -17            | -0.21%       | -0.28%       | -2.20%        | -0.1180              | 0.7799         | -0.5642        | -0.4060       | 0.9413        | -1.6080       |
| -16            | 0.48%        | 0.07%        | -1.72%        | 0.1790               | 1.2841         | 0.5198         | -0.2831       | 1.0079        | -1.0471       |
| -15            | 0.05%        | -0.25%       | -1.67%        | 0.0446               | 1.0886         | 0.1528         | -0.2402       | 1.1096        | -0.8071       |
| -14            | 0.59%        | 0.61%        | -1.08%        | 0.1842               | 0.7465         | 0.9197         | -0.1528       | 1.1210        | -0.5081       |
| -13            | 0.56%        | -0.18%       | -0.52%        | 0.1433               | 0.9893         | 0.5401         | -0.0922       | 0.9771        | -0.3519       |
| -12            | 0.03%        | -0.16%       | -0.49%        | 0.0046               | 0.5651         | 0.0306         | -0.0854       | 0.8558        | -0.3721       |
| -11            | 0.63%        | 0.44%        | 0.14%         | 0.2235               | 0.7287         | 1.1434         | -0.0104       | 0.8728        | -0.0443       |
| -10            | -0.45%       | -0.16%       | -0.31%        | -0.0684              | 0.7770         | -0.3284        | -0.0305       | 0.8494        | -0.1339       |
| -9             | 1.15%        | 0.02%        | 0.83%         | 0.3710               | 1.6905         | 0.8183         | 0.0779        | 1.0016        | 0.2899        |
| -8             | 0.55%        | 0.79%        | 1.38%         | 0.2057               | 0.7597         | 1.0094         | 0.1319        | 0.9669        | 0.5085        |
| -7             | 0.67%        | -0.16%       | 2.06%         | 0.1481               | 0.8301         | 0.6652         | 0.1667        | 1.0579        | 0.5874        |
| -6             | 1.19%        | -0.61%       | 3.25%         | 0.4060               | 1.3305         | 1.1377         | 0.2659        | 1.0178        | 0.9738        |
| -5             | -0.37%       | -0.04%       | 2.88%         | -0.1443              | 0.7209         | -0.7464        | 0.2213        | 1.0624        | 0.7767        |
| -4             | 1.07%        | -0.06%       | 3.96%         | 0.1892               | 1.3543         | 0.5207         | 0.2606        | 1.1262        | 0.8627        |
| -3             | 0.75%        | -0.05%       | 4.70%         | 0.1814               | 1.1492         | 0.5884         | 0.2960        | 1.0895        | 1.0129        |
| -2             | 1.50%        | 0.61%        | 6.20%         | 0.5268               | 1.6719         | 1.1748         | 0.4090        | 1.2258        | 1.2439        |
| -1             | 1.89%        | 0.62%        | 8.10%         | 0.8473               | 2.3732         | 1.3311         | 0.5881        | 1.1702        | <b>1.8737</b> |
| <b>0</b>       | <b>2.81%</b> | <b>1.62%</b> | <b>10.91%</b> | <b>1.4615</b>        | <b>3.3996</b>  | <b>1.6028</b>  | <b>0.8928</b> | <b>1.5427</b> | <b>2.1577</b> |
| 1              | -0.26%       | -1.02%       | 10.65%        | -0.1698              | 1.2387         | -0.5109        | 0.8361        | 1.4798        | <b>2.1066</b> |
| 2              | 1.58%        | 0.45%        | 12.23%        | 0.5156               | 0.7395         | <b>2.5996</b>  | 0.9253        | 1.5699        | <b>2.1974</b> |
| 3              | -0.57%       | -0.70%       | 11.66%        | -0.2164              | 0.7087         | -1.1383        | 0.8616        | 1.5029        | <b>2.1374</b> |
| 4              | -0.03%       | -0.10%       | 11.63%        | -0.0049              | 0.6849         | -0.0266        | 0.8432        | 1.5287        | <b>2.0565</b> |
| 5              | -0.51%       | 0.65%        | 11.12%        | -0.1258              | 1.0324         | -0.4543        | 0.8022        | 1.4546        | <b>2.0560</b> |
| 6              | -1.45%       | -0.91%       | 9.67%         | -0.5110              | 0.6488         | <b>-2.9364</b> | 0.6888        | 1.3597        | <b>1.8887</b> |
| 7              | 0.05%        | 0.02%        | 9.71%         | 0.0029               | 0.8124         | 0.0133         | 0.6770        | 1.2872        | <b>1.9608</b> |
| 8              | -0.55%       | -0.42%       | 9.16%         | -0.1704              | 0.7266         | -0.8744        | 0.6336        | 1.2559        | <b>1.8808</b> |
| 9              | 1.19%        | 0.35%        | 10.35%        | 0.4243               | 1.1283         | 1.4022         | 0.7004        | 1.3501        | <b>1.9341</b> |
| 10             | 0.67%        | 0.63%        | 11.02%        | 0.0975               | 0.8921         | 0.4074         | 0.7065        | 1.3532        | <b>1.9465</b> |
| 11             | 0.26%        | -0.47%       | 11.28%        | 0.0683               | 0.9541         | 0.2669         | 0.7074        | 1.3023        | <b>2.0254</b> |
| 12             | 0.34%        | 0.73%        | 11.62%        | 0.1594               | 1.0099         | 0.5884         | 0.7244        | 1.2609        | <b>2.1419</b> |
| 13             | -1.48%       | -1.13%       | 10.14%        | -0.4800              | 0.9776         | <b>-1.8305</b> | 0.6313        | 1.2804        | <b>1.8384</b> |
| 14             | -0.15%       | -0.91%       | 9.99%         | -0.0866              | 0.6882         | -0.4692        | 0.6076        | 1.2459        | <b>1.8182</b> |
| 15             | 0.22%        | 0.24%        | 10.21%        | 0.0867               | 0.6431         | 0.5029         | 0.6136        | 1.2654        | <b>1.8078</b> |
| 16             | -0.86%       | -0.88%       | 9.35%         | -0.2401              | 0.5229         | -1.7120        | 0.5658        | 1.2339        | 1.7094        |
| 17             | -0.66%       | -0.49%       | 8.69%         | -0.2007              | 0.9360         | -0.7992        | 0.5257        | 1.2134        | 1.6153        |
| 18             | -0.60%       | -0.62%       | 8.09%         | -0.1945              | 0.8688         | -0.8344        | 0.4878        | 1.2176        | 1.4936        |
| 19             | -0.65%       | -0.16%       | 7.44%         | -0.2430              | 0.9362         | -0.9678        | 0.4432        | 1.2139        | 1.3613        |
| 20             | 0.67%        | 0.43%        | 8.11%         | 0.2128               | 0.6192         | 1.2812         | 0.4710        | 1.2194        | 1.4401        |
| 21             | -1.00%       | -0.62%       | 7.11%         | -0.2899              | 0.7607         | -1.4208        | 0.4206        | 1.1872        | 1.3209        |
| 22             | 0.14%        | 0.26%        | 7.25%         | 0.0707               | 0.7416         | 0.3553         | 0.4265        | 1.2031        | 1.3216        |
| 23             | -0.78%       | -0.59%       | 6.47%         | -0.2551              | 0.7417         | -1.2825        | 0.3832        | 1.1991        | 1.1913        |
| 24             | 1.84%        | 0.73%        | 8.31%         | 0.6381               | 1.0910         | <b>2.1808</b>  | 0.4740        | 1.1195        | 1.5786        |
| 25             | 0.17%        | -0.19%       | 8.47%         | 0.0766               | 0.8263         | 0.3456         | 0.4801        | 1.0367        | 1.7267        |
| 26             | 0.14%        | 0.26%        | 8.62%         | -0.0001              | 1.0102         | -0.0005        | 0.4750        | 1.1060        | 1.6011        |
| 27             | 0.29%        | 0.45%        | 8.91%         | 0.1833               | 0.9692         | 0.7052         | 0.4965        | 1.1427        | 1.6197        |
| 28             | 0.06%        | 0.01%        | 8.97%         | 0.0272               | 0.8631         | 0.1177         | 0.4953        | 1.1228        | 1.6444        |
| 29             | 0.99%        | 1.11%        | 9.96%         | 0.3879               | 1.1068         | 1.3067         | 0.5451        | 1.2177        | 1.6690        |
| 30             | 0.64%        | 0.82%        | 10.60%        | 0.3052               | 1.1731         | 0.9699         | 0.5825        | 1.1935        | <b>1.8196</b> |
| <b>-1 to 1</b> |              |              | <b>4.45%</b>  | <b>StdDev(AAR-0)</b> | <b>0.07284</b> |                | 1.2350        | 2.6468        | 1.7396        |



**Table-A 7.33 Market Returns; Indian Acquirers; All Firms; (MM, 37); VWI**

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.21%        | 0.03%        | 0.21%        | 0.0151               | 0.7734        | 0.1163         | 0.0151        | 0.7734        | 0.1163        |
| -19            | -0.52%       | -0.62%       | -0.31%       | -0.2044              | 0.9122        | -1.3321        | -0.1338       | 0.9357        | -0.8503       |
| -18            | -0.06%       | -0.49%       | -0.36%       | -0.1182              | 1.1560        | -0.6080        | -0.1775       | 1.0538        | -1.0015       |
| -17            | 0.55%        | 0.31%        | 0.19%        | 0.1854               | 0.7808        | 1.4115         | -0.0611       | 0.9874        | -0.3676       |
| -16            | -0.21%       | -0.16%       | -0.02%       | -0.0328              | 0.8032        | -0.2427        | -0.0693       | 0.8702        | -0.4733       |
| -15            | 0.65%        | 0.56%        | 0.63%        | 0.2494               | 1.0201        | 1.4534         | 0.0386        | 0.8294        | 0.2765        |
| -14            | -0.70%       | -0.22%       | -0.07%       | -0.2608              | 1.5348        | -1.0101        | -0.0629       | 0.9745        | -0.3834       |
| -13            | -0.45%       | 0.05%        | -0.51%       | -0.2656              | 2.1561        | -0.7322        | -0.1527       | 1.4321        | -0.6338       |
| -12            | 0.20%        | -0.16%       | -0.31%       | 0.1333               | 1.2851        | 0.6166         | -0.0995       | 1.1240        | -0.5264       |
| -11            | 0.01%        | -0.26%       | -0.30%       | 0.0232               | 1.1155        | 0.1239         | -0.0871       | 1.1739        | -0.4409       |
| -10            | -0.45%       | -0.19%       | -0.74%       | -0.1174              | 1.0439        | -0.6683        | -0.1184       | 1.1620        | -0.6058       |
| -9             | 0.58%        | 0.42%        | -0.16%       | 0.1609               | 1.0991        | 0.8704         | -0.0669       | 1.1089        | -0.3587       |
| -8             | -0.22%       | 0.13%        | -0.38%       | -0.0468              | 0.7684        | -0.3618        | -0.0773       | 1.0883        | -0.4220       |
| -7             | 0.12%        | 0.22%        | -0.26%       | 0.0342               | 1.4946        | 0.1359         | -0.0653       | 1.2361        | -0.3141       |
| -6             | -0.50%       | -0.48%       | -0.76%       | -0.2704              | 0.9425        | <b>-1.7055</b> | -0.1329       | 1.2964        | -0.6095       |
| -5             | 0.22%        | 0.39%        | -0.54%       | 0.1005               | 0.8155        | 0.7328         | -0.1036       | 1.2177        | -0.5056       |
| -4             | 0.55%        | 0.28%        | 0.02%        | 0.2572               | 1.0335        | 1.4795         | -0.0381       | 1.1520        | -0.1965       |
| -3             | 0.23%        | -0.42%       | 0.25%        | 0.0170               | 0.9635        | 0.1052         | -0.0330       | 1.0876        | -0.1803       |
| -2             | -0.39%       | -0.39%       | -0.14%       | -0.0692              | 1.0976        | -0.3747        | -0.0480       | 1.0527        | -0.2710       |
| -1             | 0.63%        | 0.15%        | 0.49%        | 0.2061               | 1.3514        | 0.9064         | -0.0007       | 1.0653        | -0.0039       |
| <b>0</b>       | <b>1.34%</b> | <b>1.15%</b> | <b>1.83%</b> | <b>0.5363</b>        | <b>1.2906</b> | <b>2.4703</b>  | <b>0.1164</b> | <b>1.0363</b> | <b>0.6675</b> |
| 1              | -0.80%       | -0.57%       | 1.02%        | -0.3082              | 1.0772        | <b>-1.7009</b> | 0.0480        | 0.9940        | 0.2869        |
| 2              | -0.64%       | -0.41%       | 0.38%        | -0.3359              | 1.2602        | -1.5844        | -0.0231       | 0.9432        | -0.1457       |
| 3              | -0.53%       | -0.41%       | -0.15%       | -0.2381              | 0.8971        | -1.5774        | -0.0712       | 0.9509        | -0.4452       |
| 4              | 0.13%        | -0.26%       | -0.02%       | 0.0547               | 1.0921        | 0.2979         | -0.0588       | 0.9911        | -0.3529       |
| 5              | -0.43%       | -0.45%       | -0.46%       | -0.1004              | 1.5398        | -0.3876        | -0.0774       | 1.0511        | -0.4376       |
| 6              | -0.48%       | -0.23%       | -0.94%       | -0.1184              | 1.1197        | -0.6285        | -0.0987       | 1.0934        | -0.5367       |
| 7              | 0.08%        | -0.29%       | -0.86%       | 0.0218               | 1.2301        | 0.1052         | -0.0928       | 1.0379        | -0.5316       |
| 8              | 0.09%        | -0.17%       | -0.78%       | -0.0450              | 1.1439        | -0.2338        | -0.0996       | 1.0439        | -0.5670       |
| 9              | -0.77%       | -0.39%       | -1.55%       | -0.2880              | 1.0088        | <b>-1.6973</b> | -0.1505       | 1.0835        | -0.8256       |
| 10             | 0.88%        | 0.78%        | -0.66%       | 0.3820               | 1.2204        | <b>1.8605</b>  | -0.0794       | 1.0219        | -0.4621       |
| 11             | 0.46%        | 0.25%        | -0.21%       | 0.1174               | 1.0335        | 0.6754         | -0.0574       | 1.0331        | -0.3304       |
| 12             | -0.22%       | -0.24%       | -0.43%       | -0.1385              | 1.1435        | -0.7199        | -0.0807       | 1.0753        | -0.4459       |
| 13             | -0.10%       | -0.13%       | -0.53%       | -0.0226              | 1.0011        | -0.1342        | -0.0833       | 1.0597        | -0.4675       |
| 14             | -0.72%       | -0.73%       | -1.24%       | -0.3142              | 0.9804        | <b>-1.9051</b> | -0.1352       | 1.0717        | -0.7502       |
| 15             | -0.57%       | 0.10%        | -1.81%       | -0.2734              | 1.9558        | -0.8309        | -0.1789       | 1.1142        | -0.9546       |
| 16             | -0.43%       | -0.68%       | -2.24%       | -0.1726              | 1.3886        | -0.7389        | -0.2049       | 1.1299        | -1.0777       |
| 17             | -0.61%       | -0.59%       | -2.85%       | -0.2115              | 0.9873        | -1.2732        | -0.2364       | 1.1374        | -1.2358       |
| 18             | 0.17%        | 0.20%        | -2.68%       | 0.1089               | 0.9977        | 0.6486         | -0.2160       | 1.1187        | -1.1476       |
| 19             | 0.72%        | 0.18%        | -1.96%       | 0.2730               | 1.7607        | 0.9217         | -0.1701       | 1.0341        | -0.9778       |
| 20             | -0.85%       | -0.43%       | -2.80%       | -0.4019              | 2.0378        | -1.1724        | -0.2308       | 1.2105        | -1.1333       |
| 21             | -0.07%       | -0.53%       | -2.87%       | 0.0144               | 1.3463        | 0.0636         | -0.2258       | 1.1576        | -1.1594       |
| 22             | 0.42%        | 0.22%        | -2.45%       | 0.2233               | 1.1677        | 1.1368         | -0.1891       | 1.0705        | -1.0500       |
| 23             | 0.35%        | -0.12%       | -2.10%       | 0.0579               | 1.3545        | 0.2543         | -0.1782       | 1.0298        | -1.0286       |
| 24             | -0.09%       | 0.20%        | -2.19%       | -0.0635              | 1.1707        | -0.3222        | -0.1857       | 1.0677        | -1.0337       |
| 25             | -0.59%       | -0.20%       | -2.78%       | -0.2994              | 0.8913        | <b>-1.9967</b> | -0.2278       | 1.0988        | -1.2323       |
| 26             | 0.86%        | 0.28%        | -1.92%       | 0.3826               | 1.3102        | <b>1.7360</b>  | -0.1695       | 1.0818        | -0.9315       |
| 27             | -0.13%       | -0.39%       | -2.05%       | -0.0917              | 1.4287        | -0.3814        | -0.1810       | 1.1967        | -0.8990       |
| 28             | -0.13%       | -0.11%       | -2.18%       | -0.0157              | 0.9556        | -0.0975        | -0.1814       | 1.2320        | -0.8751       |
| 29             | 0.05%        | -0.65%       | -2.13%       | 0.0756               | 1.5559        | 0.2887         | -0.1688       | 1.2175        | -0.8244       |
| 30             | -0.42%       | -0.59%       | -2.55%       | -0.1643              | 1.0907        | -0.8955        | -0.1902       | 1.2849        | -0.8799       |
| <b>-1 to 1</b> |              |              | <b>1.17%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.0313</b>  | 0.2507        | 1.1482        | 1.2978        |

