

**THE INFLUENCE OF OWNERSHIP, CONTROL,
GOVERNANCE AND DIVERSIFICATION ON
THE PERFORMANCE OF FAMILY-
CONTROLLED FIRMS IN MALAYSIA**

NG SIN HUEI

UNIVERSITY OF NORTHUMBRIA AT
NEWCASTLE

2012

**The Influence of Ownership, Control, Governance
and Diversification on the Performance of
Family-controlled Firms in Malaysia**

By

Ng Sin Huei

A thesis submitted in partial fulfilment of the requirements of
the University of Northumbria at Newcastle for the degree of
Doctor of Business Administration

Research undertaken in Newcastle Business School

February 2012

Abstract

This study explores how a concentrated ownership structure and the underlying firm strategies/activities or practices influence the performance of family-controlled publicly-listed firms in Malaysia. Specifically, it aims to enhance our understanding of how differing types of significant owners, control-enhancing means, business groups and firm diversification affect firm performance within a national corporate governance system characterized by pervasive political involvement in business. It also aims to enhance our understanding of the role of board independence in moderating the above effects. The distinctiveness of this study arises from its approach of considering ownership structure and the underlying firm strategies/activities or practices in an integrated manner with particular emphasis on their inter-relationships. Multivariate with moderated regression analyses were utilized as primary tools of analysis. Based on a sample of 314 firms, major findings include (i) the proportion of family equity ownership positively influences corporate performance, (ii) group-affiliated firms generally underperform non-group affiliated firms, (iii) the heterogeneity of business groups results in considerable differences in performance. Specifically, size of business group has a negative moderating effect on the firm diversification-performance relationship, (iv) profit redistribution occurs in firms that have a high level of family ownership and that are affiliated to large business groups, (v) board independence in general lacks effectiveness in moderating the influence of firm strategies or activities on firm performance. In terms of practical/managerial implications, the study demonstrates (i) the importance of conceptualising corporate governance in a broader sense, particularly in emerging economies such as Malaysia, (ii) how policymakers and regulators may identify and better monitor firms that are more likely to expropriate investors and/or exhibit governance problems, and (iii) a potentially fruitful approach to be adopted by investment professionals in selecting firms with better overall governance structures and performance that enhance their investment returns, particularly in the long term.

Contents

| | |
|--|-------------|
| Abstract | i |
| List of Figures | viii |
| List of Tables | ix |
| Acknowledgements | xi |
| Declaration | xii |
| | |
| Chapter 1 – Introduction | 1 |
| 1.1 Chapter Outline..... | 4 |
| 1.2 Background of Study..... | 5 |
| 1.3 Research Problem and Issues..... | 8 |
| 1.3.1 Concentrated Ownership Structure..... | 8 |
| 1.3.2 Governance Concerned Firm Activities/Practices underlying Concentrated Ownership..... | 11 |
| 1.3.2.1 Control-Enhancing Practices..... | 11 |
| 1.3.2.2 Business Group Affiliation and Activities..... | 14 |
| 1.3.2.3 Firm Diversification Strategy..... | 15 |
| 1.3.3 Why Examine Firm Performance?..... | 16 |
| 1.4 Research Questions..... | 17 |
| 1.5 Objectives of Study..... | 19 |
| 1.6 The Research Framework..... | 22 |
| 1.7 Scope and Significance of Study..... | 25 |
| 1.7.1 Why Publicly-listed, Family-controlled Firms?..... | 27 |
| 1.7.2 Why Malaysia?..... | 29 |
| 1.8 Structure of the Thesis..... | 31 |
| 1.9 Chapter Summary..... | 32 |
| | |
| Chapter 2 – Literature Review | 35 |
| 2.1 Chapter Outline..... | 35 |
| 2.2 The Malaysian Governance and Institutional Environment: Political Involvement in Business and Relationship-based Corporate Culture..... | 35 |
| 2.2.1 The Pre-New Economic Policy (Pre-NEP) Period..... | 37 |

| | | |
|---|--|-----------|
| 2.2.2 | The New Economic Policy (NEP) Period..... | 39 |
| 2.2.2.1 | The Mahathir Era..... | 40 |
| 2.2.3 | Political Interference and Weak Enforcement of Rules and Regulations..... | 41 |
| 2.2.4 | Cronyism, Rent-Seeking and Governance..... | 43 |
| 2.3 | Theoretical Basis for the Study..... | 46 |
| 2.4 | Ownership Structure..... | 49 |
| 2.4.1 | Ownership Structure in East Asia and Malaysia..... | 52 |
| 2.5 | Issue of Board Independence..... | 55 |
| 2.6 | Family-controlled Business Groups..... | 59 |
| 2.6.1 | Family-controlled Business Groups in Malaysia..... | 62 |
| 2.6.1.1 | Pyramidal (and Cross-Holding) Structures..... | 63 |
| 2.7 | Chapter Summary..... | 67 |
| Chapter 3 – Literature Review with Corresponding Hypotheses..... | | 69 |
| 3.1 | Chapter Outline..... | 69 |
| 3.2 | Ownership Structure and Firm Performance in Family-controlled Firms..... | 70 |
| 3.2.1 | Various Types of Other Block-holders in Family-controlled Firms..... | 76 |
| 3.2.2 | Domestic Institutional Investors as Block-holders in Family-controlled Firms..... | 77 |
| 3.2.3 | Foreign Investors as Block-holders in Family-controlled Firms..... | 80 |
| 3.2.4 | The State as Block-holders in Family-controlled Firms..... | 83 |
| 3.2.5 | Other Unrelated Family (Auxiliary Family) as Block-holders in Family-controlled Firms..... | 84 |
| 3.3 | Family-controlled Business Groups: Advantages and Disadvantages..... | 85 |
| 3.3.1 | Family-controlled Business Groups and Firm Performance..... | 90 |
| 3.4 | Control-enhancing Means for Controlling Families..... | 92 |
| 3.5 | Profit Redistribution in Family-controlled Business Groups..... | 96 |
| 3.6 | Firm Diversification in Family-controlled Firms..... | 102 |
| 3.6.1 | Firm Diversification and Performance..... | 102 |
| 3.6.2 | Firm Diversification and Efficiency..... | 108 |
| 3.6.3 | Roles of Business Groups in Diversification..... | 108 |
| 3.6.4 | Size Effects of Business Groups on the Firm Diversification-Performance Link..... | 111 |
| 3.6.5 | Roles of Ownership Structure and Control-Enhancing Means in Firm | |

| | |
|---|------------|
| Diversification..... | 113 |
| 3.6.6 Firm Diversification and the Board of Directors..... | 116 |
| 3.7 Chapter Summary..... | 117 |
| | |
| Chapter 4 – Data and Methodology..... | 123 |
| 4.1 Chapter Outline..... | 123 |
| 4.2 Ethical Issues in Data Collection and Sampling..... | 124 |
| 4.3 Research Philosophy..... | 124 |
| 4.4 Sample Selection and Data Collection..... | 125 |
| 4.5 Constructing the Family Ownership Variable..... | 129 |
| 4.6 Firm Performance Measures..... | 131 |
| 4.7 Constructing Other Variables..... | 133 |
| 4.7.1 Other Block-holder Variables..... | 133 |
| 4.7.2 Business Group Affiliation Variables..... | 135 |
| 4.7.3 Firm Diversification Variables..... | 143 |
| 4.7.4 Control Variables..... | 144 |
| 4.8 Method of Analysis – Multiple Regression and Moderated Regression Analyses..... | 146 |
| 4.9 Model Specification..... | 148 |
| 4.9.1 Model Specification for Hypotheses Related to Ownership Structure..... | 148 |
| 4.9.1.1 The Issue of Endogeneity..... | 150 |
| 4.9.2 Model Specification for Hypotheses Related to Control-Enhancing Means and Family-controlled Business Groups..... | 151 |
| 4.9.3 Model Specification for Hypotheses Related to Profit Redistribution..... | 154 |
| 4.9.4 Model Specification for Hypotheses Related to Firm Diversification..... | 157 |
| 4.10 Chapter Summary..... | 160 |
| | |
| Chapter 5 – Findings and Discussions I – Descriptive Statistics..... | 162 |
| 5.1 Chapter Outline..... | 162 |
| 5.2 Firm Performance Data..... | 165 |
| 5.3 Ownership Data..... | 166 |
| 5.4 Control Variables Data..... | 167 |
| 5.5 Other Relevant Data..... | 168 |
| 5.6 Tests of Mean Difference and Median Difference between Group and Non-Group Firms..... | 173 |

| | | |
|---|--|------------|
| 5.6.1 | Ownership Structure..... | 173 |
| 5.6.2 | Control-Enhancing Means..... | 175 |
| 5.6.3 | Firm Diversification..... | 176 |
| 5.6.4 | Control Variables..... | 177 |
| 5.6.5 | Firm Performance..... | 178 |
| 5.7 | Further Analysis on Business Groups and the Group-affiliated Firms..... | 178 |
| 5.8 | Pearson Correlation Matrix..... | 182 |
| 5.9 | Chapter Summary..... | 186 |
| Chapter 6 – Findings and Discussions II – Multivariate Analysis..... | | 187 |
| 6.1 | Chapter Outline..... | 187 |
| 6.2 | Theme I: Influence of Ownership Structure and Board Independence Moderating Effects on Firm Performance..... | 188 |
| 6.2.1 | Controlling Family..... | 190 |
| 6.2.2 | State Ownership..... | 191 |
| 6.2.3 | Foreign Institutional Investors’ Ownership..... | 192 |
| 6.2.4 | Foreign Corporations’ Ownership..... | 192 |
| 6.2.5 | Unrelated Family Ownership..... | 193 |
| 6.2.6 | Domestic Institutional Investors’ Ownership..... | 193 |
| 6.2.7 | Non-linearity Issue..... | 194 |
| 6.2.8 | Board Independence Moderating Effect..... | 195 |
| 6.3 | Summary on Theme I..... | 197 |
| 6.4 | Theme II: Influence of Business Group Affiliation and Other Control-enhancing Means on Firm Performance..... | 199 |
| 6.4.1 | Influence of Business Group Affiliation..... | 199 |
| 6.4.2 | Influence of Group Size..... | 201 |
| 6.4.3 | Influence of Control-enhancing Means..... | 202 |
| 6.4.3.1 | Divergence of Cash Flow-to-Control Rights..... | 203 |
| 6.4.3.2 | Family Directors on Board..... | 204 |
| 6.4.3.3 | Family (i) Occupying Board Chairmanship and CEO Positions, (ii) Acting as Sole Block-holder..... | 205 |
| 6.4.3.4 | Complexity of Business Group Structures..... | 206 |
| 6.5 | Summary on Theme II..... | 207 |
| 6.6 | Theme III: Issues on Profit/Resource Redistribution and Firm Performance..... | 208 |

| | | |
|----------|--|-----|
| 6.6.1 | Group Size Effect and Family Ownership Effect..... | 211 |
| 6.6.2 | Efficiency of Profit/Resource Redistribution and Board Independence Moderating Effect..... | 215 |
| 6.6.2.1 | Firm Efficiency Issue..... | 215 |
| 6.6.2.2 | Board Independence Moderating Effect..... | 216 |
| 6.7 | Summary on Theme III..... | 218 |
| 6.8 | Theme IV.I: Issues on Firm Diversification, Efficiency and Performance..... | 219 |
| 6.8.1 | Firm Diversification and Performance..... | 219 |
| 6.8.2 | Firm Diversification and Efficiency..... | 222 |
| 6.8.2.1 | Group Firms versus Non-group Firms..... | 223 |
| 6.8.3 | Moderating Influence of Group Affiliation on Firm Diversification- Performance Link..... | 224 |
| 6.8.4 | Group Size Effect on Firm Diversification-Performance Link..... | 226 |
| 6.8.4.1 | Small Business Groups (GR_A)..... | 226 |
| 6.8.4.2 | Intermediate and Large Business Groups (GR_B and GR_C)..... | 228 |
| 6.8.4.3 | The Presence of Trend Across the Moderating Influence of Various Group Sizes..... | 229 |
| 6.8.4.4 | Corporate Environment in Malaysia..... | 230 |
| 6.9 | Summary on Theme IV.I..... | 231 |
| 6.10 | Theme IV.II: Moderating Influence on the Firm Diversification-Performance Link..... | 233 |
| 6.10.1 | Moderating Influence of Ownership Structure on the Firm Diversification- Performance Link..... | 233 |
| 6.10.2 | Moderating Influence of Board Independence on the Firm Diversification- Performance Link..... | 235 |
| 6.10.2.1 | All Audit Committee Members are Independent Directors (INDP_ADT)..... | 237 |
| 6.10.2.2 | Issue of Board Independence Revisited..... | 238 |
| 6.10.3 | Moderating Influence of Control-enhancing Means on the Firm Diversification-Performance Link..... | 239 |
| 6.10.3.1 | Complexity of Business Group Structure..... | 242 |
| 6.11 | Summary on Theme IV.II..... | 244 |
| 6.12 | Chapter Summary..... | 246 |

| | |
|---|------------|
| Chapter 7 – Conclusion..... | 251 |
| 7.1 Chapter Outline..... | 251 |
| 7.2 Discussions and Literature Review Revisited..... | 251 |
| 7.3 Policy Implications..... | 260 |
| 7.4 Contribution to Professional Practice..... | 266 |
| 7.5 Limitations of Study and Suggestions for Future Research..... | 271 |
| 7.5.1 Methodological Limitations and Suggestions for Future Research..... | 271 |
| 7.5.2 General Limitations and Suggestions for Future Research..... | 274 |
| 7.6 Concluding Remarks of the Study..... | 276 |

Appendices

| | |
|-----------------|-----|
| Appendix 1..... | A1 |
| Appendix 2..... | A3 |
| Appendix 3..... | A4 |
| Appendix 4..... | A5 |
| Appendix 5..... | A6 |
| Appendix 6..... | A10 |

References

List of Figures

| | |
|---|-----|
| Figure 1.1: Conceptual Framework of the Study..... | 24 |
| Figure 2.1: Principal-principal Problem versus Principal-Agent Problem..... | 48 |
| Figure 2.2: Illustration of Cross-holding..... | 65 |
| Figure 3.1: The Influence of Ownership Structure on Firm Performance – Hypothesis Set 1..... | 71 |
| Figure 3.2: The Influence of Control-enhancing Means (Including Group Affiliation) on Firm Performance – Hypothesis Set 2..... | 86 |
| Figure 3.3: The Influence of Profit Redistribution on Firm Efficiency and Performance – Hypothesis Set 3..... | 97 |
| Figure 3.4: The Influence of Firm Diversification on Firm Efficiency and Performance – Hypothesis Set 4..... | 103 |
| Figure 4.1: Illustration of Cash Flow-to-Control Rights..... | 139 |
| Figure 4.2: Simple Business Group (BG_S)..... | 141 |
| Figure 4.3: Business Group with Pyramidal Structure (BG_PS)..... | 141 |
| Figure 4.4: Business Group with Complicated Structure (BG_CS)..... | 142 |

List of Tables

| | |
|---|-----|
| Table 1.1: Justification and Formulation of Research Questions..... | 20 |
| Table 2.1: Definition of Business Groups According to Country..... | 61 |
| Table 3.1: Summary of the Link between Research Questions, Hypotheses and Key Operational Variables..... | 120 |
| Table 4.1: Selection Process of Sample..... | 127 |
| Table 4.2: Comparison of Sample across Sectors..... | 128 |
| Table 5.1: List of Abbreviations, Variables and Operationalization..... | 163 |
| Table 5.2: Descriptive Statistics – Firm Performance..... | 165 |
| Table 5.3: Descriptive Statistics – Ownership Data..... | 166 |
| Table 5.4: Descriptive Statistics – Control Variables..... | 168 |
| Table 5.5: Descriptive Statistics – Board Independence..... | 169 |
| Table 5.6: Descriptive Statistics – Control-enhancing Means..... | 170 |
| Table 5.7a: Descriptive Statistics – Firm Diversification Data..... | 171 |
| Table 5.7b: Descriptive Statistics – Firm Diversification Data: Group and Non-group Comparison..... | 173 |
| Table 5.8: Tests of Mean Difference and Median Difference Between Group and Non- Group Firms..... | 174 |
| Table 5.9a: Descriptive Statistics – Size of Business Groups..... | 179 |
| Table 5.9b: Descriptive Statistics – Group Size and Group Complexity with Firm Performance..... | 179 |
| Table 5.9c: Descriptive Statistics – Group Size and Group Complexity with Firm Diversification..... | 180 |
| Table 5.10: Descriptive Statistics – Family Ownership Classification for Group-affiliated Firms..... | 181 |
| Table 5.11a: Pearson Correlation Matrix (I) – Full Sample..... | 183 |
| Table 5.11b: Pearson Correlation Matrix (II) – Full Sample..... | 184 |
| Table 5.11c: Pearson Correlation Matrix (III) – Full Sample..... | 185 |
| Table 6.1a: Influence of Ownership Structure on ROA..... | 189 |
| Table 6.1b: Influence of Ownership Structure on Tobin’s Q..... | 189 |
| Table 6.2a: Moderating Influence of Board Independence on ROA..... | 196 |
| Table 6.2b: Moderating Influence of Board Independence on Tobin’s Q..... | 196 |

| | |
|---|-----|
| Table 6.3a: Influence of Business Group Affiliation and Group Size on ROA..... | 200 |
| Table 6.3b: Influence of Business Group Affiliation and Group Size on Tobin’s Q..... | 200 |
| Table 6.4a: Influence of Control-enhancing Means on ROA..... | 203 |
| Table 6.4b: Influence of Control-enhancing Means on Tobin’s Q..... | 203 |
| Table 6.5a: Profit Redistribution Effects and Firm Performance..... | 209 |
| Table 6.5b: Profit Redistribution and ROA – Group Size Effect..... | 212 |
| Table 6.5c: Profit Redistribution and Tobin’s Q – Group Size Effect..... | 213 |
| Table 6.5d: Profit Redistribution – Large Group Size and Family Ownership Classification Effects..... | 214 |
| Table 6.6a: Firm Performance and Capital Expenditure Ratio – Comparison Between Group and Non-group Firms..... | 215 |
| Table 6.6b: Firm Performance and Capital Expenditure Ratio in Group-affiliated Firm – Board Independence Moderating Influence..... | 217 |
| Table 6.7a: Firm Diversification and Performance..... | 220 |
| Table 6.7b: Influence of Firm Diversification on Firm Efficiency..... | 222 |
| Table 6.7c: Firm Diversification and Efficiency – Comparison between Group and Non- group Firms..... | 222 |
| Table 6.8a: Firm Diversification and Performance – Comparison between Group and Non-group Firms..... | 225 |
| Table 6.8b: Firm Diversification and Performance – Group Size Effect..... | 227 |
| Table 6.9a: Firm Diversification and Tobin’s Q – Influence of Ownership Structure..... | 234 |
| Table 6.9b: Firm Diversification and ROA – Influence of Ownership Structure..... | 234 |
| Table 6.10a: Firm Diversification and ROA – Influence of Board Independence..... | 236 |
| Table 6.10b: Firm Diversification and Tobin’s Q – Influence of Board Independence..... | 236 |
| Table 6.11a: Firm Diversification and ROA – Influence of Control-enhancing Means..... | 240 |
| Table 6.11b: Firm Diversification and Tobin’s Q – Influence of Control-enhancing Means..... | 241 |
| Table 6.11c: Effects of Group Structure Complexity on Diversification-Performance Link – Supplementary Test..... | 243 |

Acknowledgements

I thank the ALMIGHTY for having bestowed the blessings on me to complete this thesis successfully.

I would like to express my gratitude and sincere appreciation to my principal supervisor, Dr Philip Shrives; and co-supervisors, Dr Ken Yeoh and Assoc Prof Dr Lau Chee Kwong, for their valuable inputs, expert guidance, and constant support throughout all stages of my doctoral study. Their invaluable contribution and supervision have undoubtedly improved the quality of this work.

I would like to record my appreciation to INTI International University for granting me the scholarship to pursue this study. This study would not have been possible without their financial support.

Thanks to my friends and doctoral colleagues both in Malaysia and the UK for their mutual support, sharing and kind words of encouragement that made the research process well worth the journey. To Cheah, Mazirah, Wee Chun, Jack, and Mani; thank you all for the journey that we have gone through together. I am also grateful to Ian and Angela for their generous hospitality, assistance and kind reception during my stay at Newcastle.

I am indebted to colleagues and participants at the conferences that I attended for their feedback on my research output. I would also like to acknowledge the team of NBS lecturers in the DBA programme for their guidance, warm hospitality and professionalism. Thanks also to the administrative staff of NBS for their help and assistance.

Finally and most importantly, this thesis is dedicated to my wonderful wife, Lu Yan, for her unwavering love and support from the beginning. This thesis would not have been completed without her. I would also like to dedicate this piece of work to my beloved children, Isaac and Rachel, for their prayers and for giving me happiness and joy despite them having to bear with my frequent absences from the family activities during my study.

Declaration

I declare that the work contained in this thesis has not been submitted for any other award and that it is all my own work.

Name: Ng Sin Huei

Signature: *Sin Huei*

Date: 14 February 2012

Chapter 1 – Introduction

This thesis examines the influence of concentrated share ownership and the underlying firm strategies/activities or practices on the performance of publicly-listed family-controlled firms in Malaysia. As opposed to the ‘widely-held’ ownership structure in Anglo- Saxon countries, concentrated ownership structure is the norm in East Asia including Malaysia (World Bank, 2005; Claessens and Fan, 2002; Zhuang *et al.*, 2000). It refers to the concentration of share ownership being held by a few substantial shareholders (known as the block-holders). In the case of family-controlled firms, the families (either consisting of a single person or multiple family members) act as the largest substantial shareholders who also exert control power through their direct involvement in the senior management or directorship of the firms. The families are termed as the ‘controlling families’ in this study. The presence of other block-holders in the family-controlled firms such as institutional investors and the government may also influence the performance of the firms (Thomsen and Pederson, 2000; Filatotchev *et al.*, 2005; Borokhovich *et al.*, 2006).

Family ownership may bring along some significant benefits or advantages to the firms and the advantages could be enhanced with an increase in the level of ownership (Anderson and Reeb, 2003; Andres, 2008). This is because concentrated family ownership is able to alleviate the agency problems commonly found in the dispersed ownership structure and in addition, it also provides the controlling families with both the power and incentive to improve firm efficiency and performance. Families as the largest block-holders also exhibit unique attributes which could not be found in other types of block-holder. Such attributes are believed to be able to give rise to greater competitive advantage to the firms and improve their performance (Habbershon *et al.*, 2003). However, at the same time, an increase in family ownership also means an increase in the control (voting) power of the families. Therefore, as the largest shareholders with substantial concentrated ownership and control, the controlling families have the ‘ability and inclination’ to carry out strategies/activities or practices that benefit them but may not benefit, or may even be detrimental to, the efficiency and performance of firms and thus minority shareholders (Claessens *et al.*, 2000; Young *et*

al., 2008).¹ These ‘governance-concerned’ strategies/activities/practices underlying concentrated ownership include: (a) the use of certain methods of enhancing the families’ control power (hereafter known as the control-enhancing means) such as appointing family members into both the board chairmanship and CEO positions; (b) the interference of controlling families in the appointment of independent directors so that the board of directors loses its independence (hereafter a board independence issue); (c) the formation of a network of publicly-listed firms controlled by the families (hereafter known as business group affiliation) and; (d) the venture and expansion of the firms into various business lines (hereafter known as firm diversification).

From the above discussion, this study makes an attempt to explore the following research question²: *Coupled with the benefits brought about by concentrated family ownership, in what way will the concerns of concentrated ownership and the outlined underlying firm strategies/activities or practices in family-controlled firms influence the firm’s performance?* Following the research question, the broad objective of the study can therefore be stated as follows: *To examine the influence of concentrated ownership structure and the outlined underlying firm strategies/activities or practices on the performance of family-controlled firms.* There are three points to be noted from the objective: Firstly, in order to gain more insights into the issues, the study examines not only the direct influence of the issues on firm performance, but also how the performance could be influenced or moderated by the interplays between some of the variables involved. In other words, apart from direct influence, moderating influence is also part of the focus of the study. For instance, not only is the direct influence of family ownership on firm performance examined, but also in what way is the influence on performance affected or moderated by the extent of board independence in the firms.

Secondly, the influence of ownership structure is examined in terms of the extent as well as the identity of the ownership. In other words, besides the ownership of the controlling families, the study also examines the influence of other block-holders in the family-

¹ Details of the discussion on the advantages and disadvantages of family-controlled firms are available in subsequent chapters.

² Details of the research questions are discussed in Section 1.4

controlled firms. Thirdly, the above broad objective of the study is broken down into five specific objectives in which each objective is accompanied and supported by its respective hypotheses. Details of the specific objectives of the study and the associated hypotheses are stated in Section 1.5.

Overall, findings from this study provide clarification on issues surrounding concentrated ownership structure and the associated policy implications for family-controlled firms in Malaysia. Some of the notable findings from the study show that although there is a positive relationship between the extent of family ownership and firm performance, the relationship subsides once the controlling families attain outright ownership control. Findings on the influence of other block-holders on the performance of family-controlled firms are mixed. Notably, the extent of block-holdings by foreign institutional investors and government is found to be positively influencing the performance of family-controlled firms. The findings also suggest that control-enhancing means are not all the same and their effects on firm performance are dissimilar. Put differently, not all control-enhancing means are ill-intended. For instance, though the findings show that firm performance tends to be worse in the absence of a second block-holder to balance the power of the controlling families; the findings also suggest that firm performance improves as the proportion of family directors on the board increases.

Further evidence from the study suggests that generally, the strategies/activities of firms operating under concentrated ownership bring about more harm than good to firm performance. For instance, it is shown that the strategy of forming business groups leads to poorer performance of group-affiliated firms compared to firms without group affiliation. Moreover, there is evidence to suggest that controlling families in business groups engaged in the redistribution of resources/profits from group-affiliated firms that are well-performing to group-affiliated firms that are underperforming. In addition, the findings also show that the size of business groups negatively affects the influence of firm diversification on performance. Finally, it is found that board independence in general lacks the effectiveness to moderate the relationship between the governance-concerned firm strategies/activities (such as diversification) and firm performance. This suggests that the board of directors may not be

‘truly independent’ from the influence of the controlling families and thus unable to exert effective monitoring.

Policy implications can be drawn from the findings to help policy-makers be more informed in making decisions on governance-related policies so that they are both effective in getting family-controlled firms to embrace the substance of good governance and at the same time accommodating to the unique features of these firms.

1.1 Chapter Outline

Having introduced the thesis and addressing the ‘what is the study all about’ question, Chapter 1 continues with a discussion on the background of the study. It discusses overall corporate governance development and concerns in Malaysia with a focus on concentrated ownership structure and the issues surrounding it. The chapter then proceeds to the subsequent section on the research problem and issues, where gaps in the literature and the main themes of the study are explored and discussed. As explained in the discussion at the beginning of the chapter, the overarching theme of the study is concentrated ownership structure and associated firm strategies/activities or practices within the context of family-controlled firms. A detailed discussion in this section is necessary in order for the readers to appreciate why the problems and issues raised deserve further investigation. Justification is provided in sub-section 1.3.3 on why firm performance is chosen as the outcome variable of the study. Based on gaps in the literature, specific research questions are then formulated in the subsequent section followed by the specific objectives of the study. It should be noted that the main research question, together with the broad objective of the study, have been introduced at the beginning of the chapter.

Following that, the conceptual framework of the research is developed and presented with a flowchart diagram illustrating the conceptualization of the entire study. The conceptual framework illustrates how all the conceptual variables of the study are linked together under the general theme of the concentrated ownership structure of firms. By depicting the location,

each hypothesis is placed within the framework. The conceptual framework is also useful in understanding the development of the hypotheses as discussed in Chapter 3.

Having established the conceptual framework, the chapter proceeds to the section on the scope and significance of the study. The purpose of the section is to set the parameters in terms of the subject of research and the institutional context in which the study takes place, and by doing so, explains why choosing family-controlled firms as the subject of the study is important as well as why Malaysia should serve as an interesting country with which to examine governance-related issues. This chapter concludes with a section outlining the chapter plan of the thesis.

1.2 Background of Study

Corporate governance development in Malaysia can be basically divided into two different time frames - before and after the infamous 1997 Asian Financial Crisis (AFC). Before the AFC, the term 'corporate governance' was seldom heard of in corporate Malaysia and the importance of corporate governance was often overlooked. Even international bodies such as the World Bank (World Bank, 1993) did not consider corporate governance as a matter of concern in East Asia including Malaysia in its influential study, *The East Asian Miracle* in 1993 when evaluating the success of economic growth in East Asia from the period 1965 to 1990. However, the 1997 AFC revealed the serious weaknesses of corporate governance in the region. It has been acknowledged that weak corporate governance is one of the factors that caused the impact of the 1997 AFC to become more serious in many countries in the region including Malaysia (Haniffa and Hudaib, 2006; Beh, 2007). The performance of many firms was seriously affected during the crisis period and minority shareholders were among the victims that were particularly hurt by the crisis.

The cause of weak corporate governance specifically in Malaysia is attributable mainly to the concentrated ownership structure of firms operating in the relatively weak enforcement environments (OECD, 2004). World Bank, in its 2005 assessment of corporate governance in Malaysia (World Bank, 2005), pointed out the nature of concentrated ownership by stating that in half of the ten largest publicly-listed firms in Malaysia, over 60% of outstanding

shares are owned by the top five largest shareholders. Fazilah *et al.* (2002) also states that the largest shareholder of a typical listed firm in Malaysia (with the majority of them family shareholders) on average holds close to one-third of the firm's shares and the top five shareholders own around 60% of the firm's shares. This indicates that not only is the ownership structure of firms highly concentrated, the nature of that high concentration also did not change much and remains the same after the 1997 AFC.

The AFC is considered as the watershed that caused the 'paradigm shift' in the way that regulators and businesses view corporate governance. Today, 14 years after the crisis, corporate governance has become one of the most mentioned phrases in the vocabulary of anyone interested in corporate news; from journalists to investors, regulators and corporate managers and directors themselves. The crisis instigated an impetus for corporate governance reform in the region.³ The Malaysian government initiated a series of corporate governance reforms after the AFC to improve and strengthen the corporate governance system in the country. However, it has been a frequent criticism that the governance environment in the country has caused corporate governance reform in Malaysia to produce nothing more than an impressive set of corporate governance rules, regulations and codes of best practices, on paper only (Yeoh, 2010). Many firms that follow the codes of best practice in corporate governance have managed to achieve the status of firms with good governance only in 'form' but not in 'substance'. One criterion of good governance that may appear in form but not in substance is to merely have a higher proportion of independent directors on the board without establishing whether the directors are truly independent.

The type of corporate governance reform that focuses purely on form may hinder the progress of corporate governance development in a real sense in Malaysia. Public investors continue to be fed with news of minority shareholder expropriation and even corporate scandals. Though major corporate scandals may not happen often, anecdotal evidence shows that expropriation of minority shareholders by controlling shareholders is not uncommon in

³ An important episode of corporate governance reform in the region was the release of 'Code of Conduct' related to corporate governance to supplement the legislative reforms. For instance, Korea introduces its Code of Best Practice for Corporate Governance in 1999, followed by Malaysia, Thailand, Indonesia, and Singapore with a similar type of corporate governance code between the year 2000 and 2001 (Sharif and Zaidansyah, 2004).

this country. Firms' efficiency and performance are being jeopardized as a result of these agency problems (Shleifer and Vishny, 1997; Claessens and Fan, 2002). Expropriation of minority shareholders is something that is often heard of and it occurs continually. In fact, it is always a major on-going corporate governance concern for authority and public investors.

The root cause of the expropriation of minority shareholders is the excessive control power that resides with the controlling shareholders as a result of their concentrated ownership in the firm. This is especially true in countries with relatively weak law enforcement and where political interference in business is prevalent. Very often, controlling shareholders in Malaysia are made up of family members (including individual persons from a family) who act collectively and concertedly as the ultimate owners with the largest control (voting) rights and exert their controlling power through the family members' direct involvement in the management/directorship of the firm. The controlling families in this case are known as the *owner-managers* of the firm and the firm is known as a *family-controlled* firm. Even when a professional CEO is hired to manage a family-controlled firm (which is seldom in Malaysia), his decision-making power and scope are often quite limited by the exertion of power of the controlling families (Joh, 2003).

Essentially, concentrated ownership in the relatively weak enforcement environment of Malaysia enables owner-managers to implement policy - or strategy - related corporate activities or practices that generate for them private benefits of control at the expense of minority shareholders, firm efficiency and performance. For example, the practice of forming business groups or strategies to diversify a firm can be used by controlling families to facilitate their expropriation activities. Control over the firms by owner-managers can also be enhanced by different choices of corporate practice. For example, a controlling family can practice having the top two positions in the firm, namely the CEO and chairmanship positions, served by family members.

Nevertheless, concentration of ownership structure is not all 'bad'. The literature has documented that concentrated ownership structure, particularly when a family is the largest controlling shareholder, can be beneficial to reducing agency problems and improving firm performance (Anderson and Reeb, 2003). Concentrated ownership, as mentioned earlier,

provides the controlling shareholders with both the incentive and the sufficient control power (voting power) to improve firm performance, as improved firm performance simultaneously increases their wealth. In addition, firms owned and controlled by families have positive, unique attributes which do not exist in other types of firms. Finally, policy - or strategy - related corporate activities or practices underlying concentrated family ownership may also exert positive influence to improve firm performance. The details of this discussion will be covered in the subsequent sections.

In short, according to Bennedsen *et al.* (2010), the main governance issue facing family-controlled firms today is balancing the advantage related to having a controlling family with the challenges this structure imposes on minority shareholders and firm performance. It is thus the theme of this thesis to examine the resultant influence of concentrated ownership structure and the underlying policy - or strategy - related firm activities or practices on the performance of family-controlled firms in Malaysia. The next section will explain these policy - or strategy - related activities or practices which have important implications in corporate governance in Malaysia.

1.3 Research Problem and Issues

1.3.1 Concentrated Ownership Structure

The legal and judiciary system of a country, the board of directors and the ownership structure can be considered as the three main pillars of corporate governance. This, together with market-based governance mechanisms - namely the market for corporate control, the market for executives and the product market - form an integrated system of corporate governance. Though the judiciary system in Malaysia is one based on common law, its enforcement is still lacking (La Porta *et al.*, 1999). One of the main reasons for relatively weak law enforcement is the political patronage in business: firms which are closely associated with influential political figures or the ruling political party may have privilege under 'selective imposition of rules and regulations' (Gomez, 2006). Details of political interference in Malaysia will be discussed in Section 2.2 in Chapter 2.

Due to concentrated ownership, the market for corporate control through takeover and acquisition as well as the ‘market for executives’ are at best described as inactive and there is little role for hostile takeovers to discipline managers who are not performing to a satisfactory level (World Bank, 1999). Under such ownership makeup in an environment where the families also hold the positions of CEO and/or executive chairman of the firms, it “*serves as an effective deterrent mechanism to outside hostile takeovers*” (Haniffa and Hudaib, 2006, p.1035). The bankers are also unable to play their roles in corporate governance because banks in Malaysia “*are poor governance agents because they are weak or have distorted incentives*” and “*are hardly able to take care of themselves*” (Thillainathan, 1999, p.5 and p.18). In such an institutional setting, concentrated ownership becomes the single most important corporate governance mechanism in Malaysia.

By maintaining a high concentration of ownership, the controlling shareholders have both the control power (voting power) and incentive to play an important role in monitoring management; in Shleifer and Vishny’s (1997) words, “*enough control over the assets... to have their interests respected*” (p.754). In fact, in Malaysia, most of the largest shareholders are themselves managers. Increased shareholder monitoring reduces the costs associated with the standard textbook principal-agent problem and hence firm performance rises. More importantly, the literature highlights that concentrated ownership structure has the advantage to generate the ‘incentive or alignment of interest effects’ particularly when the controlling shareholders are themselves entrepreneurs who have a long-term commitment in the firm. As mentioned earlier, these controlling shareholders are usually known as controlling families (Claessens *et al.*, 2000, 2002; Anderson and Reeb, 2003).

However, controlling shareholders can themselves engage in entrenchment and expropriation. Controlling shareholders may act in their own interests without considering the impact of their actions on minority shareholders and other investors. This conflict of interests between the controlling shareholders and the minority shareholders is known as the ‘principal-principal’ agency problem⁴ (Dharwadkar *et al.*, 2000; Young *et al.*, 2008). Zhuang *et al.* (2000) from the Asian Development Bank (ADB) suggest that weaknesses in corporate governance in East Asian countries (including Malaysia) appear to owe much to “*highly*

⁴ Or simply known as ‘Principal-principal Problem’. It is also known as ‘Type II Agency Problem’.

concentrated ownership structure, excessive government interventions, under-developed capital markets, and the weak legal and regulatory framework for investor protection” (p.2). Due to the weaknesses as outlined by Zhuang *et al.* (2000), it can thus be concluded that conflict between controlling shareholders and minority shareholders is the most important corporate governance problem in countries with relatively poor shareholder protection (La Porta *et al.*, 1999).

As introduced in Section 1.2, families are the most common type of controlling shareholders in Malaysia. A controlling shareholder is referred to as the largest shareholder who has the capacity to influence the policies and course of action of the firm. It is reported that up to 67.2% of the publicly-listed firms in Malaysia have family as the controlling shareholder (Haslindar and Fazilah, 2009). In general, it is contended that the inclination of controlling shareholders to extract private benefits increases with the increase in their controlling interest (Shleifer and Vishny, 1997; Claessens *et al.*, 2002; Lemmon and Lins, 2003). In other words, the higher the ownership concentration and therefore control, the more likely is the expropriation of minority shareholders or the firm’s resources going to occur.

A large controlling family may be wealthy enough that they prefer to maximize their private benefits of control (for instance diversifying into unrelated activities for various non-value maximization purposes such as empire building), rather than maximize their wealth. Unless the family owns the entire firm, they will not internalize the cost of these control benefits to the other shareholders (Thillainathan, 1999). Expropriation activities may subsequently jeopardize firm efficiency and performance.

Thus far, the literature does not come to a consensus on the influence of family ownership concentration on firm performance. Nonetheless, more recent studies have indicated that concentration of ownership in the hands of controlling families initially enhances a firm’s performance but the performance declines once expropriation is extensive and the family becomes clearly entrenched (Bhaumik and Gregoriou, 2010; Anderson and Reeb, 2003; Thomsen and Pederson, 2000; Morck *et al.*, 1988).

Another interesting question in ownership structure is with regard to how the presence of other types of block-holders would affect the expropriation and performance of the family-controlled firms. For instance, the establishment of the Minority Shareholder Watchdog Group (MSWG) in 2000 by the top five public institutional investors in Malaysia, shows the efforts by the institutional investors to instil good governance practice in publicly-listed firms so that the interest of minority shareholders can be protected (Effiezal *et al.*, 2008). It is thus intriguing to establish the influence of the shareholdings of various types of block-holders in family-controlled firms. Some studies show that expropriation of minority shareholders is less serious in family firms where the stake of the family is not so pronounced and therefore the family control is more vulnerable to contest by other types of block-holders in the firm (Maury *et al.*, 2005). The presence of other block-holders (who could form an alliance amongst themselves) would propose effective monitoring of the controlling families.

1.3.2 Governance Concerned Firm Activities/Practices underlying Concentrated Ownership

1.3.2.1 Control-Enhancing Practices

Controlling families generally enhance their private benefits by engaging in non-value maximization policy - or strategy - related activities or practices underlying concentrated ownership (Shleifer and Vishny, 1997). Specifically, the application of various family control-enhancing means, business group affiliation, extensive firm diversification, and deliberately influencing the appointment of independent directors could all be part of the strategy of controlling families to facilitate their expropriation activities and strengthen their power for further expropriation. For instance, Claessens *et al.* (1999c) find that firm diversification strategy is used to facilitate expropriation in firms in East Asian countries. Studies find that firms with expropriation problems, owing to their ownership structure, have lower efficiency and value (Claessens *et al.*, 2002).

As the largest controlling shareholders, families have a major influence on the appointment of board directors. In this case, control over the firm (through board directorship) would be

associated with the ownership structure. This relationship has considerable impact on various corporate activities/practices and the performance of the firm (Loh and Ragayah, 2007). Specifically, the influence of controlling families on director appointments may raise the question of whether independent directors are truly independent. If independent directors are not truly independent, they may not be able to play an effective role in monitoring the policy - or strategy - related corporate activities or practices engaged in by the controlling shareholders. For example, it is common in Malaysia for the controlling families to ‘invite’ retired senior government officials and politicians to join the firm as independent directors and the independent status of these directors is often questionable.

Due to the dominance of their ownership and control coupled with their superior knowledge about their firms, it is not difficult for controlling families to exploit minority shareholders by expropriating resources out from the firm in pursuit of their personal/family benefits (Le Breton-Miller and Miller, 2009). Control simply refers to the ability of a particular individual or group to dominate the decision making process within a firm. To have control over a corporation is to have the capacity to determine the policies and course of action of that corporation (Loh and Ragayah, 2007). According to Lim (1981), a high concentration of ownership affects potential control in that it enables the controlling shareholders to obtain and exert more control than is reflected by the actual amount of stocks they actually own, while minority shareholders’ control ability is minimized. This implies that controlling shareholders, under the high concentration of ownership may have nearly absolute control.

Controlling families also rely on various control-enhancing means to increase the control to be more than that of their ownership right. This control-enhancing means inflates the power of the controlling family and the inclination of the controlling family to expropriate increases. For instance, La Porta *et al.* (1999) and Morck *et al.* (2005) provide international evidence that through exploiting the pyramidal structure, family-controlled firms are able to exert disproportionate control compared with their cash-flow rights. Similarly, the authors also find that families are able to enhance their control by active participation in management positions. In Malaysia, 85% of family-controlled firms have managers (CEO or chairperson) who belong to a member of the controlling family. Even in developed economies such as the US, family-controlled firms are found to be relying on means such as excess board

representation and dual-class shares to enhance their control (Villalonga and Amit, 2009). Control is also enhanced when a family is the sole block-holder in the firm without the presence of a second block-holder. The control power of the family in this case is nearly unchallengeable.