**Table-A 7.34 Market Returns; Indian Acquirers; All-firms; (OLS, 37); VWI**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|----------------|---------------|----------------|
| -20            | 0.06%        | 0.02%        | 0.06%         | -0.0433              | 0.7190        | -0.3587        | -0.0433        | 0.7190        | -0.3587        |
| -19            | -0.70%       | -0.70%       | -0.64%        | -0.2588              | 0.7999        | <b>-1.9256</b> | -0.2136        | 0.8322        | -1.5278        |
| -18            | -0.19%       | -0.63%       | -0.83%        | -0.1409              | 1.0332        | -0.8116        | -0.2558        | 0.9064        | -1.6796        |
| -17            | 0.47%        | 0.24%        | -0.36%        | 0.1440               | 0.7187        | 1.1922         | -0.1495        | 0.8626        | -1.0317        |
| -16            | -0.48%       | -0.62%       | -0.84%        | -0.1237              | 0.7550        | -0.9748        | -0.1890        | 0.7746        | -1.4525        |
| -15            | 0.53%        | 0.45%        | -0.31%        | 0.1869               | 0.9031        | 1.2317         | -0.0963        | 0.7201        | -0.7957        |
| -14            | -0.81%       | -0.23%       | -1.13%        | -0.2765              | 1.3166        | -1.2501        | -0.1936        | 0.8215        | -1.4030        |
| -13            | -0.55%       | -0.16%       | -1.68%        | -0.2531              | 1.8116        | -0.8314        | -0.2706        | 1.2021        | -1.3399        |
| -12            | 0.07%        | -0.29%       | -1.60%        | 0.0597               | 1.0819        | 0.3283         | -0.2352        | 0.9527        | -1.4696        |
| -11            | -0.11%       | -0.38%       | -1.72%        | -0.0245              | 0.9800        | -0.1491        | -0.2309        | 0.9897        | -1.3888        |
| -10            | -0.56%       | -0.43%       | -2.28%        | -0.1168              | 0.9141        | -0.7607        | -0.2554        | 0.9782        | -1.5541        |
| -9             | 0.43%        | 0.18%        | -1.85%        | 0.0634               | 0.8924        | 0.4228         | -0.2262        | 0.9199        | -1.4638        |
| -8             | -0.36%       | -0.04%       | -2.21%        | -0.0898              | 0.6573        | -0.8131        | -0.2423        | 0.9003        | -1.6017        |
| -7             | -0.14%       | -0.31%       | -2.35%        | -0.0846              | 1.2239        | -0.4116        | -0.2561        | 1.0260        | -1.4855        |
| -6             | -0.68%       | -0.68%       | -3.02%        | -0.3039              | 0.8048        | <b>-2.2479</b> | -0.3259        | 1.0714        | <b>-1.8103</b> |
| -5             | 0.16%        | 0.36%        | -2.87%        | 0.0754               | 0.7343        | 0.6112         | -0.2967        | 1.0131        | <b>-1.7430</b> |
| -4             | 0.37%        | 0.07%        | -2.49%        | 0.1690               | 0.9386        | 1.0717         | -0.2468        | 0.9628        | -1.5258        |
| -3             | 0.05%        | -0.78%       | -2.44%        | -0.0454              | 0.8773        | -0.3080        | -0.2506        | 0.9073        | -1.6436        |
| -2             | -0.50%       | -0.54%       | -2.94%        | -0.0951              | 0.9852        | -0.5748        | -0.2657        | 0.8618        | <b>-1.8351</b> |
| -1             | 0.56%        | 0.12%        | -2.39%        | 0.1472               | 1.1928        | 0.7344         | -0.2261        | 0.8551        | -1.5735        |
| <b>0</b>       | <b>1.24%</b> | <b>0.89%</b> | <b>-1.15%</b> | <b>0.4431</b>        | <b>1.1612</b> | <b>2.2713</b>  | <b>-0.1239</b> | <b>0.8389</b> | <b>-0.8792</b> |
| 1              | -0.88%       | -0.74%       | -2.03%        | -0.3236              | 0.9497        | <b>-2.0281</b> | -0.1901        | 0.8042        | -1.4068        |
| 2              | -0.68%       | -0.68%       | -2.71%        | -0.3024              | 1.0185        | <b>-1.7670</b> | -0.2489        | 0.7392        | <b>-2.0043</b> |
| 3              | -0.59%       | -0.31%       | -3.30%        | -0.2327              | 0.8152        | <b>-1.6989</b> | -0.2912        | 0.7297        | <b>-2.3751</b> |
| 4              | -0.06%       | -0.27%       | -3.36%        | -0.0100              | 0.9497        | -0.0624        | -0.2873        | 0.7844        | <b>-2.1800</b> |
| 5              | -0.52%       | -0.60%       | -3.88%        | -0.1157              | 1.2435        | -0.5538        | -0.3044        | 0.8063        | <b>-2.2470</b> |
| 6              | -0.48%       | -0.29%       | -4.36%        | -0.0938              | 0.9263        | -0.6030        | -0.3168        | 0.8330        | <b>-2.2634</b> |
| 7              | -0.10%       | -0.22%       | -4.46%        | -0.0426              | 1.0733        | -0.2361        | -0.3191        | 0.8340        | <b>-2.2774</b> |
| 8              | -0.01%       | -0.10%       | -4.47%        | -0.1060              | 1.0309        | -0.6122        | -0.3333        | 0.8607        | <b>-2.3045</b> |
| 9              | -0.81%       | -0.69%       | -5.27%        | -0.2581              | 0.8468        | <b>-1.8141</b> | -0.3748        | 0.8697        | <b>-2.5650</b> |
| 10             | 0.70%        | 0.58%        | -4.57%        | 0.2332               | 1.0531        | 1.3181         | -0.3268        | 0.8338        | <b>-2.3328</b> |
| 11             | 0.31%        | 0.00%        | -4.26%        | 0.0391               | 0.8569        | 0.2713         | -0.3147        | 0.8262        | <b>-2.2675</b> |
| 12             | -0.40%       | -0.24%       | -4.66%        | -0.1971              | 0.9977        | -1.1760        | -0.3443        | 0.8727        | <b>-2.3478</b> |
| 13             | -0.21%       | -0.10%       | -4.87%        | -0.0759              | 0.8345        | -0.5414        | -0.3522        | 0.8841        | <b>-2.3710</b> |
| 14             | -0.73%       | -1.10%       | -5.60%        | -0.2960              | 0.8757        | <b>-2.0121</b> | -0.3971        | 0.9064        | <b>-2.6080</b> |
| 15             | -0.71%       | -0.24%       | -6.31%        | -0.2677              | 1.5492        | -1.0286        | -0.4362        | 0.8932        | <b>-2.9070</b> |
| 16             | -0.33%       | -0.75%       | -6.64%        | -0.1137              | 1.1959        | -0.5659        | -0.4490        | 0.8756        | <b>-3.0518</b> |
| 17             | -0.66%       | -0.52%       | -7.30%        | -0.2184              | 0.8536        | -1.5228        | -0.4785        | 0.8940        | <b>-3.1854</b> |
| 18             | -0.02%       | 0.09%        | -7.32%        | 0.0363               | 0.9162        | 0.2356         | -0.4665        | 0.8973        | <b>-3.0941</b> |
| 19             | 0.60%        | 0.04%        | -6.72%        | 0.1404               | 1.4508        | 0.5758         | -0.4384        | 0.8828        | <b>-2.9558</b> |
| 20             | -1.02%       | -0.55%       | -7.74%        | -0.3652              | 1.7243        | -1.2607        | -0.4901        | 0.9946        | <b>-2.9328</b> |
| 21             | -0.26%       | -0.92%       | -8.00%        | -0.0502              | 1.1226        | -0.2660        | -0.4919        | 0.9660        | <b>-3.0311</b> |
| 22             | 0.25%        | 0.00%        | -7.75%        | 0.1202               | 0.9646        | 0.7418         | -0.4679        | 0.9040        | <b>-3.0805</b> |
| 23             | 0.24%        | -0.27%       | -7.51%        | -0.0046              | 1.2210        | -0.0223        | -0.4632        | 0.8991        | <b>-3.0665</b> |
| 24             | -0.15%       | 0.21%        | -7.66%        | -0.0766              | 0.9634        | -0.4729        | -0.4694        | 0.9090        | <b>-3.0738</b> |
| 25             | -0.77%       | -0.31%       | -8.43%        | -0.3262              | 0.8076        | <b>-2.4040</b> | -0.5124        | 0.9136        | <b>-3.3384</b> |
| 26             | 0.63%        | 0.22%        | -7.80%        | 0.2365               | 1.1182        | 1.2589         | -0.4724        | 0.9248        | <b>-3.0405</b> |
| 27             | -0.13%       | -0.64%       | -7.93%        | -0.0865              | 1.1852        | -0.4347        | -0.4800        | 1.0121        | <b>-2.8226</b> |
| 28             | -0.24%       | -0.15%       | -8.17%        | -0.0605              | 0.8223        | -0.4381        | -0.4837        | 1.0303        | <b>-2.7944</b> |
| 29             | -0.09%       | -0.59%       | -8.27%        | -0.0373              | 1.2748        | -0.1740        | -0.4841        | 0.9899        | <b>-2.9109</b> |
| 30             | -0.50%       | -0.90%       | -8.77%        | -0.1775              | 0.9446        | -1.1185        | -0.5042        | 1.0386        | <b>-2.8894</b> |
| <b>-1 to 1</b> |              |              | <b>0.92%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.03103</b> | 0.1540         | 1.0188        | 0.8996         |

Table-A 7.35 Fama-French Returns; Indian Acquirers; All-firms; (MM, 32)

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | -0.05%       | -0.40%       | -0.05%       | -0.1264              | 0.8083        | -0.8745        | -0.1264       | 0.8083        | -0.8745       |
| -19            | -0.31%       | -0.57%       | -0.36%       | -0.1209              | 0.8513        | -0.7945        | -0.1749       | 0.9251        | -1.0573       |
| -18            | 0.18%        | -0.22%       | -0.18%       | -0.0148              | 1.2643        | -0.0656        | -0.1514       | 1.0800        | -0.7838       |
| -17            | 0.57%        | 0.43%        | 0.39%        | 0.2426               | 0.8765        | 1.5477         | -0.0098       | 1.0237        | -0.0536       |
| -16            | 0.02%        | 0.11%        | 0.41%        | 0.0572               | 0.8434        | 0.3794         | 0.0168        | 0.8985        | 0.1047        |
| -15            | 0.76%        | 0.37%        | 1.17%        | 0.3298               | 1.1076        | 1.6655         | 0.1500        | 0.9161        | 0.9158        |
| -14            | -0.51%       | -0.26%       | 0.66%        | -0.2578              | 1.3485        | -1.0691        | 0.0415        | 1.0701        | 0.2167        |
| -13            | -0.73%       | 0.10%        | -0.07%       | -0.4244              | 2.0730        | -1.1450        | -0.1113       | 1.3784        | -0.4515       |
| -12            | 0.37%        | -0.45%       | 0.29%        | 0.1433               | 1.2496        | 0.6414         | -0.0571       | 1.0813        | -0.2956       |
| -11            | -0.06%       | -0.01%       | 0.23%        | 0.0409               | 1.1326        | 0.2021         | -0.0413       | 1.0804        | -0.2136       |
| -10            | -0.70%       | -0.64%       | -0.47%       | -0.2802              | 0.9850        | -1.5912        | -0.1238       | 1.0303        | -0.6723       |
| -9             | 0.70%        | 0.45%        | 0.22%        | 0.2517               | 1.1459        | 1.2286         | -0.0459       | 1.0023        | -0.2561       |
| -8             | -0.28%       | 0.14%        | -0.06%       | -0.0582              | 0.9177        | -0.3545        | -0.0602       | 0.9517        | -0.3540       |
| -7             | 0.26%        | -0.09%       | 0.20%        | 0.0807               | 1.5760        | 0.2862         | -0.0365       | 1.1702        | -0.1744       |
| -6             | -0.45%       | -0.54%       | -0.25%       | -0.2643              | 0.9472        | -1.5608        | -0.1035       | 1.2454        | -0.4648       |
| -5             | -0.18%       | -0.06%       | -0.43%       | -0.0287              | 0.9138        | -0.1758        | -0.1074       | 1.1429        | -0.5256       |
| -4             | 0.65%        | 0.06%        | 0.22%        | 0.2356               | 0.9305        | 1.4160         | -0.0471       | 1.1105        | -0.2370       |
| -3             | 0.44%        | 0.07%        | 0.66%        | 0.1057               | 1.0115        | 0.5844         | -0.0208       | 1.1045        | -0.1054       |
| -2             | -0.59%       | -0.54%       | 0.07%        | -0.2275              | 1.0381        | -1.2258        | -0.0725       | 1.0607        | -0.3821       |
| -1             | 0.51%        | 0.08%        | 0.58%        | 0.2157               | 1.4328        | 0.8418         | -0.0224       | 1.0556        | -0.1187       |
| <b>0</b>       | <b>1.37%</b> | <b>0.97%</b> | <b>1.95%</b> | <b>0.5739</b>        | <b>1.3212</b> | <b>2.4295</b>  | <b>0.1034</b> | <b>1.0337</b> | <b>0.5593</b> |
| 1              | -0.58%       | -1.08%       | 1.38%        | -0.2436              | 1.2043        | -1.1315        | 0.0491        | 0.9878        | 0.2777        |
| 2              | -0.58%       | -0.10%       | 0.79%        | -0.2408              | 1.3208        | -1.0195        | -0.0022       | 0.9586        | -0.0130       |
| 3              | -0.51%       | -0.61%       | 0.29%        | -0.2062              | 0.9029        | -1.2773        | -0.0443       | 0.9461        | -0.2617       |
| 4              | 0.18%        | -0.22%       | 0.47%        | -0.0127              | 1.0373        | -0.0687        | -0.0459       | 0.9912        | -0.2591       |
| 5              | -0.49%       | -0.34%       | -0.02%       | -0.1593              | 1.5196        | -0.5864        | -0.0763       | 1.0028        | -0.4254       |
| 6              | -0.86%       | -0.50%       | -0.88%       | -0.2896              | 1.1133        | -1.4546        | -0.1306       | 1.0097        | -0.7233       |
| 7              | 0.19%        | -0.09%       | -0.68%       | 0.0871               | 1.2922        | 0.3770         | -0.1118       | 0.9771        | -0.6397       |
| 8              | 0.67%        | 0.21%        | -0.01%       | 0.1942               | 1.1691        | 0.9289         | -0.0738       | 0.9949        | -0.4147       |
| 9              | -0.75%       | -0.52%       | -0.76%       | -0.3317              | 1.0104        | <b>-1.8363</b> | -0.1331       | 1.0062        | -0.7398       |
| 10             | 0.96%        | 0.66%        | 0.21%        | 0.3647               | 1.3019        | 1.5666         | -0.0654       | 0.9531        | -0.3839       |
| 11             | 0.46%        | 0.01%        | 0.66%        | 0.1710               | 1.0107        | 0.9462         | -0.0342       | 0.9727        | -0.1965       |
| 12             | -0.07%       | -0.04%       | 0.59%        | -0.0608              | 1.1365        | -0.2992        | -0.0442       | 1.0167        | -0.2433       |
| 13             | -0.07%       | -0.40%       | 0.52%        | -0.0389              | 1.0587        | -0.2053        | -0.0502       | 1.0014        | -0.2806       |
| 14             | -0.48%       | -0.70%       | 0.05%        | -0.2623              | 0.9708        | -1.5111        | -0.0939       | 1.0036        | -0.5230       |
| 15             | -0.52%       | -0.02%       | -0.48%       | -0.2221              | 1.9802        | -0.6273        | -0.1296       | 1.0356        | -0.6997       |
| 16             | -0.46%       | -0.55%       | -0.94%       | -0.1894              | 1.2749        | -0.8308        | -0.1589       | 1.0723        | -0.8290       |
| 17             | -0.46%       | -0.19%       | -1.40%       | -0.1818              | 0.9307        | -1.0923        | -0.1863       | 1.0295        | -1.0122       |
| 18             | -0.19%       | 0.01%        | -1.59%       | -0.0125              | 0.9115        | -0.0766        | -0.1859       | 0.9950        | -1.0450       |
| 19             | 0.60%        | -0.21%       | -1.00%       | 0.2051               | 1.8403        | 0.6231         | -0.1512       | 0.8880        | -0.9520       |
| 20             | -1.09%       | -0.60%       | -2.08%       | -0.5311              | 2.1150        | -1.4045        | -0.2322       | 1.0685        | -1.2156       |
| 21             | -0.10%       | -0.88%       | -2.18%       | -0.0163              | 1.3796        | -0.0660        | -0.2320       | 1.0393        | -1.2483       |
| 22             | 0.36%        | 0.15%        | -1.82%       | 0.1756               | 1.2695        | 0.7737         | -0.2025       | 0.9156        | -1.2368       |
| 23             | 0.46%        | -0.34%       | -1.37%       | 0.1011               | 1.5016        | 0.3764         | -0.1849       | 0.8834        | -1.1707       |
| 24             | 0.06%        | 0.26%        | -1.31%       | -0.0173              | 1.2542        | -0.0771        | -0.1854       | 0.9128        | -1.1361       |
| 25             | -0.76%       | -0.52%       | -2.07%       | -0.3706              | 0.9205        | <b>-2.2516</b> | -0.2381       | 0.9537        | -1.3960       |
| 26             | 1.04%        | 1.05%        | -1.03%       | 0.4751               | 1.4861        | <b>1.7880</b>  | -0.1662       | 0.9644        | -0.9639       |
| 27             | -0.13%       | -0.24%       | -1.15%       | -0.0483              | 1.5411        | -0.1751        | -0.1714       | 1.0917        | -0.8783       |
| 28             | -0.22%       | -0.24%       | -1.37%       | -0.0569              | 1.0224        | -0.3111        | -0.1778       | 1.1278        | -0.8817       |
| 29             | 0.01%        | -0.77%       | -1.36%       | 0.0657               | 1.5810        | 0.2325         | -0.1667       | 1.1291        | -0.8258       |
| 30             | -0.35%       | -0.57%       | -1.71%       | -0.1084              | 1.0632        | -0.5701        | -0.1802       | 1.2021        | -0.8386       |
| <b>-1 to 1</b> |              |              | <b>1.31%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.03276</b> | 0.3152        | 1.2748        | 1.3829        |

Table-A 7.36 Fama-French Returns; Indian Acquirers; All-firms; (OLS, 32)

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|----------------|---------------|----------------|
| -20            | -0.21%       | -0.35%       | -0.21%        | -0.1700              | 0.7521        | -1.2600        | -0.1700        | 0.7521        | -1.2600        |
| -19            | -0.46%       | -0.61%       | -0.67%        | -0.1729              | 0.7684        | -1.2545        | -0.2425        | 0.8633        | -1.5656        |
| -18            | 0.06%        | -0.13%       | -0.61%        | -0.0563              | 1.1496        | -0.2728        | -0.2304        | 0.9602        | -1.3379        |
| -17            | 0.41%        | 0.14%        | -0.20%        | 0.1804               | 0.8280        | 1.2150         | -0.1093        | 0.9344        | -0.6524        |
| -16            | -0.18%       | -0.09%       | -0.38%        | -0.0209              | 0.8028        | -0.1450        | -0.1071        | 0.8493        | -0.7033        |
| -15            | 0.69%        | 0.34%        | 0.30%         | 0.2759               | 0.9986        | 1.5404         | 0.0148         | 0.8594        | 0.0962         |
| -14            | -0.61%       | -0.58%       | -0.31%        | -0.2656              | 1.1541        | -1.2828        | -0.0866        | 0.9959        | -0.4850        |
| -13            | -0.94%       | -0.20%       | -1.24%        | -0.4302              | 1.6916        | -1.4179        | -0.2332        | 1.1952        | -1.0876        |
| -12            | 0.12%        | -0.44%       | -1.12%        | 0.0287               | 1.0399        | 0.1537         | -0.2103        | 0.9592        | -1.2221        |
| -11            | -0.10%       | 0.11%        | -1.22%        | 0.0221               | 1.0061        | 0.1224         | -0.1925        | 0.9446        | -1.1361        |
| -10            | -0.90%       | -0.87%       | -2.12%        | -0.2951              | 0.9056        | <b>-1.8164</b> | -0.2725        | 0.9040        | -1.6804        |
| -9             | 0.59%        | 0.38%        | -1.54%        | 0.1492               | 0.9381        | 0.8869         | -0.2178        | 0.8733        | -1.3905        |
| -8             | -0.41%       | -0.02%       | -1.95%        | -0.0851              | 0.7966        | -0.5957        | -0.2329        | 0.8242        | -1.5752        |
| -7             | -0.04%       | -0.23%       | -1.99%        | -0.0421              | 1.3065        | -0.1797        | -0.2357        | 1.0211        | -1.2867        |
| -6             | -0.69%       | -0.71%       | -2.68%        | -0.3225              | 0.8110        | <b>-2.2173</b> | -0.3109        | 1.0822        | -1.6019        |
| -5             | -0.31%       | -0.17%       | -2.99%        | -0.0597              | 0.7962        | -0.4181        | -0.3160        | 1.0105        | <b>-1.7434</b> |
| -4             | 0.45%        | 0.01%        | -2.54%        | 0.1421               | 0.8188        | 0.9673         | -0.2721        | 0.9878        | -1.5357        |
| -3             | 0.33%        | -0.08%       | -2.21%        | 0.0623               | 0.9212        | 0.3769         | -0.2498        | 0.9952        | -1.3992        |
| -2             | -0.66%       | -0.45%       | -2.87%        | -0.2298              | 0.9684        | -1.3230        | -0.2958        | 0.9441        | <b>-1.7469</b> |
| -1             | 0.42%        | 0.01%        | -2.45%        | 0.1500               | 1.2892        | 0.6487         | -0.2548        | 0.9144        | -1.5535        |
| <b>0</b>       | <b>1.23%</b> | <b>0.71%</b> | <b>-1.22%</b> | <b>0.4636</b>        | <b>1.1909</b> | <b>2.1701</b>  | <b>-0.1475</b> | <b>0.9244</b> | <b>-0.8895</b> |
| 1              | -0.68%       | -1.23%       | -1.90%        | -0.2754              | 1.0750        | -1.4280        | -0.2028        | 0.8887        | -1.2723        |
| 2              | -0.59%       | -0.51%       | -2.49%        | -0.2093              | 1.0781        | -1.0821        | -0.2420        | 0.8427        | -1.6010        |
| 3              | -0.56%       | -0.49%       | -3.05%        | -0.2071              | 0.8456        | -1.3656        | -0.2792        | 0.8134        | <b>-1.9134</b> |
| 4              | -0.01%       | -0.17%       | -3.06%        | -0.0649              | 0.9244        | -0.3911        | -0.2865        | 0.8698        | <b>-1.8364</b> |
| 5              | -0.63%       | -0.63%       | -3.69%        | -0.1776              | 1.2367        | -0.8004        | -0.3158        | 0.8554        | <b>-2.0579</b> |
| 6              | -0.86%       | -0.56%       | -4.55%        | -0.2601              | 0.9485        | -1.5287        | -0.3599        | 0.8526        | <b>-2.3534</b> |
| 7              | -0.08%       | -0.22%       | -4.63%        | -0.0187              | 1.1048        | -0.0942        | -0.3570        | 0.8668        | <b>-2.2957</b> |
| 8              | 0.51%        | 0.22%        | -4.12%        | 0.0849               | 1.0683        | 0.4432         | -0.3350        | 0.8955        | <b>-2.0853</b> |
| 9              | -0.82%       | -0.61%       | -4.94%        | -0.3071              | 0.8368        | <b>-2.0463</b> | -0.3854        | 0.8757        | <b>-2.4538</b> |
| 10             | 0.81%        | 0.49%        | -4.13%        | 0.2242               | 1.1659        | 1.0720         | -0.3389        | 0.8729        | <b>-2.1644</b> |
| 11             | 0.33%        | -0.23%       | -3.80%        | 0.0935               | 0.8810        | 0.5915         | -0.3170        | 0.8697        | <b>-2.0323</b> |
| 12             | -0.22%       | -0.17%       | -4.02%        | -0.1103              | 0.9924        | -0.6196        | -0.3314        | 0.9061        | <b>-2.0390</b> |
| 13             | -0.29%       | -0.47%       | -4.31%        | -0.1296              | 0.8793        | -0.8215        | -0.3487        | 0.9086        | <b>-2.1397</b> |
| 14             | -0.57%       | -0.93%       | -4.88%        | -0.2830              | 0.8515        | <b>-1.8532</b> | -0.3915        | 0.9219        | <b>-2.3676</b> |
| 15             | -0.65%       | -0.32%       | -5.54%        | -0.2292              | 1.6017        | -0.7977        | -0.4242        | 0.8873        | <b>-2.6656</b> |
| 16             | -0.40%       | -0.54%       | -5.94%        | -0.1446              | 1.0974        | -0.7348        | -0.4423        | 0.8957        | <b>-2.7527</b> |
| 17             | -0.59%       | -0.67%       | -6.53%        | -0.2245              | 0.8759        | -1.4289        | -0.4728        | 0.8785        | <b>-3.0004</b> |
| 18             | -0.50%       | -0.63%       | -7.03%        | -0.1089              | 0.8578        | -0.7081        | -0.4842        | 0.8619        | <b>-3.1318</b> |
| 19             | 0.45%        | -0.27%       | -6.58%        | 0.0857               | 1.5903        | 0.3006         | -0.4645        | 0.8643        | <b>-2.9964</b> |
| 20             | -1.28%       | -0.77%       | -7.86%        | -0.4953              | 1.7769        | -1.5539        | -0.5362        | 0.9607        | <b>-3.1114</b> |
| 21             | -0.34%       | -1.26%       | -8.21%        | -0.1069              | 1.1740        | -0.5078        | -0.5462        | 0.9444        | <b>-3.2246</b> |
| 22             | 0.08%        | 0.04%        | -8.12%        | 0.0348               | 1.0720        | 0.1811         | -0.5345        | 0.8659        | <b>-3.4415</b> |
| 23             | 0.38%        | -0.52%       | -7.74%        | 0.0435               | 1.3299        | 0.1823         | -0.5219        | 0.8798        | <b>-3.3069</b> |
| 24             | -0.07%       | 0.38%        | -7.81%        | -0.0536              | 1.0567        | -0.2830        | -0.5240        | 0.8710        | <b>-3.3543</b> |
| 25             | -0.97%       | -0.94%       | -8.79%        | -0.4004              | 0.8121        | <b>-2.7488</b> | -0.5773        | 0.8762        | <b>-3.6735</b> |
| 26             | 0.73%        | 0.41%        | -8.06%        | 0.3002               | 1.3460        | 1.2432         | -0.5274        | 0.9028        | <b>-3.2570</b> |
| 27             | -0.15%       | -0.28%       | -8.21%        | -0.0464              | 1.3309        | -0.1943        | -0.5286        | 0.9819        | <b>-3.0010</b> |
| 28             | -0.41%       | -0.34%       | -8.62%        | -0.1130              | 0.8849        | -0.7119        | -0.5393        | 0.9870        | <b>-3.0460</b> |
| 29             | -0.09%       | -0.73%       | -8.71%        | -0.0350              | 1.3282        | -0.1468        | -0.5388        | 0.9708        | <b>-3.0943</b> |
| 30             | -0.46%       | -0.86%       | -9.16%        | -0.1390              | 0.9622        | -0.8056        | -0.5530        | 1.0249        | <b>-3.0078</b> |
| <b>-1 to 1</b> |              |              | <b>0.97%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.0323</b>  | 0.1953         | 1.1503        | 0.9464         |

Table-A 7.37 Market Returns; Indian Acquirers; FF-firms; (MM, 32)

| Days           | AAR          | Median       | CAAR         | SARa                 | SD            | t-Stats        | SCARa         | SD            | t-Stats       |
|----------------|--------------|--------------|--------------|----------------------|---------------|----------------|---------------|---------------|---------------|
| -20            | 0.07%        | -0.14%       | 0.07%        | -0.0844              | 0.7662        | -0.6047        | -0.0844       | 0.7662        | -0.6047       |
| -19            | -0.46%       | -0.60%       | -0.39%       | -0.2064              | 0.9672        | -1.1719        | -0.2056       | 0.9595        | -1.1768       |
| -18            | 0.03%        | -0.44%       | -0.36%       | -0.0735              | 1.2251        | -0.3296        | -0.2103       | 1.1119        | -1.0388       |
| -17            | 0.75%        | 0.49%        | 0.39%        | 0.2923               | 0.7693        | <b>2.0866</b>  | -0.0360       | 1.0465        | -0.1889       |
| -16            | -0.18%       | -0.27%       | 0.21%        | -0.0333              | 0.7939        | -0.2300        | -0.0471       | 0.9026        | -0.2864       |
| -15            | 0.76%        | 0.63%        | 0.97%        | 0.3065               | 1.0678        | 1.5765         | 0.0822        | 0.8495        | 0.5312        |
| -14            | -0.89%       | -0.42%       | 0.08%        | -0.3853              | 1.5896        | -1.3311        | -0.0695       | 1.0069        | -0.3793       |
| -13            | -0.72%       | -0.19%       | -0.64%       | -0.4406              | 2.2374        | -1.0815        | -0.2208       | 1.4879        | -0.8151       |
| -12            | 0.37%        | -0.14%       | -0.27%       | 0.1789               | 1.3653        | 0.7196         | -0.1486       | 1.1427        | -0.7140       |
| -11            | 0.07%        | -0.37%       | -0.19%       | 0.0651               | 1.1831        | 0.3023         | -0.1204       | 1.2013        | -0.5502       |
| -10            | -0.49%       | -0.20%       | -0.68%       | -0.1939              | 0.9222        | -1.1545        | -0.1732       | 1.1393        | -0.8349       |
| -9             | 0.66%        | 0.52%        | -0.02%       | 0.2033               | 1.1535        | 0.9680         | -0.1072       | 1.1098        | -0.5302       |
| -8             | -0.18%       | 0.19%        | -0.20%       | -0.0234              | 0.8171        | -0.1573        | -0.1094       | 1.1009        | -0.5459       |
| -7             | 0.17%        | 0.11%        | -0.03%       | 0.0424               | 1.5991        | 0.1454         | -0.0941       | 1.2782        | -0.4045       |
| -6             | -0.52%       | -0.35%       | -0.55%       | -0.2597              | 1.0034        | -1.4213        | -0.1580       | 1.3527        | -0.6414       |
| -5             | 0.11%        | 0.36%        | -0.44%       | 0.0935               | 0.8291        | 0.6192         | -0.1296       | 1.2680        | -0.5613       |
| -4             | 0.64%        | 0.30%        | 0.20%        | 0.2464               | 0.9244        | 1.4641         | -0.0660       | 1.2071        | -0.3001       |
| -3             | 0.37%        | -0.42%       | 0.56%        | 0.0742               | 0.9688        | 0.4204         | -0.0466       | 1.1501        | -0.2227       |
| -2             | -0.60%       | -0.70%       | -0.04%       | -0.2253              | 0.9782        | -1.2646        | -0.0971       | 1.0916        | -0.4883       |
| -1             | 0.52%        | -0.03%       | 0.49%        | 0.2032               | 1.4280        | 0.7814         | -0.0492       | 1.1203        | -0.2411       |
| <b>0</b>       | <b>1.35%</b> | <b>1.08%</b> | <b>1.84%</b> | <b>0.5674</b>        | <b>1.2971</b> | <b>2.4020</b>  | <b>0.0758</b> | <b>1.0886</b> | <b>0.3825</b> |
| 1              | -0.72%       | -0.85%       | 1.12%        | -0.3002              | 1.1136        | -1.4802        | 0.0101        | 1.0459        | 0.0529        |
| 2              | -0.76%       | -0.60%       | 0.36%        | -0.3523              | 1.3122        | -1.4744        | -0.0636       | 0.9954        | -0.3509       |
| 3              | -0.53%       | -0.46%       | -0.17%       | -0.2259              | 0.9589        | -1.2936        | -0.1084       | 1.0040        | -0.5927       |
| 4              | 0.33%        | 0.10%        | 0.16%        | 0.0550               | 1.0233        | 0.2954         | -0.0952       | 1.0234        | -0.5107       |
| 5              | -0.53%       | -0.50%       | -0.38%       | -0.1680              | 1.6046        | -0.5749        | -0.1263       | 1.0797        | -0.6422       |
| 6              | -0.75%       | -0.26%       | -1.13%       | -0.2507              | 1.0960        | -1.2560        | -0.1721       | 1.1169        | -0.8464       |
| 7              | 0.12%        | -0.16%       | -1.01%       | 0.0601               | 1.3131        | 0.2515         | -0.1577       | 1.0640        | -0.8138       |
| 8              | 0.33%        | 0.40%        | -0.68%       | 0.0582               | 1.1958        | 0.2674         | -0.1441       | 1.0786        | -0.7338       |
| 9              | -0.75%       | -0.41%       | -1.43%       | -0.2904              | 1.0123        | -1.5757        | -0.1947       | 1.1086        | -0.9646       |
| 10             | 1.09%        | 0.82%        | -0.33%       | 0.4186               | 1.2327        | <b>1.8648</b>  | -0.1164       | 1.0309        | -0.6200       |
| 11             | 0.64%        | 0.45%        | 0.30%        | 0.2235               | 0.9823        | 1.2493         | -0.0750       | 1.0638        | -0.3874       |
| 12             | -0.30%       | -0.24%       | 0.01%        | -0.1475              | 1.1493        | -0.7048        | -0.0996       | 1.1121        | -0.4917       |
| 13             | -0.08%       | -0.14%       | -0.07%       | -0.0267              | 1.0686        | -0.1374        | -0.1027       | 1.0969        | -0.5141       |
| 14             | -0.74%       | -0.84%       | -0.81%       | -0.3378              | 1.0229        | <b>-1.8134</b> | -0.1583       | 1.1107        | -0.7827       |
| 15             | -0.40%       | 0.19%        | -1.21%       | -0.1743              | 1.9901        | -0.4810        | -0.1851       | 1.1636        | -0.8738       |
| 16             | -0.58%       | -0.69%       | -1.79%       | -0.2179              | 1.4237        | -0.8404        | -0.2184       | 1.1896        | -1.0084       |
| 17             | -0.62%       | -0.56%       | -2.41%       | -0.2371              | 1.0225        | -1.2735        | -0.2540       | 1.1883        | -1.1739       |
| 18             | 0.16%        | 0.00%        | -2.25%       | 0.1064               | 1.0736        | 0.5442         | -0.2337       | 1.1685        | -1.0984       |
| 19             | 0.67%        | 0.12%        | -1.57%       | 0.2508               | 1.8709        | 0.7363         | -0.1911       | 1.0727        | -0.9784       |
| 20             | -1.08%       | -0.61%       | -2.65%       | -0.5327              | 2.1613        | -1.3536        | -0.2720       | 1.2637        | -1.1818       |
| 21             | -0.04%       | -0.49%       | -2.69%       | 0.0170               | 1.3945        | 0.0669         | -0.2661       | 1.2017        | -1.2159       |
| 22             | 0.51%        | 0.30%        | -2.17%       | 0.2301               | 1.2301        | 1.0273         | -0.2279       | 1.1023        | -1.1353       |
| 23             | 0.34%        | -0.16%       | -1.84%       | 0.0355               | 1.4535        | 0.1341         | -0.2199       | 1.0561        | -1.1435       |
| 24             | -0.02%       | 0.23%        | -1.86%       | -0.0594              | 1.2348        | -0.2641        | -0.2263       | 1.1019        | -1.1279       |
| 25             | -0.71%       | -0.53%       | -2.57%       | -0.3539              | 0.9452        | <b>-2.0560</b> | -0.2760       | 1.1368        | -1.3333       |
| 26             | 0.92%        | 0.50%        | -1.65%       | 0.4365               | 1.3870        | <b>1.7281</b>  | -0.2094       | 1.1271        | -1.0202       |
| 27             | -0.21%       | -0.45%       | -1.86%       | -0.1005              | 1.5194        | -0.3631        | -0.2217       | 1.2581        | -0.9677       |
| 28             | 0.01%        | 0.01%        | -1.85%       | 0.0304               | 0.9968        | 0.1675         | -0.2151       | 1.2960        | -0.9114       |
| 29             | -0.05%       | -0.83%       | -1.90%       | 0.0537               | 1.6473        | 0.1791         | -0.2053       | 1.2855        | -0.8771       |
| 30             | -0.35%       | -0.45%       | -2.26%       | -0.0966              | 1.1495        | -0.4617        | -0.2168       | 1.3640        | -0.8730       |
| <b>-1 to 1</b> |              |              | <b>1.15%</b> | <b>StdDev(AAR-0)</b> |               | <b>0.03181</b> | 0.2716        | 1.2139        | 1.2286        |



Table-A 7.38 Market Returns; Indian Acquirers; FF-firms; (OLS, 32)

| Days           | AAR          | Median       | CAAR          | SARa                 | SD            | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|----------------------|---------------|----------------|----------------|---------------|----------------|
| -20            | -0.10%       | -0.12%       | -0.10%        | -0.1349              | 0.7167        | -1.0310        | -0.1349        | 0.7167        | -1.0310        |
| -19            | -0.66%       | -0.76%       | -0.75%        | -0.2654              | 0.8477        | <b>-1.7147</b> | -0.2831        | 0.8515        | <b>-1.8208</b> |
| -18            | -0.11%       | -0.49%       | -0.86%        | -0.0993              | 1.0949        | -0.4966        | -0.2885        | 0.9572        | -1.6505        |
| -17            | 0.66%        | 0.39%        | -0.20%        | 0.2411               | 0.7099        | <b>1.8598</b>  | -0.1293        | 0.9183        | -0.7709        |
| -16            | -0.47%       | -0.77%       | -0.67%        | -0.1213              | 0.7530        | -0.8823        | -0.1699        | 0.8085        | -1.1507        |
| -15            | 0.64%        | 0.52%        | -0.02%        | 0.2403               | 0.9430        | 1.3953         | -0.0570        | 0.7412        | -0.4211        |
| -14            | -1.03%       | -0.72%       | -1.05%        | -0.3897              | 1.3566        | -1.5732        | -0.2001        | 0.8490        | -1.2904        |
| -13            | -0.82%       | -0.31%       | -1.87%        | -0.4112              | 1.8696        | -1.2045        | -0.3325        | 1.2448        | -1.4629        |
| -12            | 0.24%        | -0.34%       | -1.63%        | 0.1008               | 1.1470        | 0.4813         | -0.2799        | 0.9655        | -1.5877        |
| -11            | -0.04%       | -0.35%       | -1.67%        | 0.0154               | 1.0348        | 0.0816         | -0.2607        | 1.0082        | -1.4160        |
| -10            | -0.60%       | -0.50%       | -2.28%        | -0.1819              | 0.7949        | -1.2530        | -0.3034        | 0.9436        | <b>-1.7607</b> |
| -9             | 0.50%        | 0.25%        | -1.78%        | 0.0938               | 0.9306        | 0.5518         | -0.2634        | 0.9017        | -1.5997        |
| -8             | -0.32%       | 0.01%        | -2.10%        | -0.0667              | 0.6975        | -0.5239        | -0.2716        | 0.8947        | -1.6622        |
| -7             | -0.10%       | -0.33%       | -2.20%        | -0.0854              | 1.3066        | -0.3578        | -0.2845        | 1.0470        | -1.4881        |
| -6             | -0.72%       | -0.67%       | -2.92%        | -0.2995              | 0.8514        | <b>-1.9264</b> | -0.3522        | 1.1046        | <b>-1.7461</b> |
| -5             | 0.05%        | 0.33%        | -2.88%        | 0.0735               | 0.7423        | 0.5426         | -0.3226        | 1.0396        | <b>-1.6995</b> |
| -4             | 0.45%        | 0.08%        | -2.43%        | 0.1504               | 0.8129        | 1.0132         | -0.2765        | 0.9943        | -1.5230        |
| -3             | 0.18%        | -0.80%       | -2.25%        | 0.0022               | 0.8814        | 0.0134         | -0.2682        | 0.9476        | -1.5500        |
| -2             | -0.71%       | -0.75%       | -2.96%        | -0.2289              | 0.8912        | -1.4067        | -0.3136        | 0.8806        | <b>-1.9501</b> |
| -1             | 0.45%        | -0.02%       | -2.51%        | 0.1423               | 1.2558        | 0.6204         | -0.2738        | 0.8878        | -1.6890        |
| <b>0</b>       | <b>1.25%</b> | <b>0.89%</b> | <b>-1.26%</b> | <b>0.4724</b>        | <b>1.1559</b> | <b>2.2381</b>  | <b>-0.1641</b> | <b>0.8692</b> | <b>-1.0342</b> |
| 1              | -0.79%       | -1.02%       | -2.05%        | -0.3122              | 0.9739        | <b>-1.7558</b> | -0.2269        | 0.8360        | -1.4866        |
| 2              | -0.78%       | -0.71%       | -2.83%        | -0.3028              | 1.0524        | -1.5755        | -0.2851        | 0.7748        | <b>-2.0150</b> |
| 3              | -0.58%       | -0.25%       | -3.41%        | -0.2175              | 0.8700        | -1.3690        | -0.3235        | 0.7649        | <b>-2.3160</b> |
| 4              | 0.12%        | 0.05%        | -3.29%        | -0.0114              | 0.8782        | -0.0709        | -0.3192        | 0.8030        | <b>-2.1770</b> |
| 5              | -0.61%       | -0.65%       | -3.91%        | -0.1730              | 1.2794        | -0.7407        | -0.3469        | 0.8098        | <b>-2.3462</b> |
| 6              | -0.73%       | -0.59%       | -4.64%        | -0.2082              | 0.8872        | -1.2852        | -0.3805        | 0.8246        | <b>-2.5272</b> |
| 7              | -0.07%       | -0.21%       | -4.70%        | -0.0119              | 1.1434        | -0.0571        | -0.3759        | 0.8343        | <b>-2.4677</b> |
| 8              | 0.22%        | 0.16%        | -4.48%        | -0.0209              | 1.0823        | -0.1059        | -0.3733        | 0.8723        | <b>-2.3435</b> |
| 9              | -0.78%       | -0.70%       | -5.26%        | -0.2546              | 0.8391        | -1.6620        | -0.4135        | 0.8676        | <b>-2.6100</b> |
| 10             | 0.91%        | 0.70%        | -4.35%        | 0.2619               | 1.0649        | 1.3469         | -0.3597        | 0.8238        | <b>-2.3913</b> |
| 11             | 0.49%        | 0.25%        | -3.86%        | 0.1370               | 0.7977        | 0.9407         | -0.3298        | 0.8321        | <b>-2.1709</b> |
| 12             | -0.49%       | -0.25%       | -4.35%        | -0.2092              | 0.9958        | -1.1503        | -0.3612        | 0.8802        | <b>-2.2473</b> |
| 13             | -0.19%       | -0.12%       | -4.54%        | -0.0847              | 0.8875        | -0.5228        | -0.3704        | 0.8954        | <b>-2.2653</b> |
| 14             | -0.72%       | -1.17%       | -5.26%        | -0.3124              | 0.9132        | <b>-1.8735</b> | -0.4179        | 0.9191        | <b>-2.4899</b> |
| 15             | -0.55%       | -0.16%       | -5.81%        | -0.1887              | 1.5568        | -0.6639        | -0.4435        | 0.9059        | <b>-2.6809</b> |
| 16             | -0.45%       | -0.76%       | -6.26%        | -0.1358              | 1.2353        | -0.6020        | -0.4598        | 0.9006        | <b>-2.7959</b> |
| 17             | -0.67%       | -0.44%       | -6.94%        | -0.2407              | 0.8823        | -1.4938        | -0.4927        | 0.9100        | <b>-2.9652</b> |
| 18             | -0.05%       | 0.03%        | -6.99%        | 0.0284               | 0.9849        | 0.1578         | -0.4818        | 0.9153        | <b>-2.8828</b> |
| 19             | 0.53%        | 0.04%        | -6.46%        | 0.1114               | 1.5373        | 0.3967         | -0.4581        | 0.8952        | <b>-2.8027</b> |
| 20             | -1.26%       | -0.74%       | -7.72%        | -0.4756              | 1.8278        | -1.4251        | -0.5268        | 1.0168        | <b>-2.8374</b> |
| 21             | -0.24%       | -0.96%       | -7.96%        | -0.0494              | 1.1595        | -0.2335        | -0.5281        | 0.9851        | <b>-2.9360</b> |
| 22             | 0.32%        | 0.01%        | -7.63%        | 0.1172               | 1.0137        | 0.6332         | -0.5041        | 0.9143        | <b>-3.0194</b> |
| 23             | 0.22%        | -0.36%       | -7.41%        | -0.0274              | 1.3113        | -0.1144        | -0.5024        | 0.9096        | <b>-3.0252</b> |
| 24             | -0.07%       | 0.24%        | -7.49%        | -0.0653              | 1.0112        | -0.3534        | -0.5066        | 0.9258        | <b>-2.9965</b> |
| 25             | -0.91%       | -0.94%       | -8.40%        | -0.3796              | 0.8547        | <b>-2.4319</b> | -0.5570        | 0.9310        | <b>-3.2763</b> |
| 26             | 0.67%        | 0.23%        | -7.73%        | 0.2753               | 1.1871        | 1.2702         | -0.5109        | 0.9533        | <b>-2.9347</b> |
| 27             | -0.21%       | -0.65%       | -7.94%        | -0.0975              | 1.2530        | -0.4260        | -0.5196        | 1.0516        | <b>-2.7059</b> |
| 28             | -0.11%       | -0.13%       | -8.05%        | -0.0235              | 0.8557        | -0.1507        | -0.5176        | 1.0682        | <b>-2.6536</b> |
| 29             | -0.21%       | -0.85%       | -8.26%        | -0.0633              | 1.3495        | -0.2570        | -0.5214        | 1.0305        | <b>-2.7708</b> |
| 30             | -0.44%       | -0.69%       | -8.70%        | -0.1211              | 0.9947        | -0.6667        | -0.5332        | 1.0890        | <b>-2.6814</b> |
| <b>-1 to 1</b> |              |              | <b>0.91%</b>  | <b>StdDev(AAR-0)</b> |               | <b>0.03149</b> | 0.1746         | 1.0775        | 0.8874         |