In Malaysia, cases of acts of expropriation by controlling shareholders are not unheard of. For instance, one of the relatively recently, questionable transactions highlighted, involved one of the large family-controlled business groups in Malaysia, the Genting Group. The transaction involved the acquisition of the 25-storey office building for RM259 million, and lands for RM24.5 million, by one of the affiliated firms, Genting Malaysia (Resorts) from its parent company, Genting Berhad in September 2009.⁵ The Genting group operates under the pyramidal ownership structure in which Genting Malaysia's ownership is controlled by Genting Berhad whose ownership is controlled by the founding family. Several issues of concern have been raised by the investors in the particular related party transaction (RPT) (Business Times, 16 December 2009): (i) the Malaysia's Minority Shareholder Watchdog Group (MSWG)⁶ criticized that Genting did not portray the spirit of good corporate governance in the RPT as it did not seek the approval of its minority shareholders for the RPT, (ii) since both companies are publicly-listed (Genting Malaysia and Genting Berhad), they should appoint their own 'independent' property valuer/advisor instead of sharing the same independent advisor as they did, (iii) the fact that several directors were serving as independent directors in both companies at the same time raises the question of the independence of these directors, (iv) the fact that Genting Malaysia (Resorts) is a cash cow causes the investors to link the RPT as the act of cash extraction by Genting Berhad, the parent company (a divergence of cash flow to control right issue).

The Genting example is particularly relevant to the research problem of this study as it involves the activities of a business group that are believed to benefit the controlling family at the expense of the public minority shareholders, including the alleged profit redistribution from the cash cow company.

⁵ The Genting group is one of the large family-controlled business groups in Malaysia.

⁶ MSWG is a non-profit organisation set up by the government with the help of the five largest public institutional investors in Malaysia in 2000 aimed to protect the interest of minority shareholders and to enhance foreign investors' confidence in Bursa Malaysia (The Star, 9 Sept 2001).

1.3.2.2 Business Group Affiliation and Activities

Within the corporate sector, forming business groups is a common practice in family businesses in Malaysia. A family-controlled business group is formed when two or more publicly-listed firms are simultaneously controlled by the same family. In other words, the family acts as the common controlling shareholders for the firms.⁷ Family-controlled business groups in Malaysia often operate across a diversified range of activities within a sector, as well as across many sectors as diverse as plantation, manufacturing, trading, services, construction and property development (Thillainathan, 1999). The formation of business groups by controlling families can bring additional agency problems which do not exist in Anglo-Saxon countries, particularly in US and UK corporations (Morck and Yeung, 2003). It is believed that a specific type of expropriation known as ‘tunnelling’ of resources out from the listed member firms is more prevalent in family business groups than non-group affiliated family firms (Bertrand *et al.*, 2002, 2008; Bhaumik and Gregoriou, 2010).

How a business group facilitates private benefits of control can be illustrated by the phenomenon of profit or resource redistribution in business groups. Creating a business group allows controlling families to redistribute profits or resources from one member firm to another member firm at the expense of certain groups of minority shareholders. Profit redistribution can be carried out, for example, in the form of business loans which are injected from one member firm which is more profitable to a member firm which is less profitable, so that the less profitable firms can continue to survive, therefore ensuring the survival of the entire business group (Estrin *et al.*, 2009). The survival of the business group provides continuous opportunity to enjoy the private benefits of control to be gained from running a business group for controlling families.

Essentially, the low transparency of sprawling, loosely-affiliated business groups makes it hard to determine where control resides, as well as identifying and challenging unfair intra-group transactions (Chang, 2003) in which “*such networks provide significant opportunity for collusion or other unethical transactions*” (Young *et al.*, 2008, p.206). The expanded

⁷ Detailed discussion of business group affiliation is available in Chapter 2.

control (over a number of listed member firms) made possible by business groups increases the chances of expropriation of minority shareholders. The more complicated the structure of the business group, the more serious the problem outlined above may be. This is especially true in Malaysia where it is widely known that the controlling families of many business groups, particularly the large ones, have close relationship with influential senior politicians or government officials (Gomez, 2006; Gomez and Jomo, 1999). The relationship provides ‘political patronage and protection’ to facilitate the expropriation activities by the owner-managers. The principal-principal problems can therefore be more serious in this case. Qian *et al.* (2010) find that firms with political connections perform poorer than firms without such connections because controlling shareholders who have political connections “*steal more than political ties can bring in*” (p.5). In other words, political connection is more detrimental than beneficial as far as the public minority shareholders are concerned. According to Claessens and Fan (2002), in countries where politicians and businessmen collude to extract or protect ‘rents’, it is unlikely to achieve high quality corporate governance practices.

Thus more in-depth understanding of the agency problems facing family-controlled firms can be achieved by examining the business group affiliation issue in some detail.

1.3.2.3 Firm Diversification Strategy

Family firms may also be more inclined to reduce their risk exposure in the business because usually a significant proportion of the wealth of the owners is tied to their business. One such strategy to reduce risk is to diversify into unrelated business lines. Should a market segment not perform well, there are always other business segments to cover the losses. Chinese family firms in South East Asia (including Malaysia) have a tendency to diversify, as many of them are more widely diversified compared to firms from the West (Bruton *et al.*, 2003).

Though firm diversification is not a corporate governance mechanism *per se*, previous research has suggested that firms in Asia have been active in using firm diversification for private benefits and entrenchment. Thus agency problems can be different within diversified firms (Claessen *et al.*, 2002; Mitton, 2002). The lower transparency of diversified firms in

emerging economies gives rise to a higher level of asymmetric information that may allow owner-managers or controlling families to take advantage of minority shareholders with ease (Lins and Servaes, 2002; Lins, 2003). Mitton (2002) documented that loss in firm value could be particularly pronounced for firms with high diversification during periods of economic or financial crisis. This implies that expropriation of minority shareholders increases in diversified firms during periods of crisis (Mitton, 2002).

1.3.3 Why Examine Firm Performance?

It is exceptionally difficult to directly quantify the minority shareholders expropriation activities in the real world as these activities/transactions are normally conducted in a subtle manner or are tied together with other activities/transactions as a package for the board or shareholders to approve, whilst reducing attention from the authorities. Nonetheless, the effect of expropriation is manifested by the reduction in firm performance. Numerous past studies in concentrated ownership such as Claessens *et al.* (2000, 2002), Lins (2003), Lemmon and Lins (2003), and Qian *et al.* (2010) approach expropriation of minority shareholders or firm resources by examining the influence of ownership - or governance - related firm attributes on performance or value. Firms with expropriation will underperform firms without expropriation (Shleifer and Vishny, 1997; La Porta *et al.*, 1999; Lins, 2003; Dahya *et al.*, 2008) and the greater the expropriation, the lower the firm performance, taking into account other factors affecting performance. This is because the expropriation activities carried out by the controlling family/shareholders to maximize their family/personal benefits will bring about suboptimal firm policies which subsequently subdue a firm's total earnings, growth prospects and therefore the firm's market valuation (Anderson and Reeb, 2003; Bennedsen *et al.*, 2007; Maury, 2006; Perez-Gonzalez, 2006).

The significance of linking governance-related corporate activities or practices to firm performance is that poor performance, due to expropriation of minority shareholders and firm resources, has important consequences to business and the economy. Poor performance of firms caused by governance-related issues could lead to loss of reputation and shakes the confidence of public investors to invest in publicly-listed firms. Tunnelling which can take the form of expropriation of cash flows or assets or the combination of both (Atanasov *et al.*,

2008), would over time, result in loss of earnings for the firm, either directly or by way of loss of productive assets (Bhaumik and Gregoriou, 2010). Additionally, any perception of expropriation by the market can, in turn, adversely affect outside investment and thus the market performance of those firms.

The concerns outlined above have an implication for the mechanism of capital-raising from the public. Poor performance of firms may even threaten their very survivorship. The investment returns of public minority shareholders could be seriously affected if the performance of a firm deteriorates as a result of the decline in their corporate governance quality. This is especially true during periods of economic turbulence where the owner-managers of firms will be more inclined to abuse their position and expropriate the minority shareholders (Lemmon and Lins, 2003; Johnson and Mitton, 2003). The market may not be able to fully anticipate and capture the potential expropriation of all firms and as such the effects of decline in performance will be borne by the public investors. Thus, a sound corporate governance system is important, not only for protecting investors, but to also help reduce the risk of increased agency problems during times of crisis and therefore promote financial stability. An environment more conducive to the efficient and sustainable growth of the corporate sector can be created as a result.

Efficient use of resources can be promoted and firms' cost of investment capital can be reduced when both domestic and international investor confidence is boosted. Corporate assets will be utilized as agreed regardless of whether that capital investment is debt or equity financed when good corporate governance is practiced (Loh and Ragayah, 2007). A lower cost of capital translates into higher earnings performance and market valuation for the firms. On the contrary, misallocation of resources due to the resource expropriation and agency problems underlying the poor governance system will affect not only firm performance but eventually the economic growth and social welfare of a country.

1.4 Research Questions

From discussion of the 'research problem and issues' in the previous section, it can now be summarized that the main concern of corporate governance in East Asia including Malaysia

is the principal-principal agency problems that have been exacerbated by low transparency related to rent-seeking and relationship-based corporate culture; the use of control-enhancing means; extensive use of business groups and firm diversification. Thus the main research question (RQ) of this study is stated as follows:

Main RQ: *Coupled with the benefits brought about by concentrated family ownership, in what way will the concerns of concentrated ownership and the outlined underlying firm strategies/activities or practices in family-controlled firms influence the firm's performance?* In short, the study is interested in examining the consequences of the concentrated ownership structure and the underlying firm strategies/activities or practices on the performance of family-controlled firms.

It is the intention of this study to examine the above-mentioned research question in a direct, as well as indirect, manner. In other words, emphasis will be placed not only on the direct influence of one particular variable on another variable, but also the indirect influence of a variable through its moderating influence on the relationship between two variables. A deeper and richer understanding of the issues involved may be obtained by so doing.

The main research question stated above can now be broken down into several specific research questions (RQs) as follows:

RQ1: *Coupled with the benefits brought about by the concentrated ownership structure, in what way (for example, favourably or unfavourably) will the concerns of the concentrated ownership structure in family-controlled firms influence the performance of the firms?* It should be noted that 'ownership structure' refers to both 'concentration' and 'identity' of ownership [*i.e.* the level of shareholdings ('concentration') by each type of block-holders ('identity') in the family-controlled firms].

RQ2: *Will the firm activities or practices underlying concentrated family ownership, namely, the practice of relying on control-enhancing means and the activities associated with business group affiliation and firm diversification, be beneficial or harmful to the performance of family-controlled firms?*

RQ3: *What will be the moderating influence of board independence on the effects of family ownership as well as the underlying business group affiliation and diversification activities on firm performance?*

RQ4: *What will be the moderating influence of ownership structure as well as control-enhancing means and business group affiliation on the firm diversification-performance relation?*

Table 1.1 below provides a summary of past studies together with the theoretical basis that is used to help justify and formulate the research questions. The table also provides a brief explanation of the importance of the study in contributing to the literature. More detailed discussions pertaining to the literature, theoretical basis and contribution of the study are covered in subsequent sections or chapters as annotated in the table.

1.5 Objectives of Study

Following the research questions, the broad objective of this study is: to examine the influence of concentrated ownership structure and the underlying firm strategies/activities or practices (that give rise to corporate governance issues) on the performance of family-controlled firms. This broad objective can be satisfied by achieving the following specific individual objectives:

- a) To provide a detailed examination of the influence of the firms' ownership structure on firm performance. Specifically, the influence of the controlling family's ownership as well as the ownership of other block-holders in the family-controlled firms on firm performance is explored. (Hypothesis 1) – answering RQ1.

Table 1.1: Justification and Formulation of Research Questions

| Main Research Question | Sub-Research Questions | Theoretical Basis of the Study (Covered in Section 2.3, Chapter 2) | Some Previous Studies Associated with the Research Questions (Covered in Chapter 2 and 3 of the study) | Why Is This Study Being Conducted? (More Details in Section 1.7, Chapter 1) |
|---|---|--|---|---|
| <p>Coupled with the benefits brought about by concentrated ownership in family-controlled firms, in what way will the concerns of concentrated ownership structure and the outlined underlying firm strategies/activities or practices in family-controlled firms influence the firm's performance?</p> | <p><u>RQ1</u>: Coupled with the benefits brought about by the concentrated ownership structure, in what way (for example, favourably or unfavourably) will the concerns of the concentrated ownership structure in family-controlled firms influence the performance of the firms?</p> | <p><u>Main</u>: Agency Theory – Principal-principal Problem (also known as Type II Agency Problem) <u>Complementary</u>: Resource-based View</p> | <p>Shleifer and Vishny (1997), La Porta <i>et al.</i> (1999, 2000), Claessen <i>et al.</i> (2000, 2002), Claessens and Fan (2002), Anderson and Reeb (2003), Pederson and Thomsen (2003), Haniffa and Hudaib (2006), Tam and Tan (2007), Young <i>et al.</i> (2008), Andres (2008), Jara-Bertin <i>et al.</i> (2008), Bennedsen <i>et al.</i> (2010)</p> | <ul style="list-style-type: none"> • Analysis within the framework of concentrated ownership that explicitly incorporates the underlying firm activities/strategies or practices and their interplays, such as the explicit analysis of business groups in the domain of governance-related and performance study (to the knowledge of the researcher) has not been attempted in Malaysia. • Malaysia presents an interesting and important institutional context to examine the research questions in situation where the evidence of close link between corporate and politics is pervasive and well documented (for instance in Gomez and Jomo, 1997; Faccio <i>et al.</i>, 2006⁸; Faccio, 2006; Gomez, 1999). • Focusing only on ‘family firms’ - a promising area for governance-related study and not mixing with other types of firms such as state-controlled or widely-held firms. |
| | <p><u>RQ2</u>: Will the firm activities or practices underlying concentrated family ownership, namely, the practice of relying on control-enhancing means and the activities associated with business group affiliation and firm diversification, be beneficial or harmful to the performance of family-controlled firms?</p> | | <p>Lincoln <i>et al.</i> (1996), Ang <i>et al.</i> (2000), Khanna and Palepu (2000a), Joh (2003), Morck and Yeung (2003), Gomez (2006), Claessens <i>et al.</i> (2006), Cheung <i>et al.</i> (2006), Khanna and Yafeh (2007), Florackis (2008), Estrin (2009), Berkman <i>et al.</i> (2010), Bhaumik and Gregoriou (2010), Almeida <i>et al.</i> (2011), Masulis <i>et al.</i> (2011)</p> | |
| | <p><u>RQ3</u>: What will be the moderating influence of board independence on the effects of family ownership as well as the underlying business group affiliation and diversification activities on firm performance?</p> | | <p>Rakider and Seth (1995), Filatotchev <i>et al.</i> (2005), Nazli and Weetman (2006), Bru and Crespi-Cladera (2006), Gani and Jermias (2006), Dahya <i>et al.</i> (2008), Kim <i>et al.</i> (2008), Chen <i>et al.</i> (2009), Fahlenbrach <i>et al.</i> (2010), Prabowo and Simpson (2011), Chen and Chen (2012)</p> | |
| | <p><u>RQ4</u>: What will be the moderating influence of ownership structure as well as control-enhancing means and business group affiliation on the firm diversification-performance relation?</p> | | <p>Amihud and Lev (1981), Claessens <i>et al.</i> (1999c), Chen and Ho (2000), Lins and Servaes (2002), Hoskisson <i>et al.</i> (2005), Zuaini and Napier (2006), Chakrabarti <i>et al.</i> (2007), Singh <i>et al.</i> (2007), Zunaidah and Fauzias (2008), Chu and Song (2011)</p> | |

⁸ In Faccio's *et al.* (2006) study on political connections among 35 countries in the world, Malaysia is the country with the highest percentage of firms with political connections.

- b) To examine aspects of family-controlled business group affiliation pertaining to governance and firm performance. Specifically, the effect of group affiliation on firm performance against the non-group firms (also known as independent firms) is examined. This is followed by examining the phenomenon of profit/resource redistribution in business groups and the efficiency of profit/resource redistribution in group-affiliated firms compared to non-group firms (as efficiency can impinge on firm performance). (Hypotheses 2a and 3) – answering RQ2.

- c) To examine the influence of family control-enhancing means on the performance of group-affiliated firms as well as non-group firms. The control-enhancing means to be examined are: the use of pyramidal structures to diverge the cash flows-to-control right; the forming of complicated business group structures; increase of family directors on the board; monopoly of family members in both the board chairperson and CEO positions; and the presence of the controlling family as the sole blockholder of the firm. (Hypothesis H2b-2g) – answering RQ2.

- d) To examine and compare the relationship between firm diversification and firm efficiency and performance in group-affiliated firms and non-group firms. In addition to the direct effect, focus is also directed towards examining the contributory effects of governance-related firm attributes; namely the ownership structure and the control-enhancing means in influencing the firm diversification-performance relation. (Hypothesis 4) – answering RQ2 and RQ4.

- e) To examine the moderating role of board independence on the influence of governance-related firm attributes or activities on firm performance. Specifically, the moderating influence of board independence on the effects of family ownership and diversification on firm performance is examined. The moderating influence of board independence on the efficiency of profit redistribution in group-affiliated firms is also examined. (Hypotheses H1c, H3d, H4j) – answering RQ3.

1.6 The Research Framework

The conceptualization of the entire study and the relationship between the objectives of the study and the hypotheses can be seen in the flowchart diagram of research conceptual framework (see Figure 1.1). The diagram depicts all the conceptual variables⁹ involved in the study and their influences on firm performance are indicated by the numbered hypothesis. The development of all the hypotheses as numbered in the diagram is fully explained and justified in the section on hypotheses development in Chapter 3. The flowchart starts with the concentrated ownership structure of family-controlled firms in a relatively weak law enforcement environment where political interference in the corporate sector is prevalent. Four areas of firm activities or practices underlying concentrated ownership structure which may give rise to corporate governance concerns are identified and developed into four main themes of the study.

As shown in Figure 1.1 (from the solid lines that branch out from the ‘Concentrated Ownership’ box), these areas of activities or practices are: i) the ownership holdings of controlling families and other block-holders; ii) business group affiliation and other control-enhancing means; iii) profit redistribution and related issues in business groups; iv) firm diversification activities. These firm activities or practices are either made possible by the concentrated ownership structure or at least highly influenced by it.

Four sets of hypotheses from set H1 to set H4 are then developed to form the conceptual framework, with each representing an area of governance concern underlying concentrated ownership structure. As mentioned earlier, not only is the direct influence of each conceptual variable on firm performance examined; the effects of the interaction amongst the variables (through the use of moderating variables) on firm performance are also examined so that more insight and a deeper understanding of the issues involved can be obtained.

Hypotheses in set H1 (highlighted in purple) concern the influence of ownership structure on firm performance. The diagram shows that in addition to the hypotheses on the direct

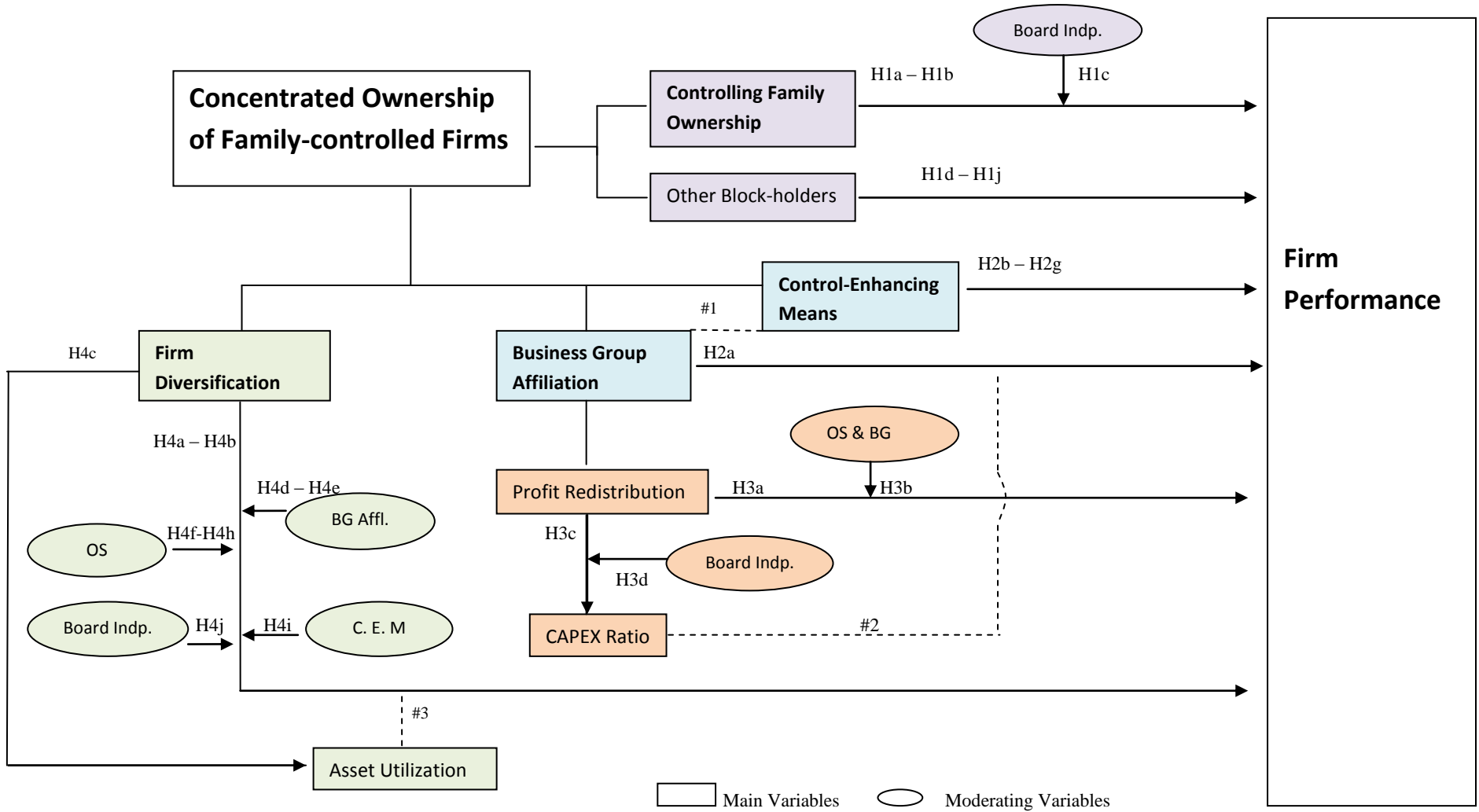
⁹ The operational variables pertaining to the conceptual variables are discussed in Chapter 4 – Data and Methodology.

influence of ownership structure on firm performance, the moderating influence of board independence on the relationship between controlling family ownership and firm performance is also examined. Set H2 (highlighted in blue) concerns the influence of business group affiliation and other family control-enhancing means on firm performance. The dotted line #1 indicates that control-enhancing means are in part associated with business group affiliation as some of the control-enhancing means, namely the pyramidal ownership structure and the complexity of business group structures, are available only to the group-affiliated firms.

Set H3 (highlighted in red) concerns the profit redistribution phenomenon in family-controlled business groups and the influence on firm performance. It also examines the influence of profit redistribution on the capital expenditure ratio in which the outcome could then be linked back to explain the relationship between business group affiliation and firm performance (as indicated by dotted line #2).

Set H4 (highlighted in green) concerns the influence of firm diversification on performance. As shown in the green area of Figure 1.1, the emphasis in this area is the use of numerous hypotheses to examine the moderating influence of other governance-related firm activities/practices on the firm diversification-performance link. These activities/practices include the areas of ownership structure, board independence, business group affiliation, and control-enhancing means. The influence of firm diversification on asset utilization (which refers to the asset turnover ratio) is also examined in which the outcome on asset utilization could be linked back to explain the relationship between firm diversification and performance (as indicated by dotted line #3).

Figure 1.1: Conceptual Framework of the Study



Notes to Figure 1.1:

1. OS = Ownership Structure.
 2. BG Affl. = Business Group Affiliation.
 3. C.E.M. = Control-enhancing Means.
 4. Board Indp. = Board Independence.
 5. OS & BG = Ownership Structure and Business Group Affiliation.
 6. Arrow lines (—→) coming out from the main (moderating) variables indicate that the variables are hypothesized as having an influence (moderating influence) on firm performance.
 7. Dotted line (-----) #1 indicates that Control-Enhancing Means are in part associated with business group affiliation as some of the control-enhancing means, namely, the pyramidal ownership structure and the complexity of business groups are only available to the group-affiliated firms and not the non-group firms.
 8. Dotted line (-----) #2 indicates that Capital Expenditure-to-Total Assets (CAPEX ratio) [which is used to examine the efficiency of resource redistribution in group-affiliated firms] could be linked to explain the relationship between group affiliation and firm performance.
 9. Dotted line (-----) #3 indicates that Asset Utilization (which refers to the asset turnover ratio) could be linked to explain the relationship between firm diversification and performance.
 10. Solid lines joining two variables (——) indicate association between the variables.
-

1.7 Scope and Significance of Study

First and foremost, concentrated ownership and its underlying governance-performance issues in this study are investigated and discussed from the perspective of a shareholder rather than a stakeholder. This does not mean to discount the importance of the stakeholder theory of corporate governance but is to essentially keep the scope of the study manageable. Thus discussion on the effects on stakeholders other than shareholders such as employees, creditors, and consumers will be minimal and they may be considered for future, post-doctoral research.

This thesis examines the relationship between concentrated ownership and the underlying firm activities or practices and firm performance in a single legal and institutional environment, therefore allowing the study to hold constant a number of important contextual factors. Put differently, undertaking a single country ownership study instead of a cross-country study has the advantage of avoiding endogeneity problems between ownership structure and other related variables and country-specific institutional characteristics (Joh, 2003; Filatotchev *et al.*, 2005). In other words, the relationship between ownership-related variables and firm performance may be caused by the difference in political and corporate environments, legal systems and enforcement, taxation or accounting rules. By focusing on a single country - Malaysia - this study can control for the outlined country-specific factors.

Though research on family-controlled firms and their performance is burgeoning, they are mostly based on examples from the West. Given their different environmental systems, the results of studies in these countries are not generalisable to emerging economies such as Malaysia. Though family business is the most common type of ownership structure in Malaysia, little research has been conducted in the area and many issues related to family ownership and underlying firm activities or practices such as the use of control-enhancing means, board independence issue, and group affiliation and diversification activities are yet to be sufficiently explored. Since there have been increased efforts only in recent years to investigate issues in emerging economies (e.g. Prabowo and Simpson, 2011 in Indonesia; Charkrabarti, 2007 in India; Tan and Tam, 2007 in Malaysia; Guest and Sutherland, 2010 in China; and Almeida *et al.*, 2011 in Korea), the pool of literature pertaining to issues in these economies is still limited. As such, this study intends to fill the gap and in so doing, contribute to the better understanding of the influence of family ownership and the underlying firm activities or practices on firm performance. This will also help policy-makers to draw up effective guidelines or codes that are, at the same time, accommodating of the unique features of family firms.¹⁰

To the best of the researcher's knowledge, this study is one of the first to provide a comprehensive empirical analysis in an approach that integrates ownership variables and respective underlying governance issues (business group affiliation, control-enhancing means,

¹⁰ The policy implications of the study are discussed in detail in Section 7.3 in Chapter 7.

and firm diversification) with corresponding interaction terms for family-controlled firms in Malaysia. According to Claessens and Fan (2002), business group affiliation and firm diversification are among several corporate governance issues underlying concentrated ownership structures which are specific to Asia, or at least more important in Asia.

Little is currently known on the interacting influence, or the interplay of, ownership and these underlying firm activities or practices on firm performance. For instance, while the relationship between firm diversification and performance has been widely researched in the literature with no definite conclusion, there are few studies which have examined the impact of the interplay between firm diversification and other governance related or concerned variables such as ownership structure, control-enhancing means, board independence, and group affiliation on firm performance. Studying the interacting effects of these firm activities and practices helps us to increase our understanding of the governance issues involved and gain richer insights into these issues so that more meaningful implications can be drawn. This study thus contributes to filling the gap in this context by providing a new spectrum of knowledge with regards to concentrated ownership, underlying firm activities or practices as well as their interaction effects on firm performance in Malaysia.

1.7.1 Why Publicly-listed, Family-controlled Firms?

According to a recent paper by Bennedsen *et al.* (2010), ‘family-controlled firms’ is a fertile ground for corporate governance and performance research. One of the reasons is because family-controlled firms are associated with significantly more dispersion in the measure of their performance than other types of firms and the corporate governance mechanisms that lead to such extreme performance outcomes are at present only partially understood (Bennedsen *et al.*, 2010). Thus, by focusing on the influence of the concentrated ownership structure of family-controlled firms and underlying firm activities or practices on firm performance, this study contributes to our understanding of the extreme governance-performance outcome as stated by Bennedsen *et al.* (2010), and by so doing; fills the gap in the corporate governance, as well as family firms, literature.

The interest of the researcher to focus on family-controlled firms in this study is also because family is the most common block-holder controlling two-thirds of publicly-listed firms in Malaysia (Claessens *et al.*, 2002; Business Times, 2010). Family-controlled firms are also the most common type of corporations in many other countries around the world (Bhaumik and Gregoriou, 2010). They represent a special class of large shareholders that have a unique incentive structure and strong motivation of owner-managers (Demsetz and Lehn, 1985) which is not found in other large shareholders such as institutional investor-controlled firms. This is because the owner-managers have the tendency and obligation to pass on wealth to the next generation and thus they possess longer-term commitment compared to non-family firms where the professional managers may be short-termist in their management approach. Thus it is important to conduct more governance-related research in family-controlled firms in order to have a deeper understanding on the governance-performance related issues in this type of firm which are currently much under-researched in Malaysia. Moreover, the decision to focus on family-controlled listed firms only is based on the assumption that mixing them with other types of listed firms could cause loss of focus to the study. This focus also helps to make the study manageable.

Though research into the problems of firms that are widely-held is abundant, research on family business groups is in its infancy due to the fact that this type of business group structure is absent in the US and UK, where most corporate governance research is carried out (Morck and Yeung, 2003). Business group affiliation is a significant governance feature of particular relevance in many East Asian countries including Malaysia and it forms part of the wider research domain of family business governance. Thus a substantial portion of this study is devoted to examining governance-related issues in family-controlled business groups, and by so doing, contributes to this promising area of corporate governance research.

Finally, this study focuses only on publicly-listed family-controlled firms and does not include privately-held family-controlled corporations in order to avoid the difficulty of obtaining data in privately-held corporations. Data on publicly-listed firms are publicly available and more importantly trustworthy as their source is mainly audited company annual reports. As shares of listed firms are publicly traded, market-based performance measures

can also be employed in the study and therefore the problem of performance measures being constrained only to accounting-based measures can be avoided.

1.7.2 Why Malaysia?

The Malaysian corporate sector represents an interesting research laboratory that presents an opportunity to expand further prior research and to make a number of contributions. First, it enables us to analyze the influence of concentrated ownership and the underlying firm activities or practices on firm performance, in situations where the managers are frequently family members, where family members also serve on the corporate board, and where they have the largest equity ownership of the firm (the largest provider of capital), either directly or indirectly through relational shareholdings in other firms (Bruton *et al.*, 2003; Filatotchev *et al.*, 2005).

Second, research on the influence of concentrated ownership and the underlying firm activities or practices; namely, the business group affiliation, the use of control-enhancing means, and firm diversification on firm performance in small emerging economies such as Malaysia is very limited as most of the previous studies in this area are targeted either at firms in advanced economies or large emerging economies such as India and China. Thus the findings in this study are useful to reflect upon in relation to other similar-size emerging economies.

Third, Malaysia offers a unique institutional setting for the research. Due to the implementation of a peculiar affirmative economic policy since 1970,¹¹ the line between the corporate sector and politics in Malaysia becomes blurred. Corporations with political connection, including family-controlled ones, are prevalent in Malaysia compared to elsewhere in the world. Therefore the findings in this study are particularly relevant to the emerging economies with considerable business-political connections. The study thus adds to the corporate governance literature in this particular context. Moreover, the relationship-based corporate culture makes it an intriguing study because this environment has produced its own variants of principal-principal problems. Strategic choices of firms such as decisions

¹¹ A review of Malaysia's economic policy is provided in Chapter 2.

on the diversification and business group affiliation strategies may produce different outcomes under different institutional contexts. Therefore, study conducted in this rich institutional context may provide more insight into how institution shapes the outcomes of the findings compared to countries with different institutional settings, particularly those in developed countries. According to Scott (1995) [as cited in Young *et al.* (2008)], “*it is difficult if not impossible to discern the effects of institutions on social structures and behaviours if all our cases are embedded in the same or very similar ones*” (p.210). Therefore, this research with its focus in Malaysia, a small emerging economy, can enlighten management study and practice not only in Malaysia, but also in developed economies such as that of the UK.

Fourth, in keeping with the Listing Requirements of Bursa Malaysia, all the listed firms in Malaysia are required to prepare their financial statements according to the accepted Malaysian Accounting Standards Board (MASB) and the Ninth Schedule of Malaysian Companies Act, 1965. In other words, data based on the annual reports are consistent with the accounting standards. The firms are also required to abide by the disclosure standards of the listing requirements. The data lodged with Bursa Malaysia would also need to be certified by qualified auditors and made accessible to the public. It is thus reasonable to consider that accounting data/financial information disclosed by the firms is consistent in quality (Fraser *et al.*, 2006). This, together with the relatively developed stock market in Malaysia, provides an opportunity to conduct a relatively rigorous empirical study using firm-level accounting and stock market data.

Finally, since Malaysia is the researcher’s home country, apart from being more familiar with the Malaysian corporate world, choosing Malaysia as the country of research focus helps to contribute to the empirical findings and literature of corporate governance in Malaysia. Thus, the compilation of knowledge can be used by relevant parties in Malaysia to help create more awareness in the corporate sector on the importance of embracing the substance of good corporate governance, particularly so if Malaysia were to be brought to the forefront of the world’s economies in the future.

1.8 Structure of the Thesis

The remaining chapters of the study are as follows:

Chapter 2 – Literature Review provides a review of current literature and other relevant sources that guide our understanding of the issues of interest in the study. It outlines the salient features of the Malaysian governance and institutional environment and explores the extant literature around ownership structures and the associated business group affiliation and board independence issues. Attention is given to the review of literature associated with East Asia and Malaysia. The chapter also provides an explanation of the theoretical basis of the study.

Chapter 3 – Literature Review with Corresponding Hypotheses is a continuation from Chapter 2. It focuses on the part of the literature review that is directly utilized to establish and justify the hypotheses in the study. Specifically, justification is made of the hypotheses that are developed and centred around the direct, as well as moderating, influence of concentrated ownership structures and the underlying firm activities/strategies or practices on firm performance. Hypotheses are introduced and stated sequentially as the review of literature progresses.

Chapter 4 – Data and Methodology provides a detailed discussion on the process of data collection and construction of variables. It also explains the methods of analysis used in the study and the justification for using them. The hypotheses introduced in the previous chapter are subjected to empirical testing by using model specifications as constructed and explained in this chapter. The chapter also contains a brief description of the philosophical stance and ethical issues of the research.

Chapter 5 – Findings and Discussions I: Descriptive Statistics represents the initial stage of analysis in the study. It provides quantitative description and comparison on the main statistical features of the variables in the study (e.g. percentage, mean and median, and standard deviation) in order to prepare for the subsequent analysis and inferences in the next chapter. Some univariate tests are performed accordingly.

Chapter 6 – Findings and Discussions II: Multivariate Analysis presents the analyses and findings based mainly on the multiple and moderated regression techniques. It aims to answer and respond to all the hypotheses and consequently the research questions developed in the study. Discussions from the analysis and findings are undertaken and inferences and implications are drawn and presented.

Chapter 7 – Conclusion offers an overall discussion on the findings followed by an overall evaluation on the policy implications of the study. It also discusses the contribution of the study to professional practice. Lastly, the chapter outlines the limitations of the study and suggestions for future research.

1.9 Chapter Summary

The purpose of this chapter is to conceptualize the entire study. It began with a ‘quick view’ of the study and addressed the question, ‘what is this study all about?’ It contains a brief explanation of the main research question and the broad objective of the study. It also provided a brief summary of findings. The chapter then proceeded to explicate the background for the study. Emphasis is given to the corporate governance development and concerns in Malaysia after the 1997 Asian Financial Crisis. Among the concerns of corporate governance reform in Malaysia is the highly concentrated structure of ownership in family-controlled firms operating in an environment of weak rule enforcement coupled with emphasis on the ‘form’ but not the ‘substance’ of governance. All these result in excessive control power in the hands of controlling families and allows them to make decision on strategies/activities or practices that privately benefit them at the expense of overall firm performance and thus minority shareholders.

The ensuing section of the chapter explained the research problem and issues. Gaps in the literature were identified and major themes of the study were explored and discussed. The section is divided into several sub-sections according to the major themes of the study. It began with the explication on why concentrated ownership structure is the single most

important corporate governance mechanism in Malaysia. It then discussed some of the advantages and disadvantages of concentrated ownership. The discussion also included the importance of other types of block-holders in family-controlled firms. The next sub-section explained the various means available to controlling families to enhance their control over the firms. They include the use of pyramidal ownership structure; the direct control of family over the two top positions of the firm; the increase of board representation; and when the families appear as the sole block-holder of the firm. The consequences of the availability of such means are an increased tendency of expropriation of the firm's resources and minority shareholders' interests. The real world case study of the Genting Group is provided to illustrate the potential expropriation by a controlling family.

The subsequent sub-section explained the potential of business groups to facilitate activities that could provide private benefits to controlling families. These include activities such as 'tunnelling' and 'redistribution of profits/resources'. The close connection of business groups with politics is also illuminated. This is especially true in business groups that are large in size and complicated in their group ownership structure. Firm diversification as a potential means to create private benefits was explained in the next sub-section. The chapter then proceeded to explicate why firm performance is chosen as the output variable in the study. It is noted from the literature that one method to approach the issue of expropriation of minority shareholders is by examining the influence of the governance-related firm attributes such as ownership and underlying activities on firm performance. Since expropriation activities are associated with sub-optimal policies and decision-makings, increasing expropriation is thus associated with decreasing firm efficiency and performance.

Following detailed explanation of the research problems and issues, the main research question, together with the specific sub-questions, was then formulated and presented in the subsequent section, followed by the objectives of study. Five objectives of study were identified, each with its respective hypotheses. The conceptual framework of the study was then presented in the following section where the conceptualization of the entire study is illustrated in Figure 1.1. The chapter then presented a detailed section on the scope and significance of the study. The section justifies the importance of studying governance-related issues on publicly-listed family-controlled firms. It also justifies the reasons for choosing

corporate Malaysia as the research laboratory. The chapter concluded with an explanation on the structure of the thesis.

In the next chapter, literature relevant to ownership structure and associated firm activities or practices is explored and reviewed. The theoretical basis for the study is also explained. Prior to that, attention is drawn to the discussion on the development of the Malaysian corporate environment and political involvement in business.

Chapter 2 – Literature Review

2.1 Chapter Outline

Chapter 2 begins with a review of the governance environment and corporate culture in Malaysia. Firstly, the development of Malaysian economic policy since independence is presented. Emphasis is given to the development which has resulted in the establishment of affirmative economic policy from 1970 to the current day. This development has a crucial impact on the blurring of lines between politics and the corporate sector which subsequently adversely affects the corporate governance environment in the country. The section reviews how the public governance, weakened by money politics and corruption, coupled with relationship-based corporate culture and cronyism, has impacted upon corporate governance development in the country.

Having examined the corporate environment in Malaysia, the following section presents the theoretical basis for the study before proceeding to a review of the ownership structure literature. Attention is drawn to ownership structure in East Asia and Malaysia. The subsequent section reviews the issue of board independence, from the perspectives of ‘agency theory’ and ‘resource-based view’. The next section is devoted to the review of business group affiliation which forms a substantial part of the study. Highlighted in the section are the different ways in which business groups are being defined in the literature, as well as in East Asian countries. The focus of the section is on family-controlled business groups in East Asia including Malaysia. A sub-section touches on the pyramidal structure, a characteristic that exists in some of the business groups in this country.

2.2 The Malaysian Governance and Institutional Environment: Political Involvement in Business and Relationship-based Corporate Culture

Principal-principal problems that exist among corporations in East Asia including Malaysia, as introduced in Chapter 1, are exacerbated by a corporate environment of low corporate

transparency, rent-seeking activities and relationship-based corporate culture (Claessens and Fan, 2002). This prevailing corporate environment in turn has a direct bearing on the opportunity of controlling shareholders to expropriate through firm activities or practices underlying concentrated ownership. It is thus important for us to understand from a historical viewpoint the development of the governance and institutional environment in this country, in which family-controlled firms operate.

The review in this section serves two purposes: i) an appreciation of the development of Malaysian governance environment and corporate culture will provide the reader with sufficient background knowledge to better understand the research problem and issues as outlined in Section 1.3 in this study and, ii) the study attempts to make the case that interference of politics in corporate Malaysia caused by the government's unique affirmative economic policy (to be explored below) has profoundly influenced corporate governance quality in the country. In other words, political connections have caused the controlling shareholders of firms to have greater inclination to expropriate firm resources and minority shareholders. This is particularly true among the controlling shareholders of large business groups where the nexus between politics/state and business is most clearly displayed (Yeoh, 2010).

The corporate culture in Malaysia and many other East Asian countries is one that is relationship-based (Rajan and Zingales, 1998). This is opposed to the arm's length corporate culture in Anglo-Saxon countries. Family-controlled listed firms in Malaysia are located in a unique institutional setting and governance environment which differ from other countries. This is because apart from South Africa, Malaysia is the only country in the world that has an affirmative action policy for the majority (Adam, 1997), with the aim of improving the economic status of the majority of ethnic Malays. As a result, many family-controlled listed firms in Malaysia in general embrace the culture of rent-seeking encouraged by the government's long-term economic affirmative action policy. A review of the impact of the policy on the governance environment and corporate culture in Malaysia is provided in the subsequent paragraphs.

The close link between business and politics in Malaysia is well documented (for example in Gomez and Jomo, 1999; Faccio, 2006; Gomez, 2006). According to Gomez and Jomo (1999), two forms of political favouritism exist in corporate Malaysia today. They are (i) where official status is awarded to firms that are managed by ethnics Malays and (ii) where informal ties exist between senior politicians and firms that are controlled by either the Chinese or Malay individuals/families. Firms with official status are also known as government-linked corporations in which the government itself is the largest shareholder and has absolute control over the firms. The discussion of political connection in this study focuses on the second form of political connection: firms which are family-controlled but where the controlling families are linked to prominent government officials or political figures.

2.2.1 The Pre-New Economic Policy (Pre-NEP) Period

Political favouritism in corporate Malaysia can be traced back to 1957 when the then Malaya gained independence from the British. As in many other British colonies during the British colonial period, the people in Malaya were subjected to the 'divide and rule' policy (Verma, 2004). The Malays, being the indigenous people of the country and forming over half the population, were mostly confined to the villages and lived as peasants, working as fishermen and civil servants. Chinese and Indian people have migrated to Malaya since the nineteenth century, and have therefore been part of the Malayan society for over a century. Naturally entrepreneurial, the Chinese mainly settled in urban areas and were involved in businesses; trading and tin mining, and the Indians mainly worked and lived in the rubber estates controlled by the British (Verma, 2004).

Among the three main ethnic groups (Malays, Chinese and Indians), the Chinese were the most economically dominant as many of them were actively involved in productive economy activities. Income inequality among the races started to become a cause for concern. The Malays were mindful of and insecure about the economic dominance of the Chinese. For example, in 1957/58, the average monthly household income for the Chinese was, in Malaysian Ringgit (RM), 300 followed by Indians RM237 and Malays RM139 (Snodgrass,

1980). The Malays (particularly the pre-colonial Malay ruling class) were more interested in political power and colonial administrative services and occupied positions immediately subordinate to those held by British administrators.

The United Malays National Organisation (UMNO) was founded in 1946 as a political party to protect the Malays' interest and many of those who led UMNO actually began their careers in colonial administration (Jomo, 1988). Due to the weaker socio-economic position of the Malays compared to other ethnic groups, especially the Chinese, when Malaya gained independence from the British in 1957, the Special Rights status for the Malays was incorporated as Article 153 of the Federal Constitution of Malaya to safeguard Malays' interests by reserving quotas to Malays in certain areas as stipulated in the article. Upon independence, the Malays had gained political power from the British but economic power resided with the Chinese. As stated by Jomo (1988), political power without an economic base was essentially fragile and untenable in the long run.

To promote Malay capitalism, UMNO, the dominant ruling party since independence, carried out some 'economic development' programmes and activities for the Malays under the Malay Special Rights. For instance, in 1965, the First National Bumiputera¹² Economic Congress was held and Bank Bumiputera was established, both aiming to improve the Malays' economic status and accumulation of Malay capital (Jomo, 1988). Despite these efforts, actual progress did not bring satisfactory results. Moreover, due to the practice of the laissez-faire system after independence from 1957-1970, the Chinese economic dominance continued to grow and expand whereas the majority of Malays continued to be economically subordinate. The income inequality between the Chinese and Malays became even more serious.

By 1970, the average household monthly income for the Chinese had increased to RM399 while the Malays remained lowest at RM177 (Heng, 1997). Chinese ownership in the corporate sector in 1970 was 34.4%, while the Malay ownership was negligible at a mere 2.4% (Heng, 1997). After over a decade's accumulation of discontent and frustration over uneven

¹² *Bumiputera* is a term used to refer to the indigenous people of Malaysia which consist mainly of ethnic Malays.

economic development among different ethnic groups, the inter-racial antagonism finally resulted in the post-election race riots of 1969. The government was convinced that the economic deprivation of the Malays was one of the main causes of the riots.

2.2.2 The New Economic Policy (NEP) Period

Fundamental changes to the Malaysian socio-economic, political and corporate landscape took place after the riots with the implementation of the ambitious 20-year New Economic Policy (NEP) (1970-1990), whose aims was to rectify the socio-economic imbalance among races (Horii, 1991). The two-pronged objective of the NEP was to eradicate poverty and restructure Malaysian society so that race dictating status within the economic function could eventually be eliminated. UMNO's hegemony in the government gave the Malay party leverage to pursue a series of ethnic affirmative actions under the NEP involving subsidies, licenses, credit schemes, ethnic employment quotas, tertiary education opportunities and federal scholarships etc.

More importantly, in the corporate and commercial sectors, various steps and measures were taken with the aim of rectifying inter-ethnics imbalance in the equity ownership and control of ownership in the country so that by 1990 *“at least 30% of the total commercial and industrial activities in all categories and scales of operation should have participation by Malays and other indigenous people in terms of ownership (including the corporate equity ownership) and management”* (Malaysia, 1971, p.158). It is said that the NEP had led to *“partial abandonment of the previously more laissez-faire (economy)...in favor of greater state intervention, primarily for ethnic affirmative actions, including the accelerated expansion of the Bumiputera middle class...and the creation of Bumiputera capitalists”* (Gomez, 1999, p.37).

From the perspective of the Chinese businessmen, the implementation of the NEP forced them to realize that in order to continue to have access to the means to accumulate wealth; they needed to cultivate ties with the influential Malays in UMNO. The Chinese capitalists began to recruit Malay politicians, politically influential Malays, and Malay ex-civil servants

as company directors; some businessmen even began funding UMNO and its leaders (Gomez, 1999). Crony capitalism, whether acknowledged or not, is believed to have been promoted during the NEP era. Both Chinese businessmen and the Malays political elite found the informal ties mutually lucrative. Some Chinese capitalists have been known to finance ambitious politicians as a means of gaining access to government patronage.

2.2.2.1 The Mahathir Era

In 1981, the appointment of Mahathir Mohamad as the president of UMNO and prime minister of Malaysia further strengthened the promotion of Malay Capitalism (Gomez and Jomo, 1999). Though Mahathir was disappointed at the mentality of some Malays businessmen and their overdependence on the government for contracts/concessions and subsidies as well as their ‘Ali Baba’¹³ way of doing business, he still relied on the ‘internal way’ of addressing the problem. Fearing that the Malays would pass their new-found wealth to the Chinese, Mahathir mentioned that “*the best way to keep shares between the Bumiputera hands is to hand them over to the Bumiputera most capable of retaining them...*” [Far Eastern Economic Review (13 April 1979)]. Due to Mahathir’s effort to explicitly promote Malay Capitalism, many Malay corporations (including publicly-listed corporations) that were set up to implement government projects during the 1980s and 1990s had close links to the Malay political elite including Mahathir himself.¹⁴ In other words, such continuous effort has led to the emergence of numerous crony capitalists and the proliferation of ‘money politics’¹⁵ (Gomez and Jomo, 1999). Political patronage has created avenues for politicians to gain access to large sums of money for party and general election campaigns.

A group of politically influential ‘new rich’ emerged in the mid-1980s, many of whom were UMNO members (Malay businessmen-cum-party members) and some Chinese

¹³ Ali Baba is the practice of using companies owned by Malays (Ali represents a Malay) to secure tenders for government projects/contract and later on pass on the contracts/projects to the Chinese (Baba represents a Chinese) to actually run the projects. In return, Ali will get a mutually agreed amount in payments or a certain percentage of the profits for the deal (Heng, 1997). ‘Ali Baba’ is commonly known as the way to ‘get rich quick’.

¹⁴ Gomez and Jomo (1997) provide a list of publicly-listed corporations that are closely associated with the top three most powerful politicians in the 1990s; Mahathir himself, Anwar Ibrahim (the then Deputy Prime Minister), and Daim Zainuddin (the then Finance Minister).

¹⁵ According to Gomez and Jomo (1999), money politics refers to a number of related issues, including political party involvement in business, abuses of power for corrupt purposes, and political patronage.

businessmen.¹⁶ The emergence of this ‘new rich’ has led to a concentration of corporate wealth, while selective distribution of state-controlled concessions has resulted in corruption, business scandals and conflict of interest involving senior government leaders. Business groups and firms controlled by well-connected business owners have been involved in corporate insider trading and manipulation of stock prices, as well as in obtaining large amount of questionable loans on favourable terms from the banks or financial institutions controlled by the government¹⁷ (Gomez, 1999).

In summary, the way in which the NEP had been implemented (especially during Mahathir’s era) resulted in an intimate relationship being forged between the state, the political party (UMNO) and business (Searle, 1999). It is contended that this growing intimacy resulted in the enmeshing and blurring of boundaries between business, politics and the state. Gomez and Jomo (1999) also opine that the spheres of government, party or private interests are no longer considered as distinct entities. National, political and private interests may be pursued in tandem, an arrangement described as ‘commonness’ rather than ‘conflict of interest’.

2.2.3 Political Interference and Weak Enforcement of Rules and Regulations

The political business environment discussed above has an implication to the development of corporate governance in Malaysia. The very existence of money politics and the complexity of political patronage networks mean that it will be very challenging for regulators to reform corporate governance and promote good governance systems to corporations, whilst at the same time penalizing those errant corporations who do not abide by the law. Very often, law enforcement and reform of corporate governance, cannot be fully carried out due to political interference and politically influential businessmen as La Porta *et al.* (2000) comment “*what the reformers see as protection of investors, the founding families call “expropriation of entrepreneurs”*. No wonder, then, that in all countries... – the families have opposed legal reform” (p.21).

¹⁶ Mahathir believed that it is also imperative to channel some of the state concessions to Chinese businessmen. He also recognized the importance of Chinese capital for sustaining growth and industrialization (Gomez, 1999).

¹⁷ The extent to which banks had been abused by politicians became evident when two state-controlled banks, Bank Bumiputera and SIME Bank, incurred huge losses in 1998, believed to be associated with questionable loans.

In Malaysia, though regulatory bodies such as the Securities Commission (SC) are given sufficient power vested in the Malaysian Securities Acts 1993 to act upon errant companies or directors, as mentioned above, law enforcement is still lacking¹⁸ as put forward by Low (2004) in his comments on the performance of corporate governance practices among East Asian nations¹⁹:

...given the perception of a dichotomy between the “rules on the books” and the extent of enforcement by regulators of capital markets... While Malaysia scored the highest amongst the ten countries surveyed in both 2002 and 2003 for the rules and regulations it has implemented, the perception of its enforcement of the same was abysmal. (p.193-194)

Low’s comments are shared by Gunasegaram (2007b) who opines that law enforcement is critical if laws are to be implemented effectively and in this area Malaysian regulatory bodies fail miserably, the cause of the failure being significantly related to political interference. The Malaysian regulatory environment is found to be the ‘weakest factor’ in the overall corporate government framework in Malaysia according to a report released by the Institute of International Finance (IIF) in August 2007 (Tat, 2007).

Gomez (2006) also shares the same view with Gunasegaram (2007a) that the low achievement of enforcement in Malaysia is to a certain significant extent associated with the ‘selective imposition of rules and regulations’ by the political executives in power when he says:

These politicians can determine if regulatory institutions should act against businessmen, even when there is evidence of corruption. By ostensibly enforcing corporate governance provisions, politicians in control of the executive have transferred corporate assets into the hands of their allies... (p.132)

¹⁸ See Appendix 2 for statistic relating to the enforcement scores of Malaysia according to the Asian Corporate Governance Association (ACGA).

¹⁹ The country’s performances was measured based on scores obtained from the annual surveys carried out by the Asian Corporate Governance Association, an independent non-profit organisation, and CLSA Emerging Markets, a leader in brokerage and investment banking.

In short, the controlling shareholders who have close political connection may have a higher tendency to expropriate minority shareholders because political protection can shield them from the risk of any serious legal punishment from the regulators (Berkman *et al.*, 2010). Moreover, controlling families also want to seize the benefits that their connections bring to the firms to at least cover the costs of building such connections (Qian *et al.*, 2010; Morck *et al.*, 2004). Some may argue that the value of the ownership that controlling families hold would increase if protection for minority shareholders is improved. So why would they want to lobby against legal reform? The answer provided by La Porta *et al.* (1999) is straight forward – if the potential to expropriate the minority shareholders diminishes, so does the value of control, which may be a significantly larger part of the controlling shareholders’ total wealth.

The World Bank (2001), in its report on the Malaysian capital market, comments that “*there has been criticism about lack of autonomy and transparency of the regulatory authorities in Malaysia*” (p.6). The relevance of considering the political structure and norms in Malaysia and their impact on the governance of listed firms is substantiated by the fact that “*the very strength of resistance to many of the changes needed significantly to enhance the protection of minority shareholders’ rights and to improve corporate governance often exerts itself most strongly through clientelistic relationship-based systems of political governance*” (Yeoh, 2010, p.112). Thus political preconditions must be suitable in the first place in order for effective reforms to take root. Reform that sounds impressive on paper but not in spirit is a key concern in many Asian countries including Malaysia. As Park (2005) notes, although there is no major distinction in the rules and regulations of corporate governance in many Asian countries, there is significant difference in relation to the market perception of their governance practices.

2.2.4 Cronyism, Rent-Seeking, and Governance

Cronyism has been criticized for the misallocation of resources in the Malaysian economy, bringing overall waste and inefficiency to the corporate sector. As mentioned earlier,

Malaysia, as with many other East Asian countries, is considered as having a relationship-based corporate system as opposed to the arm's length based system in Anglo-Saxon countries (Rajan-Zingales, 1998).²⁰ Rent-seeking, which is expenditure of resources to procure government-endowed rents (Khan, 2000) is considered inefficient from an economic perspective but provides the main income of the relationship-based system. Politically-connected business groups or firms are often labelled as rent-seekers who attempt to gain as much unearned reward as possible through their connection with politics and the state (Khanna and Yafeh, 2007). It is claimed that politically-connected business groups or firms have many privileges which are otherwise unavailable, such as preferential access to state-controlled concessions, subsidies, preferential or 'soft' loans, preferential bailouts and barriers to foreign competition. Rent-seeking behaviour is, however, regarded as leading towards inefficient use of a firm's resources²¹, low transparency, over-reliance on the government and having an adverse impact on the market performance of firms. Such inherent problems in the relationship-based system make the privileged firms unprepared and unable to withstand any external shock in the environment. For instance, Johnson and Mitton (2003) find that politically-connected firms in Malaysia were more seriously affected compared to non-politically connected firms during the Asian Financial Crisis in 1997-1998.

Shleifer and Vishny (1998) assert that political relationships are potentially harmful to shareholder value. The authors opine that the politician's 'helping hand' may also be a 'grabbing hand' which causes the minority shareholders to be expropriated.²² Specifically, empirical evidence (for instance, Bertrand *et al.*, 2002; Friedman *et al.*, 2003; Cheung *et al.*, 2006) shows that business groups are particularly conducive to expropriation such as tunnelling or related party transactions (RPTs) at the expense of the minority shareholders of the member firms in the group. This is particularly true for large business groups with close political connections in developing countries in which the elite controlling families often control a substantial portion of the country's wealth. Authors such as Searle (1999) and Yeoh (2010) also suggest that political connections are more prevalent in large publicly-listed

²⁰ The relationship-based system is also known as relationship-based capitalism and the arm's length-based system is also known as market-based capitalism.

²¹ As substantial company resources are being used to seek and secure rents.

²² See Yeoh (2010) for a compilation of some of the examples of political involvement in Malaysian publicly-listed firms and mistreatment of minority shareholders.

businesses when it is commented that “*it is in big publicly-listed businesses that the nexus between business, politics and state is most clearly displayed*” (Yeoh, 2010, p.97). The consequences of letting a small number of large business groups control a large portion of a country’s wealth are explained by Morck *et al.* (2005, p.657):

...entrusting the governance of huge slices of a country’s corporate sector to a tiny elite can bias capital allocation, retard capital market development, obstruct entry by outsider entrepreneurs, and retard growth. Furthermore, to preserve their privileged positions under the status quo, such elites might invest in political connections to stymie the institutional development of capital markets and to erect a variety of entry barriers.

Due to the close link between politics and business, this proliferation of money politics and cronyism²³ has adversely impacted the corporate governance because as put forward by Yeoh (2010, p.102):

...they culminated in a culture where the ruling elite and their corporate patrons/clients/proxies (most being major shareholders/owners of public-listed firms) as well as captive market regulators are involved in numerous blatant scandalous, manipulative and even fraudulent activities in the capital markets, often to the detriment of minority shareholders.

In short, it should be highlighted that corporate governance practices are closely associated with the standard of *public* governance of a country. As outlined, rent-seeking activities which create and protect corporate profits can be rampant in countries with unsatisfactory public governance. Thus, it is doubtful that quality of corporate governance can be improved if the public governance level is still at an unsatisfactory level whereby businesses collude

²³ The latest development in the political scenario in this country shows that money politics, corruption and cronyism in UMNO have become rampant over the years. As an illustration, the number of cases of complaint regarding money politics/corruption during the UMNO party election year has increased over the years and in the most recent UMNO party election which was held in 2009, a staggering 900 cases of complaint regarding money politics were reported to the party disciplinary committee. Ironically, the Malaysian Anti Corruption Commission (MACC) has not been engaged to investigate the cases, including high profile ones (The Star, 9 November 2008, 17 March 2009).

with politics ‘in search of rents’ and ‘in protection of rents’ for their businesses (Claessens and Fan, 2002).

It should also be noted that the principal-principal relationship in the context of conflict of interest between minority shareholders and controlling shareholders remains the core concern in this study, even though a number of contextual or institutional influences are introduced above. This is consistent with the viewpoint of Gomez-Mejia *et al.* (2005) that “*there must be a balance between recognizing unique contextual factors and the theory of principal-agent relations*” (p.1512). Thus similar to Yeoh’s (2010) study, the arguments presented above attempt to present a more socialized variant of the principal-principal problem.

The following sections will include a brief discussion of the theoretical basis for this study, followed by detailed literature related to concentrated ownership and relevant company attributes with a focus on family-controlled firms.

2.3 Theoretical Basis for the Study

The theoretical basis of the principal-principal problem, as introduced earlier in this study, is originated from the agency theory of organisations as pioneered, among others, by Jensen and Meckling (1976). According to the authors, organisations can be defined as “*legal fictions which serve as a nexus for a set of contracting relationships among individuals*” (p.310). The relationship between various parties of a company (which is a form of organisation) can be viewed from the contractual agreement which denotes the rights and duties of each party. Nonetheless, a perfect contract is impossible due to the uncertainty of the future. Thus corporate behaviour may deviate away from value maximization as a result of the nature of the incomplete contract (Berglof, 1994).

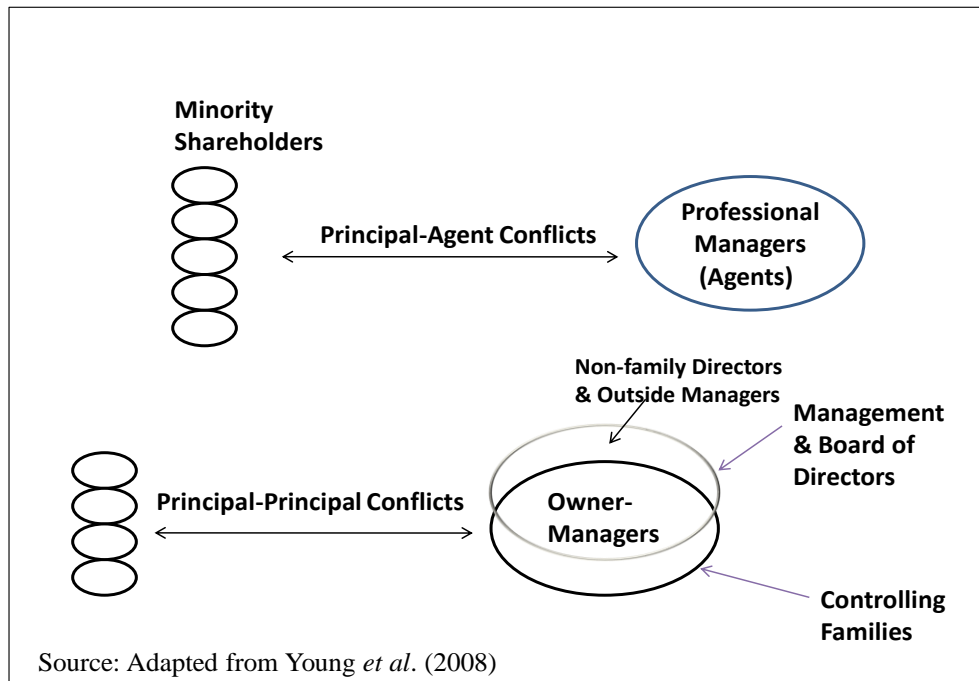
In the context of a corporation where the capital owners (the principal) delegate decisions/work and corporate control to managers and the board of directors (the agents), conflicts of interest may exist between these parties as the agents may have goals that are different from those of the principal (Jensen and Meckling, 1976). The conflict known as the

principal-agent problem or agency problem is the result of the nature of incomplete contracts. Agency theory is thus the theory developed to deal with agency problems.

The premise of agency theory (AT) is that “*agents are self-interested, risk-averse, rational actors, who always attempt to exert less effort (moral hazards) and project higher capabilities and skills than they actually have (adverse selection)*” (Ekanayake, 2004, p.49). Due to the asymmetric information problem, the principals may be unaware of the details of the business activities carried out by the agents. Accordingly, agency theorists have “*focused on identifying situations in which the principal and agent are likely to have conflicting goals and then describing the governance mechanisms that limit the agent’s self-serving behavior*” (Eisenhardt, 1989, p.59). For instance, Jensen and Meckling (1976) study how share ownership by managers helps align objectives of managers with those of owners, and Fama and Jensen (1983) study the role of the board of directors in monitoring management. However, as mentioned earlier, the version of agency problem encountered in concentrated ownership structure such as those found in Malaysia and elsewhere in East Asia, is the conflict between minority shareholders and controlling shareholders with the majority of them families. Thus the difference between Principal-Agent Problem (also known as Type I Agency Problem) and Principal-Principal Problem (also known as Type II Agency Problem) can be illustrated in Figure 2.1 below.

The upper section of the figure shows that in the standard textbook principal-agent problem, the potential conflict of interest exists between a large number of minority shareholders and the professional managers who only act as the agents without any significant amount of shareholdings. The lower section of the figure shows that conflict of interest exists between a large number of minority shareholders and the controlling families who not only own the largest concentrated ownership but are usually inclined to dominate the management and board of directors by serving directly as the senior managers and directors (shown in the figure as the substantial overlap area between ‘Controlling Families’ and ‘Management & Board of Directors’). These family members are known as owner-managers who have excessive power to carry out strategies/activities or practices that benefit them but may not benefit the minority shareholders.

Figure 2.1: Principal-Principal Problem versus Principal-Agent Problem



According to Eisenhardt (1989), agency theory only offers a partial view of the world and the author suggests that other perspectives are used, complementary to the theory in the study of firms. Thus, though agency theory will still form the main theoretical basis of this study, resource-based view (RBV) may also be relied upon when applicable to aid in the development of certain hypotheses in order to provide a richer and more composite understanding of the influence of various governance-related and organisation-related issues on firm performance. This is especially true for emerging economies where agency theory alone may not fully account for some of the phenomena observed in firms. For instance, the existence of business groups in emerging economies can be explained from RBV that such a business structure is able to provide additional resources to the group affiliates from the ‘internal market’ created by the business group (Yiu *et al.*, 2005). Clearly, incorporating other perspectives into agency theory in the study of corporate governance is an approach that “*recognize(s) the wider environmental forces that influence the governance paradigm of organizations*” (Christopher, 2010, p.685).

According to RBV, in family-controlled firms, the interaction of the family unit, the business unit and individual family members creates unique systemic family influences. These systemic interactions lead to the idiosyncratic firm-level package of resources and capabilities of the organisation commonly known as the ‘familiness’ of the firm (Habbershon *et al.*, 2003). It can be conjectured that on average the greater the ownership and control of the family over the firm, the more ‘familiness’ the firm will have. In family business literature, it is contended that ‘familiness’ is able to create competitive advantages for family-controlled firms which will then have a bearing on firm performance (Habbershon *et al.*, 2003; Habbershon and Williams, 1999).

According to RBV, resources of family-controlled firms refers not only to tangible assets, but also intangible assets such as capabilities, organisational processes, information, knowledge etc. controlled by the family that “*enable the firm to conceive of and implement strategies that improve its efficiency and effectiveness*” (Barney, 1991, p.101). An example of one such important resource is combined know-how; familiarity as well as the commitment of the family directors towards the business operation of the firm. As the number of family directors on the board increases, their efficiency and effectiveness in policy decision-making at board level is improved via stronger interaction and influence.

2.4 Ownership Structure

Ownership is considered as an important part of the corporate governance system (Shleifer and Vishny, 1997) and “*firm ownership (structure) is an increasingly influential form of corporate governance*” (Connelly *et al.*, 2010, p.1561). The importance of ownership structure can be traced back to Berle and Means (1932) when they suggested that decisions made by corporations can be greatly influenced by their ownership structure. Porter (1998) also concurs with the view that ownership structure and corporate governance are important in strategic management of firms when he admits that:

Company goals are most strongly determined by ownership structure, the motivation of owners and holders of debt, the nature of corporate governance, and the incentive processes

that shape the motivation of senior managers. The goals of publicly held corporations reflect the characteristics of that nation's capital market. (p.110)

Berle and Means (1932) were among the first to study the structure of modern corporations. Among the distinct characteristics of modern corporations is the concept of separation of ownership and control. In their review of the concept, Berle and Means (1932) ask: “*Have we any justification for assuming that those in control of the modern corporation will also choose to operate it in the interests of the owners?*” (p.141). When ownership is dispersed, as is typical for UK and US firms, agency problems will stem from the conflicts of interest between the managers and shareholders in which the manager, acting as the agent, has the tendency to appropriate private benefits of control for his own consumption (Jensen and Meckling, 1976; Dalton *et al.*, 2007). In dispersed ownership, shareholder control tends to be weak because of a lack of monitoring. The inadequacy of shareholder monitoring can be explained by the so-called free-rider problem. Small shareholders with insignificant shareholdings are not interested in monitoring because, whilst bearing all the monitoring costs, they only share a tiny proportion of the benefits.

Jensen and Meckling (1976) therefore contend that the increase of corporate ownership among managers in Anglo-Saxon countries can reduce free-riding and agency problems. In the relatively dispersed ownership structures of the US and UK, the major mechanism for protecting shareholders from management is the effective enforcement of judicial systems and the ‘market for corporate control’ (Zhuang *et al.*, 2000). However, when ownership becomes more and more concentrated until it reaches a level where the largest owner has effective control of the firm, as is typical for Malaysian and most Asian firms, the nature of the agency problem shifts away from manager-shareholder conflicts to conflicts between the controlling shareholder and public minority shareholders (Claessens and Fan, 2002).

The two opposing effects of concentrated ownership are the *incentive or alignment of interest effect* and the *entrenchment effect* (Claessens *et al.*, 2002; Fan and Wong, 2002). According to the incentive effect, the more concentrated the ownership is in the hands of the largest shareholder, the stronger is that shareholder's incentive “*to have the firm run properly, because having the firm running properly would raise his wealth*” (Claessens *et al.*, 2002,

p.2754). Thus, raising a controlling shareholder's ownership *"improves the alignment of interests between the controlling shareholder and the minority shareholders"* (Claessens and Fan, 2002, p.76). Gomes (2000) develops a theoretical model to show that by holding a high level of ownership, the owner-managers are able to commit implicitly that they do not intend to expropriate minority shareholders. This is due to the reason that the extraction of more private benefits would bring about discounted stock prices and therefore the higher the ownership level, the more harmful it will be to the owner-managers' wealth. In addition, concentrated ownership also effectively reduces the problem of asymmetric information for shareholders as occurred in the dispersed ownership structure. Large block-holders have the incentive and voting power to demand more information about the operation of firms; for instance, by having board director(s) directly representing their interests. Similarly, their incentive to extract private benefits will get weaker the higher the ownership level, because doing so would reduce the performance of the firm, therefore more seriously affecting their wealth. Consequently, the incentive effect results in a positive relationship between firm performance and the ownership level of the largest shareholder.

By way of contrast, the entrenchment effect claims that the more concentrated ownership and thus control is in the hands of the largest shareholder, the more entrenched the shareholder is because with higher control power the shareholder is able to make decisions that benefit themselves only, without considering the impact on, and often at the expense of, the rest of the shareholders. At the same time, the largest shareholder is also *"wealthy enough to prefer to use firms to generate private benefits of control that are not shared by minority shareholders"* (Shleifer and Vishny, 1997, p.759). Thus the entrenchment effect suggests a negative relationship between firm performance and the ownership level of the largest shareholder (Claessens *et al.*, 2002). Put simply, the concentrated ownership-performance relationship is a trade-off between the incentive/alignment effect and the entrenchment effect.

It is also highlighted in the literature that this effect is especially pronounced when the controlling/largest shareholder makes use of some control-enhancing means such as the pyramidal ownership structure to disproportionately raise their control above their actual ownership rights. When control rights are enhanced beyond ownership stakes (due to the control-enhancing means), the *"willingness to extract value is less restrained by the*

controlling shareholder's cash-flow stake” (Claessens *et al.*, 2002, p.2754). In other words, the availability of control-enhancing means leverages control power of the largest shareholder to make self-benefiting and value-extracting decisions at lower costs.

2.4.1 Ownership Structure in East Asia and Malaysia

In many East Asian countries including Malaysia, due to the concentration of high ownership, agency problems are mostly caused by the conflict between controlling shareholders and the rest of the shareholders (Dharwadkar *et al.*, 2000) – termed as the ‘principal-principal problem’ by Young *et al.* (2008). Under the principal-principal problem, the lack of principal-agent problems does not mean that firms will be pursuing pure profit-seeking activities. The interests of the controlling families involve “*not only the benefits (they) derives from pecuniary returns but also the utility generated by various non-pecuniary aspects of (their) entrepreneurial activities*” (Jensen and Meckling, 1976, p.312) which includes the ability to pass the firm on to subsequent generations (Bhaumik and Gregoriou, 2010). According to Demsetz and Lehn (1985), creating ‘non-pecuniary income’ includes “*the ability to deploy resources to suit one’s personal preferences*” (p.1162).

Past studies such as Phan (2001) and Tian and Lau (2001) question the suitability of using the conventional principal-agent theory in researching corporate governance issues in emerging economies. The different sociological, economic and institutional fundamentals in emerging economies could lead to a different impact on corporate governance. For instance, widespread family-ownership, the intense interference of government in the corporate sector, the weak enforcements of rules and regulations, the existence of business groups and the extensive diversification of firms are among the characteristics of emerging economies that give rise to a different type of agency problem – as mentioned above - the principal-principal problem (Claessens *et al.*, 2002; Young *et al.*, 2008; Christopher, 2010). Moreover, the western model of corporate governance may not be desirable in emerging economies because the effects could be counterproductive due to differences in cultural and institutional settings including the legal system. For instance, the suggestion to increase the ownership of shareholders in order to curb managerial opportunism and reduce agency problems is

impractical in Asia as increasing ownership in the already high ownership structure will lead to excessive power of controlling shareholders and exacerbate the principal-principal problems in those countries (Young *et al.*, 2008).

As mentioned in Section 2.3, in many East Asian countries including Malaysia, controlling families are not only the dominant shareholders in many listed firms, they normally also dominate the boards of directors (Bruton *et al.*, 2003; Young *et al.*, 2001) and senior management positions (Claessens *et al.*, 2000). Even when a hired professional manager is recruited to manage the firm, his decision-making power and scope are often rather restricted (Joh, 2003).

In Malaysia, most of the family-controlled firms have their board chairmanship occupied by either a family member or a retired bureaucrats or a member of the nine royal houses of Malaysia. These retired bureaucrats or royal family members are usually appointed as the independent chairman (Gomez and Jomo, 1997) and serve mainly as nominal figures, potentially able to help bypass restrictive red tape and secure quick and positive responses from the authorities on business matters (Gomez and Jomo, 1997). In short, families generally have effective control in a real sense over the board and management decision-making. As a result, various strategies/ activities or practices can be employed by the families to further enhance their control and/or benefits. Shleifer and Vishny (1997) describe how controlling owners create private benefits of control by their involvement in non-value maximization activities. For instance, the controlling family could utilize the business group under their control in order to diversify across industries to protect their private interests of control and facilitate their expropriation activities (Claessens *et al.*, 1999c).

Amihud and Lev (1981) and Denis *et al.* (1997) also point out that one of the possible ways for managers (including family-managers) to create private benefits is to diversify across various industries. Diversification may be regarded as management's 'perquisite consumption' because of the probable direct relationship between diversification and reduction in business risk as well as larger managerial compensation. Business risk is defined as uncertainty of earnings over time due to changes in industry-specific factors. Reduction in business risk via diversification is particularly important for a controlling family, to diminish

the exposure of the family's wealth to industry risks (Andres, 2008). However, from the perspective of minority shareholders, risk reduction through *firm* diversification across industries may not be a value-added move, simply because it is more efficient and effective to go for stock *portfolio* diversification (Ross *et al.*, 2010).

Diversification into unrelated areas of business is also generally regarded as one of the factors that caused the 1997 Asian Financial Crisis (AFC) to be more detrimental than expected (Fatimah, 2001). Chu (2007), in his study of ownership structure and rent-seeking in the Malaysian manufacturing sector also points out that diversification is among the mechanisms that can be used to expropriate shareholder value, especially when the controlling families' interest is comparatively large and the industries involved have low intensity of competition. Using a sample of 355 listed firms for the year 2000, Zuaini and Napier (2006), in their study of ownership structure and firm diversification, find that the control rights of controlling shareowners are significantly negatively associated with the 'excess value' of the firms, suggesting that expropriation increases with control rights. Their study however does not focus on family-controlled firms.

Literature that is ownership structure-specific and confined only to Malaysia is rather limited. Two early works on ownership structure in Malaysia are Lim (1981) and Sieh (1982), both using ownership data from the 1970s, who conclude in their findings that ownership structure in Malaysia is highly concentrated in the hands of families. Based on his study on the 100 largest corporations in Malaysia, Lim concludes that "*a few hundred families own the majority of stocks in Malaysia*" (Lim, 1981, p.5). Both studies by Lim (1981) and Sieh (1982) depict that not only is ownership highly concentrated in Malaysia but more importantly the ownership structure in Malaysia is very stable and remains as highly concentrated today as it was in the 1970s. Thus the often quoted endogeneity problem such as by Demsetz (1983) in his ownership structure-performance related study is not a concern in the case of Malaysian corporations. Zhuang *et al.* (2000) also find that very little change has taken place in the ownership pattern in Malaysia over time.

Finally, according to Thillainathan (1999), the high concentration of shareholding in Malaysia is attributed to poor enforcement of shareholder rights. Furthermore, restrictions on

competition in certain activities in Malaysia, such as restrictive imports and licensing arrangements, have led to higher returns or lower risk for controlling shareholders. Thus, controlling shareholders have lack of incentive to share these profits with other shareholders (Thillainathan, 1999). This observation is in line with Bebchuk (1999) who demonstrates that the lower the competitiveness of an industry; the greater the opportunity of rent-seeking²⁴ and thus the more private benefits of control can be gained from a concentrated shareholding. For instance, a controlling owner may prefer to use debt instead of issuing new equity to finance a project in an industry that is protected by government policy so that his relative equity interest in the firm will not be threatened and he can continue to enjoy rents without needing to share with new shareholders (Chu, 2007).

2.5 Issue of Board Independence

An independent board is usually considered to be a vital part of good corporate governance and its importance is normally stressed in most countries' code of corporate governance and listing requirements of national stock exchanges. In Malaysia, the Listing Requirement of Bursa Malaysia specifies that a listed company must have at least two directors or one-third of the board of directors, whichever is the higher, as independent directors (Chapter 15, Paragraph 15.02, Listing Requirement of Bursa Malaysia). Moreover, the listing requirement also states that the majority of audit committee members must be independent directors. Thus, from the above, it is clear that board independence is considered an important factor in Malaysia towards a more effective board (Foo and Mazlina, 2010).

Agency theory asserts that having a sufficient number of independent directors is critical to ensure effective 'checks and balances' to curb agency problems (such as self-serving activities) and improve firm performance (Fama and Jensen, 1983). Board independence is also enhanced when the chairman himself is an independent non-executive director (INED). Haniffa and Cooke (2002) find that firms with independent chairman status have a higher disclosure level than firms with a non-independent chairman. They argue that the

²⁴ Rent-seeking is defined as an attempt to derive economic rent by manipulating the social or political environment in which economic activities occur. Economic rent refers to payment for goods and services beyond the amount needed to bring the required factors of production into a production process (Ross, 1970).

independence of chairmen improves the monitoring effort, since the chairman, as an influential figure of the board, has no personal agenda to withhold information. The result is improved quality of disclosure.

Though agency theory has been employed as a dominant theory in explaining the board independence-firm performance link, some theoretical studies such as Hillman and Dalziel (2003) have reminded of the shortcomings of agency theory and the importance of integrating resource-based view with agency theory in explaining the functions of the board. According to Hillman and Dalziel, two important functions of the board are firstly, to be independent in protecting the rights of all shareholders and secondly, to provide ‘human and relational capital’ to the firm. Directors’ human capital includes their expertise, experience, knowledge and skills, whereas relational capital of directors includes the “*potential resources embedded within and available through personal network ties with constituents in the environment*” (Dalziel *et al.*, 2011, p.4).

From the discussion of board capital based on the resource-based view, it is believed that the *executive* directors’ ‘resource’ contributions are more prevalent compared to *independence* directors simply because of time and commitment factors. Executive directors, being ‘full time’ directors devote much more time to the company compared to ‘part-time’ independent directors. Moreover, executive directors, many of whom are family members, are also more committed and dedicated to the firm as it was founded by their forefather - such commitment may be lacking in independent directors.²⁵ Fahlenbrach *et al.* (2010) for instance assert that independent directors tend to “*quit when the firm is performing poorly*” or “*when they expect the firm to perform poorly*”. In other words, they tend to “*quit when they are most needed*” (p.3) in order to protect their own reputation and to avoid the multiplication of workload ahead when the firm is struggling.

²⁵ Besides executive directors and independent directors, another category is the non-independent non-executive director. For family-controlled firms in Malaysia, many of these directors consist of family members who are not directly involved in the management of the firms but who hold substantial shares. Thus it should be noted that a low percentage of executive directors does not automatically mean a high independence of the board because the board may be populated with non-independent non-executive directors.

The evidence as to whether that board independence affects firm performance is unclear and inconsistent. Various aspects of board independence in family-controlled firms can be examined, including the percentage of independent directors, whether the board chair is an independent director, and whether the audit committee is free from non-independent directors. More discussions on these aspects of independence are available in the subsequent sections.

The use of independent directors to measure board independence is supported by prior studies (John and Senbet, 1998). The meta-analysis of more than 50 past studies by Dalton *et al.* (1998) shows that there is no systematic evidence to support the high board independence-high firm performance hypothesis. They conclude that “*neither board composition nor board leadership structure has been consistently linked to firm performance*” (p.269). Some of the latest studies such as Wintoki *et al.* (2010) also show that there is no causal relation between board structure and current firm performance.

An interesting finding from Bhagat and Black (2002) shows that firms that perform badly are more likely to increase the number of independent directors even though this does not improve the firms’ performance. In contrast, Dahya *et al.* (2008) find a positive relation between firm performance and the proportion of independent directors in their cross-country study consisting of the majority of developed countries. Kim and Black (2010) investigate the relationship between board structure and firm value for firms affiliated with *chaebols* in Korea and find a significant positive relationship. Yeh and Woidtke (2005) find that family-controlled firms with a higher proportion of directors affiliated to the controlling family have relatively lower firm value compared to firms with a lower proportion in Taiwan. They therefore conclude that, in Taiwan, the proportion of family-affiliated directors reflects the quality of a firm’s corporate governance.

Prabowo and Simpson (2011) find that, in Indonesia, there is no significant relationship between the proportion of independent directors on the boards of family-controlled firms and firm performance. They assert that the inappropriate nomination and voting systems used in appointing independent directors in Indonesia has contributed to the failure to appoint ‘truly’ independent directors and thus the non-relationship between independent directors and firm performance occurs. They further suggest that a proper appointment system that

accommodates the interests of minority shareholders is established in order to reduce the dominance of controlling families, to include a cumulative voting system as well as a credible nomination committee.

Using a quantile regression method, Ramdani and Witteloostuijn (2010) investigate the effects of board independence on different levels of firm performance in four East Asian countries including Malaysia. They claim that the effect of board independence and CEO duality on firm performance is different at different levels of firm performance or, as put forward by them, “...*different across the conditional quantiles of the distribution of firm performance*” (Ramdani and Witteloostuijn, 2010, p.607). In Malaysia, Foo and Mazlina (2010) investigate the relationship between board independence, board diligence and stock liquidity in Malaysia and find that more independent and diligent boards are related to higher stock liquidity.²⁶

There are many other empirical studies that do not agree with the opinion that an independent board adds value and thus increases shareholder returns (for instance Nicholson and Kiel, 2007; Bonn *et al.*, 2004; Hermalin and Weisbach, 2003).

This study does not intend to look for additional evidence on the issue (the direct effects of board characteristics on firm performance) but will instead investigate the moderating effects of board independence as well as family directors on the influence of ownership structure, business groups and diversification on firm performance. There is a lack of past research with regard to the moderating roles of the company board, especially in emerging economies such as Malaysia. Moreover, the inconclusive findings from the literature on the relationship between board independence and firm performance might be due to the existence of interdependent relationships amongst governance mechanisms (Rakider and Seth, 1995). For instance, the important role of the board as a monitoring system may rely on the presence of other strong monitoring mechanisms such as ownership structure. Though concentrated ownership is able to reduce the free-riding problems of a dispersed ownership structure, it

²⁶ The measures used for board independence are, among others, the percentage of independent directors on the board and the percentage of independent directors on the audit committee. The measures for board diligence are frequency of board and committee meetings.

may cause the board's monitoring to be affected if the controlling families intend to use their control power to interfere with the board's supposedly independent decision making.