**Table-A 7.39 SW-1 Returns; Indian Acquirers; All-firms; (OLS, 37)**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD             | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|----------------------|----------------|----------------|----------------|---------------|----------------|
| -20            | 0.06%        | 0.13%        | 0.06%         | -0.0332              | 0.7301         | -0.2737        | -0.0332        | 0.7301        | -0.2737        |
| -19            | -0.66%       | -0.58%       | -0.60%        | -0.2459              | 0.7797         | <b>-1.8958</b> | -0.1974        | 0.8174        | -1.4517        |
| -18            | -0.20%       | -0.65%       | -0.80%        | -0.1418              | 0.9998         | -0.8529        | -0.2430        | 0.8755        | -1.6690        |
| -17            | 0.41%        | 0.09%        | -0.39%        | 0.1215               | 0.7298         | 1.0006         | -0.1497        | 0.8375        | -1.0750        |
| -16            | -0.43%       | -0.48%       | -0.82%        | -0.1117              | 0.7563         | -0.8880        | -0.1839        | 0.7639        | -1.4473        |
| -15            | 0.57%        | 0.37%        | -0.25%        | 0.1869               | 0.9079         | 1.2381         | -0.0915        | 0.7189        | -0.7656        |
| -14            | -0.80%       | -0.41%       | -1.04%        | -0.2759              | 1.4000         | -1.1850        | -0.1890        | 0.8537        | -1.3314        |
| -13            | -0.57%       | -0.30%       | -1.61%        | -0.2642              | 1.8609         | -0.8537        | -0.2703        | 1.2738        | -1.2756        |
| -12            | 0.15%        | -0.24%       | -1.47%        | 0.0823               | 1.1129         | 0.4449         | -0.2273        | 0.9914        | -1.3787        |
| -11            | -0.25%       | -0.30%       | -1.71%        | -0.0701              | 1.0050         | -0.4195        | -0.2379        | 1.0377        | -1.3782        |
| -10            | -0.54%       | -0.08%       | -2.25%        | -0.1083              | 0.9051         | -0.7196        | -0.2595        | 1.0020        | -1.5569        |
| -9             | 0.39%        | 0.18%        | -1.86%        | 0.0490               | 0.8944         | 0.3291         | -0.2343        | 0.9433        | -1.4932        |
| -8             | -0.42%       | -0.15%       | -2.28%        | -0.1092              | 0.6894         | -0.9527        | -0.2554        | 0.9281        | -1.6544        |
| -7             | -0.09%       | -0.29%       | -2.37%        | -0.0838              | 1.2238         | -0.4116        | -0.2685        | 1.0554        | -1.5295        |
| -6             | -0.70%       | -0.74%       | -3.07%        | -0.3060              | 0.7725         | <b>-2.3816</b> | -0.3384        | 1.1024        | <b>-1.8456</b> |
| -5             | 0.13%        | 0.47%        | -2.94%        | 0.0697               | 0.7324         | 0.5724         | -0.3102        | 1.0390        | <b>-1.7951</b> |
| -4             | 0.44%        | 0.24%        | -2.50%        | 0.1907               | 0.9254         | 1.2390         | -0.2547        | 0.9750        | -1.5706        |
| -3             | 0.01%        | -0.67%       | -2.49%        | -0.0598              | 0.8804         | -0.4084        | -0.2616        | 0.9164        | <b>-1.7165</b> |
| -2             | -0.56%       | -0.60%       | -3.05%        | -0.1105              | 0.9874         | -0.6727        | -0.2800        | 0.8768        | <b>-1.9200</b> |
| -1             | 0.42%        | 0.13%        | -2.63%        | 0.1000               | 1.1857         | 0.5072         | -0.2505        | 0.8931        | -1.6865        |
| <b>0</b>       | <b>1.31%</b> | <b>0.98%</b> | <b>-1.32%</b> | <b>0.4653</b>        | <b>1.1407</b>  | <b>2.4522</b>  | <b>-0.1430</b> | <b>0.8665</b> | <b>-0.9919</b> |
| 1              | -0.78%       | -0.71%       | -2.10%        | -0.2907              | 0.9392         | <b>-1.8609</b> | -0.2017        | 0.8375        | -1.4477        |
| 2              | -0.78%       | -0.68%       | -2.87%        | -0.3384              | 1.0381         | <b>-1.9600</b> | -0.2678        | 0.7756        | <b>-2.0758</b> |
| 3              | -0.73%       | -0.84%       | -3.60%        | -0.2769              | 0.8135         | <b>-2.0468</b> | -0.3187        | 0.7671        | <b>-2.4977</b> |
| 4              | -0.07%       | -0.24%       | -3.67%        | -0.0084              | 0.9563         | -0.0531        | -0.3139        | 0.8045        | <b>-2.3461</b> |
| 5              | -0.62%       | -0.73%       | -4.29%        | -0.1418              | 1.2686         | -0.6720        | -0.3356        | 0.8431        | <b>-2.3936</b> |
| 6              | -0.57%       | -0.30%       | -4.86%        | -0.1135              | 0.9670         | -0.7054        | -0.3512        | 0.8914        | <b>-2.3689</b> |
| 7              | 0.01%        | -0.23%       | -4.86%        | -0.0120              | 1.0812         | -0.0665        | -0.3471        | 0.8765        | <b>-2.3811</b> |
| 8              | 0.04%        | -0.08%       | -4.81%        | -0.0926              | 1.0185         | -0.5467        | -0.3583        | 0.9016        | <b>-2.3893</b> |
| 9              | -0.87%       | -0.72%       | -5.68%        | -0.2781              | 0.8651         | <b>-1.9326</b> | -0.4030        | 0.9165        | <b>-2.6440</b> |
| 10             | 0.67%        | 0.44%        | -5.01%        | 0.2288               | 1.0435         | 1.3182         | -0.3554        | 0.8820        | <b>-2.4226</b> |
| 11             | 0.25%        | -0.02%       | -4.76%        | 0.0150               | 0.8872         | 0.1014         | -0.3471        | 0.8806        | <b>-2.3701</b> |
| 12             | -0.47%       | -0.18%       | -5.22%        | -0.2245              | 0.9849         | -1.3705        | -0.3809        | 0.9283        | <b>-2.4672</b> |
| 13             | -0.17%       | -0.18%       | -5.40%        | -0.0660              | 0.8574         | -0.4631        | -0.3866        | 0.9284        | <b>-2.5038</b> |
| 14             | -0.75%       | -0.71%       | -6.15%        | -0.2941              | 0.8318         | <b>-2.1262</b> | -0.4308        | 0.9395        | <b>-2.7568</b> |
| 15             | -0.80%       | -0.35%       | -6.94%        | -0.2926              | 1.5585         | -1.1288        | -0.4735        | 0.9426        | <b>-3.0204</b> |
| 16             | -0.53%       | -0.79%       | -7.48%        | -0.1795              | 1.2238         | -0.8818        | -0.4966        | 0.9430        | <b>-3.1660</b> |
| 17             | -0.67%       | -0.51%       | -8.15%        | -0.2258              | 0.8301         | -1.6352        | -0.5266        | 0.9553        | <b>-3.3144</b> |
| 18             | 0.09%        | 0.13%        | -8.06%        | 0.0743               | 0.9508         | 0.4697         | -0.5079        | 0.9486        | <b>-3.2195</b> |
| 19             | 0.64%        | 0.04%        | -7.42%        | 0.1524               | 1.4674         | 0.6246         | -0.4774        | 0.9337        | <b>-3.0743</b> |
| 20             | -0.91%       | -0.54%       | -8.32%        | -0.3351              | 1.6676         | -1.2082        | -0.5239        | 1.0498        | <b>-3.0007</b> |
| 21             | -0.18%       | -0.96%       | -8.51%        | -0.0297              | 1.1300         | -0.1582        | -0.5222        | 1.0044        | <b>-3.1261</b> |
| 22             | 0.30%        | 0.02%        | -8.21%        | 0.1426               | 0.9929         | 0.8638         | -0.4944        | 0.9299        | <b>-3.1964</b> |
| 23             | 0.21%        | -0.01%       | -8.00%        | -0.0141              | 1.2297         | -0.0691        | -0.4908        | 0.9256        | <b>-3.1884</b> |
| 24             | -0.16%       | 0.22%        | -8.17%        | -0.0787              | 1.0026         | -0.4720        | -0.4971        | 0.9370        | <b>-3.1895</b> |
| 25             | -0.79%       | -0.38%       | -8.96%        | -0.3379              | 0.8543         | <b>-2.3783</b> | -0.5415        | 0.9482        | <b>-3.4334</b> |
| 26             | 0.64%        | 0.21%        | -8.31%        | 0.2277               | 1.1101         | 1.2334         | -0.5025        | 0.9474        | <b>-3.1886</b> |
| 27             | -0.14%       | -0.64%       | -8.45%        | -0.0818              | 1.1906         | -0.4133        | -0.5090        | 1.0351        | <b>-2.9567</b> |
| 28             | -0.32%       | -0.62%       | -8.77%        | -0.0846              | 0.8473         | -0.6000        | -0.5159        | 1.0584        | <b>-2.9304</b> |
| 29             | -0.12%       | -0.73%       | -8.89%        | -0.0440              | 1.3133         | -0.2014        | -0.5169        | 1.0189        | <b>-3.0502</b> |
| 30             | -0.50%       | -0.78%       | -9.39%        | -0.1774              | 0.9806         | -1.0878        | -0.5367        | 1.0692        | <b>-3.0177</b> |
| <b>-1 to 1</b> |              |              | <b>0.95%</b>  | <b>StdDev(AAR-0)</b> | <b>0.03027</b> |                | 0.1585         | 0.9997        | 0.9535         |

**Table-A 7.40 SW-2 Returns; Indian Acquirers; All-firms; (OLS, 37)**

| Days           | AAR          | Median       | CAAR          | SARa                 | SD             | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|----------------------|----------------|----------------|----------------|---------------|----------------|
| -20            | 0.06%        | 0.34%        | 0.06%         | -0.0312              | 0.7177         | -0.2620        | -0.0312        | 0.7177        | -0.2620        |
| -19            | -0.65%       | -0.58%       | -0.59%        | -0.2445              | 0.7716         | <b>-1.9111</b> | -0.1950        | 0.8019        | -1.4662        |
| -18            | -0.17%       | -0.66%       | -0.76%        | -0.1309              | 0.9990         | -0.7900        | -0.2347        | 0.8473        | -1.6708        |
| -17            | 0.42%        | 0.20%        | -0.34%        | 0.1226               | 0.7416         | 0.9967         | -0.1420        | 0.8158        | -1.0497        |
| -16            | -0.46%       | -0.37%       | -0.79%        | -0.1230              | 0.7838         | -0.9461        | -0.1820        | 0.7464        | -1.4705        |
| -15            | 0.56%        | 0.39%        | -0.23%        | 0.1809               | 0.9252         | 1.1793         | -0.0923        | 0.7151        | -0.7782        |
| -14            | -0.82%       | -0.57%       | -1.06%        | -0.2826              | 1.4725         | -1.1573        | -0.1922        | 0.8971        | -1.2923        |
| -13            | -0.65%       | -0.15%       | -1.71%        | -0.2842              | 1.8718         | -0.9157        | -0.2803        | 1.3424        | -1.2593        |
| -12            | 0.17%        | -0.17%       | -1.54%        | 0.0897               | 1.1422         | 0.4737         | -0.2344        | 1.0347        | -1.3660        |
| -11            | -0.23%       | -0.31%       | -1.77%        | -0.0622              | 1.0128         | -0.3707        | -0.2420        | 1.0769        | -1.3553        |
| -10            | -0.49%       | -0.41%       | -2.26%        | -0.0871              | 0.9156         | -0.5740        | -0.2570        | 1.0125        | -1.5309        |
| -9             | 0.36%        | 0.22%        | -1.91%        | 0.0393               | 0.8727         | 0.2719         | -0.2347        | 0.9506        | -1.4891        |
| -8             | -0.44%       | -0.11%       | -2.34%        | -0.1109              | 0.6943         | -0.9632        | -0.2563        | 0.9399        | -1.6443        |
| -7             | -0.16%       | -0.34%       | -2.50%        | -0.1053              | 1.2320         | -0.5155        | -0.2751        | 1.0826        | -1.5325        |
| -6             | -0.71%       | -0.65%       | -3.21%        | -0.3064              | 0.7708         | <b>-2.3976</b> | -0.3449        | 1.1280        | <b>-1.8439</b> |
| -5             | 0.14%        | 0.53%        | -3.06%        | 0.0790               | 0.7464         | 0.6384         | -0.3142        | 1.0477        | <b>-1.8085</b> |
| -4             | 0.43%        | 0.29%        | -2.64%        | 0.1857               | 0.9281         | 1.2069         | -0.2598        | 0.9786        | -1.6008        |
| -3             | 0.06%        | -0.59%       | -2.57%        | -0.0448              | 0.8841         | -0.3056        | -0.2630        | 0.9183        | <b>-1.7272</b> |
| -2             | -0.51%       | -0.60%       | -3.08%        | -0.1036              | 0.9859         | -0.6339        | -0.2798        | 0.8881        | <b>-1.8998</b> |
| -1             | 0.46%        | 0.13%        | -2.62%        | 0.1111               | 1.1905         | 0.5629         | -0.2478        | 0.9119        | -1.6390        |
| <b>0</b>       | <b>1.32%</b> | <b>1.14%</b> | <b>-1.31%</b> | <b>0.4691</b>        | <b>1.1321</b>  | <b>2.4987</b>  | <b>-0.1395</b> | <b>0.8870</b> | <b>-0.9485</b> |
| 1              | -0.85%       | -0.90%       | -2.16%        | -0.3177              | 0.9377         | <b>-2.0433</b> | -0.2040        | 0.8751        | -1.4061        |
| 2              | -0.74%       | -0.58%       | -2.90%        | -0.3308              | 1.0360         | <b>-1.9257</b> | -0.2685        | 0.8113        | <b>-1.9961</b> |
| 3              | -0.69%       | -0.59%       | -3.59%        | -0.2672              | 0.8059         | <b>-1.9996</b> | -0.3174        | 0.7946        | <b>-2.4092</b> |
| 4              | -0.03%       | 0.17%        | -3.62%        | 0.0046               | 0.9718         | 0.0284         | -0.3101        | 0.8153        | <b>-2.2937</b> |
| 5              | -0.59%       | -0.84%       | -4.21%        | -0.1300              | 1.2870         | -0.6090        | -0.3296        | 0.8462        | <b>-2.3487</b> |
| 6              | -0.56%       | -0.37%       | -4.77%        | -0.1087              | 0.9699         | -0.6760        | -0.3443        | 0.8931        | <b>-2.3249</b> |
| 7              | -0.02%       | -0.22%       | -4.79%        | -0.0205              | 1.0578         | -0.1168        | -0.3420        | 0.8772        | <b>-2.3511</b> |
| 8              | 0.01%        | -0.09%       | -4.77%        | -0.1073              | 1.0281         | -0.6293        | -0.3560        | 0.9087        | <b>-2.3622</b> |
| 9              | -0.81%       | -0.57%       | -5.58%        | -0.2583              | 0.8451         | <b>-1.8433</b> | -0.3972        | 0.9175        | <b>-2.6104</b> |
| 10             | 0.67%        | 0.51%        | -4.92%        | 0.2218               | 1.0601         | 1.2615         | -0.3509        | 0.8938        | <b>-2.3674</b> |
| 11             | 0.31%        | -0.09%       | -4.61%        | 0.0279               | 0.8841         | 0.1901         | -0.3404        | 0.8896        | <b>-2.3076</b> |
| 12             | -0.37%       | -0.17%       | -4.99%        | -0.1985              | 0.9682         | -1.2363        | -0.3698        | 0.9311        | <b>-2.3949</b> |
| 13             | -0.24%       | -0.18%       | -5.22%        | -0.0813              | 0.8649         | -0.5672        | -0.3782        | 0.9293        | <b>-2.4544</b> |
| 14             | -0.69%       | -0.72%       | -5.91%        | -0.2669              | 0.8148         | <b>-1.9754</b> | -0.4179        | 0.9354        | <b>-2.6941</b> |
| 15             | -0.83%       | -0.38%       | -6.74%        | -0.3097              | 1.5454         | -1.2084        | -0.4637        | 0.9328        | <b>-2.9976</b> |
| 16             | -0.53%       | -0.72%       | -7.27%        | -0.1826              | 1.1871         | -0.9274        | -0.4874        | 0.9310        | <b>-3.1571</b> |
| 17             | -0.71%       | -0.53%       | -7.98%        | -0.2406              | 0.8401         | <b>-1.7270</b> | -0.5200        | 0.9454        | <b>-3.3165</b> |
| 18             | 0.02%        | 0.26%        | -7.96%        | 0.0535               | 0.9545         | 0.3382         | -0.5047        | 0.9449        | <b>-3.2210</b> |
| 19             | 0.62%        | 0.06%        | -7.34%        | 0.1434               | 1.4789         | 0.5846         | -0.4757        | 0.9438        | <b>-3.0393</b> |
| 20             | -0.94%       | -0.53%       | -8.28%        | -0.3431              | 1.7058         | -1.2129        | -0.5234        | 1.0531        | <b>-2.9973</b> |
| 21             | -0.26%       | -1.06%       | -8.54%        | -0.0583              | 1.1329         | -0.3102        | -0.5261        | 1.0037        | <b>-3.1612</b> |
| 22             | 0.28%        | 0.05%        | -8.26%        | 0.1383               | 1.0134         | 0.8230         | -0.4989        | 0.9331        | <b>-3.2241</b> |
| 23             | 0.17%        | 0.12%        | -8.09%        | -0.0226              | 1.2521         | -0.1090        | -0.4966        | 0.9340        | <b>-3.2063</b> |
| 24             | -0.18%       | 0.22%        | -8.27%        | -0.0810              | 0.9774         | -0.4998        | -0.5031        | 0.9374        | <b>-3.2366</b> |
| 25             | -0.78%       | -0.30%       | -9.05%        | -0.3388              | 0.8557         | <b>-2.3877</b> | -0.5476        | 0.9651        | <b>-3.4216</b> |
| 26             | 0.65%        | 0.23%        | -8.39%        | 0.2362               | 1.1003         | 1.2945         | -0.5073        | 0.9597        | <b>-3.1874</b> |
| 27             | -0.17%       | -0.55%       | -8.56%        | -0.0912              | 1.1615         | -0.4735        | -0.5151        | 1.0383        | <b>-2.9918</b> |
| 28             | -0.26%       | -0.40%       | -8.82%        | -0.0640              | 0.8217         | -0.4698        | -0.5190        | 1.0564        | <b>-2.9625</b> |
| 29             | -0.18%       | -0.65%       | -8.99%        | -0.0567              | 1.3502         | -0.2531        | -0.5218        | 1.0092        | <b>-3.1180</b> |
| 30             | -0.52%       | -0.70%       | -9.51%        | -0.1851              | 0.9718         | -1.1489        | -0.5426        | 1.0605        | <b>-3.0852</b> |
| <b>-1 to 1</b> |              |              | <b>0.93%</b>  | <b>StdDev(AAR-0)</b> | <b>0.03003</b> |                | 0.1515         | 0.9861        | 0.9267         |



Table-A 7.41 SW-3; Indian Acquirers; All-firms; (OLS, 37)

| Days           | AAR          | Median       | CAAR          | SARa                 | SD             | t-Stats        | SCARa          | SD            | t-Stats        |
|----------------|--------------|--------------|---------------|----------------------|----------------|----------------|----------------|---------------|----------------|
| -20            | 0.09%        | 0.27%        | 0.09%         | -0.0298              | 0.7262         | -0.2482        | -0.0298        | 0.7262        | -0.2482        |
| -19            | -0.69%       | -0.47%       | -0.60%        | -0.2495              | 0.7713         | <b>-1.9535</b> | -0.1976        | 0.8103        | -1.4721        |
| -18            | -0.10%       | -0.67%       | -0.70%        | -0.1019              | 0.9811         | -0.6272        | -0.2202        | 0.8266        | -1.6081        |
| -17            | 0.46%        | 0.15%        | -0.24%        | 0.1328               | 0.7457         | 1.0752         | -0.1243        | 0.8078        | -0.9289        |
| -16            | -0.42%       | -0.73%       | -0.66%        | -0.1146              | 0.7979         | -0.8674        | -0.1624        | 0.7537        | -1.3012        |
| -15            | 0.62%        | 0.33%        | -0.04%        | 0.1981               | 0.9243         | 1.2944         | -0.0674        | 0.7068        | -0.5755        |
| -14            | -0.75%       | -0.36%       | -0.79%        | -0.2661              | 1.4478         | -1.1097        | -0.1629        | 0.8720        | -1.1283        |
| -13            | -0.61%       | -0.10%       | -1.40%        | -0.2779              | 1.8727         | -0.8959        | -0.2507        | 1.3117        | -1.1539        |
| -12            | 0.25%        | -0.17%       | -1.15%        | 0.1151               | 1.1329         | 0.6135         | -0.1980        | 1.0185        | -1.1736        |
| -11            | -0.21%       | -0.23%       | -1.36%        | -0.0550              | 1.0194         | -0.3257        | -0.2052        | 1.0568        | -1.1724        |
| -10            | -0.48%       | -0.42%       | -1.84%        | -0.0925              | 0.8912         | -0.6270        | -0.2235        | 1.0013        | -1.3480        |
| -9             | 0.35%        | 0.33%        | -1.49%        | 0.0336               | 0.8977         | 0.2258         | -0.2043        | 0.9402        | -1.3122        |
| -8             | -0.41%       | 0.07%        | -1.90%        | -0.1047              | 0.7176         | -0.8807        | -0.2253        | 0.9345        | -1.4560        |
| -7             | -0.16%       | -0.44%       | -2.06%        | -0.1064              | 1.2410         | -0.5178        | -0.2456        | 1.0755        | -1.3787        |
| -6             | -0.70%       | -0.64%       | -2.76%        | -0.3043              | 0.7700         | <b>-2.3863</b> | -0.3158        | 1.1215        | <b>-1.7004</b> |
| -5             | 0.15%        | 0.57%        | -2.61%        | 0.0799               | 0.7558         | 0.6384         | -0.2858        | 1.0391        | -1.6609        |
| -4             | 0.46%        | 0.22%        | -2.15%        | 0.1936               | 0.9157         | 1.2764         | -0.2303        | 0.9682        | -1.4365        |
| -3             | 0.10%        | -0.61%       | -2.05%        | -0.0323              | 0.8828         | -0.2209        | -0.2315        | 0.9094        | -1.5369        |
| -2             | -0.46%       | -0.48%       | -2.51%        | -0.0838              | 0.9879         | -0.5124        | -0.2445        | 0.8704        | <b>-1.6963</b> |
| -1             | 0.48%        | -0.08%       | -2.02%        | 0.1134               | 1.1549         | 0.5930         | -0.2130        | 0.8871        | -1.4497        |
| <b>0</b>       | <b>1.34%</b> | <b>0.99%</b> | <b>-0.68%</b> | <b>0.4740</b>        | <b>1.1392</b>  | <b>2.5122</b>  | <b>-0.1044</b> | <b>0.8702</b> | <b>-0.7245</b> |
| 1              | -0.80%       | -0.95%       | -1.49%        | -0.2979              | 0.9312         | <b>-1.9317</b> | -0.1655        | 0.8543        | -1.1699        |
| 2              | -0.70%       | -0.56%       | -2.18%        | -0.3110              | 1.0402         | <b>-1.8056</b> | -0.2267        | 0.7866        | <b>-1.7406</b> |
| 3              | -0.67%       | -0.29%       | -2.85%        | -0.2647              | 0.8282         | <b>-1.9301</b> | -0.2760        | 0.7684        | <b>-2.1689</b> |
| 4              | -0.02%       | 0.07%        | -2.88%        | 0.0077               | 0.9491         | 0.0491         | -0.2689        | 0.7868        | <b>-2.0634</b> |
| 5              | -0.59%       | -0.88%       | -3.47%        | -0.1307              | 1.2792         | -0.6172        | -0.2893        | 0.8122        | <b>-2.1507</b> |
| 6              | -0.53%       | -0.32%       | -4.00%        | -0.1035              | 0.9441         | -0.6622        | -0.3038        | 0.8490        | <b>-2.1609</b> |
| 7              | -0.07%       | -0.18%       | -4.08%        | -0.0342              | 1.0387         | -0.1988        | -0.3048        | 0.8425        | <b>-2.1847</b> |
| 8              | -0.03%       | -0.16%       | -4.11%        | -0.1163              | 1.0180         | -0.6899        | -0.3211        | 0.8721        | <b>-2.2233</b> |
| 9              | -0.74%       | -0.73%       | -4.85%        | -0.2394              | 0.8290         | <b>-1.7436</b> | -0.3594        | 0.8762        | <b>-2.4767</b> |
| 10             | 0.74%        | 0.65%        | -4.11%        | 0.2462               | 1.0809         | 1.3751         | -0.3094        | 0.8508        | <b>-2.1955</b> |
| 11             | 0.38%        | -0.04%       | -3.73%        | 0.0520               | 0.8848         | 0.3552         | -0.2953        | 0.8458        | <b>-2.1081</b> |
| 12             | -0.40%       | -0.20%       | -4.13%        | -0.2108              | 0.9576         | -1.3292        | -0.3275        | 0.8912        | <b>-2.2188</b> |
| 13             | -0.27%       | -0.21%       | -4.41%        | -0.0902              | 0.8645         | -0.6300        | -0.3381        | 0.9001        | <b>-2.2680</b> |
| 14             | -0.60%       | -0.54%       | -5.01%        | -0.2409              | 0.8596         | <b>-1.6921</b> | -0.3739        | 0.9117        | <b>-2.4766</b> |
| 15             | -0.79%       | -0.29%       | -5.80%        | -0.2910              | 1.5231         | -1.1537        | -0.4172        | 0.8962        | <b>-2.8111</b> |
| 16             | -0.43%       | -0.72%       | -6.23%        | -0.1525              | 1.1792         | -0.7809        | -0.4366        | 0.8832        | <b>-2.9850</b> |
| 17             | -0.67%       | -0.54%       | -6.90%        | -0.2298              | 0.8366         | -1.6582        | -0.4681        | 0.8976        | <b>-3.1489</b> |
| 18             | -0.02%       | 0.03%        | -6.92%        | 0.0386               | 0.9357         | 0.2489         | -0.4559        | 0.9025        | <b>-3.0500</b> |
| 19             | 0.60%        | 0.15%        | -6.32%        | 0.1421               | 1.4646         | 0.5860         | -0.4277        | 0.9042        | <b>-2.8562</b> |
| 20             | -0.99%       | -0.52%       | -7.31%        | -0.3634              | 1.7477         | -1.2556        | -0.4792        | 1.0090        | <b>-2.8677</b> |
| 21             | -0.31%       | -0.96%       | -7.62%        | -0.0738              | 1.1297         | -0.3944        | -0.4848        | 0.9627        | <b>-3.0411</b> |
| 22             | 0.18%        | 0.03%        | -7.44%        | 0.1067               | 1.0154         | 0.6343         | -0.4629        | 0.8932        | <b>-3.1292</b> |
| 23             | 0.23%        | 0.04%        | -7.20%        | -0.0088              | 1.2706         | -0.0417        | -0.4589        | 0.9003        | <b>-3.0780</b> |
| 24             | -0.13%       | 0.21%        | -7.34%        | -0.0699              | 0.9770         | -0.4317        | -0.4642        | 0.9044        | <b>-3.0992</b> |
| 25             | -0.81%       | -0.37%       | -8.14%        | -0.3358              | 0.8639         | <b>-2.3469</b> | -0.5087        | 0.9252        | <b>-3.3195</b> |
| 26             | 0.62%        | 0.26%        | -7.52%        | 0.2271               | 1.0895         | 1.2588         | -0.4701        | 0.9266        | <b>-3.0633</b> |
| 27             | -0.07%       | -0.44%       | -7.59%        | -0.0690              | 1.1319         | -0.3683        | -0.4751        | 1.0022        | <b>-2.8625</b> |
| 28             | -0.21%       | -0.13%       | -7.80%        | -0.0518              | 0.8218         | -0.3804        | -0.4777        | 1.0188        | <b>-2.8310</b> |
| 29             | -0.22%       | -0.72%       | -8.02%        | -0.0687              | 1.3315         | -0.3115        | -0.4826        | 0.9744        | <b>-2.9905</b> |
| 30             | -0.48%       | -0.73%       | -8.50%        | -0.1747              | 1.0032         | -1.0513        | -0.5023        | 1.0260        | <b>-2.9558</b> |
| <b>-1 to 1</b> |              |              | <b>1.02%</b>  | <b>StdDev(AAR-0)</b> | <b>0.03034</b> |                | 0.1671         | 0.9803        | 1.0295         |

## Cross-Sectional – Analysis - Targets

Table-A 7.42 Multivariate Analysis – Larger CAAR Windows; OLS CAARs

| CAAR Windows:  | (1)<br>[-20,+20]     | (2)<br>[-15,+15]     | (3)<br>[-10,+10]     | (4)<br>[-5,+5]               | (5)<br>[-1,+1]                |
|----------------|----------------------|----------------------|----------------------|------------------------------|-------------------------------|
| Cash           | 0.0616<br>(1.0979)   | 0.0599<br>(1.2334)   | 0.0664 *<br>(1.7561) | 0.0376<br>(1.1137)           | -0.0122<br>(-0.4933)          |
| <b>GJ</b>      | 0.0518<br>(0.8775)   | 0.0595<br>(1.1004)   | 0.0672 *<br>(1.7271) | <b>0.0903 **</b><br>(2.5386) | <b>0.0588 ***</b><br>(2.9759) |
| CWA            | 0.0385<br>(0.4960)   | 0.0817<br>(1.1964)   | 0.0862<br>(1.3624)   | 0.0601<br>(1.2726)           | 0.0224<br>(0.7856)            |
| Pct50          | 0.0250<br>(0.4591)   | 0.0169<br>(0.3210)   | -0.0209<br>(-0.5336) | -0.0120<br>(-0.3312)         | -0.0180<br>(-0.7193)          |
| PctToe         | 0.0012<br>(1.0470)   | 0.0010<br>(0.9689)   | 0.0012<br>(1.4648)   | 0.0012<br>(1.4864)           | 0.0006<br>(1.1329)            |
| Conglomerate   | -0.0507<br>(-0.8203) | -0.0273<br>(-0.4879) | -0.0104<br>(-0.2389) | -0.0079<br>(-0.2180)         | -0.0131<br>(-0.5997)          |
| Intercept      | -0.0012<br>(-0.0191) | -0.0089<br>(-0.1478) | -0.0217<br>(-0.4859) | -0.0146<br>(-0.4363)         | 0.0320<br>(1.6026)            |
| Observations   | 99                   | 99                   | 99                   | 99                           | 99                            |
| F-Statistics   | 0.8244               | 0.9086               | 2.0171               | 2.7405                       | 2.0442                        |
| p-value        | 0.5539               | 0.4924               | 0.0712 *             | <b>0.0170 **</b>             | 0.0675 *                      |
| Adj. R-Squared | 0.0010               | 0.0026               | 0.0673               | 0.0785                       | 0.0587                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 7.43 Multivariate Analysis – Larger CAAR Windows; MM CAARs

| CAAR Windows:  | (1)<br>[-20,+20]     | (2)<br>[-15,+15]     | (3)<br>[-10,+10]     | (4)<br>[-5,+5]               | (5)<br>[-1,+1]                |
|----------------|----------------------|----------------------|----------------------|------------------------------|-------------------------------|
| Cash           | 0.0229<br>(0.3858)   | 0.0338<br>(0.6560)   | 0.0465<br>(1.1660)   | 0.0271<br>(0.7572)           | -0.0140<br>(-0.5212)          |
| <b>GJ</b>      | 0.0804<br>(1.2888)   | 0.0892<br>(1.5899)   | 0.0790 *<br>(1.9679) | <b>0.0845 **</b><br>(2.3482) | <b>0.0657 ***</b><br>(3.0844) |
| CWA            | 0.0213<br>(0.2741)   | 0.0692<br>(1.0210)   | 0.0726<br>(1.1580)   | 0.0530<br>(1.1029)           | 0.0199<br>(0.6848)            |
| Pct50          | 0.0047<br>(0.0813)   | 0.0147<br>(0.2746)   | -0.0284<br>(-0.6925) | -0.0299<br>(-0.8109)         | -0.0134<br>(-0.4953)          |
| PctToe         | 0.0008<br>(0.6785)   | 0.0006<br>(0.5598)   | 0.0009<br>(1.1281)   | 0.0012<br>(1.5524)           | 0.0005<br>(0.8327)            |
| Conglomerate   | -0.0142<br>(-0.2347) | -0.0015<br>(-0.0274) | 0.0035<br>(0.0786)   | 0.0021<br>(0.0576)           | -0.0149<br>(-0.6691)          |
| Intercept      | 0.0959<br>(1.4479)   | 0.0598<br>(0.9603)   | 0.0328<br>(0.7524)   | 0.0170<br>(0.5076)           | 0.0410 *<br>(1.8460)          |
| Observations   | 94                   | 94                   | 94                   | 94                           | 94                            |
| F-Statistics   | 0.5021               | 0.6156               | 1.6980               | 2.5575                       | 2.0466                        |
| p-value        | 0.8052               | 0.7173               | 0.1310               | <b>0.0250 **</b>             | 0.0679 *                      |
| Adj. R-Squared | -0.0282              | -0.0200              | 0.0361               | 0.0738                       | 0.0595                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 7.44 Multivariate Analysis – Cultural Variables; OLS CAARs Indian Targets

| CAAR Windows:    | (1)<br>[-10,+10]             | (2)<br>[-7,+7]               | (3)<br>[-5,+5]               | (4)<br>[-3,+3]               | (5)<br>[-1,+1]                |
|------------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|
| Cash             | 0.0769 *<br>(1.8563)         | 0.0581<br>(1.5030)           | 0.0421<br>(1.2082)           | 0.0152<br>(0.4619)           | -0.0113<br>(-0.4640)          |
| <i>Germanic</i>  | 0.1145 *<br>(1.8769)         | <b>0.1568</b> **<br>(2.6063) | <b>0.1447</b> **<br>(2.4138) | <b>0.1282</b> **<br>(2.1842) | <b>0.1053</b> ***<br>(2.9948) |
| <i>Nordic</i>    | <b>0.1530</b> **<br>(2.0317) | 0.1436 *<br>(1.7322)         | <b>0.1575</b> **<br>(2.1135) | 0.1443 *<br>(1.8961)         | 0.0804<br>(1.4341)            |
| <i>Confucian</i> | 0.0542<br>(1.1424)           | <b>0.0840</b> **<br>(2.0315) | 0.0509<br>(1.4661)           | 0.0199<br>(0.6366)           | 0.0105<br>(0.5069)            |
| LE               | -0.0310<br>(-0.6588)         | 0.0140<br>(0.2678)           | 0.0379<br>(0.5472)           | 0.0374<br>(0.7749)           | -0.0137<br>(-0.4942)          |
| SA               | 0.0305<br>(0.3375)           | 0.0320<br>(0.5105)           | 0.0439<br>(0.7014)           | -0.0172<br>(-0.4428)         | -0.0371<br>(-0.7122)          |
| CWA              | 0.0699<br>(1.1647)           | 0.0684<br>(1.3819)           | 0.0471<br>(1.0377)           | 0.0416<br>(0.9354)           | 0.0099<br>(0.3386)            |
| Pct50            | 0.0058<br>(0.1344)           | -0.0229<br>(-0.5977)         | 0.0038<br>(0.1025)           | -0.0183<br>(-0.5553)         | -0.0100<br>(-0.4530)          |
| PctToe           | 0.0739<br>(0.8471)           | 0.1062<br>(1.2551)           | 0.0839<br>(1.0280)           | 0.0159<br>(0.2110)           | 0.0435<br>(0.8164)            |
| Intercept        | -0.0282<br>(-0.6565)         | -0.0385<br>(-1.0685)         | -0.0173<br>(-0.5835)         | 0.0307<br>(1.1215)           | 0.0388 **<br>(2.1037)         |
| Observations     | 100                          | 100                          | 100                          | 100                          | 100                           |
| F-Statistics     | 2.3679                       | 2.5383                       | 2.1973                       | 1.3361                       | 1.6379                        |
| p-value          | <b>0.0189</b> **             | <b>0.0121</b> **             | <b>0.0293</b> **             | 0.2298                       | 0.1164                        |
| Adj. R-Squared   | 0.0843                       | 0.1183                       | 0.0922                       | 0.0483                       | 0.1173                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 7.45 Multivariate Analysis – Cultural Variables; MM CAARs Indian Targets

| CAAR Windows:   | (1)<br>[-10,+10]             | (2)<br>[-7,+7]               | (3)<br>[-5,+5]               | (4)<br>[-3,+3]               | (5)<br>[-1,+1]                |
|-----------------|------------------------------|------------------------------|------------------------------|------------------------------|-------------------------------|
| Cash            | 0.0589<br>(1.3456)           | 0.0498<br>(1.2096)           | 0.0318<br>(0.8616)           | 0.0093<br>(0.2664)           | -0.0137<br>(-0.5192)          |
| <b>Germanic</b> | 0.1226 *<br>(1.9411)         | <b>0.1641</b> **<br>(2.5664) | <b>0.1447</b> **<br>(2.3158) | <b>0.1269</b> **<br>(2.1159) | <b>0.1052</b> ***<br>(2.9377) |
| <b>Nordic</b>   | <b>0.1499</b> **<br>(1.9891) | 0.1412<br>(1.6340)           | 0.1457 *<br>(1.9591)         | 0.1375 *<br>(1.7786)         | 0.0791<br>(1.3699)            |
| Confucian       | 0.0482<br>(0.9947)           | 0.0777 *<br>(1.8358)         | 0.0458<br>(1.3000)           | 0.0153<br>(0.4695)           | 0.0104<br>(0.4722)            |
| LE              | -0.0087<br>(-0.1718)         | 0.0156<br>(0.3105)           | -0.0018<br>(-0.0445)         | 0.0101<br>(0.3189)           | -0.0075<br>(-0.2401)          |
| SA              | 0.0028<br>(0.0358)           | 0.0102<br>(0.1790)           | 0.0307<br>(0.5672)           | -0.0309<br>(-0.7020)         | -0.0449<br>(-0.8288)          |
| CWA             | 0.0565<br>(0.9657)           | 0.0617<br>(1.2426)           | 0.0416<br>(0.9147)           | 0.0351<br>(0.7888)           | 0.0059<br>(0.2001)            |
| Pct50           | -0.0079<br>(-0.1790)         | -0.0343<br>(-0.8462)         | -0.0181<br>(-0.4967)         | -0.0299<br>(-0.8790)         | -0.0092<br>(-0.3760)          |
| PctToe          | 0.0393<br>(0.4402)           | 0.0854<br>(0.9835)           | 0.0873<br>(1.0914)           | 0.0128<br>(0.1693)           | 0.0342<br>(0.6161)            |
| Intercept       | 0.0374<br>(0.8315)           | 0.0047<br>(0.1227)           | 0.0204<br>(0.6652)           | 0.0575 *<br>(1.9590)         | 0.0500 **<br>(2.3744)         |
| Observations    | 95                           | 95                           | 95                           | 95                           | 95                            |
| F-Statistics    | 1.5429                       | 2.2981                       | 2.1883                       | 1.2391                       | 1.4976                        |
| p-value         | 0.1462                       | <b>0.0231</b> **             | <b>0.0306</b> **             | 0.2825                       | 0.1620                        |
| Adj. R-Squared  | 0.0394                       | 0.0979                       | 0.1010                       | 0.0503                       | 0.1018                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.46 Univariate Regression Analysis; OLS CAARs [-1,+1] - Indian Targets**

| CAAR Window:     | (1)<br>[-1,+1]                | (2)<br>[-1,+1]                | (3)<br>[-1,+1]         | (4)<br>[-1,+1]         | (5)<br>[-1,+1]         | (6)<br>[-1,+1]         | (7)<br>[-1,+1]                | (8)<br>[-1,+1]                |
|------------------|-------------------------------|-------------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------------|-------------------------------|
| <b>GJ</b>        | <b>0.0591 ***</b><br>(3.0327) |                               |                        |                        |                        |                        | <b>0.0591 ***</b><br>(3.0076) |                               |
| <b>Blockhold</b> |                               | <b>0.0646 ***</b><br>(3.2469) |                        |                        |                        |                        |                               | <b>0.0654 ***</b><br>(3.2619) |
| Cash             |                               |                               | -0.0098<br>(-0.4358)   |                        |                        |                        | -0.0118<br>(-0.4722)          | -0.0115<br>(-0.4842)          |
| CWA              |                               |                               |                        | -0.0303<br>(-1.0520)   |                        |                        | 0.0203<br>(0.7058)            | 0.0186<br>(0.6462)            |
| Pct50            |                               |                               |                        |                        | 0.0015<br>(0.0551)     |                        | -0.0148<br>(-0.6169)          | -0.0120<br>(-0.5396)          |
| PctToe           |                               |                               |                        |                        |                        | 0.0654<br>(1.2365)     | 0.0684<br>(1.2805)            | 0.0660<br>(1.3005)            |
| Intercept        | 0.0320 ***<br>(2.7878)        | 0.0330 ***<br>(3.0958)        | 0.0744 ***<br>(4.3697) | 0.0748 ***<br>(5.8843) | 0.0696 ***<br>(5.5667) | 0.0578 ***<br>(3.7144) | 0.0255<br>(1.4689)            | 0.0263<br>(1.6065)            |
| Observations     | 100                           | 101                           | 104                    | 104                    | 104                    | 103                    | 99                            | 100                           |
| F-Statistics     | 9.1974                        | 10.5425                       | 0.1900                 | 1.1067                 | 0.0030                 | 1.5290                 | 2.4686                        | 2.6491                        |
| p-value          | <b>0.0031 ***</b>             | <b>0.0016 ***</b>             | 0.6639                 | 0.2953                 | 0.9561                 | 0.2191                 | <b>0.0380 **</b>              | <b>0.0276 **</b>              |
| Adj. R-Squared   | 0.0718                        | 0.0892                        | -0.0080                | -0.0009                | -0.0098                | 0.0081                 | 0.0657                        | 0.0829                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.47 Univariate Regression Analysis; OLS CAARs [-3,+3] - Indian Targets**

| CAAR Window:     | (1)<br>[-3,+3]               | (2)<br>[-3,+3]                | (3)<br>[-3,+3]         | (4)<br>[-3,+3]         | (5)<br>[-3,+3]         | (6)<br>[-3,+3]         | (7)<br>[-3,+3]                | (8)<br>[-3,+3]                |
|------------------|------------------------------|-------------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------------|-------------------------------|
| <b>GJ</b>        | <b>0.0737 **</b><br>(2.5034) |                               |                        |                        |                        |                        | <b>0.0853 ***</b><br>(2.7286) |                               |
| <b>Blockhold</b> |                              | <b>0.0831 ***</b><br>(2.7640) |                        |                        |                        |                        |                               | <b>0.0928 ***</b><br>(2.9811) |
| Cash             |                              |                               | 0.0191<br>(0.5869)     |                        |                        |                        | 0.0143<br>(0.4251)            | 0.0162<br>(0.4982)            |
| CWA              |                              |                               |                        | -0.0134<br>(-0.3217)   |                        |                        | 0.0532<br>(1.1697)            | 0.0487<br>(1.0919)            |
| Pct50            |                              |                               |                        |                        | -0.0057<br>(-0.1593)   |                        | -0.0261<br>(-0.8023)          | -0.0204<br>(-0.6532)          |
| PctToe           |                              |                               |                        |                        |                        | 0.0727<br>(1.0203)     | 0.0606<br>(0.8524)            | 0.0554<br>(0.8162)            |
| Intercept        | 0.0421 **<br>(2.3765)        | 0.0428 ***<br>(2.6579)        | 0.0799 ***<br>(3.6367) | 0.0904 ***<br>(5.0296) | 0.0901 ***<br>(4.6470) | 0.0741 ***<br>(3.2846) | 0.0168<br>(0.6752)            | 0.0186<br>(0.7972)            |
| Observations     | 100                          | 101                           | 104                    | 104                    | 104                    | 103                    | 99                            | 100                           |
| F-Statistics     | 6.2668                       | 7.6399                        | 0.3444                 | 0.1035                 | 0.0254                 | 1.0411                 | 2.2744                        | 2.5008                        |
| p-value          | <b>0.0140 **</b>             | <b>0.0068 ***</b>             | 0.5586                 | 0.7483                 | 0.8738                 | 0.3100                 | 0.0534 *                      | <b>0.0358 **</b>              |
| Adj. R-Squared   | 0.0474                       | 0.0639                        | -0.0064                | -0.0089                | -0.0095                | 0.0012                 | 0.0420                        | 0.0552                        |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.48 Univariate Regression Analysis; OLS CAARs [-5,+5] - Indian Targets**

| CAAR Window:     | (1)<br>[-5,+5]              | (2)<br>[-5,+5]               | (3)<br>[-5,+5]        | (4)<br>[-5,+5]        | (5)<br>[-5,+5]        | (6)<br>[-5,+5]       | (7)<br>[-5,+5]              | (8)<br>[-5,+5]               |
|------------------|-----------------------------|------------------------------|-----------------------|-----------------------|-----------------------|----------------------|-----------------------------|------------------------------|
| <b>GJ</b>        | <b>0.0821**</b><br>(2.5836) |                              |                       |                       |                       |                      | <b>0.0905**</b><br>(2.5541) |                              |
| <b>Blockhold</b> |                             | <b>0.0978***</b><br>(3.0050) |                       |                       |                       |                      |                             | <b>0.1051***</b><br>(3.0353) |
| Cash             |                             |                              | 0.0478<br>(1.3545)    |                       |                       |                      | 0.0379<br>(1.1159)          | 0.0462<br>(1.3537)           |
| CWA              |                             |                              |                       | -0.0120<br>(-0.2990)  |                       |                      | 0.0589<br>(1.2655)          | 0.0537<br>(1.1940)           |
| Pct50            |                             |                              |                       |                       | 0.0115<br>(0.2886)    |                      | -0.0101<br>(-0.2904)        | 0.0031<br>(0.0868)           |
| PctToe           |                             |                              |                       |                       |                       | 0.1428*<br>(1.9454)  | 0.1246<br>(1.6479)          | 0.1080<br>(1.4633)           |
| Intercept        | 0.0352*<br>(1.7477)         | 0.0352*<br>(1.9483)          | 0.0677***<br>(2.9294) | 0.0907***<br>(4.5678) | 0.0852***<br>(4.1896) | 0.0602**<br>(2.4861) | -0.0184<br>(-0.6497)        | -0.0208<br>(-0.8001)         |
| Observations     | 100                         | 101                          | 104                   | 104                   | 104                   | 103                  | 99                          | 100                          |
| F-Statistics     | 6.6752                      | 9.0303                       | 1.8346                | 0.0894                | 0.0833                | 3.7844               | 3.3218                      | 3.8514                       |
| p-value          | <b>0.0113**</b>             | <b>0.0034***</b>             | 0.1786                | 0.7655                | 0.7735                | 0.0545*              | <b>0.0083***</b>            | <b>0.0032***</b>             |
| Adj. R-Squared   | 0.0516                      | 0.0760                       | 0.0082                | -0.0092               | -0.0089               | 0.0267               | 0.0879                      | 0.1063                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.49 Univariate Regression Analysis; OLS CAARs [-7,+7] - Indian Targets**