2.6 Family-controlled Business Groups²⁷

Business groups are a common form of business organisation in Asia. According to Claessens *et al.* (2006), normally in a business group, a family, a single individual or a coalition of families control a number of firms. The labels for business groups vary in different countries (Yiu *et al.*, 2007). For instance, among Asian countries, they are known as *keiretsu* in Japan, *hongs* in Hong Kong, business houses in India, *guanxi qiye* in Taiwan and *chaebol* in Korea. The differences are not only in the labels but also in the organisational structure of the groups (Khanna and Yafeh, 2007). For example, in the Korean *chaebols*, the affiliates tend to be tied by vertical integration of inputs and outputs (Chang and Hong, 2000). Conversely, the *guanxi qiye* in Taiwan focus more on partnerships amongst individual or family investors and a group is jointly managed as a strategy network (Yiu *et al.*, 2007).

In general, a business group is formed when independent firms are united by having the same controlling shareholder(s). Each firm in the business group still enjoys a certain amount of autonomy such as having its own board of directors and its own management team, as well its own shareholder base (Khanna and Rivkin, 2001). It is thus different from the conglomerate type of business organisation found in the United States whereby the various subordinate businesses do not have such autonomy.

Though the business group as an organisational structure is common among firms operating in East Asia and the rest of the world, there exists no legal, universal definition for it. In other words, there is no unified approach to define business groups and various definitions of business groups are given by different researchers. According to Yiu *et al.* (2007, p.1552), "*researchers usually deploy their own definitions of what they consider a business group*" and Claessens *et al.* (2006, p.6), "*the definition of group membership is country-specific*".

²⁷ Though most of the business groups are family-controlled in East Asia, in some countries such as Singapore, some business groups are controlled by the state. This study only focuses on business groups that are family-controlled.

Leff (1978) is among the first to discuss business groups and defines them, from a broad perspective, as a group of companies “*which transact in different markets... under common entrepreneurial or financial control*” and that they are “*linked by relations of interpersonal trust, on the basis of a similar personal, ethnic or communal background*” (Leff, 1978, p.663). The definition is broad as it covers firms that are linked by personal trust and similar social backgrounds.

Recent literature such as Yiu *et al.* (2005) defines business groups as “*a collection of legally independent firms that are bound by economic (such as ownership, financial and commercial) and social (such as family, kinship and friendship) ties*” (Yiu *et al.*, 2005, p.183). Yiu’s definition is specifically pointing to not only the social ties but both the ‘economic and social ties’. Chang and Hong (2002) characterize business groups as “*a collection of formally (legally) independent firms under single common administrative and financial control, that are owned and controlled by certain families*” (Chang and Hong, 2002, p.266) and Claessens *et al.* (2006) treat a business group as “*a corporate organization where a number of firms are linked through stock-pyramids and cross-ownership*” (p.1) though business groups should not be equated with pyramids (Khanna and Yafeh, 2007) as some business groups do not involve pyramiding or cross-holdings.

Khanna and Yafeh (2007) consider business groups as a collection of “*legally independent firms, operating in multiple (often unrelated) industries, which are bound together by persistent formal (e.g. equity) and informal (e.g. family) ties*” (p.331). Chakrabarti *et al.* (2007) state business groups are “*networks of legally independent firms linked by a set of formal and informal ties that coordinate their actions*” (p.106). Finally Cuervo-Cazurra (2006) suggests that business groups are “*those networks that exhibit unrelated diversification under common ownership*” (p.419).

According to Khanna and Yafeh (2007), some business groups are highly diversified and others are more focused. In a nutshell, business groups are generally accepted by contemporary researchers as a collection of firms united by ‘ownership and control ties’: common ownership, management and board directorship, and the groups generally diversify

by having member firms involved in different industries. Member firms are affiliated to each other by the same family members acting as controlling shareholders who normally also hold the senior management positions or directorships of member firms. Table 2.1 provides definition of how business groups as defined by different East Asian countries (including Malaysia) in Claessens's *et al.* (2006) study.

Table 2.1: Definition of Business Groups According to Country

| Country | Definition |
|-------------|--|
| Hong Kong | The family is the largest shareholder of the firm (firms belong to the same group when they are 'owned' by the same family) |
| Indonesia | The family is the largest shareholder of the firm (firms belong to the same group when they are 'owned' by the same family) |
| Japan | The company's CEO sits in the group's President's breakfast |
| South Korea | At least 30% of the stock of the firm is owned by other firms in the group |
| Malaysia | The family is the largest owner (firms are considered as belonging to the same group when they have a common controlling family) |
| Philippines | A family member sits on the Management Board and/or the Board of Directors |
| Singapore | The family is the largest owner (firms are considered as belonging to the same group when they have a common controlling family) |
| Taiwan | The firm is counted as group-affiliated if other firms in the group own 20% of the stock |
| Thailand | The firm is listed as a related company in the annual report of the leading company in the group |

Source: Adapted from Claessens *et al.* (2006)

According to Claessens *et al.* (2006), some of the above definitions are based on either reliable or official sources from within the individual countries. For instance, the data for the Korean groups is obtained from the Korean Fair Trade Commission which defines affiliates as those that are owned at least 30% by other firms in the same group, whereas in Taiwan, a firm is considered as group-affiliated when at least 20% of the firm's share ownership is in the hands of other firms in the respective group. In Malaysia, Singapore, Indonesia and

Thailand, firms are considered as belonging to the same group when they share a common controlling family which acts as the largest shareowner of the firms.

2.6.1 Family-controlled Business Groups in Malaysia

Like other East Asian countries, the business group is a common form of organisational structure in Malaysia where most of the business groups are family-owned and controlled. For instance, Gomez (2006) reports that 35 of the 50 largest business groups in Malaysia are family-controlled and the rest are state-controlled. Since the state-controlled business groups in Malaysia are usually large in size, the proportion of business groups that are family-controlled should therefore be even higher for the average sized business groups. Claessens *et al.* (2006) report that, in their sample, 56%, 56%, 45% and 37% of listed firms in Malaysia, Hong Kong, Taiwan and Thailand respectively are group-affiliated. Definition wise, Zuaini and Napier (2006) consider a Malaysian firm in their sample as group-affiliated when it has the “*same ultimate controlling owners with other companies in the sample or has other PLCs (publicly-listed corporations) in the ownership structure*” (p.106). According to the data provided by Chang (2006), business groups accounted for approximately 25%, 24% and 39% of total market capitalization of the stock exchanges in Malaysia, Thailand, and Singapore respectively in 2002. The author claimed that business groups that developed and built connections with the ruling political parties survived the Asian Financial Crisis (AFC) whereas business groups who lacked such connections did not.

It is common to have interlocking directorship among firms affiliated to a business group. Interlocking directorships can be divided into two main types according to Burt (1983): i) ownership ties – two or more corporations are jointly controlled by a single board of directors, and ii) direct interlocking ties – two or more companies share one or more persons as directors of their respective boards. The former is rare and the latter is more common for Malaysian corporations. Interlocking directorship contributes to the high probability of family members as directors on the boards.²⁸ Consequently, boards of directors in Malaysian family-controlled listed firms generally are not independent from family influence. Business

²⁸ In fact, more than 90% of the family-controlled firms sampled in this study have at least one family director.

groups, with their interlocking directorships and family-member managers result in high volumes of intercompany transactions and related party transactions (RPTs) in East Asian corporations. Researchers such as Cheung *et al.* (2009a, 2009b, and 2006) have cautioned that some of these transactions are suspicious as they are susceptible to controlling families' 'abuse'.²⁹ In Malaysia, listed firms are required to abide by the Bursa Malaysia Listing Requirements (Section 10.02, 10.08 and 10.09) that stipulate the related party disclosure standards. However, loopholes in the listing requirements and the relatively weak enforcement of rules and regulations enable the controlling families to obtain approval to practise questionable RPTs and even bypass regulators' jurisdiction. The president of the Remisier Association of Malaysia, Sam Ng, admitted that 'un-ignorable' loopholes exist in the current RPT approval process that need to be closed (The Star, 21 August 2010). Furthermore, due to the lack of detailed disclosure of these transactions in Malaysia, it is an extremely challenging task to conduct a serious study on RPTs in Malaysia. For instance, firms may record RPTs in their annual reports but are unlikely to disclose the amounts involved.

2.6.1.1 *Pyramidal (and Cross-Holding) Structures*

As discussed in sub-section 2.2.4, business groups also seem to be inseparable from politics (Khanna and Yafeh, 2007). In Malaysia, the extensive and close relationships between business groups and the ruling party is reported by Gomez and Jomo (1999), Gomez (2006) and Johnson and Mitton (2003). Business groups have existed in the Malaysian corporate scene since the British colonial era (Gomez 2006). During the period of the New Economic Plan (NEP) from 1970-1990 (as discussed in Section 2.2), many firms controlled by Chinese families were forced to take some accommodative measures to integrate the NEP in order to grow and expand. Many of these Chinese entrepreneurs chose to form close relationships with the influential political figures of the time, as well as the ruling political party, in order to continue to receive contracts and other benefits from the government (Gomez, 1999). Those Chinese enterprises that were successful in obtaining support from prominent politicians and the ruling party proliferated and expanded during the era. In order to support

²⁹ The CFA Institute published a report 'Related-Party Transactions – A Cautionary Tale for Investors in Asia' (2009) to caution even the most sophisticated investors about the needs to be wary about RPTs in Asia.

their expansion, pyramiding was used to acquire other, or form new, businesses, being a particularly affordable way to acquire control of other firms using a relatively small amount of capital. For instance, Gomez (2006) elaborates on how the late Lee Loy Seng, one of the Malaysian Chinese tycoons had successfully used the pyramidal holding structure to form his business group:

Lee discovered that Parit Perak Bhd, a quoted European controlled rubber company with a small paid up capital, had 'hard cash reserves'. Lee acquired a controlling stake in the company and, according to him, then 'used Parit Perak money to buy a controlling share in Glenealy. Then Glenealy and Parit Perak together bought Batu Lintang. Then with the help of a few friends, Batu Lintang, Glenealy and Parit Perak bought control of Batu Kawan. We just rolled on like this'. (p.20)

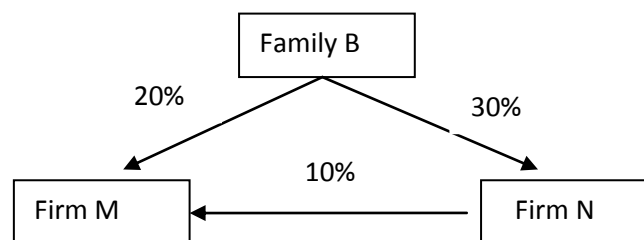
Pyramidal structures involve “*owning a majority of the stock of one corporation which in turn holds a majority of the stock of another, a process that can be repeated a number of times*” (Claessens *et al.*, 2000, p.93). As mentioned, pyramiding is a legal and appealing way for someone to control a firm without having to invest too much capital. In other words, the cash flow right (which is based on the capital invested) of the controlling family is lower than its control (voting) right in the companies at the lower tier of the pyramid. An illustration will clarify the advantage of pyramiding: Suppose family A has 50% share ownership of firm P, who in turn owns 40% of shares of firm Q and firm Q has a 50% ownership of firm R. In this three-tier pyramid, family A is therefore said to have only 10% ($0.5 \times 0.4 \times 0.5$) cash flow right of firm R. However, following the ‘weakest link principle’ of Claessens (2000), the control right of family A over firm R is 40% since this is the lowest percentage of ownership in the chain of the pyramidal structure.³⁰

Cross-holding is another method besides the pyramidal structure to obtain control rights with relatively smaller investments. Cross-holding is said to occur when “*a company down the chain of control has some shares in another company in the chain of control*” (Thillainathan, 1999, p.16). Cross-holding is, however, less popular in Malaysia compared to the pyramidal structure. For instance, Claessens *et al.* (2000) find that about 39% of their sample firms from

³⁰ More detailed illustrations using the sample firms in the study are provided in Chapter 4.

Malaysia are associated with pyramidal structure and only 14% are involved in cross-holdings.³¹ An example of a basic cross-holding is as follows (see Figure 2.2 below): Suppose family B has direct control ownership of 20% and 30% over firms M and N respectively. Cross-holding exists when at the same time firm N also directly owns 10% of shares of firm M. In this case, the cash flow right of the family over M is calculated as $20\% + (30\% \times 10\%) = 23\%$ but the control right over M is $20\% + 10\% = 30\%$.

Figure 2.2: Illustration of Cross-holding



Business groups in Malaysia are like many other East Asian firms which are characterized not only by high concentrated ownership but also the inclination of some controlling shareholders to use the pyramidal structure and (to a lesser extent) cross-holdings to exert enhanced control power. In other words, firms which form part of the pyramidal structure are themselves considered group-affiliated. For instance, Faccio *et al.* (2001), in their study on the issue of expropriation in business groups in East Asia (including Malaysia), consider a firm in their sample as group-affiliated if it fulfils one of the following criteria:

- (i) it is controlled by a shareholder via pyramiding, i.e. indirectly through a chain of corporations;
- (ii) it controls another corporation in the sample;
- (iii) it has the same controlling shareholder as at least one other corporation in the sample.

(p.61)

³¹ The actual percentage of firms in Malaysia with pyramidal or cross-holdings should be lower than the ones reported by Claessens *et al.* (2000) as their sample firms are skewed towards large firms where the chances for pyramiding or cross-holdings to occur are higher.

The practice of pyramiding business groups, coupled with the significant participation of owners in the management/directorship; corporate sector in this region is known to have an insider system of corporate governance (Khatri *et al.*, 2002) which gives the controlling shareholders excessive power to conduct activities or practices that may not benefit the public minority shareholders.

The problem with the pyramidal holding structure and cross-holdings is that since the cash flow right is lower than the control right, the controlling family may have a tendency to expropriate the rest of the shareholders because the costs that they need to bear are lower than the benefits that they can achieve. The potential for abuse is highlighted in the OECD report (2004, p.42):

...The potential for abuse is marked where the legal system allows, and the market accepts, controlling shareholders to exercise a level of control which does not correspond to the level of risk that they assume as owners through exploiting legal devices to separate ownership from control, such as pyramid structures...

As such, not only can business groups facilitate expropriation activities (Almeida and Wolfenzon, 2006), business groups with a pyramidal structure can provide incentives to controlling families to expropriate. For instance, the family could decide to sell an overpriced asset from a company at the lower tier of the pyramid to another firm at the higher tier or use their listed firms to purchase supplies and materials above the market price from private corporations owned by the family. Tunnelling activities through such transactions involving related parties (known as related party transactions or RPTs) under the pyramidal structure are well documented in a number of studies, particularly among corporations in East Asia such as Gordon *et al.* (2004), Cheung *et al.* (2006), Cheung *et al.* (2009a, 2009b), and Qian *et al.* (2011).

2.7 Chapter Summary

The chapter began by examining, from a historical viewpoint, Malaysian governance and the institutional environment, focusing on political involvement in business, to provide readers with sufficient background information in order to better understand the issues of interest to the study. Moreover, this study attempts to make the case that political interference in corporate Malaysia has a profound adverse influence on corporate governance development in the country, in which the politics-business connection is particularly prevalent in large business groups.

The earlier part of the chapter focuses on the imbalanced socio-economic conditions in the country that had eventually led to the implementation of the NEP in 1970. The NEP was the watershed, not only for the economic development of the country, but also for its corporate and institutional development. It is during the NEP period that the interference of politics in business becomes apparent. An intimate relationship was formed between politics and business during the Mahathir era where the founders/controlling shareholders of many corporations, especially the large ones, were well-connected to the group of 'new rich' and political elites in the country. The lines between business, politics and the state are blurred. Political patronage in business has also caused the enforcement of rules and regulations to be difficult and the resultant weak enforcements become one of the major corporate governance concerns in the country.

Meanwhile, many firms develop into the cronies of the ruling party and influential political figures in order to facilitate their engagement in both expropriation and rent-seeking activities. This has an overall impact on the operating efficiency and subsequently the performance of firms as resources are misallocated or tunnelled away from them. The section concludes that without a proper reform in public governance, the reform in corporate governance, including the associated law enforcement, will be a daunting task.

The next section explained the theoretical basis of the study. Agency theory (AT) is employed as the main theoretical lens in examining the issues of interest in the study. As AT only provides a partial view of the world, resource-based view (RBV) is used to augment AT

as it offers a complementary view for the issues under examination. Using dual or multi-theoretic perspectives in corporate governance-related research is encouraged and looked upon favourably by the literature.

The subsequent sections of the chapter explicated the literature review related to the major themes of the study. Literature on ownership structure was first presented and discussed. It is acknowledged that ownership structure turns out to be the single most powerful governance mechanism in Malaysia. The incentive/alignment and entrenchment effects of concentrated ownership in family-controlled firms are explained. The study focuses discussion on the concentrated ownership structure and the resultant principal-principal problems in East Asia and Malaysia. It also offers some preliminary discussion on the firm activities/practices underlying concentrated ownership structure including board independence, business group affiliation and firm diversification.

Following the preliminary discussion, full discussion is then devoted to these activities/practices in the ensuing sections. In the section, on the issue of board independence, a review from both agency theory and resource-based view is presented and followed by a discussion on the influence of board independence on firm performance. It is noted that this study will concentrate on the moderating influence of board independence. Specifically, the moderating influence of board independence on the performance outcome of family ownership and firm activities/practices such as profit redistribution in business groups and firm diversification are examined. In the section on family-controlled business groups, focus is given to the various ways of defining business groups according to the literature and different countries. The focus is then shifted to family-controlled business groups in Malaysia and the pyramidal structure in business groups.

The next chapter will continue with the second part of the literature review that focuses on the hypotheses development. Based on arguments from the literature, four sets of hypotheses based on the four major themes of the study are developed.

Chapter 3 – Literature Review with Corresponding Hypotheses

3.1 Chapter Outline

This chapter is a continuation from Chapter 2. Compared to the literature review in Chapter 2 which is broader in scope, the review in this chapter is specific as it matches the literature to the hypotheses. Thus the aim of the chapter is to develop hypotheses which are based on the justification from the arguments in the literature. Four sets of hypotheses (H1 – H4) are developed to represent the four major themes of the study: ownership structure, group affiliation and other control-enhancing means, profit redistribution and related issues, and firm diversification. These hypotheses will address the research questions as posed in Chapter 1.

The chapter begins with a review related to the influence of ownership structure on firm efficiency and performance. Attention is given not only to the ownership of controlling families, but also to the potential influence of other types of block-holders in family-controlled firms. The moderating influence of board independence on the performance outcome of family ownership is also discussed. It is common to see family ownership and control being facilitated by the formation of business groups in East Asia including Malaysia. Thus, in the following section, the study discusses how affiliation to family-controlled business groups could possibly influence the performance of firms compared to firms without group affiliation. The discussion then proceeds to a review of how the potential use of control-enhancing means (some of which are associated with business groups) by controlling families could influence a firm's performance.

The phenomenon of profit redistribution in family-controlled business groups is discussed in the next section. The influence from the heterogeneity of business groups, as well as the extent of family ownership and control on the phenomenon, is also discussed. The potential influence of board independence on the efficiency of profit redistribution also forms part of the discussion. The final section of the chapter is devoted to a review centred around the performance outcomes of firm diversification. Specifically, the discussion is centred around

the moderating influence of ownership structure, control-enhancing means and board independence on the performance outcomes of diversification. The discussion also involves a comparison of diversification outcomes in group-affiliated firms and non-group firms.

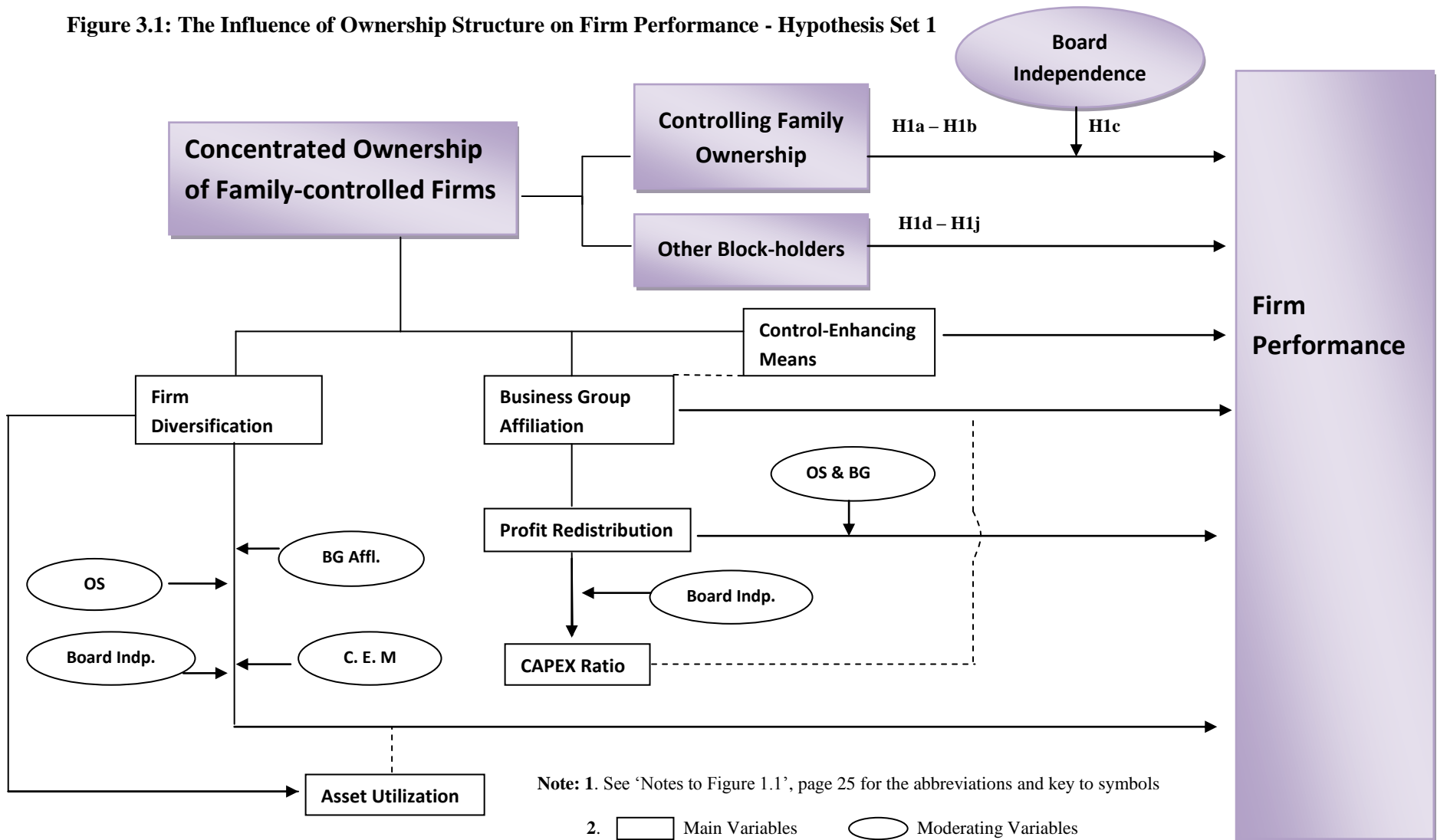
3.2 Ownership Structure and Firm Performance in Family-controlled Firms

This section reviews the literature and develops corresponding hypotheses pertaining to the influence of various ownerships on the performance of family-controlled firms. In terms of the conceptual framework as established in Figure 1.1, the relevant hypotheses being examined are those of Hypothesis Set 1 as highlighted in Figure 3.1 (shaded in purple).

As discussed in Chapter 2, in a dispersed ownership structure, individual shareholders do not have the power or will to play an active role in the governing and monitoring of firms. Subsequently, shareholders will be subject to the free-riding problem as each of them will ‘hope’ for others to make the effort to monitor management and then reap the benefits of any corrected management behaviour. It is believed that concentrated ownership of family firms in many Asian countries overcomes the free-rider problem of dispersed ownership structure in which controlling shareholders are non-existent (Shleifer and Vishny, 1997).

In contrast to Anglo-Saxon countries in which the free-riding problem is abated through strong legal protection and enforcement, shareholders in many Asian countries need to depend on controlling shareholders (whether they like it or not) to address the free-riding problem because the governments of these countries thus far have not been successful in providing ‘public goods’ (effective law enforcement). The reduction of free-rider agency costs from concentrated ownership will lead to more savings and surplus resources for firms and increases financial returns (Miller and Le- Breton Miller, 2006).

Figure 3.1: The Influence of Ownership Structure on Firm Performance - Hypothesis Set 1



With the substantial ownership and control rights that they have, family firms will ensure that their interests will be maintained and protected. Drawing upon resource-based view (RBV), Carney (2005) states these are the ‘Personalism’ and ‘Particularism’ qualities owned by family firms. Personalism refers to the unique power which results from the combination of ownership and control held by the controlling family. Thus, the higher the ownership and control of the family over their firm, the less need they have “*to account for their actions to other constituencies, giving them the discretion to act as they see fit*” (Poza, 2010, p.23). Particularism refers to the product of the concentration of control rights and its resulting discretion as elaborated by Poza (2010) that “*family businesses... have the particular ability to use idiosyncratic criteria and set goals that deviate from the typical profit-maximisation concerns of nonfamily firms*” (p.23). It is contended that both qualities lead to advantages for family firms as they enhance overall efficiency of the company. Thus it is believed that the greater the family ownership and control, the more prevalent will be the Personalism and Particularism qualities of family firms.

According to Carney (2005), the personalistic and particularistic tendencies of family firms will combine to generate competitive advantages as they enhance firm efficiency and facilitate the creation and utilization of ‘opportunistic investment’ and ‘social capital’. Opportunistic investment refers to the ability to allocate a firm’s resources “*without regard to internal and external processes of accountability*” and “*owner-managers may analyze their investment decisions on the back of an envelope or utilize heuristic methods or a mental calculus rather than a careful and exact accounting calculation*” (Carney, 2005, p.259). Thus, such ability provides advantages and facilitates the fast and decisive seizure of opportunities that lead to improved efficiency and performance. This is especially true when “*time is of the essence and in situations where it is ‘better to be always first than always right’*” (Carney, 2005, p.260). Conversely, social capital refers to those stocks of social trust, norms, and networks that controlling families can draw upon to solve common problems or create common benefits among the controlling families who belong to the same social networks (Carney, 2005; Poza, 2010). In short, through social capital and opportunistic investment, personalism and particularism qualities could ultimately lead to value creation for family-controlled firms and positively impact upon their performance.

From the agency theory perspective, the association between ownership structure and firm performance can be viewed from two different effects working in opposition to each other as highlighted in Section 2.4 in Chapter 2: the incentive or alignment of interest effect and the entrenchment effect (Morck *et al.*, 1988; Shleifer and Vishny, 1997). A higher level of ownership by ‘insiders’ (such as owner-managers in family-controlled firms) will reduce the agency conflict because the interests of the insiders will converge with those of the shareholders (Jensen and Meckling, 1976). In other words, insiders (the controlling family) will have the incentive to improve their respective firms’ performance and share prices as they reap the benefits from doing so. Also, increases in ownership of the largest shareholder (the controlling family) indicate that more and more family wealth is tied into the business and thus there will be greater incentive to increase the performance/value of the firm.

Furthermore, families are more likely to have *strategic interests* rather than *financial interests* in the firm – in other words, family ownership is motivated not only by short term financial interest but also longer term non-financial goals such as creating sustainable competitive advantages and capabilities. As controlling shareholders, families exercise their ownership stakes as a means of pursuing the strategic interests of their organisations such as securing new markets and protecting managerial autonomy so that the owner-managers are able to “*make tough decisions*” more effectively (Aguilera and Jackson, 2003, p.457). Overall, firm performance is expected to improve and the improvement is sustainable in long term.

In terms of empirical findings, one of the most cited works in family ownership and firm performance is by Anderson and Reeb (2003) which is based on family firms in the S&P 500. Contrary to their expectations, they find family firms perform better than non-family firms. Their finding has intrigued and inspired other researchers to undertake further research in this area. Andres (2008) contends that family ownership in Germany “*can be regarded as an efficient ownership structure*” (p.440) as they perform better than firms with dispersed and other types of ownership. Wiwattanakantang (2001) finds that ownership concentration is positively related to firm performance in Thailand, a country with a number of similarities to Malaysia in terms of economic development and a corporate landscape that is dominated by the family-controlled firms of Chinese descendants. Finally, Lins (2003) after examining

firms in 18 emerging economies, finds a positive relationship between ownership concentration and firm value. He concludes that large shareholders play a positive and significant role in the corporate governance of firms in emerging economies.

By way of contrast, Chen *et al.* (2004) do not find any relationship between family ownership and the operating performance of family PLCs in Hong Kong, an advanced economy with relatively good judiciary system and law enforcement. They also find that the composition of the board of directors has only little impact on firm performance and dividend policy. Filatotchev *et al.* (2005) also do not find any association between family control and firm performance among family-controlled listed firms in Taiwan.

The above discussion indicates that empirical examination based on different countries on the relationship between family ownership and firm performance may yield different findings. A likely reason for the different findings is that firms in different countries operate with a distinctive culture and in different legal, enforcement and institutional environments. These country-specific differences may thus have a significant impact on the ownership-performance relationships (Joh, 2003; Filatotchev *et al.*, 2005).

In Malaysia, Haniffa and Hudaib (2006) find that the higher the concentration of ownership, the better the accounting performance of the listed firms but they do not report any significant findings in the relationship between managerial ownership and market-based performance. Tam and Tan (2007) find that, under the concentrated ownership setting in Malaysia, different types of owners exhibit distinct preferences of corporate governance practices. For instance, family owners are found to have a preference for CEO duality and such practice is found to have an impact on firm performance. However, their study does not consider the effects of other block-holders in family-controlled firms.

Overall, the expropriation of firm resources by the controlling families at the expense of minority shareholders suggests a negative impact of family ownership on firm performance. However, the 'incentive or alignment effect' and the distinctive family qualities or 'familiness' suggest that higher family ownership is beneficial to firm performance. In summary, it is difficult to conjecture the overall impact of family ownership on firm

performance, *a priori*. This study infers that all the above-mentioned advantages of family ownership should outweigh the possibility of expropriation and thus the following hypothesis is proposed:

H1a: The stake of ownership by the controlling family positively affects the performance of family-controlled firms.

However, when the insiders achieve a certain level of effective control in their ownership, they may have a tendency to start to engage in non-value maximising behaviour to create private benefits, especially when the costs of creating private benefits that they must bear are lower than the private benefits they enjoy (Shleifer and Vishny, 1997). Stulz (1988), using his takeover model, predicts that as ownership and control increases, the negative effect on firm performance and value associated with the entrenchment of manager-owners will surpass the incentive benefits and causes the overall firm performance/value to drop. Empirically, by combining the two opposite effects (incentive effect and entrenchment effect), Morck *et al.* (1988) and McConnell and Servaes (1990) show that ownership structure and firm performance has an inverted U-shaped relationship: to begin with firm performance improves as ownership level increases, but performance will eventually reach a peak and additional ownership levels beyond that will result in a decline in performance. This is interpreted thus: increases in managerial ownership initially provide incentives to managers to strive for improvement of firm performance, but thereafter managers become entrenched and pursue private benefits at the expense of shareholders.

La Porta *et al.* (1999) in their survey of ownership structure around the world assert that the greatest source of agency costs of high concentrated ownership structure is the tendency of controlling shareholders to ‘tunnel’ the firm’s resources for their own private benefits; in other words, expropriation of minority shareholders’ wealth. Dharwadkar *et al.* (2000) also agree with this view. Firms experiencing greater expropriation of resources are likely to exhibit poorer performance (Joh, 2003) because expropriation is executed at the expense of the firm’s efficiency. According to Anderson and Reeb (2003), whether family ownership hinders or helps firm performance is an empirical issue that depends on the institutional and political-regulatory environment of a country. Their study on family ownership and firm

performance among the S&P 500 firms in the US indicates that the relationship is non-linear and in which firm performance increases until families' share ownership reaches around one-third of the total share ownership, after which firm performance begins to decline. They thus conclude that “*when families have the greatest control of the firm, the potential for entrenchment and poor performance is the greatest*” (Anderson and Reeb, 2003, p.1324).

From the above discussion, the following hypothesis is proposed:

H1b: There is an inverted U-shape relationship between family ownership and firm performance in family-controlled firms i.e. ownership by family positively affects firm performance only up to a certain threshold level beyond which the effect will be reversed.

Since the board of directors is the highest authority of a firm, it has the ability to exert monitoring power to curb ‘unscrupulous’ activities, provided it is independent from the owner-managers’ influence. Thus this study intends to examine whether board independence moderates the effects of controlling families’ ownership stakes on firm performance. Board independence and controlling family ownership may influence each other to affect firm performance. Thus more insights could be obtained by observing how they interact with each other; for instance, whether higher board independence can positively moderate the effects of ownership stake on firm performance.

H1c: The effect of the controlling family’s ownership stake on firm performance is moderated by board independence.

3.2.1 Various Types of Other Block-holders in Family-controlled Firms

From the convergence of the interest hypothesis and the efficient monitoring hypothesis, it is asserted that due to the size of their holdings; block-holders (a shareholder is considered a block-holder if the percentage of shares held is at least 5%) have the incentive as well as the ability to pressurize management to take actions to improve the firm’s performance (Brown *et al.*, 2011; Shleifer and Vishny, 1986). For instance, Hoskisson *et al.* (1994) find that the

number of outside block-holders as well as the percentage of equity they own may help to reduce the implementation of poor corporate strategy such as the over-investment of free cash flows into diversification projects that is value destroying but enables the owner-managers to pursue their private benefits. They show that a reduction in poor strategy avoids poor performance and subsequently reduces the magnitude of corporate restructuring. Jara-Bertin *et al.* (2008) find that increased shareholdings by other types of block-holders improve firm performance and value.

Anderson and Reeb (2003, 2004) also opine that the ownership level of large outside block-holders in the family-owned and controlled firms can help mitigate the moral hazard conflict between the family and the rest of the shareholders. Moreover, the controlling family may need the consent of a coalition of other large block-holders before they make any decision to expropriate minority shareholders (La Porta *et al.*, 2000). As a result, the coalition, led by the controlling family may hold too high cash flow rights (their combined ownership level) to profit from their expropriation activities as the costs could be higher than the private benefits gained. Accordingly, Bennedsen and Wolfenzon (2000) suggest that the alignment effect of a coalition of large shareowners could give rise to a positive relationship between the combined ownership level of the controlling coalition and firm value. However, an outside block-holder should not have any business relationship with the firm if it wants to be an effective monitor of the company (Borokhovich *et al.*, 2006).

H1d: The ownership of other unrelated block-holders in family-controlled firms positively affects the performance of the firms.

3.2.2 Domestic Institutional Investors as Block-holders in Family-controlled Firms

In addition, the identity of the block-holder is also important. This is because different investment objectives and decision-making opportunities, as well as resource endowments among owners, could “*determine their relative power, incentives and ability to monitor managers*” (Douma *et al.*, 2006, p.637-638), all of which have important implications for

corporate strategy and performance (Douma *et al.*, 2006; Tihanyi *et al.*, 2003; Thomsen and Pedersen, 2000). For instance, certain institutional investors such as mutual funds may be attracted by short-term yields on their investment, while family or government may be more concerned over long-term investment.

It is suggested that institutional investors are more likely to play leading roles in governance compared to other types of outside block-holders (Khan, 2006). Nonetheless, institutional investors are rather diverse, with pension funds, mutual (investment) funds, insurance companies and banks being the most important. Some institutional investors belong to the ‘pressure-resistant’ and some to be ‘pressure-sensitive’ categories (Brickley *et al.*, 1988; Kochar and David, 1996; Elyasiani and Jia, 2010). According to Brickley *et al.* (1988), who are among the first to suggest the categorization, institutional investors such as pension funds, investment and mutual funds and foundations are likely to be ‘pressure-resistant’ from corporate managers since they do not form business relationships with the firms in which they have invested. They are thus more active and likely to oppose managers on corporate issues than banks and insurance companies which are ‘pressure-sensitive’ from corporate managers as they often derive benefits from their business relationship with the companies in which they have invested.

Most of the major institutional investors in Malaysia are government-controlled or sponsored and need not solicit business from corporate managers, Thus they are good examples of pressure-resistant investors.³² In Malaysia, banks, and to a certain extent insurance companies, are considered highly regulated industries and restrictions are imposed on these institutions in terms of corporate shares investment.³³ Thus, share ownership of institutional

³² The five major institutional investors in Malaysia are the Employee Provident Fund (EPF) (pension fund), the Permodalan Nasional Berhad (PNB) (investment fund), the Muslim Pilgrim Saving and Management Authority (LTH) (investment fund), the Armed Forces Fund (LTAT) (investment fund), and the National Social Security Organisation (Socso). Together, their shareholdings stand for around 70% of total institutional shareholdings in listed firms in Malaysia. All five are government-controlled and sponsored institutions. For example, EPF is a government agency under the Ministry of Finance responsible for managing pension funds for employed workers in Malaysia.

³³ Banks and insurance companies in Malaysia are regulated by the Banking and Financial Act, 1989 (BAFIA 1989). BAFIA 1989 prohibits banks from assuming any management role or taking up any board positions in both private and public corporations. BAFIA 1989 allows banks only to make portfolio investments in non-financial firms up to a maximum of 20% of the bank’s shareholders’ funds and up to 10% of the issued share capital of a firm in which the investment is made. A somewhat more lenient restriction than the one on banks is imposed on insurance companies.

investors in Malaysia mostly occurs in investment funds and pension fund. Although the largest domestic institutional investor in Malaysia, the Employees Provident Fund (EPF) has not been active in the corporate governance of the firms in which they have invested.³⁴ Permodalan Nasional Berhad (PNB), the largest investment fund in Malaysia, in contrast, has been playing a more active role in monitoring the performance and corporate governance of the firms in which they have invested (Thillainathan, 1999).³⁵

However, according to Effiezal *et al.* (2008), since EPF and PNB are both public institutional investors (run and managed by the government), they may invest more in politically connected firms than in non-politically connected firms. Furthermore, some of these public institutional investors such as PNB³⁶ are established for the purpose of increasing Bumiputera share ownership in corporations to help achieve the objective of the New Economic Policy/National Development Policy (Gomez and Jomo, 1997; Fraser *et al.*, 2006). Thus the ability and willingness of these institutional investors to monitor firm performance is yet to be fully understood.

Elsewhere globally, the impact of institutional investors' involvement in corporate governance and activism on firm performance and shareholders' wealth is not clear. For instance, Choi and Cho (2003), who examine Korean *Chaebols* find that institutional investor activism is neither harmful nor beneficial to financial performance. Karpoff (2001) also finds no support to a link between shareholders' value improvement and increased shareholder activism. Based on the assumption that most institutional investors in Malaysia are pressure-resistant, their presence in family-controlled firms in Malaysia might help to reduce the costs of the principal-principal problem and subsequently improve firm performance (Gomez-Mejia *et al.*, 2003). From the above discussion, two hypotheses related to institutional investors' ownership in family firms are developed:

H1e: Ownership by domestic institutional investors in family-controlled firms is positively/negatively associated with firm performance.

³⁴ EPF is the sole pension fund for Malaysian civilian. Membership is mandatory for all employed Malaysian citizens.

³⁵ It is not uncommon for PNB to have a director representing their interest on the board.

³⁶ PNB is established in 1978 during the NEP period.

H1f: Ownership by domestic public institutional investors in family-controlled firms is positively/negatively associated with firm performance.

3.2.3 Foreign Investors as Block-holders in Family-controlled Firms

Foreign shareholdings in family-controlled firms might have significant governance implications which could eventually affect firm performance. Foreign holdings can be broadly split into categories of either ‘direct investment’ or ‘portfolio investment’. Direct investment is generally made by foreign corporations who have some sort of partnership with local firms, whereas portfolio investment is generally made by foreign institutional investors (commonly known as foreign fund managers). Thus both types of foreign investors behave in a different manner; the foreign institutional investors’ investment horizon may be relatively shorter and they are more concerned with stock market performance of the firms, and foreign corporations generally intend to form longer relationships with firms and invest in companies which are related to their core business. For instance, Seadrill Limited, a foreign offshore oil drilling company invests in Sapuracrest Petroleum, a family-controlled firm in Malaysia which is involved in the same field. Foreign corporate investors are thus likely to have *strategic interests*³⁷ – they may use their ownership stake in domestic firms as a way to develop their strategic interests, such as securing access to new markets or location-specific resources. Moreover, their ownership stakes in domestic firms also facilitates those firms accessing superior technical, managerial and financial resources (Chibber and Majumdar, 1999). Their presence also exerts monitoring of the owner-managers. Thus, the presence of foreign corporate investors in domestic firms may produce positive impact on firm performance.

Due to the ever increasing competition and higher corporate governance requirements post Asian Financial Crisis, it is more and more challenging for firms in emerging economies to attract the participation of foreign institutional investors in stock ownership. Meanwhile, as

³⁷ Aguilera and Jackson (2003) made a distinction between block-holders who have *financial interests* or *strategic interests*. They state that “*financial interests are predominant when investment is motivated by the prospect of financial return on investment...In contrast, strategic interests are prevalent when investment is motivated by nonfinancial goals, such as control rights*” (p.451).

these emerging economies liberalize their capital markets, firms find it more important than ever to attract foreign institutional investors to invest in them. Two company attributes that appear to be important for foreign fund managers to invest in a firm are good profitability and good corporate governance.³⁸

Foreign fund managers would avoid firms with poor profitability because investing in this type of firms would result in failure to meet their acceptable return-on-investment benchmark. They would also avoid investing in firms with weak corporate governance (particularly in emerging markets where the legal enforcement may be poor) because of the various types of excessive risks associated with companies with weak governance. The types of risks are accounting risk, asset risk and strategic policy risk (McEnally and Kim, 2008).³⁹ For instance, asset risk refers to the risk that the firm's assets will be misappropriated by the controlling manager-owners whereas strategic policy risk refers to the risk that manager-owners may enter into transactions such as diversification through mergers or takeovers that may not be in the best interest of shareholders, but that may result in large benefits for the managers or directors (McEnally and Kim, 2008). Conversely, the above-mentioned risks will be lower for firms with strong corporate governance and the lower risks will translate into lower cost of equity and therefore higher value of Tobin's Q.