| CAAR Window:     | (1)<br>[-7,+7]              | (2)<br>[-7,+7]               | (3)<br>[-7,+7]       | (4)<br>[-7,+7]        | (5)<br>[-7,+7]        | (6)<br>[-7,+7]       | (7)<br>[-7,+7]              | (8)<br>[-7,+7]               |
|------------------|-----------------------------|------------------------------|----------------------|-----------------------|-----------------------|----------------------|-----------------------------|------------------------------|
| <b>GJ</b>        | <b>0.0819**</b><br>(2.4092) |                              |                      |                       |                       |                      | <b>0.0942**</b><br>(2.5484) |                              |
| <b>Blockhold</b> |                             | <b>0.1098***</b><br>(3.1806) |                      |                       |                       |                      |                             | <b>0.1228***</b><br>(3.4236) |
| Cash             |                             |                              | 0.0595<br>(1.5015)   |                       |                       |                      | 0.0501<br>(1.3601)          | 0.0624*<br>(1.6738)          |
| CWA              |                             |                              |                      | -0.0031<br>(-0.0728)  |                       |                      | 0.0814<br>(1.5746)          | 0.0811<br>(1.6360)           |
| Pct50            |                             |                              |                      |                       | -0.0060<br>(-0.1278)  |                      | -0.0401<br>(-1.1673)        | -0.0221<br>(-0.6044)         |
| PctToe           |                             |                              |                      |                       |                       | 0.1375*<br>(1.6809)  | 0.1348*<br>(1.7541)         | 0.1079<br>(1.4295)           |
| Intercept        | 0.0265<br>(1.1801)          | 0.0214<br>(1.0617)           | 0.0596**<br>(2.1573) | 0.0864***<br>(3.7820) | 0.0878***<br>(3.9100) | 0.0579**<br>(2.0528) | -0.0319<br>(-0.9577)        | -0.0418<br>(-1.3583)         |
| Observations     | 100                         | 101                          | 104                  | 104                   | 104                   | 103                  | 99                          | 100                          |
| F-Statistics     | 5.8042                      | 10.1163                      | 2.2544               | 0.0053                | 0.0163                | 2.8255               | 3.7236                      | 4.7688                       |
| p-value          | <b>0.0179**</b>             | <b>0.0020***</b>             | 0.1363               | 0.9421                | 0.8985                | 0.0959*              | <b>0.0041***</b>            | <b>0.0006***</b>             |
| Adj. R-Squared   | 0.0446                      | 0.0850                       | 0.0116               | -0.0098               | -0.0096               | 0.0162               | 0.1172                      | 0.1459                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.50 Univariate Regression Analysis; OLS CAARs [-10,+10] - Indian Targets**

| CAAR Window:   | (1)<br>[-10,+10]     | (2)<br>[-10,+10]            | (3)<br>[-10,+10]            | (4)<br>[-10,+10]       | (5)<br>[-10,+10]       | (6)<br>[-10,+10]      | (7)<br>[-10,+10]           | (8)<br>[-10,+10]             |
|----------------|----------------------|-----------------------------|-----------------------------|------------------------|------------------------|-----------------------|----------------------------|------------------------------|
| GJ             | 0.0522<br>(1.4131)   |                             |                             |                        |                        |                       | 0.0674 *<br>(1.7460)       |                              |
| Blockhold      |                      | <b>0.0843**</b><br>(2.2205) |                             |                        |                        |                       |                            | <b>0.1004***</b><br>(2.6589) |
| Cash           |                      |                             | <b>0.0817**</b><br>(2.1078) |                        |                        |                       | <b>0.0668*</b><br>(1.7555) | <b>0.0847**</b><br>(2.0942)  |
| CWA            |                      |                             |                             | 0.0258<br>(0.4930)     |                        |                       | 0.0846<br>(1.3587)         | 0.0854<br>(1.4148)           |
| Pct50          |                      |                             |                             |                        | 0.0063<br>(0.1484)     |                       | -0.0184<br>(-0.4996)       | 0.0048<br>(0.1171)           |
| PctToe         |                      |                             |                             |                        |                        | 0.1332<br>(1.6345)    | 0.1253<br>(1.6196)         | 0.0889<br>(1.1194)           |
| Intercept      | 0.0468 *<br>(1.7977) | 0.0395 *<br>(1.6820)        | 0.0508 *<br>(1.9722)        | 0.0830 ***<br>(3.8530) | 0.0850 ***<br>(3.5705) | 0.0590 **<br>(2.2132) | -0.0268<br>(-0.6542)       | -0.0416<br>(-1.0880)         |
| Observations   | 100                  | 101                         | 104                         | 104                    | 104                    | 103                   | 99                         | 100                          |
| F-Statistics   | 1.9969               | 4.9305                      | 4.4426                      | 0.2430                 | 0.0220                 | 2.6715                | 2.4182                     | 2.9715                       |
| p-value        | 0.1608               | <b>0.0287**</b>             | <b>0.0375**</b>             | 0.6231                 | 0.8823                 | 0.1053                | <b>0.0415**</b>            | <b>0.0155**</b>              |
| Adj. R-Squared | 0.0097               | 0.0384                      | 0.0324                      | -0.0076                | -0.0096                | 0.0159                | 0.0767                     | 0.1002                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.51 Univariate Regression Analysis; MM CAARs [-1,+1] - Indian Targets**

| CAAR Window:   | (1)<br>[-1,+1]               | (2)<br>[-1,+1]               | (3)<br>[-1,+1]         | (4)<br>[-1,+1]         | (5)<br>[-1,+1]         | (6)<br>[-1,+1]         | (7)<br>[-1,+1]               | (8)<br>[-1,+1]               |
|----------------|------------------------------|------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------|------------------------------|
| GJ             | <b>0.0653***</b><br>(3.2016) |                              |                        |                        |                        |                        | <b>0.0657***</b><br>(3.1125) |                              |
| Blockhold      |                              | <b>0.0705***</b><br>(3.3848) |                        |                        |                        |                        |                              | <b>0.0714***</b><br>(3.3783) |
| Cash           |                              |                              | -0.0143<br>(-0.6255)   |                        |                        |                        | -0.0135<br>(-0.4986)         | -0.0140<br>(-0.5503)         |
| CWA            |                              |                              |                        | -0.0359<br>(-1.2431)   |                        |                        | 0.0175<br>(0.5978)           | 0.0149<br>(0.5108)           |
| Pct50          |                              |                              |                        |                        | 0.0015<br>(0.0545)     |                        | -0.0100<br>(-0.3806)         | -0.0073<br>(-0.3086)         |
| PctToe         |                              |                              |                        |                        |                        | 0.0555<br>(1.0443)     | 0.0544<br>(0.9869)           | 0.0526<br>(1.0106)           |
| Intercept      | 0.0380 ***<br>(3.1340)       | 0.0397 ***<br>(3.5302)       | 0.0852 ***<br>(4.9090) | 0.0845 ***<br>(6.5527) | 0.0782 ***<br>(5.9920) | 0.0681 ***<br>(4.3523) | 0.0337 *<br>(1.6666)         | 0.0357 *<br>(1.9236)         |
| Observations   | 95                           | 96                           | 99                     | 99                     | 99                     | 98                     | 94                           | 95                           |
| F-Statistics   | 10.2501                      | 11.4567                      | 0.3913                 | 1.5452                 | 0.0030                 | 1.0905                 | 2.4785                       | 2.6266                       |
| p-value        | <b>0.0019***</b>             | <b>0.0010***</b>             | 0.5331                 | 0.2168                 | 0.9567                 | 0.2990                 | <b>0.0378**</b>              | <b>0.0291**</b>              |
| Adj. R-Squared | 0.0849                       | 0.1023                       | -0.0064                | 0.0031                 | -0.0103                | 0.0033                 | 0.0663                       | 0.0851                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.52 Univariate Regression Analysis; MM CAARs [-3,+3] - Indian Targets**

| CAAR Window:     | (1)<br>[-3,+3]              | (2)<br>[-3,+3]              | (3)<br>[-3,+3]        | (4)<br>[-3,+3]        | (5)<br>[-3,+3]        | (6)<br>[-3,+3]        | (7)<br>[-3,+3]              | (8)<br>[-3,+3]               |
|------------------|-----------------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------------|------------------------------|
| <b>GJ</b>        | <b>0.0746**</b><br>(2.4520) |                             |                       |                       |                       |                       | <b>0.0832**</b><br>(2.5438) |                              |
| <b>Blockhold</b> |                             | <b>0.0805**</b><br>(2.5760) |                       |                       |                       |                       |                             | <b>0.0868***</b><br>(2.6778) |
| Cash             |                             |                             | 0.0147<br>(0.4439)    |                       |                       |                       | 0.0093<br>(0.2576)          | 0.0111<br>(0.3226)           |
| CWA              |                             |                             |                       | -0.0204<br>(-0.4816)  |                       |                       | 0.0472<br>(1.0303)          | 0.0401<br>(0.8931)           |
| Pct50            |                             |                             |                       |                       | -0.0182<br>(-0.5161)  |                       | -0.0350<br>(-1.0293)        | -0.0288<br>(-0.8940)         |
| PctToe           |                             |                             |                       |                       |                       | 0.0631<br>(0.8861)    | 0.0541<br>(0.7492)          | 0.0493<br>(0.7103)           |
| Intercept        | 0.0580***<br>(3.1732)       | 0.0606***<br>(3.6628)       | 0.0973***<br>(4.3821) | 0.1073***<br>(5.8842) | 0.1097***<br>(5.4817) | 0.0914***<br>(4.0322) | 0.0406<br>(1.4707)          | 0.0448*<br>(1.7640)          |
| Observations     | 95                          | 96                          | 99                    | 99                    | 99                    | 98                    | 94                          | 95                           |
| F-Statistics     | 6.0122                      | 6.6359                      | 0.1971                | 0.2320                | 0.2664                | 0.7853                | 2.0247                      | 2.0064                       |
| p-value          | <b>0.0161**</b>             | <b>0.0116**</b>             | 0.6581                | 0.6311                | 0.6070                | 0.3778                | 0.0829*                     | 0.0854*                      |
| Adj. R-Squared   | 0.0477                      | 0.0581                      | -0.0083               | -0.0082               | -0.0076               | -0.0016               | 0.0370                      | 0.0426                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.53 Univariate Regression Analysis; MM CAARs [-5,+5] - Indian Targets**

| CAAR Window:     | (1)<br>[-5,+5]              | (2)<br>[-5,+5]               | (3)<br>[-5,+5]        | (4)<br>[-5,+5]        | (5)<br>[-5,+5]        | (6)<br>[-5,+5]             | (7)<br>[-5,+5]              | (8)<br>[-5,+5]               |
|------------------|-----------------------------|------------------------------|-----------------------|-----------------------|-----------------------|----------------------------|-----------------------------|------------------------------|
| <b>GJ</b>        | <b>0.0804**</b><br>(2.5341) |                              |                       |                       |                       |                            | <b>0.0845**</b><br>(2.3616) |                              |
| <b>Blockhold</b> |                             | <b>0.0905***</b><br>(2.7669) |                       |                       |                       |                            |                             | <b>0.0935***</b><br>(2.6644) |
| Cash             |                             |                              | 0.0405<br>(1.1580)    |                       |                       |                            | 0.0270<br>(0.7512)          | 0.0363<br>(1.0098)           |
| CWA              |                             |                              |                       | -0.0195<br>(-0.4813)  |                       |                            | 0.0534<br>(1.1365)          | 0.0443<br>(0.9744)           |
| Pct50            |                             |                              |                       |                       | -0.0104<br>(-0.2709)  |                            | -0.0304<br>(-0.8790)        | -0.0154<br>(-0.4389)         |
| PctToe           |                             |                              |                       |                       |                       | <b>0.1337*</b><br>(1.8643) | 0.1237<br>(1.6326)          | 0.1064<br>(1.4215)           |
| Intercept        | 0.0588***<br>(2.9302)       | 0.0616***<br>(3.4113)        | 0.0925***<br>(4.1875) | 0.1140***<br>(5.8445) | 0.1141***<br>(5.5855) | 0.0834***<br>(3.5362)      | 0.0180<br>(0.6102)          | 0.0183<br>(0.6798)           |
| Observations     | 95                          | 96                           | 99                    | 99                    | 99                    | 98                         | 94                          | 95                           |
| F-Statistics     | 6.4217                      | 7.6558                       | 1.3409                | 0.2317                | 0.0734                | 3.4756                     | 3.0221                      | 3.0919                       |
| p-value          | <b>0.0129**</b>             | <b>0.0068***</b>             | 0.2497                | 0.6314                | 0.7870                | 0.0653*                    | <b>0.0145**</b>             | <b>0.0128**</b>              |
| Adj. R-Squared   | 0.0522                      | 0.0676                       | 0.0037                | -0.0085               | -0.0095               | 0.0254                     | 0.0843                      | 0.0877                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01



**Table-A 7.54 Univariate Regression Analysis; MM CAARs [-7,+7] - Indian Targets**

| <b>CAAR Window:</b> | (1)<br>[-7,+7]              | (2)<br>[-7,+7]               | (3)<br>[-7,+7]        | (4)<br>[-7,+7]        | (5)<br>[-7,+7]        | (6)<br>[-7,+7]        | (7)<br>[-7,+7]              | (8)<br>[-7,+7]               |
|---------------------|-----------------------------|------------------------------|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------------|------------------------------|
| <b>GJ</b>           | <b>0.0891**</b><br>(2.5475) |                              |                       |                       |                       |                       | <b>0.0998**</b><br>(2.5395) |                              |
| <b>Blockhold</b>    |                             | <b>0.1108***</b><br>(3.0968) |                       |                       |                       |                       |                             | <b>0.1216***</b><br>(3.1652) |
| Cash                |                             |                              | 0.0478<br>(1.1900)    |                       |                       |                       | 0.0401<br>(1.0258)          | 0.0526<br>(1.3358)           |
| CWA                 |                             |                              |                       | -0.0162<br>(-0.3740)  |                       |                       | 0.0752<br>(1.4512)          | 0.0698<br>(1.4056)           |
| Pct50               |                             |                              |                       |                       | -0.0205<br>(-0.4391)  |                       | -0.0491<br>(-1.2923)        | -0.0292<br>(-0.7411)         |
| PctToe              |                             |                              |                       |                       |                       | 0.1123<br>(1.3796)    | 0.1137<br>(1.4350)          | 0.0877<br>(1.1122)           |
| Intercept           | 0.0556**<br>(2.4648)        | 0.0541***<br>(2.6819)        | 0.0963***<br>(3.4250) | 0.1206***<br>(5.2171) | 0.1245***<br>(5.4394) | 0.0944***<br>(3.3220) | 0.0086<br>(0.2447)          | 0.0028<br>(0.0884)           |
| Observations        | 95                          | 96                           | 99                    | 99                    | 99                    | 98                    | 94                          | 95                           |
| F-Statistics        | 6.4899                      | 9.5900                       | 1.4161                | 0.1399                | 0.1928                | 1.9032                | 3.3040                      | 3.9464                       |
| p-value             | <b>0.0125**</b>             | <b>0.0026***</b>             | 0.2370                | 0.7092                | 0.6616                | 0.1709                | <b>0.0088***</b>            | <b>0.0028***</b>             |
| Adj. R-Squared      | 0.0530                      | 0.0853                       | 0.0040                | -0.0094               | -0.0080               | 0.0081                | 0.1008                      | 0.1189                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.55 Univariate Regression Analysis; MM CAARs [-10,+10] - Indian Targets**

| <b>CAAR Window:</b> | (1)<br>[-10,+10]      | (2)<br>[-10,+10]            | (3)<br>[-10,+10]      | (4)<br>[-10,+10]      | (5)<br>[-10,+10]      | (6)<br>[-10,+10]      | (7)<br>[-10,+10]     | (8)<br>[-10,+10]            |
|---------------------|-----------------------|-----------------------------|-----------------------|-----------------------|-----------------------|-----------------------|----------------------|-----------------------------|
| <b>GJ</b>           | 0.0654*<br>(1.7806)   |                             |                       |                       |                       |                       | 0.0790*<br>(1.9773)  |                             |
| <b>Blockhold</b>    |                       | <b>0.0878**</b><br>(2.3218) |                       |                       |                       |                       |                      | <b>0.1017**</b><br>(2.5567) |
| Cash                |                       |                             | 0.0589<br>(1.5224)    |                       |                       |                       | 0.0464<br>(1.1542)   | 0.0643<br>(1.5161)          |
| CWA                 |                       |                             |                       | 0.0038<br>(0.0723)    |                       |                       | 0.0732<br>(1.1985)   | 0.0666<br>(1.1252)          |
| Pct50               |                       |                             |                       |                       | -0.0112<br>(-0.2735)  |                       | -0.0292<br>(-0.7541) | -0.0041<br>(-0.0967)        |
| PctToe              |                       |                             |                       |                       |                       | 0.0943<br>(1.1807)    | 0.0904<br>(1.1607)   | 0.0566<br>(0.6900)          |
| Intercept           | 0.0875***<br>(3.3986) | 0.0857***<br>(3.7073)       | 0.1065***<br>(4.1527) | 0.1327***<br>(6.2334) | 0.1368***<br>(5.7250) | 0.1126***<br>(4.2541) | 0.0345<br>(0.8055)   | 0.0259<br>(0.6503)          |
| Observations        | 95                    | 96                          | 99                    | 99                    | 99                    | 98                    | 94                   | 95                          |
| F-Statistics        | 3.1704                | 5.3908                      | 2.3176                | 0.0052                | 0.0748                | 1.3941                | 1.8425               | 2.1766                      |
| p-value             | <b>0.0782*</b>        | <b>0.0224**</b>             | 0.1312                | 0.9426                | 0.7851                | 0.2406                | 0.1128               | <b>0.0637*</b>              |
| Adj. R-Squared      | 0.0221                | 0.0451                      | 0.0134                | -0.0103               | -0.0096               | 0.0038                | 0.0470               | 0.0621                      |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

## Cross-Sectional – Analysis – Acquirers

Table-A 7.56 Multivariate Analysis – Cultural Analysis; OLS CAARs Indian Acquirers

| CAAR Windows:  | (1)<br>[-7,+7]       | (2)<br>[-5,+5]               | (3)<br>[-3,+3]                  | (4)<br>[-1,+1]                  | (5)<br>[0,+1]                   |
|----------------|----------------------|------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Cash           | -0.0079<br>(-0.2441) | -0.0037<br>(-0.1816)         | -0.0349 *<br>(-1.8257)          | -0.0084<br>(-0.5535)            | -0.0219 *<br>(-1.7191)          |
| Anglo          | 0.0036<br>(0.0783)   | -0.0157<br>(-0.7871)         | -0.0411<br>(-1.6714)            | <b>-0.0600</b> ***<br>(-2.8529) | <b>-0.0722</b> ***<br>(-4.5377) |
| ED             | -0.0093<br>(-0.0446) | -0.1607 *<br>(-2.0277)       | <b>-0.3074</b> ***<br>(-3.3360) | <b>-0.4390</b> ***<br>(-5.3173) | <b>-0.5318</b> ***<br>(-6.7100) |
| CWT            | -0.0183<br>(-0.5302) | 0.0027<br>(0.1210)           | -0.0285<br>(-1.6371)            | -0.0162<br>(-1.1419)            | -0.0071<br>(-0.5415)            |
| Pct50          | 0.0210<br>(0.5111)   | -0.0036<br>(-0.1366)         | -0.0221<br>(-0.5828)            | -0.0374<br>(-1.3972)            | -0.0084<br>(-0.5869)            |
| PctToe         | -0.0742<br>(-0.7519) | -0.0650<br>(-1.6846)         | -0.0001<br>(-0.0033)            | <b>0.0626</b> **<br>(2.3499)    | 0.0274<br>(0.9559)              |
| Conglomerate   | 0.0212<br>(0.3845)   | <b>0.0583</b> **<br>(2.1311) | 0.0213<br>(1.2345)              | -0.0051<br>(-0.3085)            | 0.0167<br>(1.4894)              |
| Intercept      | -0.0196<br>(-0.3535) | 0.0100<br>(0.3577)           | 0.0664 *<br>(2.0378)            | 0.0872 ***<br>(3.2473)          | 0.0950 ***<br>(4.5239)          |
| Observations   | 35                   | 35                           | 35                              | 35                              | 35                              |
| F-Statistics   | 0.3814               | 2.0523                       | 4.1143                          | 12.3522                         | 9.3097                          |
| p-value        | 0.9051               | 0.0847 *                     | <b>0.0034</b> ***               | <b>0.0000</b> ***               | <b>0.0000</b> ***               |
| Adj. R-Squared | -0.2089              | 0.0219                       | 0.1074                          | 0.3365                          | 0.5010                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 7.57 Multivariate Analysis – Cultural Analysis; MM CAARs Indian Acquirers

| CAAR Windows:  | (1)<br>[-7,+7]       | (2)<br>[-5,+5]               | (3)<br>[-3,+3]                  | (4)<br>[-1,+1]                  | (5)<br>[0,+1]                   |
|----------------|----------------------|------------------------------|---------------------------------|---------------------------------|---------------------------------|
| Cash           | -0.0055<br>(-0.1557) | -0.0038<br>(-0.1521)         | -0.0349 *<br>(-1.7173)          | -0.0081<br>(-0.5251)            | -0.0209<br>(-1.5779)            |
| Anglo          | 0.0084<br>(0.1665)   | -0.0163<br>(-0.7284)         | -0.0419 *<br>(-1.7662)          | <b>-0.0586</b> **<br>(-2.7561)  | <b>-0.0695</b> ***<br>(-4.1370) |
| ED             | -0.0187<br>(-0.0815) | -0.1762<br>(-1.4927)         | <b>-0.3179</b> ***<br>(-2.9535) | <b>-0.4378</b> ***<br>(-5.2112) | <b>-0.5251</b> ***<br>(-6.5599) |
| CWT            | -0.0174<br>(-0.5098) | 0.0071<br>(0.2754)           | -0.0251<br>(-1.4026)            | -0.0176<br>(-1.2102)            | -0.0100<br>(-0.7487)            |
| Pct50          | 0.0279<br>(0.6350)   | 0.0041<br>(0.1302)           | -0.0166<br>(-0.4154)            | -0.0366<br>(-1.3368)            | -0.0092<br>(-0.6046)            |
| PctToe         | -0.0641<br>(-0.6965) | -0.0608<br>(-1.0977)         | 0.0048<br>(0.0913)              | <b>0.0617</b> **<br>(2.2329)    | 0.0285<br>(1.0057)              |
| Conglomerate   | 0.0368<br>(0.7502)   | <b>0.0724</b> **<br>(2.3850) | 0.0299<br>(1.5075)              | -0.0014<br>(-0.0801)            | 0.0188<br>(1.5014)              |
| Intercept      | -0.0080<br>(-0.1276) | 0.0188<br>(0.5681)           | 0.0721 **<br>(2.1908)           | 0.0897 ***<br>(3.3197)          | 0.0962 ***<br>(4.3634)          |
| Observations   | 35                   | 35                           | 35                              | 35                              | 35                              |
| F-Statistics   | 0.3637               | 1.5833                       | 2.8376                          | 12.5038                         | 9.9678                          |
| p-value        | 0.9153               | 0.1830                       | <b>0.0236</b> **                | <b>0.0000</b> ***               | <b>0.0000</b> ***               |
| Adj. R-Squared | -0.1976              | 0.0121                       | 0.1226                          | 0.3130                          | 0.4634                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 7.58 Univariate Regression Analysis; OLS CAARs [0,+1] - Indian Acquirers

| CAAR Windows:  | (1)<br>[0,+1]        | (2)<br>[0,+1]                  | (3)<br>[0,+1]        | (4)<br>[0,+1]        | (5)<br>[0,+1]        | (6)<br>[0,+1]      | (7)<br>[0,+1]        | (8)<br>[0,+1]      | (9)<br>[0,+1]      | (10)<br>[0,+1]                  | (11)<br>[0,+1]                  | (12)<br>[0,+1]                  |
|----------------|----------------------|--------------------------------|----------------------|----------------------|----------------------|--------------------|----------------------|--------------------|--------------------|---------------------------------|---------------------------------|---------------------------------|
| Cash           | -0.0073<br>(-0.5359) |                                |                      |                      |                      |                    |                      |                    |                    | -0.0287 *<br>(-1.9463)          | -0.0221<br>(-1.4482)            | -0.0219 *<br>(-1.7191)          |
| ED             |                      | <b>-0.2446 **</b><br>(-2.3761) |                      |                      |                      |                    |                      |                    |                    | <b>-0.4417 ***</b><br>(-3.4612) | <b>-0.4376 ***</b><br>(-3.1183) | <b>-0.5318 ***</b><br>(-6.7100) |
| Diffused       |                      |                                | -0.0058<br>(-0.2218) |                      |                      |                    |                      |                    |                    |                                 | <b>-0.0549 **</b><br>(-2.3368)  |                                 |
| AS             |                      |                                |                      | -0.0072<br>(-0.3067) |                      |                    |                      |                    |                    | <b>-0.0601 **</b><br>(-2.7530)  |                                 |                                 |
| Anglo          |                      |                                |                      |                      | -0.0110<br>(-0.5453) |                    |                      |                    |                    |                                 |                                 | <b>-0.0722 ***</b><br>(-4.5377) |
| CWT            |                      |                                |                      |                      |                      | 0.0053<br>(0.4013) |                      |                    |                    | -0.0088<br>(-0.5745)            | -0.0051<br>(-0.3271)            | -0.0071<br>(-0.5415)            |
| Pct50          |                      |                                |                      |                      |                      |                    | -0.0071<br>(-0.2721) |                    |                    | -0.0160<br>(-0.9313)            | -0.0021<br>(-0.1011)            | -0.0084<br>(-0.5869)            |
| PctToe         |                      |                                |                      |                      |                      |                    |                      | 0.0468<br>(1.0820) |                    | 0.0206<br>(0.6098)              | 0.0139<br>(0.4412)              | 0.0274<br>(0.9559)              |
| Conglomerate   |                      |                                |                      |                      |                      |                    |                      |                    | 0.0185<br>(1.4993) | 0.0088<br>(0.7073)              | 0.0111<br>(0.9144)              | 0.0167<br>(1.4894)              |
| Intercept      | 0.0066<br>(0.6127)   | 0.0174 **<br>(2.0489)          | 0.0082<br>(0.3206)   | 0.0091<br>(0.4003)   | 0.0113<br>(0.5918)   | 0.0018<br>(0.1706) | 0.0051<br>(0.8488)   | 0.0017<br>(0.2212) | 0.0011<br>(0.1346) | 0.0915 ***<br>(3.0212)          | 0.0822 **<br>(2.6800)           | 0.0950 ***<br>(4.5239)          |
| Observations   | 37                   | 37                             | 37                   | 37                   | 37                   | 37                 | 37                   | 35                 | 37                 | 35                              | 35                              | 35                              |
| F-Statistics   | 0.2872               | 5.6459                         | 0.0492               | 0.0941               | 0.2973               | 0.1611             | 0.0740               | 1.1708             | 2.2480             | 2.5223                          | 2.0281                          | 9.3097                          |
| p-value        | 0.5954               | <b>0.0231 **</b>               | 0.8258               | 0.7609               | 0.5890               | 0.6906             | 0.7871               | 0.2871             | 0.1428             | <b>0.0392 **</b>                | 0.0881 *                        | <b>0.0000 ***</b>               |
| Adj. R-Squared | -0.0214              | 0.1790                         | -0.0254              | -0.0233              | -0.0145              | -0.0251            | -0.0238              | 0.0052             | -0.0063            | 0.3458                          | 0.3077                          | 0.5010                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 7.59 Univariate Regression Analysis; OLS CAARs [-1,+1] - Indian Acquirers

| CAAR           | (1)                | (2)                             | (3)                | (4)                  | (5)                  | (6)                  | (7)                   | (8)                | (9)                  | (10)                            | (11)                            | (12)                            |
|----------------|--------------------|---------------------------------|--------------------|----------------------|----------------------|----------------------|-----------------------|--------------------|----------------------|---------------------------------|---------------------------------|---------------------------------|
| Windows:       | [-1,+1]            | [-1,+1]                         | [-1,+1]            | [-1,+1]              | [-1,+1]              | [-1,+1]              | [-1,+1]               | [-1,+1]            | [-1,+1]              | [-1,+1]                         | [-1,+1]                         | [-1,+1]                         |
| Cash           | 0.0017<br>(0.1041) |                                 |                    |                      |                      |                      |                       |                    |                      | -0.0171<br>(-0.9817)            | -0.0081<br>(-0.4323)            | -0.0084<br>(-0.5535)            |
| <b>ED</b>      |                    | <b>-0.2622 ***</b><br>(-3.1042) |                    |                      |                      |                      |                       |                    |                      | <b>-0.3904 ***</b><br>(-3.9940) | <b>-0.3551 ***</b><br>(-3.3260) | <b>-0.4390 ***</b><br>(-5.3173) |
| Diffused       |                    |                                 | 0.0031<br>(0.1296) |                      |                      |                      |                       |                    |                      |                                 | -0.0438<br>(-1.6793)            |                                 |
| <b>AS</b>      |                    |                                 |                    | -0.0019<br>(-0.0858) |                      |                      |                       |                    |                      | <b>-0.0593 **</b><br>(-2.1941)  |                                 |                                 |
| <b>Anglo</b>   |                    |                                 |                    |                      | -0.0005<br>(-0.0255) |                      |                       |                    |                      |                                 |                                 | <b>-0.0600 ***</b><br>(-2.8529) |
| CWT            |                    |                                 |                    |                      |                      | -0.0055<br>(-0.4189) |                       |                    |                      | -0.0190<br>(-1.2367)            | -0.0144<br>(-0.9334)            | -0.0162<br>(-1.1419)            |
| Pct50          |                    |                                 |                    |                      |                      |                      | -0.0232<br>(-0.8662)  |                    |                      | -0.0470<br>(-1.6559)            | -0.0320<br>(-0.9411)            | -0.0374<br>(-1.3972)            |
| <b>PctToe</b>  |                    |                                 |                    |                      |                      |                      |                       | 0.0404<br>(1.1925) |                      | 0.0543 *<br>(1.9535)            | 0.0522 *<br>(1.8347)            | <b>0.0626 **</b><br>(2.3499)    |
| Conglomerate   |                    |                                 |                    |                      |                      |                      |                       |                    | -0.0032<br>(-0.2169) | -0.0122<br>(-0.7019)            | -0.0098<br>(-0.5802)            | -0.0051<br>(-0.3085)            |
| Intercept      | 0.0085<br>(0.8431) | 0.0239 **<br>(2.6157)           | 0.0067<br>(0.2946) | 0.0106<br>(0.5141)   | 0.0095<br>(0.5428)   | 0.0111<br>(0.9610)   | 0.0142 **<br>(2.1369) | 0.0041<br>(0.4830) | 0.0096<br>(1.0836)   | 0.0955 **<br>(2.5488)           | 0.0745 *<br>(2.0434)            | 0.0872 ***<br>(3.2473)          |
| Observations   | 37                 | 37                              | 37                 | 37                   | 37                   | 37                   | 37                    | 35                 | 37                   | 35                              | 35                              | 35                              |
| F-Statistics   | 0.0108             | 9.6360                          | 0.0168             | 0.0074               | 0.0006               | 0.1755               | 0.7504                | 1.4220             | 0.0471               | 4.7208                          | 3.1003                          | 12.3522                         |
| p-value        | 0.9177             | <b>0.0038 ***</b>               | 0.8976             | 0.9321               | 0.9798               | 0.6778               | 0.3923                | 0.2416             | 0.8295               | <b>0.0015 ***</b>               | <b>0.0156 **</b>                | <b>0.0000 ***</b>               |
| Adj. R-Squared | -0.0283            | 0.1779                          | -0.0278            | -0.0283              | -0.0285              | -0.0253              | 0.0153                | -0.0057            | -0.0280              | 0.3007                          | 0.2018                          | 0.3365                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 7.60 Univariate Regression Analysis; OLS CAARs [-3,+3] - Indian Acquirers

| CAAR           | (1)                  | (2)                             | (3)                  | (4)                  | (5)                  | (6)                  | (7)                  | (8)                  | (9)                  | (10)                            | (11)                            | (12)                            |
|----------------|----------------------|---------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------------------|---------------------------------|---------------------------------|
| Windows:       | [-3,+3]              | [-3,+3]                         | [-3,+3]              | [-3,+3]              | [-3,+3]              | [-3,+3]              | [-3,+3]              | [-3,+3]              | [-3,+3]              | [-3,+3]                         | [-3,+3]                         | [-3,+3]                         |
| Cash           | -0.0154<br>(-0.8761) |                                 |                      |                      |                      |                      |                      |                      |                      | -0.0414 *<br>(-1.7663)          | -0.0360 *<br>(-1.7132)          | -0.0349 *<br>(-1.8257)          |
| ED             |                      | <b>-0.1510 ***</b><br>(-3.1169) |                      |                      |                      |                      |                      |                      |                      | <b>-0.2785 ***</b><br>(-3.6238) | <b>-0.2660 ***</b><br>(-3.1658) | <b>-0.3074 ***</b><br>(-3.3360) |
| Diffused       |                      |                                 | 0.0015<br>(0.0787)   |                      |                      |                      |                      |                      |                      |                                 | -0.0353<br>(-1.4946)            |                                 |
| AS             |                      |                                 |                      | 0.0009<br>(0.0484)   |                      |                      |                      |                      |                      | -0.0421<br>(-1.4859)            |                                 |                                 |
| Anglo          |                      |                                 |                      |                      | -0.0007<br>(-0.0372) |                      |                      |                      |                      |                                 |                                 | -0.0411<br>(-1.6714)            |
| CWT            |                      |                                 |                      |                      |                      | -0.0067<br>(-0.4110) |                      |                      |                      | -0.0306<br>(-1.6350)            | -0.0277<br>(-1.5736)            | -0.0285<br>(-1.6371)            |
| Pct50          |                      |                                 |                      |                      |                      |                      | -0.0278<br>(-0.9362) |                      |                      | -0.0291<br>(-0.7154)            | -0.0190<br>(-0.4877)            | -0.0221<br>(-0.5828)            |
| PctToe         |                      |                                 |                      |                      |                      |                      |                      | 0.0167<br>(0.3663)   |                      | -0.0063<br>(-0.1372)            | -0.0095<br>(-0.2166)            | -0.0001<br>(-0.0033)            |
| Conglomerate   |                      |                                 |                      |                      |                      |                      |                      |                      | 0.0254<br>(1.4782)   | 0.0163<br>(0.8490)              | 0.0180<br>(1.0214)              | 0.0213<br>(1.2345)              |
| Intercept      | -0.0018<br>(-0.1566) | 0.0005<br>(0.0422)              | -0.0092<br>(-0.5675) | -0.0087<br>(-0.6015) | -0.0076<br>(-0.5631) | -0.0057<br>(-0.4660) | -0.0020<br>(-0.2682) | -0.0078<br>(-0.9197) | -0.0115<br>(-1.1728) | 0.0739 *<br>(1.7783)            | 0.0637 *<br>(1.8483)            | 0.0664 *<br>(2.0378)            |
| Observations   | 37                   | 37                              | 37                   | 37                   | 37                   | 37                   | 37                   | 35                   | 37                   | 35                              | 35                              | 35                              |
| F-Statistics   | 0.7675               | 9.7149                          | 0.0062               | 0.0023               | 0.0014               | 0.1689               | 0.8764               | 0.1342               | 2.1852               | 5.3778                          | 5.7046                          | 4.1143                          |
| p-value        | 0.3870               | 0.0036 ***                      | 0.9378               | 0.9617               | 0.9705               | 0.6836               | 0.3556               | 0.7165               | 0.1483               | <b>0.0006 ***</b>               | <b>0.0004 ***</b>               | <b>0.0034 ***</b>               |
| Adj. R-Squared | -0.0069              | 0.0257                          | -0.0284              | -0.0285              | -0.0285              | -0.0247              | 0.0213               | -0.0262              | 0.0001               | 0.0989                          | 0.0674                          | 0.1074                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 7.61 Univariate Regression Analysis; OLS CAARs [-5,+5] - Indian Acquirers

| CAAR                | (1)                  | (2)                    | (3)                  | (4)                  | (5)                  | (6)                  | (7)                            | (8)                    | (9)                          | (10)                           | (11)                           | (12)                         |
|---------------------|----------------------|------------------------|----------------------|----------------------|----------------------|----------------------|--------------------------------|------------------------|------------------------------|--------------------------------|--------------------------------|------------------------------|
| Windows:            | [-5,+5]              | [-5,+5]                | [-5,+5]              | [-5,+5]              | [-5,+5]              | [-5,+5]              | [-5,+5]                        | [-5,+5]                | [-5,+5]                      | [-5,+5]                        | [-5,+5]                        | [-5,+5]                      |
| Cash                | 0.0016<br>(0.0905)   |                        |                      |                      |                      |                      |                                |                        |                              | -0.0120<br>(-0.5405)           | -0.0080<br>(-0.3833)           | -0.0037<br>(-0.1816)         |
| ED                  |                      | -0.1105 *<br>(-1.9252) |                      |                      |                      |                      |                                |                        |                              | <b>-0.2007</b> **<br>(-2.7058) | <b>-0.1963</b> **<br>(-2.6823) | -0.1607 *<br>(-2.0277)       |
| Diffused            |                      |                        | -0.0015<br>(-0.0934) |                      |                      |                      |                                |                        |                              |                                | -0.0306 *<br>(-1.7310)         |                              |
| AS                  |                      |                        |                      | -0.0023<br>(-0.1517) |                      |                      |                                |                        |                              | -0.0342 *<br>(-1.7230)         |                                |                              |
| Anglo               |                      |                        |                      |                      | 0.0082<br>(0.5335)   |                      |                                |                        |                              |                                |                                | -0.0157<br>(-0.7871)         |
| CWT                 |                      |                        |                      |                      |                      | 0.0109<br>(0.6091)   |                                |                        |                              | -0.0006<br>(-0.0270)           | 0.0016<br>(0.0726)             | 0.0027<br>(0.1210)           |
| Pct50               |                      |                        |                      |                      |                      |                      | <b>-0.0362</b> **<br>(-2.2178) |                        |                              | -0.0126<br>(-0.4792)           | -0.0046<br>(-0.1789)           | -0.0036<br>(-0.1366)         |
| PctToe              |                      |                        |                      |                      |                      |                      |                                | -0.0490 *<br>(-1.7799) |                              | -0.0725 *<br>(-1.7366)         | -0.0760 *<br>(-1.8942)         | -0.0650<br>(-1.6846)         |
| <b>Conglomerate</b> |                      |                        |                      |                      |                      |                      |                                |                        | <b>0.0559</b> **<br>(2.0661) | <b>0.0554</b> **<br>(2.1021)   | <b>0.0567</b> **<br>(2.1240)   | <b>0.0583</b> **<br>(2.1311) |
| Intercept           | -0.0092<br>(-0.7402) | -0.0023<br>(-0.2012)   | -0.0074<br>(-0.6484) | -0.0068<br>(-0.6696) | -0.0143<br>(-1.5307) | -0.0124<br>(-1.0528) | -0.0007<br>(-0.0674)           | -0.0043<br>(-0.4179)   | -0.0161 *<br>(-1.8150)       | 0.0345<br>(1.0609)             | 0.0284<br>(0.9702)             | 0.0100<br>(0.3577)           |
| Observations        | 37                   | 37                     | 37                   | 37                   | 37                   | 37                   | 37                             | 35                     | 37                           | 35                             | 35                             | 35                           |
| F-Statistics        | 0.0082               | 3.7065                 | 0.0087               | 0.0230               | 0.2847               | 0.3710               | 4.9188                         | 3.1679                 | 4.2686                       | 3.1869                         | 3.2049                         | 2.0523                       |
| p-value             | 0.9284               | 0.0624 *               | 0.9261               | 0.8803               | 0.5970               | 0.5464               | <b>0.0332</b> **               | 0.0843 *               | <b>0.0463</b> **             | <b>0.0136</b> **               | <b>0.0133</b> **               | 0.0847 *                     |
| Adj. R-Squared      | -0.0283              | -0.0009                | -0.0284              | -0.0282              | -0.0235              | -0.0188              | 0.0519                         | -0.0025                | 0.1037                       | 0.0646                         | 0.0537                         | 0.0219                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.62 Univariate Regression Analysis; OLS CAARs [-7,+7] - Indian Acquirers**

| <b>CAAR Windows:</b> | <b>(1)</b>           | <b>(2)</b>           | <b>(3)</b>           | <b>(4)</b>           | <b>(5)</b>           | <b>(6)</b>           | <b>(7)</b>           | <b>(8)</b>           | <b>(9)</b>           | <b>(10)</b>          | <b>(11)</b>          | <b>(12)</b>          |
|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
|                      | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       |
| Cash                 | -0.0041<br>(-0.1446) |                      |                      |                      |                      |                      |                      |                      |                      | -0.0064<br>(-0.1809) | -0.0076<br>(-0.2311) | -0.0079<br>(-0.2441) |
| ED                   |                      | -0.0221<br>(-0.2369) |                      |                      |                      |                      |                      |                      |                      | -0.0040<br>(-0.0230) | -0.0102<br>(-0.0534) | -0.0093<br>(-0.0446) |
| Diffused             |                      |                      | 0.0108<br>(0.3807)   |                      |                      |                      |                      |                      |                      |                      | 0.0040<br>(0.0849)   |                      |
| AS                   |                      |                      |                      | 0.0087<br>(0.3242)   |                      |                      |                      |                      |                      | 0.0065<br>(0.1377)   |                      |                      |
| Anglo                |                      |                      |                      |                      | 0.0080<br>(0.3099)   |                      |                      |                      |                      |                      |                      | 0.0036<br>(0.0783)   |
| CWT                  |                      |                      |                      |                      |                      | -0.0269<br>(-0.9663) |                      |                      |                      | -0.0177<br>(-0.5013) | -0.0183<br>(-0.5215) | -0.0183<br>(-0.5302) |
| Pct50                |                      |                      |                      |                      |                      |                      | 0.0194<br>(0.5655)   |                      |                      | 0.0225<br>(0.5221)   | 0.0208<br>(0.5077)   | 0.0210<br>(0.5111)   |
| PctToe               |                      |                      |                      |                      |                      |                      |                      | -0.0533<br>(-0.5334) |                      | -0.0728<br>(-0.7280) | -0.0730<br>(-0.7204) | -0.0742<br>(-0.7519) |
| Conglomerate         |                      |                      |                      |                      |                      |                      |                      |                      | 0.0055<br>(0.1068)   | 0.0218<br>(0.3972)   | 0.0215<br>(0.3916)   | 0.0212<br>(0.3845)   |
| Intercept            | -0.0208<br>(-1.0880) | -0.0212<br>(-1.1642) | -0.0309<br>(-1.3670) | -0.0291<br>(-1.4390) | -0.0281<br>(-1.5730) | -0.0130<br>(-0.7000) | -0.0267<br>(-1.6598) | -0.0221<br>(-1.4988) | -0.0232<br>(-1.5912) | -0.0236<br>(-0.3788) | -0.0204<br>(-0.3362) | -0.0196<br>(-0.3535) |
| Observations         | 37                   | 37                   | 37                   | 37                   | 37                   | 37                   | 37                   | 35                   | 37                   | 35                   | 35                   | 35                   |
| F-Statistics         | 0.0209               | 0.0561               | 0.1449               | 0.1051               | 0.0960               | 0.9338               | 0.3197               | 0.2845               | 0.0114               | 0.3886               | 0.4001               | 0.3814               |
| p-value              | 0.8859               | 0.8141               | 0.7058               | 0.7477               | 0.7585               | 0.3405               | 0.5754               | 0.5973               | 0.9155               | 0.9008               | 0.8938               | 0.9051               |
| Adj. R-Squared       | -0.0280              | -0.0281              | -0.0257              | -0.0266              | -0.0266              | -0.0047              | -0.0194              | -0.0182              | -0.0281              | -0.2084              | -0.2088              | -0.2089              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.63 Univariate Regression Analysis; MM CAARs [0,+1] - Indian Acquirers**