More importantly, good profitability and good corporate governance are found to be connected in numerous studies. Young *et al.* (2008) believe that foreign institutional investors may play an important role in the process of governance reform in emerging economies (Young *et al.*, 2008). Foreign institutional investors may be able to monitor better because they are "*outside the domestic social networks from which the institutional norms of behaviour are generated, and they are therefore more likely to push for transparent deals...*" (Young *et al.*, 2008, p.212). They are therefore more 'pressure-resistant' to owner-managers of firms compared to domestic investors. Thus, the better monitoring ability of pressure-resistant foreign institutional investors helps to improve firm performance. Studies such as

³⁸ McKinsey Global investor Opinion Survey on Corporate Governance, 2002 shows that in the Asian region, 61% (21%) of foreign institutional investors consider corporate governance as equally important to (more important than) financial issues such as profitability in evaluating which companies they will invest in. Only 18% of the respondents consider corporate governance as less important than financial issues.

³⁹ See McEnally and Kim (2008) for further explanation on the risks associated with weak corporate governance.

Brown and Caylor (2004) and Anson *et al.* (2004) prove that firms performing well are more likely to be from among those with good corporate governance.

A study conducted by an industry practitioner from Malaysia, Amar Gill on emerging markets [as quoted by the CFA Institute (2005)] also found that well-governed firms enjoy much higher above-average total five-year returns of 930%, compared to 388% for the rest of the firms in the study. The McKinsey Global Investor Opinion Survey in 2002 shows that institutional investors are willing to pay a higher price for the stocks of firms with better corporate governance. The race to attract foreign investors has, to a certain extent, ‘encouraged’ firms to improve their corporate governance in order to compete successfully with other firms. In short, firms with good governance tend to generate better results; both for the firms and the investors and the better results tend to attract investors, particularly foreign fund managers, from developed economies.

Any association between foreign institutional investors’ ownership level and firm performance may also simply suggest another alternative explanation: that these investors ‘cherry-pick’ their stock investments. Studies also highlight that foreign institutional investors are generally more likely to have *financial interests* – though they may be capable to exert good monitoring, their focus on short term return and liquidity results in their unwillingness to develop a long term relationship with the firm (Douma *et al.*, 2006). Many of them would prefer to ‘vote with their feet’ rather than ‘vote with their voices’ if their investments return is unsatisfactory (Aguilera and Jackson, 2003). Nonetheless, one can still argue that to be cherry-picked by foreign institutional investors, firms need to show an encouraging improvement in their performance, possibly accomplished by having good governance.

In fact, good governance alone is a factor in being cherry-picked by foreign institutional investors. 63% of the institutional investors in the McKinsey Global Investor Opinion Survey, 2002, say that they will avoid companies with poor corporate governance. As an illustration, from that survey, some questions and responses from investors: “*How does corporate governance affect your investment decision?*” in McKensey’s survey: “*Our investment group would never approve an investment in a company with bad governance*” (U.S. investment

manager, USD20 billion private equity fund); “*Good governance is a qualitative cut-off criterion*” (Analyst, USD62 billion European Asset Manager); and “*I simply would not buy a company with poor corporate governance*” (CFO, USD3 billion, European Private Bank).

Overall, firms that are able to attract foreign institutional investors through good governance are able to achieve a higher market value for their equity and thus a higher Tobin’s Q. This is due to the assumption that the demand for their shares will be higher with the support and positive signalling of these foreign institutional investors, particularly in emerging markets where foreign investors are considered as the important drivers of market sentiment.

H1g: Ownership by foreign institutional investors in family-controlled firms is positively associated with firm performance.

H1h: Ownership by foreign corporations in family-controlled firms is positively associated with firm performance.

3.2.4 The State as Block-holders in Family-controlled Firms

State-owned corporations have been criticized as being inefficient and performing worse than other types of firm ownership (Ramaswamy, 2001; Orden and Garmendia, 2005; Shleifer and Vishny, 1997). State enterprises are subject to double agency problems. First is the tendency of managers to pursue objectives of self-interest and second is the tendency of the state (politicians/bureaucrats) to use the firms under their control to pursue political objectives instead of the commercial objective of profit maximisation, whilst the public pays for any losses (Shleifer and Vishny, 1994).

Though there are many empirical findings on the poor performance of state-owned corporations, there are virtually no studies that have been conducted on the performance of family-controlled firms with the state serving as the block-holder. It is possible that family-

controlled firms with substantial government ownership⁴⁰ may be able to perform better than family firms without government ownership due to several reasons.

Firstly, family-controlled firms with government ownership are different from state-controlled firms which often succumb to double agency problems as mentioned above. Due to the alignment of interest effect, owner-managers of family firms have more incentive to maximize the value of the firm than professional managers of state-owned firms. Secondly and more importantly, since government has direct interest in the ownership of these family firms, it suggests that these firms should have a certain degree of connection with senior government officials and influential political figures. Fraser *et al.* (2005) also use the equity ownership of government as one of their proxies for political patronage in examining the relationship between debt level and political patronage in Malaysia. In resource-based view (RBV), this political connectedness is beneficial for the firms as they are able to more easily obtain certain valuable resources and supports from the government; possibly at a cheaper price (Xu *et al.*, 2010). These firms may also receive preferential treatment in government contracts (Faccio *et al.*, 2006) and bank loan (Fraser *et al.*, 2005; Fan *et al.*, 2008). Thus, it is conjectured that:

H1i: Ownership by government in family-controlled firms positively affects firm performance.

3.2.5 Other Unrelated Family (Auxiliary Family) as Block-holders in Family-controlled Firms

The existence of *other unrelated* families as block-holders in family-controlled firms is more likely to pose a negative effect on firm performance. With potentially higher combined ownership (ownership of the controlling families plus the ‘auxiliary’ families), there is a tendency for both families to collude for the purpose of extracting private benefits. It is accepted that the possibility of consensus among shareholders of different families is more feasible because an alliance formed by families is subject to lower costs of extracting private

⁴⁰ Substantial holding refers to shareholding of at least 5%.

benefits. In contrast, the likelihood for institutional investors to form alliances with the family is lower due to the fact that their investment policy is normally subject to strict supervision and authority monitoring, and as such, the costs of extracting private benefits will be much higher (Maury *et al.*, 2005; Jara-Bertin *et al.*, 2008).

H1j: Ownership by ‘auxiliary family’ in family-controlled firms negatively affects firm performance.

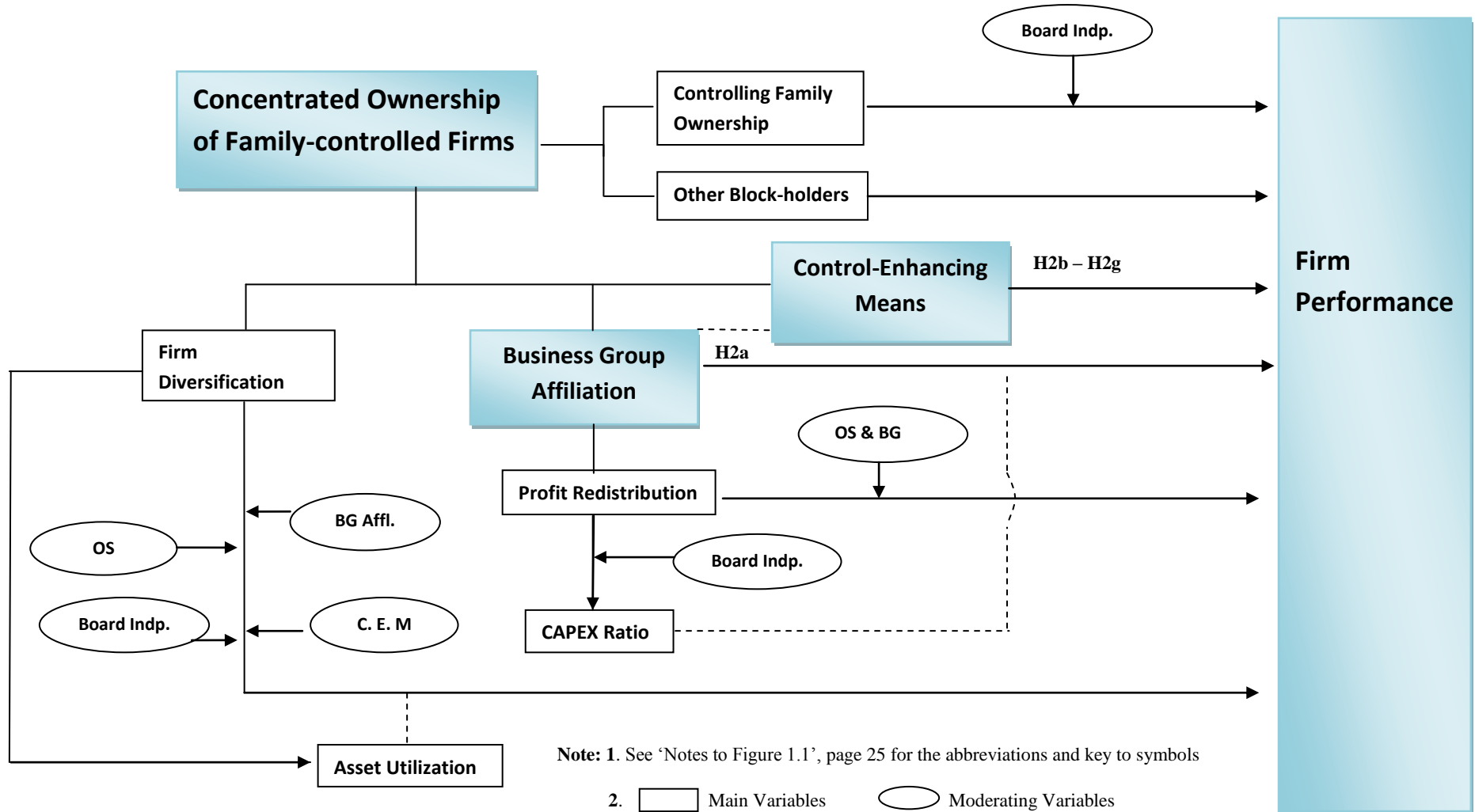
3.3 Family-controlled Business Groups: Advantages and Disadvantages

This section, together with Section 3.4, reviews the literature and develops the corresponding hypotheses related to the influence of business group affiliation and other potential control-enhancing means on the performance of family-controlled firms. In terms of the conceptual framework established, the relevant hypotheses are Hypothesis Set 2 as highlighted in Figure 3.2 (shaded in blue).⁴¹

The early works of Coase (1960) and Williamson (1981) contribute to the literature on business groups as they discuss the economic benefits of ‘internal market’ as opposed to ‘external market’. They stress the role of organisation in reducing transaction costs in various markets. According to Leff (1978) and Goto (1982), business groups exist because of imperfection in factor markets including the capital market and financial institutions. An important feature of market imperfection is the absence of effective intermediary institutions, due to which it is “*costly for emerging market firms to acquire necessary inputs such as finance, technology, and management talent*” (Khanna and Palepu, 2000a, p.868). With business groups, an internal market such as the internal capital market can be created within member firms where inputs and resources can be transferred from one firm to another with ease. Thus the more effective internal market of business groups – the intra-group transactions – compared to the external markets, the lower transaction costs for group-affiliated firms.

⁴¹ It should be noted that controlling families are able to structure business groups and use this to enhance their control. Thus business groups are ‘grouped’ together with other control-enhancing means as depicted in Hypothesis Set 2.

Figure 3.2: The Influence of Control-enhancing Means (Including Group Affiliation) on Firm Performance - Hypothesis Set 2



Family-controlled business groups are more common in developing countries because the imperfections therein are more prevalent compared to developed countries. In these countries, as mentioned above, group-affiliated firms have the advantage over independent firms via intra-group trading and internal capital markets (Leff, 1978). This is in contrast to developed countries such as the US and UK where the capital, labour, raw materials as well as product markets function well. Business groups are formed in developing countries as the external markets are generally underdeveloped. A business group can take advantage of its large size to borrow money at a lower cost. Subsequently, it can operate an internal capital market for its member firms (Joh, 2003). For instance, the internal capital market of business groups allows controlling shareholders to access the cash flows of all member firms, and capital can be transferred from one member firm to another member firm more efficiently without the need to rely on external markets (Almeida and Wolfenzon, 2006).

Business groups are common in developing countries because they can be used as ‘vehicles’ by controlling shareholders to diversify across different industries in order to build their business empire, as the small size of the domestic market does not allow for internal expansion in the same business line (Leff, 1978). As such, many business groups are formed in Malaysia (as a small emerging economy) as a way to expand their business empire and provide a solution to the small domestic market (Chu and Song, 2011). In some developing countries such as China and India, a variety of market failures or imperfections occur because of asymmetric information and agency problems as illustrated by Khanna and Palepu (2000a) on the imperfection in capital markets:

...the financial markets are characterized by inadequate disclosure and weak corporate governance and control. Intermediaries such as financial analysts, mutual funds, investment bankers, venture capitalists, and the financial press are not fully evolved. Finally, securities regulations are generally weak and their enforcement is erratic. (p.868)

From an agency theory perspective, business groups can be regarded as “*a collection of agency relationships between the controlling and minority shareholders*” (Yiu *et al.*, 2007, p.1557). The existence of family business groups raises two main concerns. First, there is a

greater chance of inefficient transfer of cash flows or resources from the profitable member firms with high cash flow, to firms with low cash flow, without considering the investment opportunities for each firm (Shin and Park, 1999). Second, there is a tendency of the controlling family to ‘tunnel’ the assets and resources from the firm through pyramiding and cross-holdings (Bertrand *et al.*, 2002, 2008; Johnson *et al.*, 2000). Pyramidal structure and cross-holdings are the common characteristics of business groups and Claessens *et al.* (2000) state that in East Asian countries, “(t)he separation of ownership and control is most pronounced among family-controlled firms...” (p.81). These types of ownership structure allow the controlling family to expropriate the minority shareholders’ value by ‘tunnelling’ assets within the group (Chang, 2003). For instance, Bertrand *et al.* (2002, 2008) find that business groups are used by controlling families to tunnel resources away from minority shareholders. Business groups can thus be used as a tunnelling device by the controlling families when it engages in intra-group transactions for instance.

Specifically, the controlling families can divert resources from a member firm of which they own less to a member firm of which they own more. Khanna and Rivkin (2001) explain that managers of the affiliate firms have little incentive to be efficient because they are “*secure in the embrace of the group*” (p.51). The controlling families can also sell (buy) an asset of a member firm of which they own less to (from) another member firm of which they own more at a lower (higher) price than the market price. In a nutshell, the principal-principal problem in business groups as explained by Dharwadkar *et al.* (2000) and Young *et al.* (2008) has led to more research being carried out to investigate whether business groups create or destroy value (due to tunnelling) for their minority shareholders (Bertrand *et al.*, 2002; Bae *et al.*, 2002; Johnson *et al.*, 2000).

According to Cheong *et al.* (2010), who draw on the classic work of Penrose’s (1959) resource-based view (RBV), some vital resources are “*lumpy or indivisible and thus they must be purchased or installed only in certain sizes*” (p.141). Thus, even without market imperfections, business groups have the advantage over independent or free-standing firms in acquiring and maintaining these resources.

In East Asian countries including Malaysia, business groups will continue to exist so long as the factor markets remain imperfect and their governments continue to influence the allocation of resources in the economy (Chang 2006). However, according to authors such as Khanna and Palepu (2000c) and Peng *et al.* (2005), the benefits of business groups might dissipate as time passes and the markets become more efficient and political interference subsides. Chang (2006) seconds the authors' view and believes that business groups in East Asia may need to "*narrow down their business portfolios and focus upon their core businesses*" (p.413) over time as the nations' capital markets and other institutions such as the legal institution and law enforcement develop further. This is especially true when business groups face intense competition from their foreign counterparts as those countries liberalize their markets (Peng *et al.*, 2005).

In other words, diversification within business groups and firms affiliated to groups is seen as undesirable, failing to promote value enhancement to the firms and groups themselves, particularly under the auspices of globalization and liberalization. In a more competitive product market, the intra-group transactions of business groups are less attractive, as stated by Joh (2003) that "*(w)ithout competition, the seller with a captive buyer has less incentive to lower cost and improve quality. Likewise, a developed external capital market erodes the advantage of an internal market*" (p.295). In short, as an economy progresses and undergoes liberalization, the external product, factor and capital markets will become more competitive, thus reducing the advantages of intra-group transactions and internal capital markets (Joh, 2003).

Moreover, Scharfstein and Stein (2000) and Shin and Stulz (1998) contend that internal capital markets in diversified groups are often inefficient. They assert that groups have the tendency to over-invest in weak businesses and under-invest in the stronger ones and ultimately lower the entire value of the group. Past research conducted on western conglomerates in the 1990s such as Lichtenberg (1992) and Lang and Stulz (1994) have already shown that the values, as well as productivity of focused (undiversified) firms, are generally greater than those of diversified conglomerates.

3.3.1 Family-controlled Business Groups and Firm Performance

Business groups have received increasing attention recently from corporate governance researchers. The research on business groups “*has recently become highly topical*” (Guest and Sutherland, 2010, p.618). Many of these corporate governance researchers regard business groups as an interesting and promising area of study surrounding the conflict of interests between controlling and other stakeholders. In particular, controlling shareholders in business groups may expropriate the wealth of other shareholders through activities such as ‘tunnelling’,⁴² and excessive diversification across unrelated industries etc. (Khanna and Yafeh, 2007; Bhaumik and Gregoriou, 2010).

On the positive side, business groups are more common in emerging economies as they are seen as having the ability to fill the ‘institutional voids’ in these economies, as elaborated by Guest and Sutherland (2010) that: “*(b)y compensating for imperfect or under developed markets in finance, labour and products, for example, they may help facilitate exchanges that could not happen through the market place*” (p.618). The impacts are that business groups allow member firms to benefit from internal markets created by the group and access to group resources and thus enjoy lower transaction costs and better company development. The economic benefits of internal markets compared to external markets have been highlighted since by Coase (1960) and later by Williamson (1981).

Khanna and Yafeh (2007) provide a comprehensive reviews of the advantages and disadvantages of business groups and ask probably the most apt question in this field of research: Should business groups be viewed as ‘paragons’ or ‘parasites’? Some research finds that group affiliation provides benefits for member firms and their shareholders under certain conditions but others find that group affiliation is harmful, especially to minority shareholders. Evidence from the literature with regard to the benefits and costs of business groups is mixed and inconclusive.

⁴² Tunnelling is the term introduced by Johnson *et al.* (2000) to describe the activity of transferring assets and resources out of firms by controlling shareholders.

Further to the literature on the strengths and weaknesses of business groups, research has been extended to study the performance of group-affiliated firms compared to non-affiliated firms. The empirical evidence thus far is rather mixed. According to Joh (2003), Korean group-affiliated firms in the mid-1990s showed lower profitability than independent firms and when resources are transferred from one affiliate to another, they are usually wasted, implying that tunnelling occurs. By way of contrast, Chang and Choi (1988), who analyse group-affiliated firms in Korea from 1975 to 1984, find that they performed better than independent firms. Similarly, Khanna and Palepu (2000a), who examine the financial performance of group-affiliated firms in India in 1993, found that these firms performed better than their counterparts without group affiliation. Joh (2003) believes that differences in the development stages of firms partly explain the opposing findings made by himself and the above researchers. Chang and Choi's (1988) and Khanna and Palepu's (2000a) studies are based on samples drawn from the early development of each country but Joh's (2003) study is drawn from Korean firms in the mid-1990s by which point the country had already achieved a certain level of progress and development in its external product, factor and capital markets. This is evidence that as an economy progresses, the "*potential benefits of overcoming market imperfections decreases while the cost of agency problems and conflicts of interest between controlling family shareholders and minority shareholders can increase*" (Joh, 2003, p.318).

In general, as discussed in the literature and shown by the empirical evidence, it is difficult to predict whether the benefits associated with business groups will outweigh the costs or *vice versa* because either outcome is possible. Firm performance will be positively (negatively) affected when the benefits (costs) outweigh the costs (benefits). Thus the following hypothesis is proposed:

H2a: Firms affiliated to a business group perform better (worse) than firms without group affiliation.

3.4 Control-enhancing Means for Controlling Families

Both the pyramidal structure and cross-holdings mechanisms can be used by controlling families to create business groups with highly complicated structures. An example of such a ‘complicated business group structure’ in Malaysia is the Berjaya Group, controlled by the Vincent Tan family.⁴³ According to Khanna and Palepu (2000b), the complicated structure of business groups gives rise to more opportunities to expropriate. La Porta *et al.* (1999) also question whether the controlling owners of business groups create complicated ownership structures in order to reduce the threat to their control. Thus, business groups with more complicated structures are reputed to be less transparent and have more opportunities to engage in questionable practices at the expense of minority shareholders and firm performance.

The above argument suggests that family business groups are not all alike as some group structures can be complex while others can be straightforward. For instance, a simple group structure in Malaysia may involve a collection of listed firms with common ownership and control by a family without any pyramidal structure/cross-holdings. In other words, the member firms of a business group are *directly* controlled by the same family (as the largest shareowner) without using pyramidal structure/cross-holdings mechanisms. However, some business groups in Malaysia are formed by using pyramidal structure, as acknowledged by Claessens *et al.* (2000) and in a small number, pyramidal structure and cross-holdings can be complicated as they involve simultaneous holdings of a listed firm’s equity by several other listed firms in the group and these firms may concurrently cross-hold each other’s shares. Since pyramidal structure and cross-holdings as control-enhancing mechanisms are associated with divergence of cash flow from control, they need to be accounted for in examining the impact of ownership control on firm performance.

Apart from pyramids and cross-holdings, controlling families of either group-affiliated or non-affiliated firms could also have their control over the firms enhanced under other various

⁴³ This study categorizes family business groups in Malaysia into three levels of complexity: i) business groups with simple structures, ii) business groups with pyramidal structures, and iii) business groups with complicated structures. The details are discussed in sub-section 4.7.2 in Chapter 4.

circumstances. One such circumstance is when appointing more family members to the board of directors, not only to represent the interests of the family but sometimes to dominate the board. A board with a high presence of family directors may find it easier to carry out activities detrimental to firm performance such as tunnelling of company resources (Prabowo and Simpson, 2011). According to Prabowo and Simpson's (2011) findings, family control through family ownership and involvement on the board is negatively related to firm performance. They also find that family ownership is more damaging to firm performance whenever the family is highly involved in the board's decision-makings. One such scenario is when the family occupies the two most senior posts (Chairman of board and CEO) of the firm simultaneously.

Another instance of enhanced family control suggested in this study is when the controlling family is the sole or only block-holder of the firm. The idea is that if a second party, unrelated to the family, has an equity stake of at least 10% in the firm, "*it could be more difficult for the first owner to control the board of directors*" (Claessens's *et al.*, 2000, p.93). A 10% cut-off point is suggested by Claessens *et al.* (2000) as it is sufficient enough to cause concern to the family's level of control.

An important aspect of heterogeneity of business groups which needs to be considered and reviewed in this study is their size. Business groups vary in size and the size of a business group can be measured by total market value of the group or the number of listed affiliates in the group. The finding from Khanna and Palepu (2000a), in their study on Indian business groups, shows that the scale (size) of business groups is important in affecting the performance of its affiliated members. Specifically in their findings, business groups of small and medium sizes underperform their non-group counterparts but large business groups outperform their non-group counterparts. They attribute the findings to the efficient working of internal markets in large business groups where the benefits are more than offsetting the costs associated with creating and forming the structure of the business group.

Moreover, the largest business groups "*are able to derive economic benefits because of their political connections in an economy where government regulation plays an important role*" (Khanna and Palepu, 2000a, p.888). However, the same equivalent efficiency does not exist

for small and medium sized business groups due to lack of managerial skills, economy of scale and political connections. Coupled with weak institutional development and the corporate governance environment in India, the agency problems are severe and cause the overall underperformance of small and medium sized business groups.

In Malaysia, it is also well documented that many large family business groups are well connected to the ruling political party and influential politicians (Gomez and Jomo, 1997; Nazli and Weetman, 2006). In resource-based view (RBV), access to ‘valuable resources’ through political channels may suggest an advantage to business groups which helps to maintain or improve firm performance. These business groups receive substantial political patronage and privilege from the government and influential politicians, such as being granted special licenses, government concessions and contracts, access to cheap credit, and approval to operate in lucrative economy sectors such as power generation and oil and gas related industries (Gomez and Jomo, 1999; Gomez, 2006; Johnson and Mitton, 2003).

Due to the support of senior politicians, large business groups are able to secure and enjoy state-created ‘rents’ and add to the controlling family’s wealth. The ruling political party and politicians, in reply, benefit by receiving funds from corporate figures for political campaigns. Instances of corruption are not uncommon as political figures attempt to create personal wealth. The *quid pro quo* politico-business relationship is maintained as long as the political figures are in power.

However, whether nepotism and cronyism help to improve or worsen firm performance is not clear. As discussed in Chapter 2, resources may not be efficiently allocated as they will be used by the owner-managers for rent-seeking activities, hence a negative effect of inefficient resource allocation on firm performance. Moreover, large business groups may also be more prone to tunnelling and expropriation activities as their group structures become more complicated and lack transparency. It is already argued in sub-sections 2.2.3 and 2.2.4 in Chapter 2 that the prevalence of political connection in large business groups causes the controlling families of those business groups to be more inclined towards expropriating company resources.

Cases of minority shareholders' expropriation in firms controlled by family business groups that are politically well connected are not unheard of in Malaysia. For instance, in the infamous case of the Renong Corporation, the controlling family, Halim Saad, who was also politically well connected, had made use of United Engineer Malaysia (UEM) (another listed firm controlled by Halim via the Renong Corporation) to buy out some management-controlled shares of the financially-troubled Renong at artificially high prices. The buy-out directly transferred wealth to Halim Saad's family at the expense of the minority shareholders of both Renong and UEM (Moore, 1998).

Another reported case involved Ting Pek Khiing, politically well connected and the founder and chairman of the business group, Ekran. Ekran issued shares in May 1997 with the intention to purchase shares from an affiliated firm which was involved in the construction of the Bakun Dam, the largest hydroelectric project ever undertaken in Malaysia. Instead, with the occurrence of the Asian Financial Crisis beginning July 1997, the funds raised from the share issuance was used, via third parties, to buy out Ting's stakes in several financially distressed affiliated firms of Ekran.

Thus, from the above discussions, the following hypotheses are proposed:

H2b: Due to the higher tendency of expropriation, group-affiliated firms with family control enhanced by the pyramidal structure perform worse than all other firms without such enhanced control.

H2c: Firms with both the chairmanship and CEO positions being occupied by family members perform worse than firms without such an arrangement.

H2d: Firms without the presence of other block-holders besides the controlling family perform worse than firms with the presence of other block-holders.

H2e: The extent of family directors on the board positively (negatively) affects firm performance.

H2f: The complexity of business groups negatively affects firm performance.

H2g: The size of business groups positively (negatively) affects firm performance.

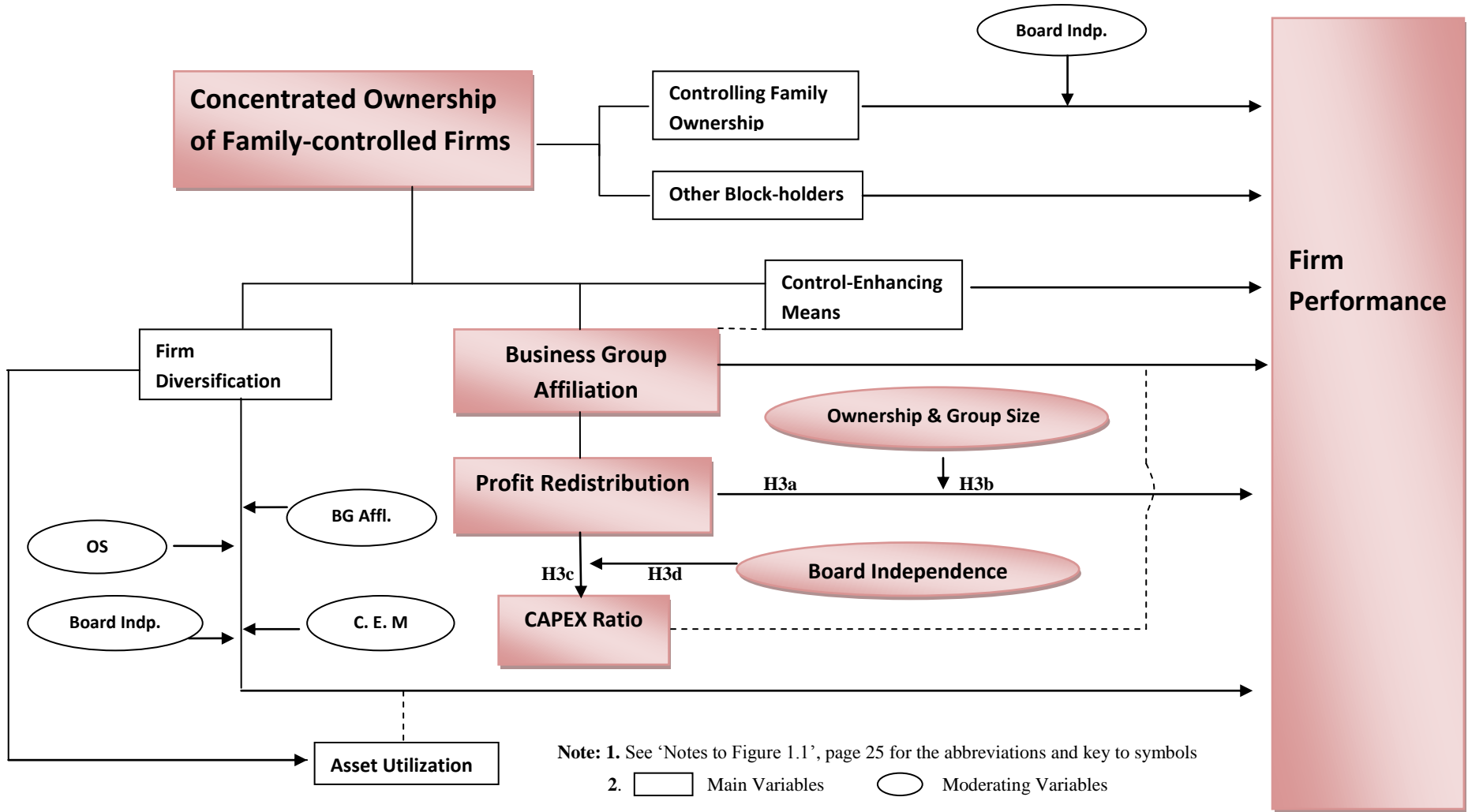
3.5 Profit Redistribution in Family-controlled Business Groups

This section reviews the literature and develops corresponding hypotheses pertaining to the influence of profit/resource redistribution phenomenon on the efficiency and performance of family-controlled firms. In terms of the conceptual framework established, the relevant hypotheses are Hypothesis Set 3 as highlighted in Figure 3.3 (shaded in red).

As discussed earlier, the internal market of business groups facilitates the transfer of resources and cash flows from one affiliated firm to support the operation of another. It is not surprising therefore to note that “*poorly performing member firms can access valuable group resources, including capital, managerial talent or even preferential access to government favours at the expense of better performing members*” (Estrin *et al.*, 2009, p.400-401). The redistribution of profits and resources occurs due to several possible reasons.

One cause of redistribution is where families are concerned with the *profit stability* of the group rather than the *profit maximization* of member firms. Firms with low profits need to be assisted in order to continue to exist, thus the profit stability of the group is more likely to assure the group’s survival (and perhaps political power) so that the family can continue to accrue benefits from the group (Ferris *et al.*, 2003; Estrin *et al.*, 2009).

Figure 3.3: The Influence of Profit Redistribution on Firm Efficiency and Performance - Hypothesis Set 3



Ferris *et al.* (2003), who examine Korean *chaebols* conclude that the costs associated with *chaebols* outweigh the benefits and thus *chaebol*-affiliated firms' return of assets is lower and they suffer a value loss relative to non-affiliated firms. In other words, group-affiliated firms have lower value relative to comparable firms without affiliation. They suggest three reasons for the value loss: (i) the controlling shareholders are more concerned about the *profit stability* of the group rather than the *profit level* of individual member firms. In other words, evening out returns across member firms in order to stabilize the entire group's profits is more important because this is more likely to assure the group's survival so that the family can continue to accrue benefits from the group. Estrin *et al.* (2009) also find such 'variance-reducing' redistribution among Russian business groups, (ii) the over-investment in member firms operating in low growth industries. This is consistent with Jensen's (1986) *free cash flow hypothesis* that managers who have at their disposal ample free cash flows tend to over-invest in empire building and pet projects and, (iii) the existence of cross-subsidizing the unprofitable and troubled member firms of the group. This practice of 'propping up' the poor-performing firms in business groups is also documented in Cheung *et al.* (2009b), Jian and Wong (2010), Friedman *et al.* (2003) and Johnson *et al.* (2000).

Bertrand *et al.* (2002) examine tunnelling activities within business houses in India and find evidence of earnings being transferred from member firms in which the controlling families have low cash flow rights to firms in which they hold high cash flow rights. Transfer of earnings takes place through non-operating items, such as nonrecurring gains and losses (Cheung *et al.*, 2009a, 2009b, 2006). The transfer or redistribution of profits and resources can be done in many ways such as the manipulation of transfer price, asset transactions between member firms at above or below market prices and intra-group loans at a rate different to the market rate, etc.

The above 'dark side' of redistribution suggests that the internal monitoring mechanisms established in groups are not effective in addressing agency problems that arise from business activities, including capital investment and project selection activities (Ferris *et al.*, 2003). Though anecdotal evidence shows that it is not uncommon for the redistribution or transfer of profits or resources to take place, it is very difficult to prove such activities empirically because they are normally executed discreetly (George and Kabir, 2008). This

study will use the method employed by Gedajlovic and Shapiro (2002) and Lincoln *et al.* (2004, 1996) in an attempt to test the inter-affiliates profit redistribution hypotheses. These studies deem that the outcome of profit redistribution is that affiliates with previously high profits will subsequently experience reduced profitability, while firms with previously low profits will subsequently gain.

The study by Estrin *et al.* (2009) shows that firms affiliated with business groups in Russia are more profitable than non-affiliated firms. Moreover, their analysis also testifies that groups practice ‘profit redistribution’ from stronger to weaker group members. As an emerging economy that is undergoing transition, Russia has many similar characteristics with other emerging economies such as high concentration of corporate ownership and inefficient external markets.

It must be acknowledged that besides the above value-destroying causes, some of the motives behind profit and resources redistribution may add value for the shareholders and improve firm performance. For instance, Lewellen’s (1971) ‘co-insurance effect’, as discussed in an earlier section, would increase the affiliated firms’ debt capacity which would incur higher tax shields and correspondingly less payment of tax. Gramlich *et al.* (2004) concur with the idea and add that the shifting of profits among member firms allows the group to reduce its combined tax burdens. Another sensible reason for redistribution is the requirement of funds to finance new investments for affiliated firms that are financially constrained (George and Kabir, 2008). Ferris *et al.* (2003) find that *chaebols*-affiliated firms have significantly higher leverage than non-affiliated firms and lower tax burdens. Cestone and Fumagalli (2005) show that funds are channelled to affiliated firms in business groups to help increase the group’s competitiveness in the industry.

From the above discussion, the hypothesis is:

H3a: Redistribution within a business group leads to firms with previously high (low) profitability seeing their profitability reduced (improved) in the subsequent period.

Generally, larger business groups are involved in an extensive range of industries and have a higher number of affiliated firms that also vary in size. Consequently, the difference in profitability (profitability variance) between member firms will be greater for larger business groups and thus larger business groups may engage more in redistribution of earnings and resources (such as capital) than smaller business groups (George and Kabir, 2008).

In addition, the literature also highlights that larger business groups are more inclined to have political connections (Faccio, 2006; Johnson and Mitton, 2003; Agrawal and Knoeber, 2001) and these connections may strengthen the profit redistribution efforts of the controlling families. Moreover, the strength or intensity of the distribution effect could be moderated by the strength of family control in the affiliate firms (Lincoln, 1996). Generally, the higher the level of family control over an affiliate, the more dominant the family will be and the easier it will be for them to perform more redistribution activities. Thus the hypothesis that follows is:

H3b: The strength of the profit redistribution effect is affected by the size of the business group and the strength of family control; the larger the size of the business group and the greater the strength of family control, the more likely profit redistribution will be.

Finally, if expropriation is expected to be more serious in group-affiliated family firms than in non-group family firms, some of the costs of expropriation could manifest through the inefficient reallocation of resources from one member firm to another member firm within the ‘internal market’ of the business group (George and Kabir, 2008). In other words, resources will be reallocated from high-performing firms (with good investment prospects) to low-performing firms (with poor investment prospects)⁴⁴.

Oppositely, if resource allocation is efficient, more business group resources will be allocated to deserving good-performing firms, whereas poor-performing firms will not be subsidized. Following this reasoning, the implication is that if resource allocation among member firms is inefficient, cash flows and other resources allocated for capital investments (capital expenditure) of good-performing firms, on average, will not be greater than poor-performing

⁴⁴ Good investment prospects or opportunities refer to investments that yield positive NPV and *vice versa*. Thus firms with good investment prospects generally perform better than firms with poor investment prospects.

firms (they will be either the same or lower). Conversely, without the ‘internal market’, non-group firms need to rely on the external market for their capital expenditure and therefore only good-performing firms have both the need and ability to invest in capital expenditure than poor-performing firms. Thus in non-group firms, capital expenditure will be significantly higher for those performing well and lower for firms performing poorly.

This study also intends to examine whether in group-affiliated firms there is a difference in the capital expenditure of ‘firms with high board independence’ compared to ‘firms with a lack of board independence’. Three distinct board characteristics are used in this study to describe the attributes of board independence or the lack thereof: (i) whether independent directors make up of least 50% of the board; (ii) whether the chairman of the board is independent; (iii) whether the audit committee members are all independent. A board having any of the above attributes, such as a higher proportion of independent directors, an independent chairman, or all independent directors on the audit committee would be better able to monitor inappropriate company activities or decisions such as capital expenditure on poor performing projects. As a result, the inefficient reallocation of resources (reallocation from good-performing to poor-performing firms) can be monitored and curbed. The outcome is that more resources and cash flows will be channelled to deserving firms (good-performing firms) from undeserving firms and *vice versa*. Consequently, the high performance-high capital expenditure and low performance-low capital expenditure relationship will be restored in group-affiliated firms with such attributes.

Based on the above discussion, the following two hypotheses are proposed:

H3c: Due to the presence of inefficient resource (profit) redistribution only in group-affiliated firms, capital expenditures of good-performing firms will not be greater than poor-performing firms among group-affiliated firms; whereas capital expenditures of good-performing firms will be greater than poor-performing firms for the non-group firms.

H3d: The board of a group-affiliated firm with certain attribute of independence curtails inefficient resource redistribution and thus the capital expenditures between good and

poor-performing firms are differentiable with good-performing firms, on average, having higher capital expenditure than poor-performing firms.

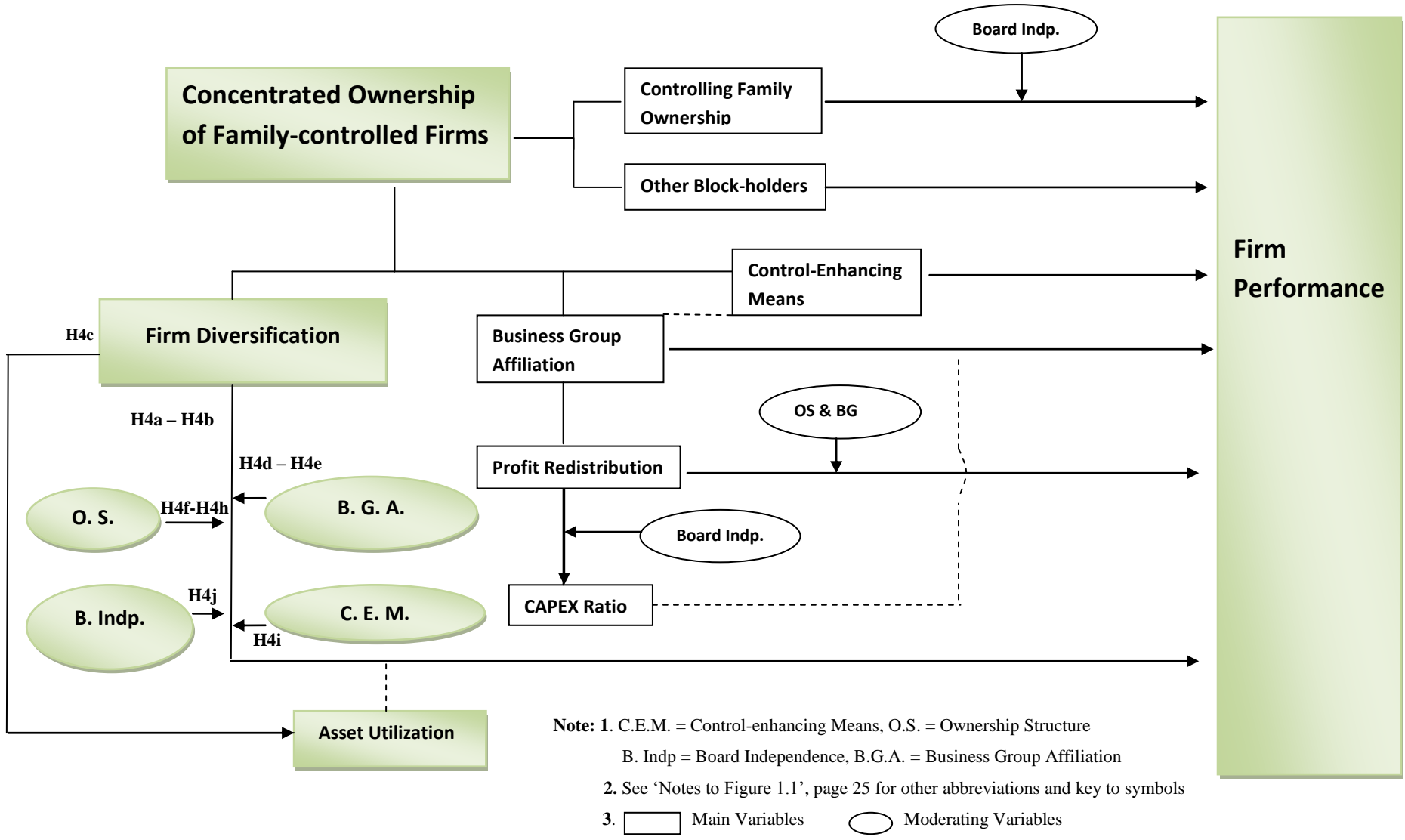
3.6 Firm Diversification in Family-controlled Firms

This section reviews the literature and develops the corresponding hypotheses related to the effects of firm diversification on the efficiency and performance of family-controlled firms. In terms of the conceptual framework established, the relevant hypotheses are Hypothesis Set 4 as highlighted in Figure 3.4 (shaded in green).