| <b>CAAR</b>     | <b>(1)</b>           | <b>(2)</b>                     | <b>(3)</b>           | <b>(4)</b>           | <b>(5)</b>           | <b>(6)</b>         | <b>(7)</b>           | <b>(8)</b>         | <b>(9)</b>         | <b>(10)</b>                     | <b>(11)</b>                     | <b>(12)</b>                     |
|-----------------|----------------------|--------------------------------|----------------------|----------------------|----------------------|--------------------|----------------------|--------------------|--------------------|---------------------------------|---------------------------------|---------------------------------|
| <b>Windows:</b> | <b>[0,+1]</b>        | <b>[0,+1]</b>                  | <b>[0,+1]</b>        | <b>[0,+1]</b>        | <b>[0,+1]</b>        | <b>[0,+1]</b>      | <b>[0,+1]</b>        | <b>[0,+1]</b>      | <b>[0,+1]</b>      | <b>[0,+1]</b>                   | <b>[0,+1]</b>                   | <b>[0,+1]</b>                   |
| Cash            | -0.0040<br>(-0.2777) |                                |                      |                      |                      |                    |                      |                    |                    | -0.0274 *<br>(-1.7682)          | -0.0210<br>(-1.3351)            | -0.0209<br>(-1.5779)            |
| <b>ED</b>       |                      | <b>-0.2429 **</b><br>(-2.4855) |                      |                      |                      |                    |                      |                    |                    | <b>-0.4373 ***</b><br>(-3.5486) | <b>-0.4336 ***</b><br>(-3.1989) | <b>-0.5251 ***</b><br>(-6.5599) |
| <b>Diffused</b> |                      |                                | -0.0055<br>(-0.2098) |                      |                      |                    |                      |                    |                    |                                 | <b>-0.0526 **</b><br>(-2.2068)  |                                 |
| <b>AS</b>       |                      |                                |                      | -0.0070<br>(-0.2965) |                      |                    |                      |                    |                    | <b>-0.0575 **</b><br>(-2.5844)  |                                 |                                 |
| <b>Anglo</b>    |                      |                                |                      |                      | -0.0107<br>(-0.5219) |                    |                      |                    |                    |                                 |                                 | <b>-0.0695 ***</b><br>(-4.1370) |
| CWT             |                      |                                |                      |                      |                      | 0.0046<br>(0.3400) |                      |                    |                    | -0.0117<br>(-0.7467)            | -0.0081<br>(-0.5126)            | -0.0100<br>(-0.7487)            |
| Pct50           |                      |                                |                      |                      |                      |                    | -0.0130<br>(-0.4778) |                    |                    | -0.0164<br>(-0.9350)            | -0.0031<br>(-0.1474)            | -0.0092<br>(-0.6046)            |
| PctToe          |                      |                                |                      |                      |                      |                    |                      | 0.0457<br>(1.0499) |                    | 0.0221<br>(0.6671)              | 0.0157<br>(0.5089)              | 0.0285<br>(1.0057)              |
| Conglomerate    |                      |                                |                      |                      |                      |                    |                      |                    | 0.0215<br>(1.5592) | 0.0111<br>(0.8203)              | 0.0133<br>(1.0041)              | 0.0188<br>(1.5014)              |
| Intercept       | 0.0070<br>(0.6165)   | 0.0190 **<br>(2.1185)          | 0.0096<br>(0.3816)   | 0.0106<br>(0.4726)   | 0.0128<br>(0.6702)   | 0.0037<br>(0.3422) | 0.0082<br>(1.2916)   | 0.0048<br>(0.6030) | 0.0024<br>(0.2850) | 0.0924 ***<br>(2.9693)          | 0.0836 **<br>(2.6591)           | 0.0962 ***<br>(4.3634)          |
| Observations    | 37                   | 37                             | 37                   | 37                   | 37                   | 37                 | 37                   | 35                 | 37                 | 35                              | 35                              | 35                              |
| F-Statistics    | 0.0771               | 6.1778                         | 0.0440               | 0.0879               | 0.2724               | 0.1156             | 0.2283               | 1.1022             | 2.4312             | 2.5437                          | 2.1109                          | 9.9678                          |
| p-value         | 0.7829               | 0.0179 **                      | 0.8351               | 0.7686               | 0.6050               | 0.7359             | 0.6358               | 0.3014             | 0.1279             | <b>0.0379 **</b>                | 0.0769 *                        | <b>0.0000 ***</b>               |
| Adj. R-Squared  | -0.0266              | 0.1584                         | -0.0260              | -0.0240              | -0.0166              | -0.0261            | -0.0141              | 0.0027             | -0.0012            | 0.3210                          | 0.2874                          | 0.4634                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01



Table-A 7.64 Univariate Regression Analysis; MM CAARs [-1,+1] - Indian Acquirers

| CAAR           | (1)                | (2)                             | (3)                | (4)                  | (5)                  | (6)                  | (7)                   | (8)                | (9)                | (10)                            | (11)                            | (12)                            |
|----------------|--------------------|---------------------------------|--------------------|----------------------|----------------------|----------------------|-----------------------|--------------------|--------------------|---------------------------------|---------------------------------|---------------------------------|
| Windows:       | [-1,+1]            | [-1,+1]                         | [-1,+1]            | [-1,+1]              | [-1,+1]              | [-1,+1]              | [-1,+1]               | [-1,+1]            | [-1,+1]            | [-1,+1]                         | [-1,+1]                         | [-1,+1]                         |
| Cash           | 0.0040<br>(0.2465) |                                 |                    |                      |                      |                      |                       |                    |                    | -0.0161<br>(-0.8854)            | -0.0075<br>(-0.3879)            | -0.0081<br>(-0.5251)            |
| <b>ED</b>      |                    | <b>-0.2585 ***</b><br>(-3.3586) |                    |                      |                      |                      |                       |                    |                    | <b>-0.3854 ***</b><br>(-4.0385) | <b>-0.3504 ***</b><br>(-3.3677) | <b>-0.4378 ***</b><br>(-5.2112) |
| Diffused       |                    |                                 | 0.0036<br>(0.1494) |                      |                      |                      |                       |                    |                    |                                 | -0.0409<br>(-1.5562)            |                                 |
| <b>AS</b>      |                    |                                 |                    | -0.0016<br>(-0.0736) |                      |                      |                       |                    |                    | <b>-0.0561 **</b><br>(-2.0544)  |                                 |                                 |
| <b>Anglo</b>   |                    |                                 |                    |                      | -0.0010<br>(-0.0538) |                      |                       |                    |                    |                                 |                                 | <b>-0.0586 **</b><br>(-2.7561)  |
| CWT            |                    |                                 |                    |                      |                      | -0.0046<br>(-0.3411) |                       |                    |                    | -0.0200<br>(-1.2667)            | -0.0157<br>(-0.9873)            | -0.0176<br>(-1.2102)            |
| Pct50          |                    |                                 |                    |                      |                      |                      | -0.0286<br>(-1.0668)  |                    |                    | -0.0453<br>(-1.5533)            | -0.0311<br>(-0.9083)            | -0.0366<br>(-1.3368)            |
| <b>PctToe</b>  |                    |                                 |                    |                      |                      |                      |                       | 0.0401<br>(1.1409) |                    | 0.0541 *<br>(1.8775)            | 0.0524 *<br>(1.8276)            | <b>0.0617 **</b><br>(2.2329)    |
| Conglomerate   |                    |                                 |                    |                      |                      |                      |                       |                    | 0.0015<br>(0.0942) | -0.0083<br>(-0.4424)            | -0.0060<br>(-0.3259)            | -0.0014<br>(-0.0801)            |
| Intercept      | 0.0100<br>(0.9748) | 0.0262 ***<br>(2.7771)          | 0.0089<br>(0.3957) | 0.0129<br>(0.6347)   | 0.0124<br>(0.7128)   | 0.0133<br>(1.1290)   | 0.0179 **<br>(2.5999) | 0.0080<br>(0.9246) | 0.0115<br>(1.2692) | 0.0957 **<br>(2.5251)           | 0.0752 *<br>(2.0483)            | 0.0897 ***<br>(3.3197)          |
| Observations   | 37                 | 37                              | 37                 | 37                   | 37                   | 37                   | 37                    | 35                 | 37                 | 35                              | 35                              | 35                              |
| F-Statistics   | 0.0608             | 11.2804                         | 0.0223             | 0.0054               | 0.0029               | 0.1163               | 1.1380                | 1.3017             | 0.0089             | 6.5102                          | 4.2890                          | 12.5038                         |
| p-value        | 0.8068             | <b>0.0019 ***</b>               | 0.8821             | 0.9417               | 0.9574               | 0.7351               | 0.2934                | 0.2621             | 0.9255             | <b>0.0002 ***</b>               | <b>0.0027 ***</b>               | <b>0.0000 ***</b>               |
| Adj. R-Squared | -0.0268            | 0.1625                          | -0.0276            | -0.0284              | -0.0285              | -0.0263              | 0.0347                | -0.0068            | -0.0285            | 0.2675                          | 0.1789                          | 0.3130                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 7.65 Univariate Regression Analysis; MM CAARs [-3,+3] - Indian Acquirers

| CAAR           | (1)                  | (2)                            | (3)                  | (4)                  | (5)                  | (6)                  | (7)                  | (8)                  | (9)                  | (10)                            | (11)                            | (12)                            |
|----------------|----------------------|--------------------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|---------------------------------|---------------------------------|---------------------------------|
| Windows:       | [-3,+3]              | [-3,+3]                        | [-3,+3]              | [-3,+3]              | [-3,+3]              | [-3,+3]              | [-3,+3]              | [-3,+3]              | [-3,+3]              | [-3,+3]                         | [-3,+3]                         | [-3,+3]                         |
| Cash           | -0.0150<br>(-0.7914) |                                |                      |                      |                      |                      |                      |                      |                      | -0.0388<br>(-1.5394)            | -0.0343<br>(-1.5289)            | -0.0349 *<br>(-1.7173)          |
| ED             |                      | <b>-0.1397 **</b><br>(-2.4141) |                      |                      |                      |                      |                      |                      |                      | <b>-0.2647 ***</b><br>(-3.1183) | <b>-0.2528 ***</b><br>(-2.7798) | <b>-0.3179 ***</b><br>(-2.9535) |
| Diffused       |                      |                                | 0.0023<br>(0.1143)   |                      |                      |                      |                      |                      |                      |                                 | -0.0284<br>(-1.2217)            |                                 |
| AS             |                      |                                |                      | 0.0014<br>(0.0727)   |                      |                      |                      |                      |                      | -0.0345<br>(-1.1981)            |                                 |                                 |
| Anglo          |                      |                                |                      |                      | -0.0039<br>(-0.2098) |                      |                      |                      |                      |                                 |                                 | -0.0419 *<br>(-1.7662)          |
| CWT            |                      |                                |                      |                      |                      | -0.0006<br>(-0.0348) |                      |                      |                      | -0.0261<br>(-1.3016)            | -0.0237<br>(-1.2577)            | -0.0251<br>(-1.4026)            |
| Pct50          |                      |                                |                      |                      |                      |                      | -0.0338<br>(-0.9527) |                      |                      | -0.0209<br>(-0.4700)            | -0.0126<br>(-0.3030)            | -0.0166<br>(-0.4154)            |
| PctToe         |                      |                                |                      |                      |                      |                      |                      | 0.0285<br>(0.5867)   |                      | 0.0009<br>(0.0177)              | -0.0015<br>(-0.0304)            | 0.0048<br>(0.0913)              |
| Conglomerate   |                      |                                |                      |                      |                      |                      |                      |                      | 0.0361<br>(1.6496)   | 0.0253<br>(1.2103)              | 0.0267<br>(1.3491)              | 0.0299<br>(1.5075)              |
| Intercept      | 0.0044<br>(0.3118)   | 0.0062<br>(0.4886)             | -0.0035<br>(-0.2135) | -0.0027<br>(-0.1877) | 0.0011<br>(0.0785)   | -0.0015<br>(-0.1060) | 0.0056<br>(0.7349)   | -0.0003<br>(-0.0314) | -0.0066<br>(-0.6107) | 0.0697<br>(1.5802)              | 0.0607<br>(1.6825)              | 0.0721 **<br>(2.1908)           |
| Observations   | 37                   | 37                             | 37                   | 37                   | 37                   | 37                   | 37                   | 35                   | 37                   | 35                              | 35                              | 35                              |
| F-Statistics   | 0.6263               | 5.8278                         | 0.0131               | 0.0053               | 0.0440               | 0.0012               | 0.9077               | 0.3442               | 2.7213               | 3.4628                          | 3.9029                          | 2.8376                          |
| p-value        | 0.4341               | <b>0.0211 **</b>               | 0.9096               | 0.9424               | 0.8350               | 0.9724               | 0.3473               | 0.5614               | 0.1080               | <b>0.0089 ***</b>               | <b>0.0046 ***</b>               | <b>0.0236 **</b>                |
| Adj. R-Squared | -0.0123              | 0.0082                         | -0.0283              | -0.0285              | -0.0276              | -0.0285              | 0.0298               | -0.0190              | 0.0174               | 0.0768                          | 0.0549                          | 0.1226                          |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

Table-A 7.66 Univariate Regression Analysis; MM CAARs [-5,+5] - Indian Acquirers

| CAAR Windows:       | (1)<br>[-5,+5]       | (2)<br>[-5,+5]       | (3)<br>[-5,+5]     | (4)<br>[-5,+5]     | (5)<br>[-5,+5]       | (6)<br>[-5,+5]       | (7)<br>[-5,+5]         | (8)<br>[-5,+5]       | (9)<br>[-5,+5]               | (10)<br>[-5,+5]              | (11)<br>[-5,+5]              | (12)<br>[-5,+5]              |
|---------------------|----------------------|----------------------|--------------------|--------------------|----------------------|----------------------|------------------------|----------------------|------------------------------|------------------------------|------------------------------|------------------------------|
| Cash                | -0.0003<br>(-0.0126) |                      |                    |                    |                      |                      |                        |                      |                              | -0.0085<br>(-0.3024)         | -0.0057<br>(-0.2186)         | -0.0038<br>(-0.1521)         |
| ED                  |                      | -0.1061<br>(-1.3701) |                    |                    |                      |                      |                        |                      |                              | -0.1836 *<br>(-1.7444)       | -0.1793 *<br>(-1.7499)       | -0.1762<br>(-1.4927)         |
| Diffused            |                      |                      | 0.0023<br>(0.1328) |                    |                      |                      |                        |                      |                              |                              | -0.0205<br>(-0.9773)         |                              |
| AS                  |                      |                      |                    | 0.0010<br>(0.0559) |                      |                      |                        |                      |                              | -0.0234<br>(-0.9582)         |                              |                              |
| Anglo               |                      |                      |                    |                    | 0.0065<br>(0.3701)   |                      |                        |                      |                              |                              |                              | -0.0163<br>(-0.7284)         |
| CWT                 |                      |                      |                    |                    |                      | 0.0168<br>(0.8238)   |                        |                      |                              | 0.0053<br>(0.2033)           | 0.0068<br>(0.2654)           | 0.0071<br>(0.2754)           |
| Pct50               |                      |                      |                    |                    |                      |                      | -0.0381 *<br>(-1.8203) |                      |                              | -0.0010<br>(-0.0280)         | 0.0045<br>(0.1432)           | 0.0041<br>(0.1302)           |
| PctToe              |                      |                      |                    |                    |                      |                      |                        | -0.0348<br>(-1.2052) |                              | -0.0652<br>(-1.1361)         | -0.0674<br>(-1.1871)         | -0.0608<br>(-1.0977)         |
| <b>Conglomerate</b> |                      |                      |                    |                    |                      |                      |                        |                      | <b>0.0711 **</b><br>(2.2382) | <b>0.0701 **</b><br>(2.3670) | <b>0.0710 **</b><br>(2.3744) | <b>0.0724 **</b><br>(2.3850) |
| Intercept           | 0.0031<br>(0.2068)   | 0.0089<br>(0.6489)   | 0.0012<br>(0.1021) | 0.0022<br>(0.2221) | -0.0016<br>(-0.1635) | -0.0030<br>(-0.2078) | 0.0112<br>(0.9116)     | 0.0076<br>(0.6326)   | -0.0066<br>(-0.6420)         | 0.0298<br>(0.7005)           | 0.0251<br>(0.6710)           | 0.0188<br>(0.5681)           |
| Observations        | 37                   | 37                   | 37                 | 37                 | 37                   | 37                   | 37                     | 35                   | 37                           | 35                           | 35                           | 35                           |
| F-Statistics        | 0.0002               | 1.8772               | 0.0176             | 0.0031             | 0.1370               | 0.6786               | 3.3136                 | 1.4524               | 5.0095                       | 1.8514                       | 1.8205                       | 1.5833                       |
| p-value             | 0.9900               | 0.1794               | 0.8951             | 0.9558             | 0.7135               | 0.4157               | 0.0773 *               | 0.2367               | <b>0.0317 **</b>             | 0.1179                       | 0.1241                       | 0.1830                       |
| Adj. R-Squared      | -0.0286              | -0.0103              | -0.0283            | -0.0285            | -0.0263              | -0.0118              | 0.0353                 | -0.0200              | 0.1245                       | 0.0208                       | 0.0164                       | 0.0121                       |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

**Table-A 7.67 Univariate Regression Analysis; MM CAARs [-7,+7] - Indian Acquirers**

| <b>CAAR</b>     | <b>(1)</b>           | <b>(2)</b>           | <b>(3)</b>           | <b>(4)</b>           | <b>(5)</b>           | <b>(6)</b>           | <b>(7)</b>           | <b>(8)</b>           | <b>(9)</b>           | <b>(10)</b>          | <b>(11)</b>          | <b>(12)</b>          |
|-----------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| <b>Windows:</b> | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       | <b>[-7,+7]</b>       |
| Cash            | -0.0022<br>(-0.0748) |                      |                      |                      |                      |                      |                      |                      |                      | 0.0008<br>(0.0201)   | -0.0023<br>(-0.0665) | -0.0055<br>(-0.1557) |
| ED              |                      | -0.0292<br>(-0.2312) |                      |                      |                      |                      |                      |                      |                      | 0.0189<br>(0.1067)   | 0.0116<br>(0.0605)   | -0.0187<br>(-0.0815) |
| Diffused        |                      |                      | 0.0184<br>(0.6393)   |                      |                      |                      |                      |                      |                      |                      | 0.0202<br>(0.4277)   |                      |
| AS              |                      |                      |                      | 0.0157<br>(0.5750)   |                      |                      |                      |                      |                      | 0.0241<br>(0.4971)   |                      |                      |
| Anglo           |                      |                      |                      |                      | 0.0097<br>(0.3565)   |                      |                      |                      |                      |                      |                      | 0.0084<br>(0.1665)   |
| CWT             |                      |                      |                      |                      |                      | -0.0229<br>(-0.8614) |                      |                      |                      | -0.0149<br>(-0.4117) | -0.0165<br>(-0.4629) | -0.0174<br>(-0.5098) |
| Pct50           |                      |                      |                      |                      |                      |                      | 0.0139<br>(0.3920)   |                      |                      | 0.0347<br>(0.7304)   | 0.0289<br>(0.6576)   | 0.0279<br>(0.6350)   |
| PctToe          |                      |                      |                      |                      |                      |                      |                      | -0.0377<br>(-0.3878) |                      | -0.0584<br>(-0.6441) | -0.0565<br>(-0.6075) | -0.0641<br>(-0.6965) |
| Conglomerate    |                      |                      |                      |                      |                      |                      |                      |                      | 0.0229<br>(0.4660)   | 0.0387<br>(0.7893)   | 0.0377<br>(0.7701)   | 0.0368<br>(0.7502)   |
| Intercept       | -0.0040<br>(-0.2074) | -0.0032<br>(-0.1728) | -0.0192<br>(-0.8351) | -0.0167<br>(-0.8092) | -0.0116<br>(-0.5914) | 0.0032<br>(0.1612)   | -0.0078<br>(-0.4862) | -0.0032<br>(-0.2108) | -0.0079<br>(-0.5321) | -0.0281<br>(-0.4192) | -0.0222<br>(-0.3506) | -0.0080<br>(-0.1276) |
| Observations    | 37                   | 37                   | 37                   | 37                   | 37                   | 37                   | 37                   | 35                   | 37                   | 35                   | 35                   | 35                   |
| F-Statistics    | 0.0056               | 0.0534               | 0.4088               | 0.3307               | 0.1271               | 0.7420               | 0.1536               | 0.1504               | 0.2172               | 0.4126               | 0.4242               | 0.3637               |
| p-value         | 0.9408               | 0.8185               | 0.5268               | 0.5689               | 0.7236               | 0.3949               | 0.6974               | 0.7007               | 0.6441               | 0.8860               | 0.8786               | 0.9153               |
| Adj. R-Squared  | -0.0284              | -0.0278              | -0.0205              | -0.0222              | -0.0258              | -0.0117              | -0.0239              | -0.0245              | -0.0199              | -0.1891              | -0.1920              | -0.1976              |

*t* statistics in parentheses; \* p<.10, \*\* p<.05, \*\*\* p<.01