3.6.1 Firm Diversification and Performance

The literature on firm diversification is voluminous, diverse and ever-growing. One of the most important areas of firm diversification research is concerned with the relationship between diversification and firm performance. Two important survey papers, Martin and Sayrak (2003) and Palich *et al.* (2000), show continuing interest exists in the subject of diversification-performance among researchers. Though there is no lack of prior literature on the diversification-performance link, very limited research work, especially in Malaysia, has been undertaken on the roles of corporate governance, such as ownership structure and board independence, in influencing the diversification-performance link. Moreover, the presence of business groups (which alone raise governance issues) may also affect the diversification-performance link. This element of the diversification-performance link research is still lacking and this study intends to fill the gap in the literature.

Figure 3.4: The Influence of Firm Diversification on Firm Efficiency and Performance – Hypothesis Set 4



According to Gomez (2006), using diversification to expand a business has been a popular strategy for corporations in Malaysia ever since the British colonial period: “*Chinese immigrants (in Malaya) diversified into any field that held out the prospect of high returns*” (Gomez, 2006, p.124), and “*Bumiputeras (the indigenous Malays) who controlled quoted companies began doing the same in the 1980s*” (Gomez, 2006, p.124). Prior to 1997, before the AFC, there were signs of over-diversification in many firms in Malaysia. Most of these firms took the opportunity of the availability of relatively low-cost credit and bank loans to finance their expansion and diversification (Fatimah, 2001). Many firms were reported to have a very high debt-to-equity ratio prior to the AFC (Chu and Song, 2011; Suto, 2003).

Initially, diversification is believed to have some economic and strategic value. However, over time, as firms are ambitiously involved in diversification, it is possible they will be diversified beyond their core competencies and capabilities – into unrelated businesses. The manager-owners could increase diversification to boost the chances of inefficient reallocation of resources, transfer pricing, insider trading or other activities that protect the interests of the controlling families which subsequently leads to lower firm value (Chu, 2007). Early works such as Palepu (1985) show that firms with unrelated diversification are less profitable than firms without unrelated businesses. Some researchers argue that excessive diversification is a reflection of poor corporate governance mechanisms.

From the agency perspective, it is argued that additional power, self-pride, prestige and size-related managerial compensation are all examples of private benefits that can be derived from firm diversification (Jensen, 1986). Demsetz and Lehn (1985) find that diversification allows controlling shareholders to derive greater insider information and additional ‘profits’ from insider trading activities in the form of both pecuniary and non-pecuniary private benefits.

Singh *et al.* (2007) argue that: “*...in emerging markets where proper monitoring mechanisms do not exist, market based checks and balances are absent, and an active market for corporate control is practically non-existent, agency led diversification may be a strong possibility*” (p.340). This is especially true in a corporate sector which is dominated by

family firms and family business groups with “*almost unchecked power and financial strength*” (p.340).

In Malaysia, diversification is a way for a firm to expand and become larger; larger firms stand a better chance to form ‘relationships’ with political figures and ‘work together’ with them for *quid-pro-quo* benefits (for instance receiving political patronage for controlling shareholders and funds for politicians and their ruling political party). The information compiled by Gomez and Jomo (1997) shows that many of the firms which are politically well connected to high-ranking political figures are larger firms or business groups that are widely diversified.

Asian (including Malaysian) corporations are well known for extensive diversification (Claessens and Fan, 2002). Claessens *et al.* (2003) find that about 70% of Malaysian firms pursued diversification that led to misallocation of capital and resources and were thus inefficient. The danger of extensive diversification is that it may result in manager-owners expanding the firm beyond what is sensible, affecting firm performance. Examples of insensible motives of diversification include empire-building and the participation in pet projects (Thillainathan, 1999).

In Anglo-Saxon countries, it is asserted that diversification is the main reason for the stock value of conglomerates being traded at a discount. One of the causes of discounting is agency problem (Amihud and Lev, 1999; Denis *et al.*, 1999). However, the reason why agency problem could cause diversification discount is unclear. From the agency theory perspective, the intention of management to diversify could be due to the empire-building mindset. ‘Diversification discount’, as reported in the literature, is generally interpreted as evidence of misalignment between the managers’ behaviour and shareholders’ interests and therefore is an example of agency problem in the corporate governance of the firms (Bru and Crespi-Cladera, 2006). Over-diversification could be a reflection of unscrupulous investment behaviour of managers (Jensen, 1986). The consequences of ill-intended diversification are declining firm performance and destroyed firm value. Yet Fauver *et al.* (2003) do not find evidence to support diversification discount in developing countries even though it is

documented in developed countries. Firm diversification might bring more benefits than costs in emerging economies.

From resource-based view, diversification can provide resources and capabilities that are transferable across various divisions of a firm (Martin and Sayrak, 2003). It also creates value by mitigating failures in product, labour and capital markets in less developed countries by replicating the functions of institutions that are ‘missing’ in those countries (Khanna and Palepu, 2000a). Khanna and Palepu (2000a) find that, in India, an increase in diversification can reduce transaction costs and improve firm performance. Also, diversification may ease firms’ access to external markets and allow them to borrow more, at a cheaper cost. This is because different cash flows among divisions could cancel out each other’s cash flow fluctuations and stabilize the overall cash flows of the entire firm (Lewellen, 1971). From the perspective of creditors, the risk-reduction creates what Lewellen (1971) calls the ‘co-insurance’ of diversification where the lending has a lower default risk. Nevertheless, excessive borrowing in diversified firms is considered to be one of the factors which contributed to financial distress and bankruptcy in many firms during the 1997 AFC (Claessens *et al.*, 1998a and 1998b).

Chu and Song (2011) study the connections between firm diversification, capital structure and the role of large shareholders in Malaysian firms. They find diversification to be non-linearly related to firm value in which a low level of diversification improves firm value and a high level of diversification destroys firm value. However, by covering only the manufacturing industry with sample data collected from the period 1994 to 2000, before corporate governance reform became effective in Malaysia, Chu and Song’s study is rather narrow in scope.⁴⁵

Using a sample of 355 listed companies, Zuaini and Napier (2006) investigate the relationship between diversification and firm value in Malaysia. In contrast to what is claimed by some, their overall result shows no evidence of lower value for firms with a higher degree of diversification. Part of this study is to extend Zuaini and Napier’s (2006)

⁴⁵ Corporate governance reform took place in Malaysia with the release of the Malaysian Code on Corporate Governance in 2000.

work by including not only ownership structure but also various aspects of business groups (such as group size and group complexity) and board independence in the analysis of the diversification-performance link so that a better understanding can be obtained.

Chakrabarti *et al.* (2007) do not find any relationship between firm diversification and performance in Malaysia and Thailand, both economies with relatively weak institutions (e.g. the regulatory institutions), whereas they find that diversification is positively related to return on assets (ROA) for Indonesia, the economy with the least developed institutions and finally a negative relationship in the case of Japan and Korea, both with relatively developed institutional environments. They conclude that diversification is therefore beneficial only in economies with “*substantially underdeveloped institutional environments*” (Chakrabarti *et al.*, 2007, p.111), whereas diversification is harmful in more developed institutional environments.

Lee *et al.* (2008) contend that the ‘diversification premium’ caused by the imperfection of input and product markets [known as ‘institutional voids’ by Khanna and Palepu, (2000a, 2000c)], as documented in some past studies of emerging economies, is not likely to stand the test of time. The findings of their study in Korea from 1984 to 1996 have empirically shown that as the markets in Korea developed and underwent institutional transition during the period, the premium enjoyed by diversified firms had gradually dissipated over time and was eventually replaced by ‘diversification discount’.

In Malaysian firms, ‘diversification premium’ could have been replaced with ‘diversification discount’ as a decade had passed after the Asian Financial Crisis wherein progress has been made with regards to corporate governance development. Therefore, on balance, it is acceptable to expect that the effect of diversification on firm performance is likely to be negative. Thus,

H4a: Diversified firms underperform focused firms.

H4b: The greater firm diversification is across industries, the lower is firm performance.

3.6.2 Firm Diversification and Efficiency

According to Singh *et al.* (2007), one of the possibilities of poorer performance of diversified firms associated with diversification discount, as documented in past studies, is higher agency problems in these diversified firms. If diversification is agency-driven, then a negative relation will be expected between asset utilization efficiency and the degree of diversification.

According to Ang *et al.* (2000), asset utilization efficiency can be measured by the asset turnover ratio (total sales/total assets) of firms. The ratio indicates how effectively owner-managers deploy the firm's assets. This ratio is also used as a proxy for agency costs in Florackis (2008), Singh and Davidson (2003) and Fleming *et al.* (2005) and the explanation provided is that “(a) low asset turnover ratio may indicate poor investment decisions, insufficient effort, consumption of perquisites and purchase of unproductive products (e.g. office space)” (Florackis, 2008, p.45).

Moreover, since the conflict of interests between owner-managers and minority shareholders in group-affiliated firms may be more serious than non-group firms, as discussed earlier, the negative relationship between asset utilization efficiency and firm diversification could be stronger in these firms compared to non-group firms. Thus, the following hypothesis is proposed:

H4c: Asset utilization efficiency is negatively related to the degree of firm diversification because firm diversification is agency-driven and this relationship is stronger for group-affiliated firms than non-group firms.

3.6.3 Roles of Business Groups in Diversification

Business groups, as discussed earlier, can be summarized as “networks of legally independent firms linked by a set of formal and informal ties that coordinate their actions” (Chakrabarti *et al.*, 2007, p.106). Chakrabarti *et al.* (2007), who examine the differences in

the diversification-performance link between group-affiliated firms and non-group firms in six East Asian countries, state that:

group affiliation often affects the outcomes of diversification. In most cases, the outcomes of diversification differ significantly, though not in a consistent direction, between group-affiliated and non-group firms within and across countries....This suggests that the nature of business groups varies across country and institutional environments, and that this variation substantially affects the outcomes of their affiliated firms' diversification. (p.117)

The above statement suggests that it is important to conduct more research in different countries and institutional environments in order to capture the 'contextual variations' that can contribute to the improved understanding of the role of family business groups in affecting the outcomes of diversification in different countries. Khanna and Yafeh (2007), who perform a comprehensive review of the business group literature, also concur with Chakrabarti's *et al.* (2007) findings that the performance of business groups is connected to the specific institutional environment in which they evolve. Singh *et al.* (2007) argue that a firm's diversification-performance link will be moderated by it being part of a large business group because of the possibility of greater information asymmetries, conflict of interest among member firms, inefficient investment plans and cross-subsidization in large business groups.

Do group-affiliated firms perform better in diversification compared to non-group firms? Will member firms in the group benefit more or less from diversifying than non-group firms? Chakrabarti *et al.* (2007) provide some views on the above questions. According to them, business groups, as a network type of organisation, tend to diversify themselves by having affiliates operating in various industries. Chakrabarti *et al.* (2007) state that "*to the extent that diversified groups act as internal markets for affiliated firms, there might be less need and fewer benefits to affiliates diversifying themselves*" (p.102). Oppositely, they also mention that using readily available group resources may improve the outcomes of diversification made at the individual firm level. Both anecdotal and empirical evidence shows that member firms in the group do diversify (Chang and Hong, 2002). "*Because of the*

expectation that diversification occurs at the group level and not at the individual firm level” (Chakrabarti *et al.*, 2007, p.102), it is thus intriguing to find out how *firm level* diversification can be affected by group affiliation in emerging economies.

Some advantages of firm level diversification in business groups are summarized by Chakrabarti *et al.* (2007). Firstly, it is claimed that member firms in the group may be able to diversify effectively by taking advantage of ‘spill-overs’ from resource transfers within the group. Secondly, group affiliation may provide “*reputation benefits and privileged access*” (Chakrabarti *et al.*, 2007, p.106) which enable member firms to mobilize resources more easily or at lower prices from external parties. Member firms may also gain from the spill-over effects of the development of “*greater managerial and organizational sophistication and resources*” (Chakrabarti *et al.*, 2007, p.106) that are expected to occur at the group level. Kim *et al.* (2004) find evidence that *keiretsu*-affiliated firms benefit from *keiretsu*’s internal market when they pursue diversification compared to independent Japanese firms which generally do not perform well following diversification. Through diversification, business groups are also able to reduce risk and uncertainty in the operation of member firms (Joh, 2003). This has the effect of reducing default and bankruptcy risks.

On the contrary, inefficient transfer of resources in business groups could cause a group-affiliated firm to relinquish potential investment opportunities if funds/resources are used by the controlling family to subsidize weaker affiliates in the group. Moreover, Lins and Servaes (2002), who examine the value of corporate diversification in seven emerging markets (including Malaysia), find that diversified firms are traded at a discount of 7% compared to focused firms and more importantly the discounts are mainly from *group-affiliated* diversified firms and less from independent diversified firms. They contend that since business groups are able to capture the benefits of diversification through group diversification, there are few reasons for individual firm diversification within groups. Thus, the choice to diversify in member firms is more likely an act of expropriation (Lins and Servaes, 2002).

Finally, business groups may also be involved in corporate strategies such as using their member firms for excessive diversification that fulfils a personal or family agenda at the

expense of the firms' performance (Young *et al.*, 2008, Backman, 1999) As such, agency problems can be more serious among these firms especially in developing countries where legal and regulatory systems are lacking.

Why would member firms in a group diversify when their group can perform the task more effectively and what is the outcome of diversification in group-affiliated firms compared to independent (non-group) firms? According to Chakrabarti *et al.* (2007), research has paid little attention to questions which are related to firm level diversification in business groups such as the ones presented above, probably because past research has been “*implicitly relying on the proposition that group diversification substitutes for and precludes affiliated-firm diversification*” (Chakrabarti *et al.*, 2007, p.106). It is thus the intention of this study to fill the gap in the literature to respond to the above question.

Overall, the above discussion shows that it is important to consider group affiliation and its effects on the firm diversification-performance link. Thus the next hypothesis is:

H4d: The greater the firm diversification, the lower is the performance of the firms. This relationship is more obvious (less obvious) for firms with group affiliation compared to firms without group affiliation.

3.6.4 Size Effects of Business Groups on the Firm Diversification-Performance Link

Not all business groups are alike. Business groups may have various features that could affect firm performance differently (Kim *et al.*, 2004; Khanna and Palepu, 2000a). For instance, the size or scope of a business group is one such feature. Larger business groups consist of more member firms and are usually associated with a more complex pyramidal structure or cross-holdings. The complexity of the organisational structure of large business groups fosters greater tendency of controlling shareholders to expropriate because the expropriatory activities or transactions that occur within the internal market of business groups can be easily concealed and undiscovered. Firm diversification into various business

lines is an example of such activities that provides opportunities for controlling families to engage in expropriation activities.⁴⁶ For instance, instead of paying dividends, the earnings are retained and reinvested to diversify and expand the business. In such circumstances, as explained above, opportunities arise, particularly for large business groups, to be involved in asset transactions that benefit the controlling families at the expense of firm performance and minority shareholders' interests [for example, using the target firm to purchase assets (as part of diversification activities) from the private companies owned by the controlling families at a price higher than the market rate].

Moreover, expropriation tends to be more serious in business groups with political connections, and it is in the large business groups that the connections are more prevalent and clearly displayed (Searle, 1999; Gomez and Jomo, 1999; Nazli and Weetman, 2006; Sahoo, 2010; Yeoh, 2010). Accordingly, larger business groups may tend to engage more in the above-mentioned 'agency-driven' diversification which would in turn negatively affect the performance of group-affiliated firms.

In contrast, Khanna and Palepu (2000a) observe that the majority of small and medium sized business groups in India do not have the "*management skills, the internal processes, or the political connections to generate benefits from diversification*" (p.888). As a result, coupled with the poor monitoring institutions in India, these business groups are susceptible to serious agency problems and consequently the member firms of these business groups generally perform worse than the independent firms. Moreover, large business groups have the scale and scope to internalize costs associated with creating internal structures and processes more efficiently and are subsequently capable of creating added value for member firms (Khanna and Palepu, 2000a). In addition, larger business groups are conceivably more able than smaller business groups to offer 'valuable, rare and inimitable resources' to their member firms which will in turn enhance the outcome of the firms' diversification efforts and subsequently improve their performance.

⁴⁶ Diversification with the intention to expropriate firms' resources and minority shareholders is known as 'agency-driven' or 'agency-led' diversification.

A business group has a choice; whether to undertake diversification at group or firm level. A smaller group with a small number of firms may not be as diversified as a large group. However, the less diversified nature of smaller groups can be compensated for by increasing the diversification at firm level. In other words, the affiliated firms can be used to advance the group's activities into different industries and business sectors. With this reasoning, a large business group is capable of proceeding with group diversification through its numerous affiliated firms that are involved in different industries (Chakrabarti *et al.*, 2007). Therefore, the group does not need to undertake diversification at firm level as much as a smaller group does. Thus, in this case, firm level diversification would be negatively related to the size of the business group and this in turn would affect the performance of the firms in the group.

From the discussion in the previous section, we know that diversification may positively or negatively affect firm performance. Since the size of a business group could affect the way in which diversification is undertaken at firm level, it is thus reasonable to expect that the size of a business group may influence firm performance via its impact on firm level diversification. Therefore, the following hypothesis is proposed:

H4e: The size of business groups moderates the effect of firm diversification on firm performance.

3.6.5 Roles of Ownership Structure and Control-Enhancing Means in Firm Diversification

According to Hoskisson *et al.* (2005), ownership of firms is an important factor influencing firms' diversification strategies. Different types of ownership, whether insiders such as family owners (owner-managers) or outsiders such as institutional investors, tend to create different impacts on firms' diversification strategies. The impact of managerial ownership on the diversification-performance link has been studied in the west. For instance, Denis *et al.* (1997) claim that due to the alignment of interest effect, higher managerial equity ownership (insider ownership) is linked to activities and policies that are less destructive to firm value.

Thus they believe that there is an inverse relationship between the level of value-destroying diversification and managerial ownership. They state that agency problems are responsible for firms retaining value-destroying diversification strategies.

Lins and Servaes (2002) find that ‘diversification discount’ in emerging markets is mostly confined to firms where the ownership concentration level of the management is within 10% to 30% but not in firms with management holdings below 10%. They justify that: “*at low levels of control, there is less of an opportunity for management to expropriate minority shareholders. When control becomes more concentrated, insiders become more entrenched, and the opportunity for minority shareholder expropriation increases*” (p.26). They further add that “*...insiders can use the diversified firm structure to allocate jobs and favors and generally run the firm to suit their personal interests*” (p.26). An early study by Amihud and Lev (1981) however shows that firms without large and powerful shareholders have greater unrelated product diversification.⁴⁷

In contrast, Lane *et al.* (1998) do not find any association between ownership concentration and firm diversification, whilst Anderson *et al.* (2000) find little evidence that diversification discount is associated with ownership structure. It is claimed that as legal systems improve and shareholder activism is strong, minority shareholders are better protected, making it more difficult for controlling shareholders to use a diversified structure to transfer wealth to themselves (Lins and Servaes, 2002).

Ramaswamy *et al.* (2002) find that *pressure-sensitive* owners are positively related to unrelated product diversification and in contrast, the relationship is negative for *pressure-resistant* owners. Thus outside block-holders who are *pressure-resistant* such as public pension fund (EPF in Malaysia’s case) and other public institutional investors (PNB, LTH, LTAT in Malaysia’s case) could provide the necessary monitoring and reduce losses due to excessive diversification, particularly in economies with weak corporate governance mechanisms (Gleason *et al.*, 2012; Hoskisson and Tuck, 1990). As mentioned in an earlier

⁴⁷ Unrelated product diversification as opposed to related product diversification, refers to diversification undertaken by firms to venture into a business line that is not related to the existing businesses of the firms. Unrelated diversification is criticized in corporate finance literature as being activities that do not create value with the motives behind them dubious.

section, the corporate governance mechanisms available in Malaysia are rather weak because the highly concentrated family ownership renders impotent most of the external mechanisms, such as the market for corporate control and the market for executives. It can thus be conjectured that the shareholdings of these public institutional investors may positively moderate the diversification-performance link.

Overall, the above discussion provides an adequate basis from which to conclude that the moderating effect of ownership structure may affect the diversification-performance relationship. Hence, the following hypotheses are proposed:

H4f: The diversification-performance link of firms is moderated by ownership structure. Specifically, the ownership of the controlling family moderates the relationship.

H4g: The diversification-performance link of firms is moderated by ownership structure. Specifically, the ownership of public institutional investors positively moderates the relationship.

The ownership in, and control of group-affiliated firms is distinct from independent firms in that the controlling shareholders in business groups achieve their control of member firms through direct, as well as indirect, equity holdings using a pyramidal structure or cross-holdings (Claessens *et al.*, 2000). Thus this may impose additional principal-principal problems as indirect holdings via a pyramidal structure or cross-holdings are associated with higher control rights but lower cash flow (voting) rights for the controlling shareholders. As discussed in an earlier section, this divergence of cash flow and control rights provides better opportunity for the controlling shareholders to expropriate the minority shareholders. One such activity is to restrain dividend payments and invest free cash flows into questionable business diversifications for empire-building and enhanced private benefits of control. Lins and Servaes (2002) discover that ‘diversification discount’ is commonly found in firms where there is a considerable difference in the management’s cash flow rights and control rights. In short, the higher the family control, the higher the tendency of the controlling families to expropriate the firm’s resources and to be entrenched (Anderson and Reeb, 2003; Shleifer and Vishny, 1989).

Besides pyramiding and cross-holdings, family control (as discussed in an earlier section) can also be enhanced via other ‘routes’ such as forming a complicated business group structure, appointing more family directors, having both chairmanship and CEO positions occupied by family members, or simply by being the only block-holder in the firm. Thus, these ‘control enhancing tools’ could be exploited by the controlling families to approve more questionable diversification activities and cause the relationship between diversification and firm performance to be altered.

From the above discussion, it is conjectured that:

H4h: Ownership structure moderates the diversification-performance link in firms affiliated to business groups. Specifically, the extent of family ownership in group-affiliated firms moderates the relationship.

H4i: The relationship between firm diversification and performance is negatively moderated by the existence of ‘control enhancing means (tools)’ in the firm.

3.6.6 Firm Diversification and the Board of Directors

Generally, agency theory believes that more independent boards will protect shareholders’ interests such as constraining the over-pursuit of diversification strategies by the managers (Anderson *et al.*, 2000, Gleason *et al.*, 2012). Accordingly, compared to management-dominated boards, it is reasonable to expect that independent boards are linked to relatively lower levels of diversification. Bru and Crespi-Cladera (2006) find that group-affiliated firms with more family members on the board tend to have higher diversification compared to comparable firms with less family members on the board. In contrast, Chen *et al.* (2009) believe that corporate decisions such as diversification are generally made by management without direct participation of the board. Thus the asymmetric information between management and independent directors prevents the latter from acting independently and making informed decisions.

Chen *et al.* (2009), who investigate the association between the composition of the board of directors (including board independence) and corporate diversification in Australia, a developed economy, find that there is no link between the two. Specifically, they do not find evidence to show that a more independent board improves profitability and promotes shareholders' interests in the form of reduced corporate diversification. Thus they suggest revising the current requirement or recommendation in many jurisdictions that boards be more independent. They add that "*board composition should also consider directors' knowledge, relevant expertise, availability, and length of tenure*" (Chen *et al.*, 2009, p.208). For instance, tenure of independent directors should be examined by regulators because over time, independence may be compromised (Chen *et al.*, 2009).

However, as an emerging economy, at this stage in its development of corporate governance, Malaysia still lags behind Australia and thus the findings in Australia by Chen *et al.* (2009) may only serve as a reference and are not directly applicable to Malaysia. On-going efforts by the authorities are still needed to enhance board independence in this country, as they explore other aspects of how a board could increase overall efficiency. A highly independent board may help a firm to curb unscrupulous, dubious and value-destroying diversification but nonetheless support diversifications that are sensible or value-adding and *vice versa* for boards with low independence. In other words, board independence may moderate the effects of strategic decisions such as diversification on firm performance. Thus it is conjectured that:

H4j: Board independence positively moderates the effect of firm diversification on firm performance in Malaysia.

3.7 Chapter Summary

This chapter reviewed and explicated the literature that is directly linked and applied to the development of the hypotheses. The discussions are directed towards the influence of concentrated ownership structure and underlying firm strategies/activities or practices and their intertwined influence on the performance of family-controlled firms. Four sets of

hypotheses (H1 to H4) are developed based on the arguments from the literature pertaining to the major themes in the study, namely; ownership structure (family ownership and other types of block-holders), business group affiliation and other control-enhancing means (including a pyramidal structure, group complexity and size, family as the sole block-holder, family directors on the board and family occupying both the chairmanships and CEO positions), profit redistribution of business groups, and firm diversification. Hypotheses are introduced and stated sequentially as the review of literature progresses.

The chapter began with a discussion on the favourable and unfavourable influences of concentrated family ownership on firm performance. Emphasis is given to the incentive (alignment of interests) effects and entrenchment (expropriation) effects of agency theory and the 'personalism' and 'particularism' effects of resource-based view. Empirical findings from the literature are then presented and discussed. Included in the discussion is the justification for the possibility of a non-linear relationship between controlling family ownership and firm performance. It is also hypothesized that board independence is able to moderate the influence of controlling family ownership on firm performance. The study then discussed the influence of other types of block-holders in family-controlled firms on firm performance. These block-holders include domestic and foreign institutional investors, foreign corporations, state/government and other unrelated families. It is learnt from the review that block-holders are very distinct from each other in terms of their roles in family-controlled firms and that they may thus exert different influence on the efficiency and performance of firms.

The next section explored the advantages and disadvantages of family-controlled business groups from theoretical perspectives, as found in the literature. The study proceeded to review the association between group-affiliated firms and their performance compared to non-affiliated firms. The review then continued with business groups that involve pyramidal structures and complicated group structures. Since families are able to enhance their control over firms affiliated to such business groups, these business groups are believed to be more prone to expropriation by controlling families. The review also highlighted other potential types of control-enhancing means, (available not only to group-affiliated firms but also to non-group firms) in affecting firm performance. These include the tendency to appoint more

family directors to the board, power concentration of controlling families by occupying the chairmanship and CEO positions and a controlling family being the sole block-holder of the firm. The review also pointed out that due to the prevalence of their connection with politics and government, as well as their lower transparency in business activities/transactions, large business groups may engage more in expropriation activities.

The ensuing section reviewed the potential occurrence of profit redistribution in family business groups. It is argued that there exists a tendency for business groups (particularly large business groups with extensive family control) to redistribute resources from group affiliates that outperformed to affiliates that underperformed. These ‘propping up’ activities are believed to adversely affect the shareholders of the outperforming affiliates as the performance of these affiliates diminishes due to the profit redistribution. They also result in inefficient allocation of resources within the business group, though it is hypothesized that higher board independence reduces such inefficiency.

The study then moved on to review the influence of diversification in family-controlled firms on the firms’ efficiency and performance. It is hypothesized that extensive diversification increases the inefficiency of asset utilization which may subsequently affect a firm’s performance. The role of the business group in firm diversification was also discussed and it is conjectured that the size of business groups and the ownership structure of group members may moderate the diversification-performance outcome. From the review, the extent of influence of firm diversification on firm performance is also conjectured to be negatively moderated by control-enhancing means but positively moderated by the extent of board independence.

The next chapter deals with the overall data collection and methodology of the study. It includes a brief discussion on the research philosophy and ethical issues, followed by a detailed discussion on the sampling and data collection process, the construction of the variables, the methods of analysis and the model specifications used in testing the hypotheses.

Finally, a summary table of the hypotheses linked back to the research questions is provided below (Table 3.1). The table also provides a cross reference to the key operational variables that appear in the subsequent chapters.

Table 3.1: Summary of the Link between Research Questions, Hypotheses and Key Operational Variables

| Research Questions | Hypotheses | Key Operational Variables ⁴⁸ |
|--|---|---|
| <p>RQ1: Coupled with the benefits brought about by the concentrated ownership structure, in what way (for example, favourably or unfavourably) will the concerns of the concentrated ownership structure in family-controlled firms influence the performance of the firms?</p> | <p><i>H1a: The stake of ownership by the controlling family positively affects the performance of family-controlled firms.</i></p> | FAMOWN (Controlling Family Ownership) |
| | <p><i>H1b: There is an inverted U-shape relationship between family ownership and firm performance in family-controlled firms i.e. ownership by family positively affects firm performance only up to a certain threshold level beyond which the effect will be reversed.</i></p> | FAMOWN ² (Square of Controlling Family Ownership) |
| | <p><i>H1d: The ownership of other unrelated block-holders in family-controlled firms positively affects the performance of the firms.</i></p> | Other BHS [Other (Outside) Block-holders] |
| | <p><i>H1e Ownership by domestic institutional investors in family-controlled firms is positively/negatively associated with firm performance.</i></p> | DOMII (Domestic Institutional Investors Ownership) |
| | <p><i>H1f: Ownership by domestic public institutional investors in family-controlled firms is positively/negatively associated with firm performance.</i></p> | DOMPUBII (Domestic Public Institutional Investors Ownership) |
| | <p><i>H1g: Ownership by foreign institutional investors in family-controlled firms is positively associated with firm performance.</i></p> | FORGNI (Foreign Institutional Investors Ownership) |
| | <p><i>H1h: Ownership by foreign corporations in family-controlled firms is positively associated with firm performance.</i></p> | FORGN (Foreign Corporations Ownership) |
| | <p><i>H1i: Ownership by government in family-controlled firms positively affects firm performance.</i></p> <p><i>H1j: Ownership by 'auxiliary family' in family-controlled firms negatively affects firm performance.</i></p> | STATE (State Ownership) AUXFAM (Auxiliary or Unrelated Families Ownership) |
| <p>RQ2: Will the firm activities</p> | <p><i>H2a: Firms affiliated to a business group perform better (worse) than firms without group affiliation.</i></p> | Group (Business group affiliation) |

⁴⁸ See Table 5.1 for the operationalization of the variables.

| Research Questions | Hypotheses | Key Operational Variables ⁴⁸ |
|---|--|--|
| or practices underlying concentrated family ownership, namely, the practice of relying on control-enhancing means and the activities associated with business group affiliation and firm diversification, be beneficial or harmful to the performance of family-controlled firms? | <p><i>H2b: Due to the higher tendency of expropriation, group-affiliated firms with family control enhanced by the pyramidal structure perform worse than all other firms without such enhanced control.</i></p> <p><i>H2c: Firms with both the chairmanship and CEO positions being occupied by family members perform worse than firms without such an arrangement.</i></p> | <p>CF/CONT (Cash Flow-to-Control Rights), CF/CONT_DUM (Cash Flow-to-Control Rights Dummy)</p> <p>CHR_CEO (Chairman and CEO positions simultaneously occupied by the controlling family)</p> |
| | <p><i>H2d: Firms without the presence of other block-holders besides the controlling family perform worse than firms with the presence of other block-holders.</i></p> | <p>FAMONLY (Controlling family as the only or sole block-holder)</p> |
| | <p><i>H2e: The extent of family directors on the board positively (negatively) affects firm performance.</i></p> | <p>FAMDIR (Family Directors on the Board)</p> |
| | <p><i>H2f: The complexity of business groups negatively affects firm performance.</i></p> | <p>BG_S (Business Groups with Simple Structure), BG_PS (Business Groups with Pyramidal Structure), BG_CS (Business Groups with Complicated Structure)</p> |
| | <p><i>H2g: The size of business groups positively (negatively) affects firm performance.</i></p> <p><i>H3a: Redistribution within a business group leads to firms with previously high (low) profitability seeing their profitability reduced (improved) in the subsequent period.</i></p> | <p>GR_A (Small size business group), GR_B (Intermediate size business group), GR_C (Large size business group)</p> <p>Lag (ROA) [Previous year ROA], Lag (Tobin's Q) [Previous year Tobin's Q]</p> |
| | <p><i>H3b: The strength of the profit redistribution effect is affected by the size of the business group and the strength of family control; the larger the size of the business group and the greater the strength of family control, the more likely profit redistribution will be.</i></p> | <p>FAMOWN1 (Controlling family without majority ownership), FAMOWN2 (Controlling family with majority ownership), GR_A, GR_B, GR_C, Lag(ROA), Lag(Tobin's Q), CF/CONT, CF/CONT_DUM</p> |
| | <p><i>H3c: Due to the presence of inefficient resource (profit) redistribution only in group-affiliated firms, capital expenditures of good-performing firms will not be greater than poor-performing firms among group-affiliated firms; whereas capital expenditures of good-performing firms will be greater than poor-performing firms for the non-group firms.</i></p> <p><i>H4a: Diversified firms underperform focused firms.</i></p> | <p>CAPEX Ratio (Capital Expenditure Ratio)</p> <p>DVSF_D (Diversification Dummy)</p> |
| | <p><i>H4b: The greater firm diversification is across industries, the lower is firm performance.</i></p> | <p>E (ENTROPY), HERF(Herfindahl Index), NUM_SEG (Number of Segments)</p> |

| Research Questions | Hypotheses | Key Operational Variables ⁴⁸ |
|--|--|--|
| | <i>H4c: Asset utilization efficiency is negatively related to the degree of firm diversification because firm diversification is agency-driven and this relationship is stronger for group-affiliated firms than non-group firms.</i> | Efficiency (Asset Turnover Ratio), E, HERF, NUM_SEG, DVSF_D, Group |
| <u>RQ3</u> : What will be the moderating influence of board independence on the effects of family ownership as well as the underlying business group affiliation and diversification activities on firm performance? | <i>H1c: The effect of the controlling family's ownership stake on firm performance is moderated by board independence.</i> | PrINED (Proportion of Independent Directors), INDP_CHR (Independent Chairman), INDP_ADT (Independent Audit Committee), H_INDP_B (Highly Independent Board), FAMOWN |
| | <i>H3d: The board of a group-affiliated firm with certain attribute of independence curtails inefficient resource redistribution and thus the capital expenditures between good and poor-performing firms are differentiable with good-performing firms, on average, having higher capital expenditure than poor-performing firms.</i> | PrINED, INDP_CHR, INDP_ADT, H_INDP_B, CAPEX Ratio |
| | <i>H4j: Board independence positively moderates the effect of firm diversification on firm performance in Malaysia.</i> | PrINED, INDP_CHR, INDP_ADT, H_INDP_B, E, HERF, NUM_SEG, DVSF_D |
| <u>RQ4</u> : What will be the moderating influence of ownership structure as well as control-enhancing means and business group affiliation on the firm diversification-performance relation? | <i>H4d: The greater the firm diversification, the lower is the performance of the firms. This relationship is more obvious (less obvious) for firms with group affiliation compared to firms without group affiliation.</i> | E, HERF, NUM_SEG, DVSF_D, Group |
| | <i>H4e: The size of business groups moderates the effect of firm diversification on firm performance.</i> | E, HERF, NUM_SEG, DVSF_D, GR_A, GR_B, GR_C |
| | <i>H4f: The diversification-performance link of firms is moderated by ownership structure. Specifically, the ownership of the controlling family moderates the relationship.</i> | E, HERF, NUM_SEG, DVSF_D, FAMOWN |
| | <i>H4g: The diversification-performance link of firms is moderated by ownership structure. Specifically, the ownership of public institutional investors positively moderates the relationship.</i> | E, HERF, NUM_SEG, DVSF_D, DOMPUBII |
| | <i>H4h: Ownership structure moderates the diversification-performance link in firms affiliated to business groups. Specifically, the extent of family ownership in group-affiliated firms moderates the relationship.</i> | E, HERF, NUM_SEG, DVSF_D, FAMOWN, Group |
| | <i>H4i: The relationship between firm diversification and performance is negatively moderated by the existence of 'control enhancing means (tools)' in the firm.</i> | E, HERF, NUM_SEG, DVSF_D, CF/CONT, CF/CONT_DUM, CHR_CEO, FAMONLY, FAMDIR, BG_S, BG_PS, BG_CS |

Chapter 4 – Data and Methodology

4.1 Chapter Outline

This chapter begins with a brief explanation of the ethical issues involved in the study followed by a brief discussion on its philosophical stance. The processes of sample selection and data collection are explicated in the following section. Emphasis is given to justifying why the final selected sample of family-controlled firms should be representative of all publicly-listed family-controlled firms across various sectors/industries in Malaysia.

Following the explanation on the sampling process, subsequent sections discuss the construction of the variables involved in the study. Emphasis is given to explain how the *conceptual* variables such as family ownership, group-affiliation and diversification are operationalized through the construction of the corresponding *operational* variables. An explanation based on previous literature is first provided on the construction of the family ownership variable, followed by an explanation of firm performance variables in the following section. Explanation is also provided regarding the winsorization⁴⁹ of the performance data. Detailed explanations on the construction of other block-holders variables are then provided with illustrations taken from the sampled firms. This is followed by another sub-section which is devoted to the detail explanation on the construction of business group-related variables. Three types of business groups, in terms of group structure complexity, are constructed with illustration provided for each type. The construction of firm diversification variables by four various measures is explained in the sub-section that follows. Finally this section is completed with the discussion of the control variables used in the study and the justification for their inclusion.

The ensuing section discusses why multiple and moderated regression analyses are chosen as the main tools of analysis in the study. This is followed by explanation of the development of various model specifications in the study. A total of thirteen specifications are used for the purpose of hypotheses testing. The discussion in this section is divided into several sub-

⁴⁹ Winsorization is a data treatment technique. See Section 4.6 for discussion of the method.

sections according to the four major themes in the study, namely ownership structure, group affiliation and other control-enhancing means, profit redistribution, and firm diversification. This chapter concludes with the chapter summary.

4.2 Ethical Issues in Data Collection and Sampling

Ethical issues involved in this study are minimal. As this study is based on data from reliable secondary sources, it is not subject to the same concerns found in primary data research such as issues of whether there is harm to participants, lack of informed consent or invasion of privacy. This study is also independent of any conflicts of interest with any parties. Real-world examples used in this study are from publicly available sources and meant for impartial academic purposes only. The researcher does not foresee any potential ethical or legal issues pertaining to the dissemination of results as no specific firms are referred to.

4.3 Research Philosophy

This study takes the positivist approach in which hypotheses are developed based on the notion that the influence of ownership structure and underlying firm activities/attributes on firm performance is apprehensible and can be examined and empirically tested using the researcher's tools of analysis and theoretical conjectures. Consider, as stated by sociologists Burrell and Morgan, that positivists "*seek to explain and predict what happens in the social world by searching for regularities and causal relationships between its constituent elements*" (Burrell and Morgan, 1979, p.5). A deductive or 'top-down' approach is applied where the pre-existing theoretical basis is identified and relied upon in developing the hypotheses. Empirical findings from hypothesis testing will then confirm whether the hypothesis developed based on the theoretical arguments is supported. To achieve this objective, regressions are used as the main tools of analysis in this study in which the researcher pursues the positivists' understanding of the conduct of methodological process that is "*unaffected by individual perceptual differences*" (Ardalan, 2008, p.11).

4.4 Sample Selection and Data Collection

The sample was drawn from the 632 companies listed on the Main Board of Bursa Malaysia, the sole stock exchange in Malaysia, as in September 2007. All listed companies are classified by Bursa Malaysia into ‘sectors’ based on their core business. This sector classification enables sector effects to be taken into account in the regression analysis later. Companies from the Second Board were excluded from the selection because the listing requirements of the Second Board are different from the Main Board, rendering them incomparable.⁵⁰

Of the eleven sectors that were identified by Bursa Malaysia, four sectors, namely ‘Finance’, ‘Hotels’, ‘Mining’ and ‘IPC’ were excluded from the study. The finance sector is excluded from the study because firms in this sector are governed by a different set of rules and regulations and thus make them incomparable to firms in other sectors.⁵¹ The exclusion of the finance sector is also consistent with previous studies in this area (for instance in Anderson and Reeb, 2003; Claessens *et al.*, 2006; Jiraporn *et al.*, 2006; Andres, 2008; Estrin *et al.*, 2009). The other three sectors were excluded because the number of firms in each sector is too small to provide any meaningful analysis. There were only five, one, and seven firms from the ‘Hotel’, ‘Mining’ and ‘IPC’ sectors respectively on Bursa Malaysia and thus render their statistic inferences meaningless. The remaining 565 firms were from the seven core sectors namely the ‘Consumer Products’, ‘Industrial Products’, ‘Technology’, ‘Properties’, ‘Trading’, ‘Plantations’, and ‘Construction’.

Ownership and board-related data are hand-collected from the annual reports published by the listed firms for the fiscal year 2007. Though this process of data collection is time-consuming, it has a number of benefits (Fraser *et al.*, 2006). Firstly, as the primary source of data, the company annual report is more accurate than other secondary data sources. In addition, as already highlighted in sub-section 1.7.2, all listed firms must abide by the Listing Requirements of Bursa Malaysia. Specifically, Paragraph 9.26 of the listing requirements

⁵⁰ For instance, the paid-up capital requirement for listing in the Second Board is different from the Main Board.

⁵¹ As stated in footnote 33, in Malaysia, firms in the finance sector such as banks and insurance companies are governed by the Banking and Financial Act, 1989.

states that all annual audited financial statements in the annual reports must be prepared according to the Malaysian Accounting Standards Board (MASB) and the Malaysian Companies Act 1965. The disclosure standards in the listing requirements also make it mandatory for financial reports lodged with Bursa Malaysia to be approved by qualified auditors. As a whole, information and data based on annual reports demonstrate a high level of consistency in quality.

Cross-sectional studies are common in the previous studies related to this area. For instance, Nazli and Weetman (2006) utilize data from 2001 for 87 companies in Malaysia to examine the issue of ownership structure, board characteristics and voluntary disclosures. Filatotchev *et al.* (2005) use a sample of 228 Taiwanese firms in 1999 to study the effects of ownership structure and board characteristics on firm performance. Kim K-H *et al.* (2008) use a stratified random sampling to select 290 firms from the 2002 list of Fortune 1000 firms in their cross-sectional study pertaining to ownership structure and firm diversification. Mak and Kusnadi (2005) select 279 firms from a total of 795 in Malaysia in their cross-sectional study related to corporate governance and firm value for the year 2000. Ayoib *et al.* (2003) select a final sample of 236 firms from 529 in their cross-sectional study of firm diversification for 1995 in Malaysia.

This study uses Krejcie and Morgan's (1970) method as a starting point in selecting the sample size. The minimum sample size for the population size of 632 according to Krejcie and Morgan's (1970) scale is around 242.⁵² The final sample of 314 firms in this study is derived based on the following selection process: first, all 565 firms from the seven core sectors as mentioned above are stratified into their respective sectors. Then, firms in each sector are arranged based on their size (as measured by their total assets value) from the smallest to the largest. The researcher then employed systematic sampling in order to select firms in each sector (from the smallest to the largest firm in each sector) in such a way that two-thirds of firms from each sector are selected. This yields a total of 379 firms. Finally, of the 379 firms, 65 (or 17%) are firms where the largest shareholder is not a family or an individual but is instead government, foreign corporations (affiliates of foreign firms),

⁵² Haniffa and Hudaib (2006), for instance, also make use of Krejcie and Morgan (1970) as a guideline for sample size selection.

institutional investors, widely-held corporations or firms without an ultimate owner.⁵³ Since these firms are not in the scope of this study, they are excluded from the sample. The final sample derived therefore consists of 314 firms which are known as ‘family-owned and controlled firms’ or simply ‘family-controlled firms’. The sampling process is summarized in Table 4.1.⁵⁴

The advantage of the above process of data sampling is that it ensures that all seven core sectors in the stock exchange are included, with the number of observations in each sector as proportionate as possible to the actual number of firms in each sector of the stock exchange. It also ensures that firms of various sizes are satisfactorily covered in the sample.

Table 4.1: Selection Process of Sample

| | |
|--|-----|
| Total number of listed firms on Bursa Malaysia (Main Board) as in Sept 2007 | 632 |
| less Finance, IPC, Hotel and Mining Sectors | 67 |
| Remaining Firms in the Main Board | 565 |
| Firms stratified into sectors and two-thirds selected from each sector using systematic sampling | 379 |
| less Firms whose largest ultimate owner is NOT family or individual (state, foreign firms, widely-held corporations and firms without ultimate owners) | 65 |
| Final sample | 314 |

The company annual reports are available for download from the Bursa Malaysia Securities Berhad official website. Annual reports for 2007 and 2008 are used for the purpose of this study since a complete set of company annual reports are available from the website for both years. Since the data in this study was collected in 2010, some of the annual reports for 2009

⁵³ Firms are considered as ‘without an ultimate owner’ when the equity stake of the largest shareholder is below 10%.

⁵⁴ The list of firms as per group-affiliated and non-group categories is available in Appendix 1.

and 2010 were unavailable from the Bursa Malaysia website. Thus using data from the annual reports for 2007 and 2008 reflects the latest available data at the time of collection.

Table 4.2 below shows the statistical breakdown of firms in each sector for both the selected sample and the population (actual number of firms in each sector on the Main Board of Bursa Malaysia). Overall, the number of firms included in each sector in the sample is representative of the actual number of firms in each sector.

Table 4.2: Comparison of Sample across Sectors

| Sector | Number of firms on Main Board ⁵⁵ | Number of Firms in Sample |
|--------------------|---|---------------------------|
| Construction | 41 | 26 |
| Consumer Product | 85 | 48 |
| Industrial Product | 151 | 93 |
| Plantation | 44 | 21 |
| Properties | 89 | 45 |
| Technology | 16 | 11 |
| Trading/Services | 142 | 70 |
| Total | 565 | 314 |

Financial data necessary for the study are collected for the fiscal year 2008. This includes the market value and book value of ordinary shares, total debts, earnings before interest, taxes, depreciation and amortisation (EBITDA), total assets, year of firm incorporation (firm age) and total sales, which are all largely obtained from the Worldscope Database, except for the data on ‘year of firm incorporation’. Due to frequently missing values for the ‘year of firm incorporation’ on Worldscope, other sources including LexisNexis, companies’ websites and other internet sources are used to complete the information. Finally, for the purpose of constructing firm diversification variables, two sets of diversification-related data are collected: the number of business segments of firms, which is collected from company

⁵⁵ Total number of firms listed (from the seven sectors) on the Main Board of Bursa Malaysia as at 31 September 2007.

annual reports, and segmental sales values which are obtained from Worldscope. Data from Worldscope is randomly cross-checked with company annual reports to verify accuracy.

4.5 Constructing the Family Ownership Variable

Since the sample in this study consists of publicly-listed firms that are family-owned and controlled, further clarification of family ownership in this study is essential. The criterion used to define a firm as family-owned and controlled is based on the ‘10% cut-off level’ definition used in two often cited influential studies: La Porta *et al.* (1999) and Claessens *et al.* (2000). One of the reasons to use the 10% cut-off level is explained by La Porta *et al.* (1999, p.475-476):

To describe control of companies, we generally look for all shareholders who control more than 10 percent of the votes. The cutoff of 10 percent is used because (1) it provides a significant threshold of votes; and (2) most countries mandate disclosure of 10 percent, and usually even lower, ownership stakes.

According to the studies, using the 10% cut-off level, a corporation is said to have an ultimate controlling shareholder if this shareholder’s direct and indirect voting rights in the firm exceed 10% (La Porta *et al.*, 1999).⁵⁶ Since members of a family are seen as persons acting in concert, a family firm is defined as firm that is owned by a single individual or two and above family members who collectively own 10% or more of the shareholdings. Thus, shareholdings of family members are aggregated and treated as shareholdings of *the* family. In short, following La Porta *et al.* (1999) and Claessens *et al.* (2000), firms are known as family-controlled in this study if one or more family members are collectively identified as the largest shareholders of the firm and own at least a 10% equity stake of the company.

⁵⁶ Both La Porta *et al.* (1999) and Claessens *et al.* (2000) also use a 20% equity stake as another cut-off level besides the 10% level. In contrast, Anderson and Reeb (2003) and Villalonga and Amit (2006) do not set any specific cut-off level to define a family firm in their study, as long as the person or family is the largest blockholder of the firm (block-holder = at least a 5% equity stake).

As mentioned earlier, the data related to ownership structure and control are hand-collected from the 2007 company annual reports. However, the influence of ownership structure on firm performance may only be apparent after a year. Thus to capture this effect, firm performance data are collected for 2008. Using this ‘lagged’ measure of ownership and control data also implies the assertion that ‘ownership’ influences ‘firm performance’ and not the other way around. As stated in Section 4.4, all other financial data of the firms, such as total debts and total sales, are also collected for 2008.

Ownership data is collected from the company annual reports under the section ‘Analysis of Shareholdings’ as per the substantial shareholder disclosure requirement of Section 69D(1), Companies Act 1965. The Act stipulates the mandatory disclosure of substantial shareholders who are defined as holding more than a 5% equity stake of any firm, irrespective of their direct or indirect interest in the shares.

The information available in the annual reports is (i) the names of all substantial shareholders and the percentage of their direct and indirect shareholdings; (ii) the names of all directors and the percentage of their direct and indirect shareholdings. As part of the Bursa Malaysia Listing Requirements, family relationships or kinship must be disclosed. This information is provided in the ‘Profiles of Directors’ Section of annual reports. The Malaysian Companies Act, 1965 (Section 122A) defines family members as the spouse, parent, child, brother or sister and the spouse of that child, brother or sister. Information pertaining to the board of directors such as family directors or independent directors is obtained from the ‘Corporate Information’ and ‘Profiles of Directors’ Sections of annual reports.

Following Claessens *et al.* (2000) and La Porta *et al.* (1999), this study employs the ‘ultimate owner’ approach in determining the shareholdings of a family. Direct ownership reported in annual reports is often inappropriate and insufficient to determine the ownership level of a family, as many individuals and members of their family maintain indirect ownership of the listed firm through other corporations, particularly through private companies that they own.⁵⁷ Thus, when the principal shareholders of a corporation are themselves corporate

⁵⁷ These private companies which are wholly owned by the family and close friends are used as ‘vehicles’ to facilitate the control of other firms by the family.

entities, the major shareowners of these entities will be identified; then the major shareowners of the major shareowners will be identified and so on, until the identity of the ultimate owners/controllers of the votes are identified (La Porta *et al.* 1999). In addition, as part of the disclosure requirements, family members who own the firm indirectly through their privately-held or publicly-listed company(ies) will be reported in the annual reports as having indirect holdings in the firm with the percentage of those holdings disclosed.

For instance, for one of the firms in the sample in this study – Tan Chong Motors Holdings Berhad – the largest *direct* shareholder of the firm is a private company with a 45.6% equity stake. There are ten members of the ‘Tan Family’ reported in the annual report as each having *indirect* holdings of a 45.6% equity stake with an explanation in the report that the shareholdings are held through a private company. Thus the ‘Tan Family’ is therefore regarded as the ultimate controller of the listed firm. In this study, only those firms with an individual person or a family as the ultimate controller will be considered. Thus, 65 firms from the sample in this study are excluded, as explained in the data selection section as their ultimate controlling owner is not a family/individual person. As previously mentioned, a family or individual is considered as the ultimate owner of the firm if they are collectively (for a family) or he/she (for an individual) is the largest shareholder and controls at least a 10% equity stake in the firm.⁵⁸ An ultimate holder is someone who is not controlled by anybody else (La Porta *et al.*, 1999; Claessens *et al.*, 2000).

4.6 Firm Performance Measures

Due to the lack of consensus in the literature with regard to the choice of firm performance measure, it is thus difficult to identify a single indicator for firm performance. This study opts to use both the accounting-based return on assets (ROA) and the stock-market-based simplified Tobin’s Q (also known as Q) as the proxies to measure firm performance. It is intended that using alternate measures also helps to verify the robustness of the results (Haniffa and Hudaib, 2006). Both measures are widely used as the only performance

⁵⁸ Firms in which a family or an individual appears to be the largest shareholder but nonetheless controls below the 10% cut-off level are considered as firms without an ultimate owner and thus as widely-held corporations.

measures in the past studies [such as in Khanna and Palepu (2000a), Anderson and Reeb (2003), Haniffa and Hudaib (2006), George and Kabir (2008), Andres (2008) and Masulis *et al.* (2011)].⁵⁹

ROA is defined as earnings before interest, taxes, depreciation and amortization (EBITDA) divided by book value of total assets. EBITDA is used to assess the operating efficiency of firms without being influenced by debt policy and associated amounts of interest. Q is defined as the sum of market value of equity and book value of total liability divided by the book value of total assets (Mak and Kusnadi, 2005).

The researcher is aware that firm performance can be examined from different perspectives. The above proxies represent the examining of firm performance from two different perspectives. Firstly, Tobin's Q is a market-based measurement whereas ROA is an accounting-based measurement. Thus, from a time perspective, the accounting measurement is historical and retrospective whereas Tobin's Q is forward-looking. Secondly, the accounting measurement is affected by accounting practices, whereas Q captures the investors' value or the market assigned to the firm, based on predicted future cash flows. Thus Q measures what management *will* accomplish and ROA measures what management *has* accomplished. Both have their own advantages and disadvantages as measures of performance.

One of the common problems of empirical studies involving firm performance data is the presence of outliers. Outliers in the data may distort the analysis and findings of the study. One way to solve the problem is to remove them from the sample. However, removing the outliers will cause the number of observations to decrease, hence loss of information. Winsorization provides an alternative method of dealing with outliers. Instead of removing outliers from the sample, this study winsorizes the firm performance data (the simplified Tobin's Q and ROA). For the ROA data, due to the presence of extreme values at both ends of the data (very high negative and positive ROA values), it is winsorized at its 1st and 99th

⁵⁹ Besides Tobin's Q and ROA, ROE is another performance measure that is widely used. As a robustness check, the researcher examined some of the hypotheses in this study using ROE as the performance measure and found that the findings remain qualitatively similar to the findings based on ROA (albeit weaker in terms of the significance level).

percentiles. In other words, the lowest values (those below the 1st percentile) will be replaced with the 1st percentile value and the highest values (those above the 99th percentile) will be replaced with the 99th percentile value. Whereas for the data of simplified Tobin's Q, due to the presence of extreme values only at one end of the data (very high positive Q value)⁶⁰, winsorization is applied only to the extreme positive values.

Winsorization has the advantage of correcting the skewness in the distribution of the data and improves their statistical properties (such as the normality) (Salkind, 2010). It also *“preserves the information that a case had among the highest (or lowest) values in a distribution but protects against some of the harmful effects of outliers”* (Salkind, 2010, p.1637). Winsorization at the 1st and 99th percentiles or the 5th and 95th percentiles is common. The method to winsorize data at their 1st and 99th percentiles is also used, for instance, by Guest and Sutherland (2010) in their study of business group affiliation and firm performance in China. Chen and Chen (2012) winsorize their data at the 5th and 95th percentiles in their study of how various aspects of corporate governance structures affect the resource allocation efficiency of diversified firms.

4.7 Constructing Other Variables

4.7.1 Other Block-holder Variables

The most important ownership variable in this study is the ownership stake of the controlling family acting as the largest shareholder. The construction of the family ownership variable is already explained in Section 4.5. This section explains the ownership variables of other block-holders in family-controlled firms. As stated earlier, a block-holder is defined as a shareholder with an equity stake of at least 5% in the firm.

A block-holder is categorized as 'State' if it is a statutory body established at federal or state level, or directly owned by the government through its ministries such as the Ministry of

⁶⁰ The fact that Tobin's Q cannot take a negative value leads to an extreme value only at one end of the Tobin's Q data.

Finance. Examples are: Khazanah Nasional Berhad (an investment holding arm wholly owned by the Ministry of Finance), Federal Land Development Authority (FELDA) and various State Economic Development Corporations such as Johor Corporation (owned by the state of Johor) and Pahang State Development Corporation (owned by the state of Pahang). A block-holder is categorized as ‘Foreign’ if it is a corporation incorporated outside Malaysia or owned by a foreign government.⁶¹ For example, Seadrill Limited, a foreign corporation listed on the New York Stock Exchange is a block-holder which owns 18.5% of shares of Sapuracrest Petroleum; Marubeni-Itochu Steel Inc., a privately-owned corporation from Japan, is a block-holder which owns 18.41% of shares of Yung Kong; Tata Group from India is a block-holder which owns 28% of shares of Southern Steel; and Government of Singapore Investment Corporation owns 21.39% of Sunway City. Sapuracrest Petroleum, Yung Kong, Southern Steel and Sunway City all are family-controlled listed firms included in this study.

A block-holder is categorized as ‘Institution (Domestic)’ if it is an investment-related or bank-related institution established in Malaysia. This includes domestic institutional investors (such as insurance firms, investment firms, fund managers, and pension funds) and financial institutions such as banks, Islamic banks and development finance institutions. A subset is then drawn from the ‘Institution (Domestic)’ category to construct another group of block-holders known as ‘Domestic Public Institutional Investors’. First, as institutional investors, they invest and manage funds on behalf of individuals. Second, as they are government-controlled and sponsored institutional investors and do not have business relationships with business corporations, they are good examples of ‘pressure-resistant’ institutional investors. They are also the most important institutional investors in Malaysia in terms of their investment volume, with total shareholdings of approximately 13% of the total market capitalization of Bursa Malaysia (Effiezal *et al.*, 2008).⁶² Thus, it is important to uncover the roles and significance of these investors’ ownership on firm performance.

⁶¹ Private companies that are registered as offshore companies in those offshore financial centres such as the British Virgin Islands and Cayman Islands are normally owned by an individual or a family. These firms are not considered to be ‘Foreign’ in this study. Information on the firm’s country of origin is available from their annual reports or the ‘company announcements’ section of Bursa Malaysia’s official website.

⁶² These public institutional investors consist mainly of the five largest institutional investors introduced in sub-section 3.2.2 in Chapter 3 – PNB, EPF, LTH, LTAT and SOCSO.

A block-holder is categorized as ‘Institutional Investors (Foreign)’ if it is an institution from a foreign country which invests and manages funds on behalf of individuals or companies. These institutional investors consist of overseas investment institutions (fund managers), insurance firms, pension funds etc. Examples of domestic and foreign institutional investors in family-controlled firms are: Arisaig Asean Fund, a Singapore-based fund manager which owns 15% of Asia File Corporation; Permodalan Nasional Berhad (PNB), the largest Malaysian government-controlled fund management institution which owns 19.71% of shares of Box-Pak and; Asian Small Companies Portfolio, a US-based (Boston) fund manager which owns 5.3% of shares of Kossan. Asia File Corporation, Box-Pak and Kossan are all family-controlled listed firms included in the study. It is relatively straightforward to differentiate whether an institutional investor is domestic or foreign as this information is generally available in the annual report or can be sourced via the internet.

Finally, a block-holder is categorized as ‘Unrelated or Auxiliary Family/Individual’ if the shareholder is a family/individual with shareholdings of at least 5% and not the largest shareholder of the firm.

4.7.2. Business Group Affiliation Variables

Group-affiliated firms are defined in this study as firms that are under the control of the same/common controlling family. Control can be achieved by the controlling family either by direct or indirect holding of shares through another corporation(s) (which can be publicly-listed or privately-held). A family or an individual is considered as the ‘controlling family’ when they hold at least a 10% cut-off level of the total shares of the firm and serve as the largest shareholder of the company. In short, listed firms that share the same ultimate controlling owner are considered as affiliated to the same business group.

Information on whether a firm is affiliated to a business group can be traced from company annual reports under the sections ‘Corporate Structure’ and ‘Directors’ Profile’ (for some business groups some of their affiliated firms have the name of the group as part of their names and thus can be easily identified, for instance Lion Diversified, Lion Industries, Lion

Corporation and Lion Forest Industries are firms affiliated to the Lion Group).⁶³ Firms are required to disclose in their annual report (usually in the ‘Directors’ Profile’ section) whether a board director also hold the directorship in another corporation(s) and the name of that corporation must be disclosed if it is publicly-listed. These disclosures enable the researcher to link firms that are affiliated to one director. Firms affiliated to the same business group can then be identified once it is confirmed that the director is a member of the controlling family. It is found that most members of controlling families with multiple directorships in more than one listed firm are directors occupying senior positions such as board chairman, vice chairman or managing director/CEO.

To illustrate, the managing director of the ‘Lion Industries Corporation’⁶⁴ is Datuk Cheng Yong Kim and according to the disclosure in the ‘Directors’ Profile’ section of the company’s annual report:

Datuk Cheng’s other directorships in public companies are as follows:

- Managing Director of Lion Diversified Holdings Berhad, a public listed company
- Director of Lion Corporation Berhad, a public listed company
- Director of Silverstone Corporation Berhad and Hy-Line Berhad, both public companies

... Datuk Cheng is the nephew of Y. Bhg. Tan Sri Cheng Heng Jem, a major shareholder of the Company, and his brother, Mr Cheng Yong Liang, is also a Director of the Company.

(Lion Industries Corporation Annual Report, 2007, p.5)

⁶³ Though not objective, the familiarity of the researcher with business groups in Malaysia also helps to identify the affiliated firms.

⁶⁴ The chairman of Lion Industries Corporation is an independent director and is thus disregarded in this case. Thus the next person in line is the managing director.

From the above information, the two publicly-listed companies' ('Lion Diversified' and 'Lion Corporation') annual reports will be examined for further data on affiliated firms. Upon examination, Tan Sri Cheng Heng Jem is identified as the chairman of 'Lion Diversified' and below is another excerpt from his profile in the 'Lion Diversified' annual report:

Tan Sri William Cheng Heng Jem's other directorships in public companies are as follows:

- Chairman of Lion Forest Industries Berhad and Silverstone Corporation Berhad
- Chairman and Managing Director of Parkson Holdings Berhad, Lion Corporation Berhad and Silverstone Berhad
- Director of Amsteel Corporation Berhad

Save for Silverstone Corporation Berhad, Silverstone Berhad and Amsteel Corporation Berhad, all the above companies are listed on Bursa Malaysia Securities Berhad.

(Lion Diversified Annual Report, 2007, p.6)

After verifying that Tan Sri Cheng Heng Jem's family is the controlling shareholder of the Lion Group, the above two excerpts allow us to compile the publicly-listed firms under the group; three from the first excerpt (Lion Industries, Lion Diversified, and Lion Corporation) plus another two from the second excerpt (Lion Forest Industries and Parkson Holdings Berhad), resulting in a total of five affiliated listed firms in the group.

This study also separates family-controlled business groups into three different types of business groups based on the complexity of the group structures. The first type, known as 'Simple Business Group' (BG_S), refers to business groups with affiliated firms controlled by the same controlling family without using a pyramidal structure – in other words, the

controlling family is the largest shareholder of these firms and owns the equity stake directly or indirectly through their closely-held companies. There is no pyramidal structure involving the publicly-listed affiliates in the group. The group structure diagram provided in Figure 4.2 is an example of such business groups that is included in the sample in this study. The figure illustrates that all three listed companies are controlled by the ‘Tan Family’ through their closely-held companies.

The second type of business group is known as ‘Business Group with Pyramidal Structure’ (BG_PS). As the name suggests, this type of business group involved the formation of a pyramidal structure: there is at least one publicly-listed affiliate in the group which is *indirectly* controlled by the family through another *publicly-listed* company. For example, Figure 4.3 illustrates one such business group taken from the sample in this study – the ‘Tradewinds Group’. There are three listed affiliates (Tradewinds Plantations, Zelan Berhad and Kramat Tin Dredging) in the group that are controlled by ‘Tan Sri Syed Mokhtar and Family’ indirectly through other publicly-listed affiliates: Tradewinds Plantations is controlled through Tradewinds (M) Berhad whereas Zelan and Kramat are controlled through MMC corporation.

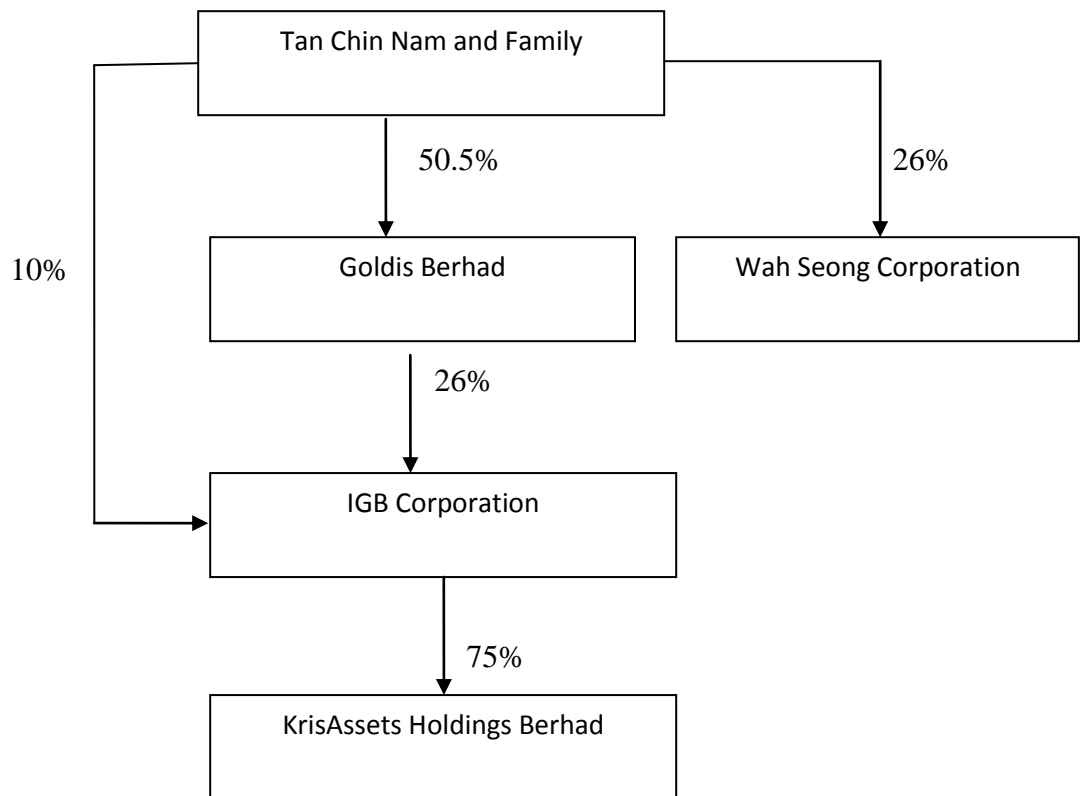
The cash flow-to-control rights ratio can be computed without too much difficulty for firms affiliated to this type of business group. As an illustration, Figure 4.1 presents the partial ownership structure⁶⁵ of one of the business groups included in this study – the business group controlled by ‘Tan Chin Nam and Family’. The founder of the group, Dato’ Tan Chin Nam has retired and the group is now managed by six second-generation family members.

The family has a 50.5% ownership stake in Goldis Berhad and 26% in the Wah Seong Corporation. Goldis Berhad in turn owns 26% of the IGB Corporation. Thus the cash flow rights of ‘Tan Chin Nam and Family’ over the IGB Corporation through Goldis Berhad is calculated as $50.5\% * 26\% = 13.13\%$. At the same time, collectively, the family members also directly own 10% of the IGB Corporation. Thus the total cash flow rights of ‘Tan Chin Nam and Family’ over the IGB Corporation is $13.13\% + 10\% = 23.13\%$. Following the ‘weakest

⁶⁵ The partial ownership structure only illustrates the listed firms of the group. It does not include the family’s closely-held companies as they are commonly wholly owned by the family (with the possibility of a few close allies) and thus the cash flows-to-control rights ratio involving the closely-held companies is not affected.

link' approach of Claessens *et al.* (2000), the control rights (also known as the voting rights) of the family over the IGB Corporation is 36% (10% + 26%), which is the sum of the weakest links in the chain of voting rights. Finally, the cash flow-to-control rights ratio is calculated as $23.13/36 = 0.64$. As for KrisAssets Holdings Berhad, 'Tan Chin Nam and Family's cash flow rights and control rights over the firm are 17.35% and 36% respectively. The cash flow-to-control rights ratio is therefore even lower, at 0.48.

Figure 4.1: Illustration of Cash Flow-to-Control Rights



The third type of business group is known as 'Business Group with Complicated Structure' (BG_CS). This type of business group is introduced in this study to cater for business groups with highly complicated structures where the cash flow-to-control rights ratio could not be computed with a reasonable degree of accuracy. In this type of business group, an affiliated firm is usually controlled by a few other listed firms belonging to the group in a non-straightforward manner involving complicated pyramiding and/or cross-holding. Business groups with cross-holding structures complicate the group ownership structure, as stated by Claessens *et al.* (2000): "The presence of cross-holdings creates some difficulties in

measuring the cash flow to voting rights. Imagine that firm A owns 50% of firm B which, in turn, owns 25% of firm A. How should firm A be classified?” (p.93). The problem encountered by this study is that, as complexity of ownership structure in the group increases, disclosures of share ownership in the annual report are not sufficiently clear to allow for computation of the cash flow-to-control rights ratio. For instance, details regarding how one listed firm is related to another in the group may not be clearly disclosed.

An illustration of a business group with a complicated structure is presented in Figure 4.4. It shows the group ownership structure for the Berjaya Group, one of the business groups from the sample in this study. The figure illustrates, for instance, that Matrix International Berhad is controlled by ‘Tan Sri Vincent Tan and Family’ through the following means:

- (i) Direct ownership by the family of 50.7%;
- (ii) Indirect ownership through BJ Corporation in which the percentage of ownership is not separately disclosed or available as the ownership (by BJ Corporation of Matrix International) is indirect through other private companies owned by BJ Corporation (the dotted arrow line in the diagram indicates indirect ownership) and this ownership stake is consolidated with ownership by other private companies of Matrix International for a total stake of 17%;
- (iii) Indirect ownership of 3% through BJ Land and 11% through private companies controlled by BJ Land;
- (iv) Indirect ownership of 7% through private companies controlled by Dijaya Berhad;
- (v) Indirect ownership through private companies controlled by BJ Sports Toto with no exact percentage separately disclosed. It can also be seen that cross-holding exists between BJ Corporation and Matrix International as they own (directly and indirectly) each other’s shares. Due to the complexity of the ownership structure, the cash flow-to-control rights ratio for the affiliates in this type of business group cannot be calculated with any reasonable degree of confidence.

From the ownership structure perspective, it is conjectured that among the three types of business group, the tendency to expropriate is relatively lower in the first, moderate in the second and high in the third.

Figure 4.2: Simple Business Group (BG_S)

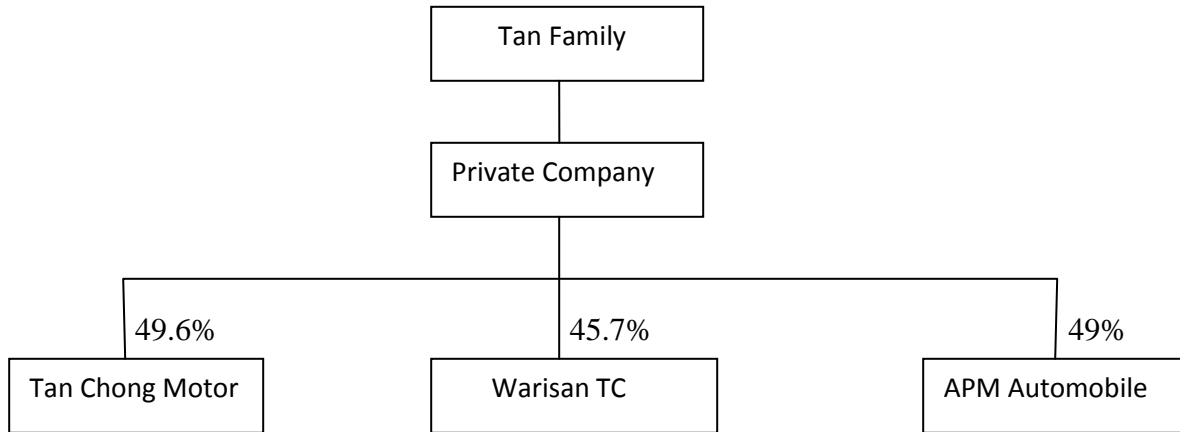


Figure 4.3: Business Group with Pyramidal Structure (BG_PS)

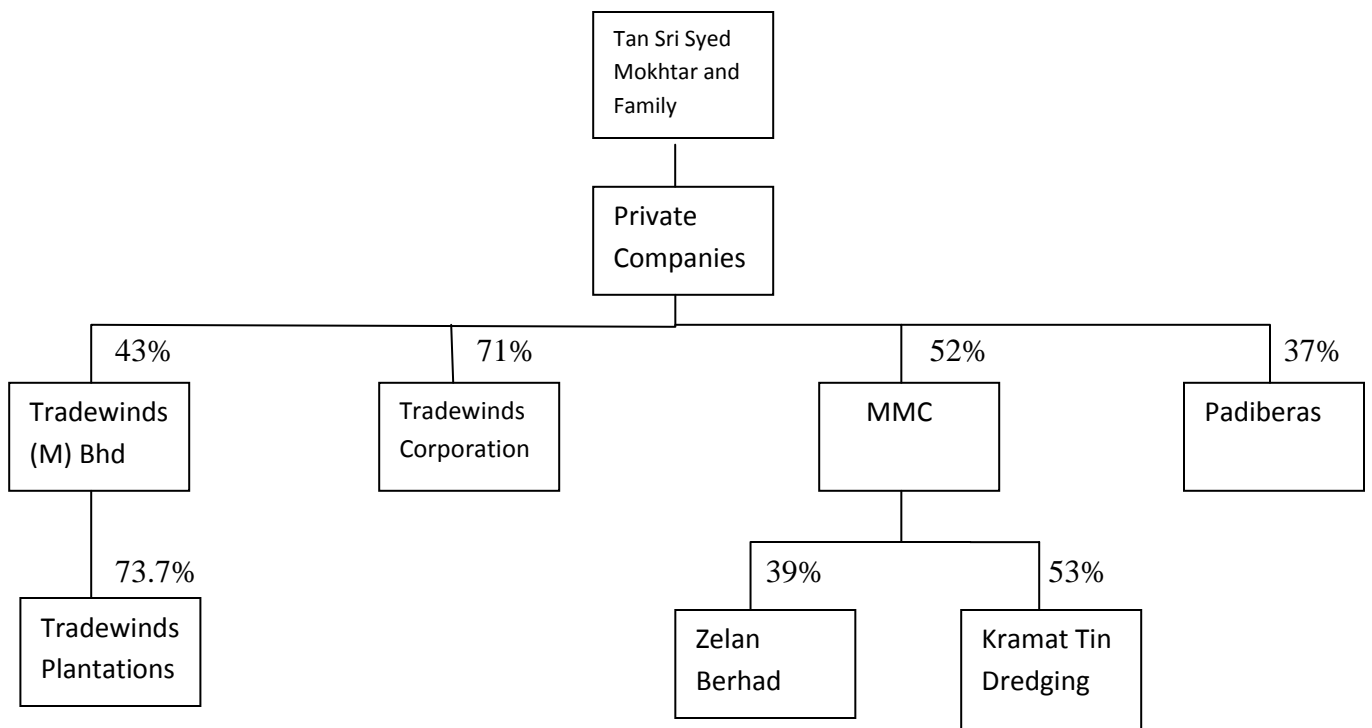
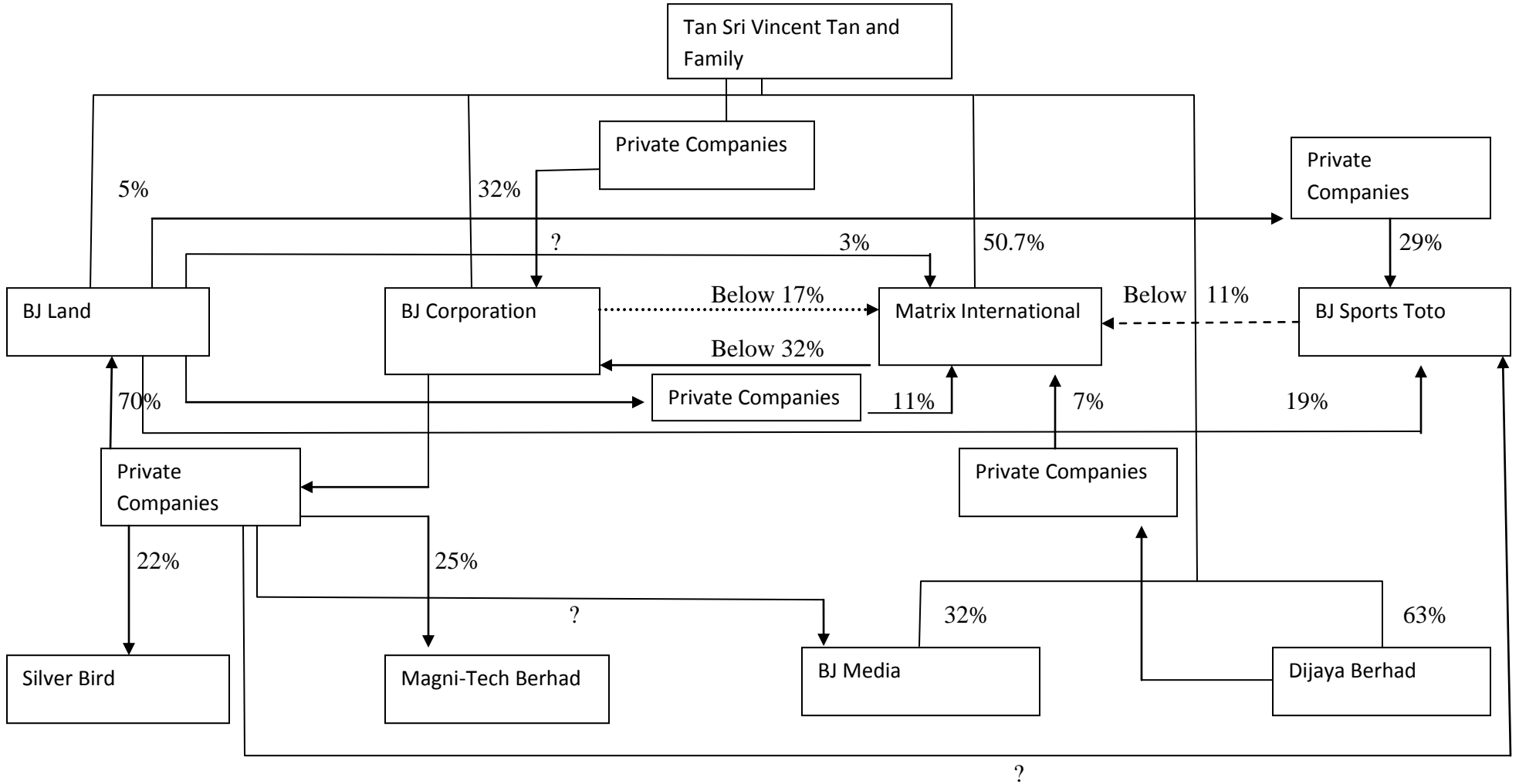


Figure 4.4: Business Group with Complicated Structure (BG_CS)



Source: Various 2007 Annual Reports of Berjaya Group Affiliates

4.7.3 Firm Diversification Variables

Firm diversification data used in this study are based on information in the ‘Segmental Disclosure’ in ‘Notes to the Financial Statements’ of company annual reports. All publicly-listed firms in Malaysia are required by the Malaysian Companies Act 1965 to disclose their revenues and profits before tax for each segment of business in which they are involved. The disclosure of the business segment must abide by the FRS114 (Segment Reporting) issued by the Malaysian Accounting Standard Board (MASB).⁶⁶ Specifically, following FRS114 (Segment Reporting), publicly-listed firms are required to report information for business and geographical segments whose revenue, assets or net profit is at least 10% or more of the total consolidated amount.

Due to controversy surrounding the appropriateness of different measures of firm diversification as highlighted by Robins and Wiersema (2003), this study employs several types of diversification measures in order to improve the robustness of the findings. The using of several measures of diversification is also consistent with previous studies such as Lee *et al.* (2008) and Denis *et al.* (1997). The construction of all diversification measures in this study is based on segmental disclosure in annual reports as highlighted in the above paragraph. Ayoib *et al.* (2003) and Zuaini and Napier (2006) also use segmental disclosure in annual reports to measure diversification for firms in Malaysia.

The following measures of diversification are used in this study:

- (i) Dummy variable – firms are classified as ‘diversified’ or ‘focused’ based on the number of segments disclosed. Firms that fulfil the following conditions are classified as diversified: with more than a single segment and where the sales in the largest segment are less than 90% of total sales. Firms that do not fulfil the conditions are classified as focused (Claessens *et al.*, 1999c; Fauver *et al.*, 2003; Lins and Servaes, 2002).

⁶⁶ The reporting and disclosure requirements of FRS114 are similar to the requirements of the revised International Accounting Standards (IAS) 14. The new standard IFRS 8 (Operating Segments) is enforceable in Malaysia with effect from 2009.

- (ii) The number of business segments as disclosed in the annual reports. This measure is used in Denis *et al.* (1997) and Zuaini and Napier (2006).
- (iii) The Herfindahl (H) Index – constructed from sales and a common measure used in many previous studies examining diversification issues (such as Chen and Ho, 2000; Denis *et al.*, 1997; Lang and Stulz, 1994).
- (iv) The Entropy measure – introduced by Jacquemin and Berry (1979) and Palepu (1985), also widely used by previous studies, for instance in Singh *et al.* (2007), Chakrabarti *et al.* (2007) and Kim *et al.* (2008).

The H index is calculated as follows for each firm *i*:

$$H = \sum (\text{Sales per segment} / \text{Total sales})^2$$

The H Index ranges from 0 to 1. The closer an H Index is to 1, the more a firm's sales are concentrated within a few of its segments, and the closer it is to 0, the greater the firm diversification.

The Entropy (E) is calculated as follows for each firm *i*:

$$E = \sum_{i=1}^n P_i \ln(1/P_i)$$

where P_i is the *i*th business segment's sales divided by the firm's total sales, and *n* is number of firm's business segments. $\ln(1/P_i)$ is the logarithm of the inverse of a business segment's sales over the total sales. The higher the E, the greater the firm diversification.

4.7.4 Control Variables

This study includes several control variables that are considered important in affecting firm performance. These variables are firm size, age, gearing ratio and sector classification. They are frequently used as control variables in multiple regression analysis in relevant literature.

For instance, the control variables used in Khanna and Palepu (2000a), Douma *et al.* (2006) and George and Kabir (2008) are very similar to those mentioned above.

Firm size is measured by the total value of sales, and log transformation was applied to correct the positive skewness in the data distribution of the variable. Firm size is included to account for the possible economies of scale and scope common to large firms. A positive significant value for the variable in regressions indicates a positive relationship between firm size and performance, indicating that large firms may benefit from economies of scale and scope (Joh 2003). Overall, the literature recognizes the effect of firm size on performance but that it is ambiguous. Some researchers believe that a larger company may not be as efficient as a smaller company due to decreasing control by senior management over strategic and operating activities as firm's size increases. Others, such as Nenova (2003), believe that larger firms may be subject to greater scrutiny and it is therefore more costly for the controlling families to extract private benefits. Larger firms are also associated with larger market power and thus better performance.

Gearing ratio is measured by total debts over total assets. Jensen's (1986) free cash flows hypothesis argues that high levels of debt 'discipline' managers, as the obligation to make periodic repayments of interest and principal will restrain them from using the firm's free cash flows for unproductive investments such as unnecessary diversification. The stock beta of firms with greater debt may also be higher, reflecting higher financial risk. This may affect the market value of the stock and subsequently the market-based performance of the firm such as the Q measure. From the governance perspective, higher gearing could also result in creditors monitoring management more closely. However, too much gearing may incur a burden of excessive interest and affect firm performance. Early studies such as Myers (1977) and Stulz (1988) suggest that there is a negative association between gearing and firm value.

Firm age is measured by the number of years that a corporation has been incorporated and controls for the 'life cycle effects' and the 'learning curve' of firms. Older firms may be more prone to entrenchment by the owner-manager and may also be unable to respond rapidly to changes in the environment (Sarkar and Sarkar, 2000). Claessens *et al.* (2002) assert that larger and older firms have better disclosure but fewer growth opportunities. Firm

age can be a useful proxy for a firm's growth opportunities (Borghesi *et al.*, 2007). Growth and the variability of firm growth may decrease as firms age (Evans, 1987). Older firms are also normally more experienced and more established, having gone through the learning curve process. However, older companies may lack the dynamism of younger firms and be less flexible to adapt to any changes in business environments.

The business sector in which a firm operates could possibly influence its performance. Seven sectors from Bursa Malaysia's sector classification system are used in this study, as introduced in the sampling and data collection section. A broad range of sector classification is used due to the reliability issue of classifying firms into more refined groupings. This is also consistent with common practice in the literature involving Malaysian firms (for instance in Tam and Tan, 2007 and Haniffa and Hudaib, 2006). A substantial proportion of publicly-listed family firms in East Asian countries (including Malaysia) are more widely diversified than firms in the US and UK, in which case the validity of using highly differentiated classifications is questionable (Bruton *et al.*, 2003). Sectors are dummy-coded for the purpose of regression analysis where one of the sectors serves as the control.

The researcher acknowledges that the measurement of the above control variables is an inexact science. In addition, it could also be argued that other relevant factors may exist. Nonetheless, it is common practice in relevant literature to include the above as control variables and thus the researcher is confident that they are sufficient and fitting to the overall model specification of regression.

4.8 Method of Analysis – Multiple Regression and Moderated Regression Analyses

Regression is the main tool of analysis used in this study as it is one of the widely-used methods in relational research. In general, regression involves the following steps: (a) Specification of the model in equation form, together with the *a priori* theoretical basis relating to the sign of the coefficients of the variables; (b) Collection of data on the variables of the model and estimation of the coefficients of the function with appropriate regression

techniques and (c) Evaluation of the estimated coefficients of the function on the basis of the theoretical bases (for instance agency theory and resource-based view).

Multiple regression analysis is chosen as the main tool of analysis in this study as it is *“the appropriate method of analysis when the research problem involves a single metric variable presumed to be related to two or more independent variables”* (Hair *et al.*, 2010, p.16) In addition, it is also an appropriate method as the data are cross-sectional, hence do not have to address autocorrelation issues. It is one of the most common methods of analysis used in previous research exploring the relationship between corporate governance mechanisms, organisational structures and firm performance and is used, for instance, in Anderson and Reeb (2003), Claessens *et al.* (2006) and Khanna and Palepu (2000a). Specifically, multiple regressions based on ordinary least square (OLS) estimation technique are used to test the hypotheses in this study.⁶⁷ OLS is appropriate as it is the most straightforward regression technique and the estimation is reliable as long as common regression problems are accounted for. All issues commonly associated with regression such as normality, multicollinearity and heteroscedasticity are addressed in the study using appropriate steps or measures. These are highlighted in the analysis chapter.⁶⁸

‘Moderated Regression Analysis’ (MRA) is also used in this study to predict the moderating effects of an independent variable on firm performance. Moderating effect (also known as interaction effect) occurs when the moderator variable - a second independent variable - changes the *form* or the *strength* of the relationship between the independent and dependent variables (Hair, *et al.*, 2010). MRA is a commonly used statistical method for *“studies predicting that the impact of the moderator variable on the dependent variables fluctuates across different levels of independent variables”* (Gani and Jermias, 2006, p.299). Hartmann and Moers (1999) also state that MRA is suitable in testing hypotheses involving interaction terms as it is *“a specific application of multiple regression analysis, in which the regression equation contains an interaction term”* (p.293).

⁶⁷ Masulis *et al.* (2011), Claessens *et al.* (2006) and Khanna and Palepu (2000a) also rely on OLS in their analyses.

⁶⁸ Appendix 4 presents the statistical problems, diagnostic and remedial measures in the multivariate regression.

Since the research questions in this study involve the examination of ‘dependence relationship’, the researcher had considered other available ‘dependence methods’ of analysis before deciding upon the multiple regression method.⁶⁹ According to Hair *et al.* (2010), depending on the task and relationship, there is a set of techniques or methods available to researchers when research questions involve the study of dependence relationship. The dependence methods available are: multiple regressions, multiple discriminant analysis, logistic regression, canonical correlation, multivariate analysis of variance (MANOVA) and conjoint analysis (Hair *et al.*, 2010). After considering all available methods, the researcher found that multiple regression method is the most suitable tool of analysis for the study as it is capable of sustaining all the hypotheses and answering all the research questions.

The other above-mentioned methods are less suitable due to the following reasons: multiple discriminant analysis and logistic regression are suitable in situations involving a non-metric (categorical) dependent variable (the dependent variable in this study involves a metric variable); canonical correlation is suitable when the researcher is interested in relationships between sets of multiple dependent and multiple independent variables, in other words, it is the method to accommodate multiple dependent and independent variables; conjoint analysis is used when the study involves only non-metric independent variables and MANOVA is suited to the analysis of multiple metric dependent variables and non-metric independent variables. Thus from the above, it is clear that the multiple regression method that is used to study the relationship between a metric dependent variable and a set of metric, dichotomous (dummy) and moderator variables is among the most suitable methods for this study.

4.9 Model Specification

4.9.1 Model Specification for Hypotheses Related to Ownership Structure

In order to gain insight into the relationship between ownership structure and firm performance, this study uses the following regression specification:

⁶⁹ ‘Dependence methods or techniques’ are one of the two classifications of multivariate analysis. The other classification – ‘Interdependence techniques’ are used when variables cannot be classified as either dependent or independent. See Hair *et al.* (2010) for more details on multivariate analysis.

PERM = function (ownership variables, other control variables)

----- (Specification 1)

where PERM refers to firm performance which is a function of ownership variables and other control variables.

The dependent variable, PERM, is measured by ROA and Tobin's Q. Various types of ownership are used as explanatory variables. These ownership variables are denoted as follows: the percentage of the controlling family's ownership (FAMOWN) and the ownership percentage for each of the six categories of 'other block-holders' in family-controlled firms: state block-holdings (STATE), foreign block-holdings (FORGN), block-holdings by domestic institutions (DOMII), block-holdings by domestic public institutional investors (DOMPUBII), block-holdings by foreign institutional investors (FORGNII) and block-holdings by 'unrelated/auxiliary' family (AUXFAM). Various regression models are used to estimate the above basic specification.

The following regression specification is used to test the moderating effects of board independence on the association between the controlling family's ownership stake and firm performance:

PERM = function (ownership variables, BDINDP, FAMOWN*BDINDP, other control variables)

----- (Specification 2)

where BDINDP refers to board independence variables.

The focus in this specification is on the interaction term (FAMOWN*BDINDP) that shows the moderating effect of board independence. Four measures are used to indicate various aspects of board independence. They are: *Proportion of Independent Non-executive*

Directors on Board (PrINED)⁷⁰, dummy variable *Independent Chairman* (INDP_CHR), dummy variable *Audit Committee consists of All Independent Directors* (INDP_ADT) and dummy variable *Highly Independent Board* (H_INDP_B). H_INDP_B is created for firms possessing all three traits of board independence simultaneously.⁷¹

A statistically significant positive value for the coefficients of the interaction term involving the board dummy variable (INDP_CHR, INDP_ADT, or H_INDP_B) indicates that the presence of (certain aspect of) board independence positively moderates the effects of FAMOWN on firm performance. An insignificant coefficient of the interaction term suggests that board independence does not have any moderating effect on the FAMOWN-Performance link. As for the interaction term involving PrINED (which is a continuous variable), a positive significant coefficient value can be interpreted as follows: the greater the degree of board independence, the greater (more positive) the effect of FAMOWN on firm performance. An insignificant coefficient indicates the lack of moderating effect of PrINED on the relationship between FAMOWN and firm performance.

4.9.1.1 The Issue of Endogeneity

A common concern in the estimation of ownership structure and firm performance as presented above is the possibility of endogeneity problems (Demsetz & Lehn, 1985). Not only could performance be affected by the ownership structure, but the ownership structure itself might be affected by the performance of the firm. In other words, the controlling shareowners may want to increase their holdings when the firm perform well and *vice versa*. However, La Porta *et al.* (1999) observe that ownership structures of family firms in East Asian (including Malaysian) corporations is relatively stable over both the short and long term. For instance, family ownership remained intact even during and after the 1997 Asian Financial Crisis. Moreover, shareholdings by controlling families in Malaysia were stable during the four decades since the inception of the NEP and it is therefore illogical to believe

⁷⁰ Information on whether a director is independent is disclosed in the company annual report. The Bursa Malaysia Listing Requirements define an independent director as a person who is not involved in the management of the firm and does not have any direct or indirect interest.

⁷¹ Formal definition for H_INDP_B is available in Table 5.1.

that controlling families have super-human ability and can see into the future and foretell their firm's performance, hence success or otherwise, of their shareholdings.

Anderson and Reeb (2003) and Andres (2008) also cast doubt on the reverse causality of ownership structure and firm performance. Andres (2008) contends that ownership structure is stable over the long term “*even in economically bad times*” (p.443) among family firms in Germany and thus shows that the reverse causality that performance causes ownership structure is unjustifiable. Thomsen and Pedersen (2000), in investigating the effects of ownership structure on company performance in Europe, discover that ownership structure is remarkably stable even during turbulent periods. Maury and Pajuste (2005) also assert that ownership structures tend to be stable over the time. From the above, it is therefore sensible to consider ownership structure as exogenous and thus the endogeneity issue should not be a concern in this study.

4.9.2 Model Specification for Hypotheses Related to Control-Enhancing Means and Family-controlled Business Groups

The following regression specification will be used in order to examine whether firms affiliated to a business group perform better or worse than firms without group affiliation:

$$\text{PERM}_{i,t} = \alpha + \psi(\text{BG}) + \delta Z_{i,t} + \theta X_{i,t} + \varepsilon_{i,t} \quad \text{----- (Specification 3)}$$

where PERM refers to firm performance, as measured by ROA and Tobin's Q; BG is the explanatory variable of interest which is dummy coded with 1 for group-affiliated firms and 0 for independent firms.

Psi (ψ) refers to the estimated coefficient for BG and measures the effect of group affiliation. For the hypothesis to be fully supported, ψ should be negative and statistically significant. Z is a vector of various ownership variables as introduced earlier and δ is the corresponding vector of estimated coefficient. X is a vector of control variables used in this study and θ is

the corresponding vector of estimated coefficient. X consists of firm size, age, gearing and sector affiliation. Alpha (α) is the constant term, ε is the error term and subscript i and t denote individual firms and time (year) respectively.

As discussed in the hypotheses development in Chapter 3, size of business groups may affect the performance of affiliated members (Khanna and Palepu, 2000a). Thus, to analyse the effect of group size, a related regression model is used in which the variable BG is split into three group size dummies: GR_A for firms affiliated to small business groups (small business groups refer to business groups with two listed affiliates), GR_B for firms affiliated to medium business groups (business groups with three to four listed affiliates), and GR_C for firms affiliated to large business groups (business groups with five or more listed affiliates). The categorization of group size in this case is somewhat arbitrary as in Khanna and Palepu (2000a).

This study also makes use of the following five alternative measures to account for enhanced family control as discussed in the hypotheses development in Chapter 3:

- (i) Cash flow-to-control ratio (CF/CONT);
- (ii) Group Complexity;
- (iii) Family Directors (FAMDIR);
- (iv) Both Chairmanship and CEO positions occupied by family (CHR_CEO);
- (v) The controlling family being the sole or only block-holder (FAMONLY).

The regression specification used for the purpose is as follows:

$$\text{PERM}_{i,t} = \alpha + \psi(\text{BG}) + \delta Z_{i,t} + \varphi \text{FAMCONT} + \theta X_{i,t} + \varepsilon_{i,t} \quad \text{----- (Specification 4)}$$

where the new explanatory variable FAMCONT refers to the family control-enhancing means which is proxied by the above five respective measures. The five control-enhancing means are examined one at a time in separate regression models. This helps to alleviate

multicollinearity. The inclusion of too many variables (if they are insignificant) may also increase standard errors in the regressions.

Under the CF/CONT variable, a family's control over group-affiliated firms is enhanced through the pyramidal structure and/or cross-holding. As explained by La Porta *et al.* (1999) and Claessens *et al.* (2000) among others, a pyramid enables controlling families to use a relatively small amount of capital investment to obtain a larger portion of control rights (voting rights) over firms. The divergence of cash flow-to-control rights is criticized as being one of the causes of expropriation of minority shareholders' wealth. The method used to calculate the ratio is explained in sub-section 4.7.2.

Due to the complexity of ownership structure of three business groups (Berjaya Group, Lion Group and MUI Group), this study has to forgo the calculation of the cash flow-to-control rights ratio for eleven firms that separately belong to these business groups, as the ratio for these firms cannot be calculated with any reasonable degree of confidence. The exclusion of these firms could create a bias in the outcome of the analysis which is thus considered to be a limitation of the study. However, since the three business groups are also categorized as 'business groups with complicated structure' (BG_CS) (the structure is depicted earlier in Figure 4.3), the outcome of the hypothesis testing on the firms affiliated to this structure, to a certain extent, may also reflect the outcome of the possibly high divergence of cash flow-to-control rights in these firms.

Under the 'Group Complexity' measure, group-affiliated firms are classified into three different dummy variables according to the complexity of the group structure: (i) BG_S for firms affiliated to simple business groups without pyramidal structure, (ii) BG_PS for firms affiliated to business groups with pyramidal structure; and (iii) BG_CS for firms affiliated to business groups with complicated pyramidal structure. Explanation for these three types of group complexity is already discussed in sub-section 4.7.2.

Under the FAMDIR variable, family control is measured by the proportion of family directors over the total number of directors on the board. Generally, a higher proportion of family directors indicates greater family control over the firms. Under the CHR_CEO

measure, firms with the two most senior positions (board chairmanship and CEO) occupied by family members are dummy coded as 1 and 0 otherwise. Finally, under the FAMONLY variable, a firm is dummy coded as 1 when its controlling family acts as the only blockholder without the presence of a second blockholder with at least a 10% shareholding. Family control is enhanced in this case without the presence of such second blockholder.

4.9.3 Model Specification for Hypotheses Related to Profit Redistribution

Following Gedajlovic and Shapiro (2002) and Lincoln *et al.* (1996, 2004), the following regression specification is used to test the profit redistribution hypotheses in group-affiliated firms:

$$\text{PERM}_{i,t} = \alpha + \beta (\text{control})_{i,t} + \theta X_{i,t} + \lambda \text{PERM}_{i,t-1} + \Phi (\text{control})_{i,t} * \text{PERM}_{i,t-1} + \varepsilon_{i,t}$$

----- (Specification 5)

where: $X_{i,t}$ is a vector of control variables that accounts for differences in the following: ownership of other blockholders, firm size, age, gearing and business sector effects. Theta (θ) is the corresponding vector of the estimated coefficient for the control variables. PERM is firm performance as measured by ROA and Tobin's Q. 'Control' refers to the strength of family control in which FAMOWN and CF/CONT are used respectively as the proxy.

Lincoln *et al.* (1996, 2004) suggest that the coefficient λ on the 'lagged' profitability term ($\text{PERM}_{i,t-1}$) would reflect the ability of business groups to redistribute profits. The lower the coefficient, the greater the redistribution effect, as explained by Gedajlovic and Shapiro (2002), that "*(r)edistribution from high-profitability firms to low-profitability firms smoothes out performance over time and lowers the estimated coefficient on the lagged term*" (p.568).⁷²

Since profit redistribution is associated with the strength of family control over the firm (Lincoln, 1996), the ownership level of the controlling family (FAMOWN) is used to

⁷² For further explanation on the methods and technical aspects of profit redistribution in business groups, see Lincoln *et al.* (1996).

indicate the strength of family control in examining the profit redistribution hypothesis (Gedajlovic and Shapiro, 2002; George and Kabir, 2008). The degree to which family ownership influences the extent of redistribution can be estimated by coefficient Φ , on the interaction term ($FAMOWN_{i,t} * PERM_{i,t-1}$) between family ownership and past performance (Lincoln *et al.*, 1996, 2004). If Φ is a negative value and significant, then it implies that ‘family ownership’ is associated with the redistribution of profits from higher to lower-profit firms. Put simply, higher performance of a group-affiliated firm in a particular year is followed by reduced performance in the ensuing year. Alternative measures of the strength of family control based on the cash flow-to-control rights ratio (CF/CONT) and the dummy variable of cash-flow-to-control rights ratio (CF/CONT_DUM) are also employed in separate regressions to examine the above profit redistribution hypothesis.

To test the hypothesis that the strength of the profit distribution effect could be affected by the size of business groups as well as the strength of family control (Hypothesis 3b), the following specifications are applied to group-affiliated firms:

$$PERM_{i,t} = \alpha + \zeta GRSZ + \theta X_{i,t} + \lambda PERM_{i,t-1} + FAMOWN_{i,t} + \Phi FAMOWN_{i,t} * PERM_{i,t-1} * GRSZ + \varepsilon_{i,t}$$

----- (Specification 6a)

$$PERM_{i,t} = \alpha + \zeta GRSZ + \theta X_{i,t} + \lambda PERM_{i,t-1} + \text{cash-to-control ratio}_{i,t} + \Phi \text{cash-to-control ratio}_{i,t} * PERM_{i,t-1} * GRSZ + \varepsilon_{i,t}$$

----- (Specification 6b)

$$PERM_{i,t} = \alpha + \zeta GRSZ + \psi \text{Family}_{i,t} + \theta X_{i,t} + \lambda PERM_{i,t-1} + \Phi \text{Family}_{i,t} * PERM_{i,t-1} * GRSZ + \varepsilon_{i,t}$$

----- (Specification 6c)

where: GRSZ consists of three size groupings – GR_A, GR_B and GR_C as defined earlier in sub-section 4.9.2. Specifications (6a) and (6b) use FAMOWN and ‘divergence of cash flow and control rights’ respectively as the measure of the strength of family control. The

interaction terms employed in both specifications test the joint effect of group size and family control strength.

In order to further examine the relationship between the rising thresholds of family control and profit redistribution, ownership of controlling families (FAMOWN) is split into two different variables: FAMOWN1 for family ownership of less than 50% and FAMOWN2 for family ownership of 50% and above. The choice of 50% as the cut-off point is sensible as an ownership level of 50% and above indicates majority ownership. The explanatory variable ‘*Family*’ in Specification (6c) includes FAMOWN1 and FAMOWN2. The interactions term ($\Phi \text{Family}_{i,t} * \text{PERM}_{i,t-1} * \text{GRSZ}$) is employed to test the joint effect of ‘*Family*’ and ‘*GRSZ*’ on profit redistribution. For instance, the joint effect of the interaction between FAMOWN2 and GR_C could be tested.

Next, to test the hypothesis on the inefficiency of profit redistribution, both categories of group and non-group firms are further split into two separate sub-categories based on their median ROA (Q) values: a sub-category with high ROA (Q) and a sub-category with low ROA (Q). The capital expenditures of the two sub-categories from the *group-affiliated* firms are then compared, with a similar comparison then made for the *non-group* firms. If profit redistribution is inefficient in group-affiliated firms, capital expenditure for the group-affiliated firms with high Q *will not* be statistically higher than the group-affiliated firms with low Q (the capital expenditure will be either the same or lower). Based on the discussion in Section 3.5, it is noted that inefficient profit redistribution is only associated with group-affiliated firms and not with non-group firms. Hence, without the hypothesized inefficient profit redistribution, capital expenditures of good-performing firms should be greater than poor-performing firms in non-group firms.

To test the effects of board independence on capital expenditure between good and poor-performing firms in *group-affiliated* firms; the firms are first split into two sub-categories: firms with high ROA (Q) and firms with low ROA (Q) based on the median ROA (Q) value of the sample (firms with ROA (Q) above the median value are considered as high-performing firms and *vice versa* for low-performing firms). Within each sub-category, firms are further split into two sub sub-categories: ‘firms with board independence’ and ‘firms

without board independence'. Board independence, as explained in sub-section 4.9.1, is operationalized respectively by three variables: PrINED, INDP_CHR, and INDP_ADT.

A comparison on the level of capital expenditure is then made between the high ROA (Q) firms and low ROA (Q) firms within each sub sub-category of board independence. A higher level of capital expenditure (statistically significant) for the high ROA (Q) firms compared to low ROA (Q) firms in the 'firms with board independence' and not in the 'firms without board independence', suggests that board independence has the ability to curb inefficient profit redistribution and restore a high-performing/high capital expenditure and low-performing/low capital expenditure relationship.

4.9.4 Model Specification for Hypotheses Related to Firm Diversification

The following regression specification is used to examine the hypothesis on the effect of firm diversification on performance (Hypothesis 4). This specification is also used to separately test the effect of diversification on the performance of group-affiliated firms compared to non-group firms:

$$\text{PERM}_{i,t} = \alpha + \upsilon \text{DVSF}_{i,t} + \delta Z_{i,t} + \theta X_{i,t} + \varepsilon_{i,t} \quad \text{----- (Specification 7)}$$

where: DVSF is firm diversification measured by the four diversification measures respectively as stated in sub-section 4.7.3: Diversification Dummy, Number of Business Segments, H Index, and Entropy. The focus is on the coefficient value, υ , in which a positive value for υ (for H index) or a negative value for υ (for the 'Diversification Dummy', 'Number of Segments' and 'Entropy' measures) is an indication of a negative association between the level of firm diversification and performance, and *vice versa*. Z is a vector of various ownership variables as introduced earlier. X is a vector of other control variables, namely firm size, age, group, gearing and business sector effects.

In order to test whether firm diversification is agency-driven, the following regression specification is used. This specification is also used separately to test the hypothesis for group-affiliated firms and non-group firms:

$$\text{Ln (Efficiency)}_{i,t} = \alpha + \beta \text{DVSF}_{i,t} + \delta Z_{i,t} + \theta X_{i,t} + \varepsilon_{i,t}$$

----- (Specification 8)

where: *Efficiency* refers to ‘Asset Utilization Efficiency’ which is measured by the asset turnover ratio (Total Sales/Total Assets). The variable is transformed using natural log (Ln) since it leads to better statistical characteristics (Fleming *et al.*, 2005). A negative value for coefficient β indicates that higher diversification is associated with a lower asset turnover ratio and suggests that diversification is agency-driven (see sub-section 3.6.2 for the literature). Z is a vector of ownership variables as described earlier and X is a vector of control variables that includes firm size, age, gearing, ROA and business sector effects. The inclusion of these ownership and control variables is consistent with those in Fleming *et al.* (2005).

The next regression specification is used to test the hypothesis on the moderating effect of the size of business group on the firm diversification-performance link:

$$\text{PERM}_{i,t} = \alpha + \nu \text{DVSF}_{i,t} + \zeta \text{GRSZ} + \beta \text{GRSZ} * \text{DVSF}_{i,t} + \theta X_{i,t} + \varepsilon_{i,t}$$

----- (Specification 9)

where: GRSZ is the dummy variable as defined in Specification 6. The moderating effects of different sizes of business groups on the diversification-performance link can be determined from the coefficients ν and β in Specification 9. Different regression models using different group sizes are employed in the specification.

The next two regression specifications are used to examine the moderating effect of the ownership of controlling families (FAMOWN) and the domestic public institutional investors (DOMPUBII) on the diversification-performance link. The specifications are also used to

separately test the moderating effect of FAMOWN and DOMPUBII on the diversification-performance link for group-affiliated firms.

$$\text{PERM}_{i,t} = \alpha + \upsilon \text{DVSF}_{i,t} + \omega \text{FAMOWN}_{i,t} + \Phi \text{DVSF}_{i,t} * \text{FAMOWN}_{i,t} + \theta X_{i,t} + \varepsilon_{i,t}$$

----- (Specification 10)

$$\text{PERM}_{i,t} = \alpha + \upsilon \text{DVSF}_{i,t} + \omega \text{DOMPUBII}_{i,t} + \Phi \text{DVSF}_{i,t} * \text{DOMPUBII}_{i,t} + \theta X_{i,t} + \varepsilon_{i,t}$$

----- (Specification 11)

where: the moderating effect of FAMOWN and DOMPUBII on the diversification-performance link is determined by the υ and Φ coefficients.

Finally, the two regression specifications below are used to separately examine the moderating effects of board independence and control-enhancing means on the diversification-performance link:

$$\text{PERM}_{i,t} = \alpha + \upsilon \text{DVSF}_{i,t} + \delta \text{BDINDP}_{i,t} + \gamma \text{DVSF}_{i,t} * \text{BDINDP}_{i,t} + \theta X_{i,t} + \varepsilon_{i,t}$$

----- (Specification 12)

$$\text{PERM}_{i,t} = \alpha + \upsilon \text{DVSF}_{i,t} + \delta \text{FAMCONT}_{i,t} + \gamma \text{DVSF}_{i,t} * \text{FAMCONT}_{i,t} + \theta X_{i,t} + \varepsilon_{i,t}$$

----- (Specification 13)

where: BDINDP and FAMCONT refer to board independence and control-enhancing means respectively, definitions of which are provided in sub-sections 4.9.1 and 4.9.2. The interaction terms ($\text{DVSF}_{i,t} * \text{BDINDP}_{i,t}$) and ($\text{DVSF}_{i,t} * \text{FAMCONT}_{i,t}$) are included in the above regressions to examine the moderating effects of BDINDP and FAMCONT on the diversification-performance link.

4.10 Chapter Summary

The chapter began with a brief explanation of ethical issues in the research. Ethical issues are minimal, as only reliable secondary data is utilized in the study and real world illustrations used are from publicly-available sources. The chapter then explained the researcher's positivist philosophical stance. Positivists believe that a phenomenon or hypothesis can be understood through empirical testing. Thus, a deductive approach is used in the study and, as the research questions demand an examination of the 'dependence relationship', regression is chosen as the main tool of analysis. Other 'dependence' methods of analysis were found to be inappropriate as justified in Section 4.8.

The study proceeded to explicate in detail the sample selection and data collection process. Data relating to ownership and board of directors were collected from 2007 company annual reports and financial and market data for 2008 were obtained mainly from the Worldscope database. A total of 314 family-controlled firms were selected to represent all seven main business sectors. The study then provided an explanation of how the key operational variables are constructed. This includes ownership, business group affiliation, firm diversification and performance variables.

The construction of the two most essential variables in the study, namely family ownership and firm performance variables, is explained first. The construction of the family ownership variable includes the criterion used to define a firm as family-controlled: – the family/individual should have a minimum of a 10% cut-off level of shareholding of the firm and act as the largest shareholder. As many controlling families maintain indirect ownership of publicly-listed firms through their privately-held companies, the ultimate ownership approach is used to determine their actual ownership of listed firms. Family relationship is identified as per the disclosure in the company annual reports.

The selection of simplified Tobin's Q and ROA as the output variables of the study was then explained and justified. Both measures of firm performance represent two different perspectives with Tobin's Q as a market-based forward-looking performance measure and ROA as an accounting-based historical performance measure. Winsorization technique is

used to address the presence of outliers in the performance data. The researcher then explicated the construction of other variables including 'other block-holders', business group affiliation and diversification variables. The 'other block-holders' are classified into six different types, namely state, foreign corporations, domestic institutional investors and its subset domestic public institutional investors, foreign institutional investors, and unrelated/auxiliary family.

The construction of the group affiliation variable and the categorization of business groups into three different dummy variables, according to the complexity of the group structure, were then explicated. Real-world corporations are used as examples to illustrate the construction of the three dummy variables, namely 'Simple Business Groups', 'Business Groups with Pyramidal Structure', and 'Business Groups with Complicated Structure'. Next, for the purpose of robustness, firm diversification variables were constructed by using four different measures: Entropy, Herfindahl (H) Index, Number of Business Segments, and Diversification Dummy. Four important variables known in the literature to affect firm performance are also included as control variables in the study. They are the firm size, age, gearing and business sector/industry effects.

In the ensuing section, the researcher explained the method of analysis for the study. Ordinary Least Square (OLS) multiple regressions and moderated regressions are applied as the main tools of analysis and justifications are given for their application. Appropriate remedial measures, which are highlighted in the next chapter, are used to address common problems associated with multiple and moderated regressions such as normality, multicollinearity, heteroscedasticity and endogeneity. Finally the chapter details the various specifications of model to be used in the empirical examination of the hypotheses. Based on earlier constructed variables, a total of 13 model specifications are constructed and categorized according to the major themes in the study, namely i) ownership structure, ii) control-enhancing means and group affiliation, iii) profit redistribution and iv) firm diversification. Findings and discussions based on the model specifications are presented in the next two chapters.

Chapter 5 – Findings and Discussions I – Descriptive Statistics

5.1 Chapter Outline

This chapter deals with the descriptive statistics for the data used in the analysis. The aim is to describe quantitatively some of the main features of the data (e.g. data distribution such as percentage, central tendency of the statistics such as mean and median, and data dispersion such as standard deviation) so that some simple comparisons can be made between the data/variables. Since the descriptive statistics are intended to summarize the data sets, they will not be emphasized for major statistical inferences. The main inferences and conclusions of the study are drawn from the multiple regression analysis in the next chapter, in which all the variables that are relevant in a model specification are simultaneously included and tested. For ease of reference, a list of abbreviations used in this and the next chapter, together with a definition/explanation, is presented in Table 5.1 at the end of the chapter outline.

Both the ‘Findings and Discussions’ chapters (this chapter and the next) are written from the approach that discussion of results and implications appears immediately after the analysis of data for each sub-section is presented and completed. This approach serves best in providing continuity of discussion and the advantage of being able to conveniently check or refer back to the statistics from which the discussions or implications are drawn.

Table 5.1: List of Abbreviations, Variables and Operationalization

| Abbreviation | Variable | Operationalization |
|---------------------|--|---|
| ROA | Return on Assets | EBITDA / Total assets |
| Tobin's Q or Q | Simplified Tobin's Q | (Market value of equity + Book value of total liability) / Book value of assets |
| FAMOWN | Controlling Family Ownership | Percentage of shareholding by the controlling family or individual person. A firm is defined as family-controlled if the family is the largest block-holder with at least 10% of shareholdings. |
| STATE | State Ownership | Percentage of block shareholding by the government in a family-controlled firm. |
| FORGN | Foreign Corporations Ownership | Percentage of block shareholding by foreign corporations in a family-controlled firm. |
| DOMII | Domestic Institutional Investors Ownership | Percentage of block shareholding by domestic institutional investors in a family-controlled firm. |
| DOMPUBII | Domestic Public Institutional Investors Ownership | Percentage of block shareholding by domestic public institutional investors in a family-controlled firm. |
| FORGNII | Foreign Institutional Investors Ownership | Percentage of block shareholding by foreign institutional investors in a family-controlled firm. |
| AUXFAM | Auxiliary or Unrelated Families Ownership | Percentage of block shareholding by auxiliary or unrelated families in a family-controlled firm. |
| Other BHS | Other (Outside) Block-holders | Combined percentage of shareholding by all the block-holders except the controlling family in a family-controlled firm. |
| PrINED | Proportion of Independent Directors | Number of independent directors / Total number of directors on the board |
| INDP_CHR | Independent Chairman | Dummy is 1 if chairman of the board is an independent director; 0 otherwise. |
| INDP_ADT | Independent Audit Committee | Dummy is 1 if all the audit committee members are independent directors; 0 otherwise. |
| H_INDP_B | Highly Independent Board | Dummy is 1 if the following are satisfied: at least half of the board members are independent directors, chairman is an independent director, and all the audit committee members are independent directors; 0 otherwise. |
| CF/CONT | Cash Flow-to-Control Rights | Cash flow rights / control rights |
| CF/CONT_DUM | Cash Flow-to-Control Rights Dummy | Dummy is 1 if the ratio of cash flow-to-control right is below 1.00; zero if the ratio is 1.00. |
| FAMDIR | Family Directors on the Board | Number of family directors / Total number of directors |
| CHR_CEO | Chairman and CEO positions simultaneously occupied by the controlling family | Dummy is 1 if the board chair and CEO positions are simultaneously occupied by the controlling family; 0 otherwise. |

| | | |
|-----------------|---|---|
| FAMONLY | Controlling family as the only or sole block-holder | Dummy is 1 if the controlling family is the sole block-holder of the firm without the presence of a second block-holder who has at least a 10% shareholding; 0 otherwise. |
| Group | Business Group-affiliated | Dummy is 1 if the firm is affiliated to a business group; zero otherwise. A firm is considered as group-affiliated if it shares the same controlling family with other publicly-listed firm(s). |
| BG_S | Business Groups with Simple Structure | Dummy is 1 if the firm is affiliated to a business group without a pyramidal structure; 0 otherwise. |
| BG_PS | Business Groups with Pyramidal Structure | Dummy is 1 if the firm is affiliated to a business group with a pyramidal structure; 0 otherwise. |
| BG_CS | Business Groups with Complicated Structure | Dummy is 1 if the firm is affiliated to a business group with complicated structure (contains complex network of pyramid and cross-holding) in which the cash flow-to-control rights ratio is indeterminate; 0 otherwise. |
| Lag (ROA) | Previous year ROA | ROA for fiscal year 2007 |
| Lag (Tobin's Q) | Previous year Tobin's Q | Tobin's Q for fiscal year 2007 |
| GR_A | Small size business group | Dummy is 1 if the firm is affiliated to a business group with only two publicly-listed affiliates; 0 otherwise. |
| GR_B | Intermediate size business group | Dummy is 1 if the firm is affiliated to a business group with three to four publicly-listed affiliates; 0 otherwise. |
| GR_C | Large size business group | Dummy is 1 if the firm is affiliated to a business group with five or more publicly-listed affiliates; 0 otherwise. |
| FAMOWN1 | Controlling family without majority ownership | Percentage of family shareholding below 50%. |
| FAMOWN2 | Controlling family with majority ownership | Percentage of family shareholding of 50% and above. |
| CAPEX Ratio | Capital Expenditure Ratio | Capital expenditure/ Total assets |
| E | ENTROPY or E value | $E = \sum P_i \ln(1/P_i)$ where P_i is the i -th business segment's sales divided by the firm's total sales. The higher the E, the greater the firm diversification. |
| HERF | Herfindahl or H Index | $H = \sum (\text{Sales per segment}/\text{Total sales})^2$. The lower the H, the greater is firm diversification. |
| NUM_SEG | Number of Segments | Number of business segments as reported in company annual reports. |
| DVSF_D | Diversification Dummy | Dummy is 1 if the firm has more than a single business segment and where the sales in the largest segment are less than 90% of total sales; 0 otherwise. |
| Efficiency | Asset Turnover Ratio | Total sales / Total assets |
| Sales | Total Sales | Total sales or revenues in Ringgit Malaysia |
| Gearing | Gearing Ratio | Total debts / Total assets |
| Age of firm | Age of firms in years | Number of years since incorporation of a firm |

5.2 Firm Performance Data

The section begins with a presentation of the descriptive statistics for the dependent or output variable: firm performance. Descriptive statistics on the performance measures of the sample firms are depicted in Table 5.2 below. The maximum value of ROA (Tobin's Q) is close to 53% (7.00) whereas the lowest value is close to -80% (0.33). The distribution of the statistics is centred at the value of 9.19% (0.87) with the median of 9.07% (0.76).

Table 5.2: Descriptive Statistics – Firm Performance

| Performance Measure | Mean | Median | Maximum | Minimum | Standard Deviation |
|---------------------|------|--------|---------|---------|--------------------|
| ROA (%) | 9.19 | 9.07 | 52.74 | -79.76 | 9.18 |
| Tobin's Q | 0.87 | 0.76 | 6.91 | 0.33 | 0.53 |

Between the two performance measures, Tobin's Q is especially affected by the general stock market movement. The mean of 0.87 (based on the end of 2008 data) may reflect the overall bearish market that existed during the period. The benchmark of Bursa Malaysia KLCI stood at 877 points at the end of 2008. This is significantly lower than the index recorded for the same period in the three years before 2008: 899 (end of 2005), 1096 (end of 2006) and 1445 (end of 2007). Overall, the stock market performance was encouraging and exhibited an upward trend from 2005 to 2007. However, the performance deteriorated in 2008 as a result of the US credit crisis that occurred during the year. The stock market recovered in 2009 and 2010 with the index stood at 1273 and 1519 respectively at the end of both years. Tobin's Q in this study, on average, would have been higher if the trough period of the economy cycle (i.e. 2008) is avoided. Put differently, the mean value of less than 1.00 for Tobin's Q in this study, to a large extent, is explainable by the deteriorating market condition in 2008.⁷³

⁷³ As stated in Table 5.1, Tobin's Q is calculated as the ratio of market value of equity plus total liability divided by the book value of total assets of the firm. It should be noted that the market value of equity will generally be greater than its book value when the economy is growing satisfactorily. Tobin's Q will be greater than 1.00 in such circumstances. Conversely, when the economy stalls or slows down, the declining stock market may cause the market value of equity to fall below its book value and Tobin's Q will therefore fall below 1.00.

5.3 Ownership Data

Table 5.3 depicts the descriptive statistics for the various types of block-holders.⁷⁴ The statistics show that the ownership level of family-controlled firms in Malaysia is highly concentrated with a mean of 37.97%. This figure is comparable to the 38.45% average ownership of family-controlled firms reported by Tam and Tan (2007) with their sample size of 150 listed firms in Malaysia.⁷⁵

All other types of block-holder (STATE, FORGN, FORGNII, DOMII, DOMPUBII and AUXFAM), on average, account for only a small percentage of the equity of the sampled firms. However, the mean statistics are greatly ‘averaged down’ by the fact that these ‘other block-holders’ do not appear in every single firm and in fact the involvement of some of these block-holders in firms is rather limited. STATE, FORGN, FORGNII, DOMII, DOMPUBII and AUXFAM appear in 19, 17, 34, 111, 105 and 135 firms respectively from

Table 5.3: Descriptive Statistics – Ownership Data

| Ownership of Various Block-holders (%) | Mean | Median | Maximum | Minimum | Standard Deviation |
|--|--------------|-----------|---------|---------|--------------------|
| FAMOWN | 37.97 | 37.36 | 71.77 | 6.00 | 15.14 |
| STATE | 0.86 (14.16) | 0 (14.99) | 26.04 | 0 | 3.72 |
| FORGN | 0.76 (14.03) | 0 (10.23) | 30.27 | 0 | 3.84 |
| DOMII | 3.60 (10.18) | 0 (8.62) | 29.87 | 0 | 5.88 |
| DOMPUBII | 3.33 (9.96) | 0 (8.55) | 29.87 | 0 | 5.68 |
| FORGNII | 1.09 (10.11) | 0 (7.84) | 27.54 | 0 | 3.85 |
| AUXFAM | 6.29 (14.62) | 0 (11.37) | 38.32 | 0 | 9.33 |

the total of 314 firms in the sample. The numbers suggest that these block-holders, particularly state and foreign, are rather selective in choosing which family-controlled firms

⁷⁴ See Table 5.1 for explanation of abbreviations.

⁷⁵ Family-controlled firms are known as ‘individual firms’ in Tam and Tan (2007).

they wanted to invest in. It is therefore important to find out in the multivariate analysis whether the equity stake of the different identity block-holders influences the performance of the firms differently.

Moreover, though foreigners' equity participation is not widespread in family-controlled firms in Malaysia, they actually form a considerable fraction of the daily stock trading on Bursa Malaysia. For instance, on average, the daily trading participation disclosed in the Bursa Malaysia official website for the month of June 2011 shows that foreign participation accounts for about one-third of the total trading value.⁷⁶ Foreign investors are also viewed as an important element affecting market sentiment.

Separate statistics (shown in parentheses in the table) for each type of block-holder are computed for the purpose of showing the mean and median of the sub-sample firms that contain only that particular type of block-holder. The statistics portray that the average stakes held by each type of block-holder are quite substantial, in the range between 10-15% with the maximum percentage approaching 30% for most types of block-holder and 38.32% for AUXFAM.

The next section presents the descriptive statistics of another set of data which are applied throughout the entire multiple regression analysis – the control variables data.

5.4 Control Variables Data

Table 5.4 shows the descriptive statistics for the control variables: sales, gearing ratio and age of firm since incorporation. A family firm of an average size (mean value) in the sample generates about RM813 million of annual sales. However, the median firm size is much smaller at around RM293 million. The large difference between the mean and the median indicates that the distribution of sales is skewed and not symmetrical. Thus data

⁷⁶ Foreigners only hold a small portion of stocks but account for one-third of the daily trading value suggesting that the ownership structure is highly concentrated in that most of the stocks are 'non-publicly tradable' in the real sense. Non-tradable stocks refer mainly to the long-term holdings of the controlling family and other major shareholders as well as other restricted holdings such as employee share schemes. In other words, the percentage of free-float stocks in Malaysia is low and continues to be problematic.

transformation is made by taking the natural log for the variable in order to normalize the distribution before multivariate analysis is performed. The average gearing ratio is 23% and the mean age of firms is 24.5 years which is slightly younger than the mean of 28.8 years reported by Claessens *et al.* (2000) for Malaysian firms.⁷⁷ It also shows that family firms in Malaysia are relatively young compared to, for example, the average age of 82 years reported in Andres (2008) for Germany firms.

Table 5.4: Descriptive Statistics – Control Variables

| Firm variable | Mean | Median | Maximum | Minimum | Standard Deviation |
|---------------------|---------|---------|------------|---------|--------------------|
| Sales (RM '000) | 813,623 | 293,335 | 14,665,369 | 8,740 | 1,524,205 |
| Gearing ratio | 0.230 | 0.228 | 0.789 | 0.000 | 0.170 |
| Age of firm (years) | 24.5 | 19 | 95 | 1 | 17.33 |

5.5 Other Relevant Data

Table 5.5 shows the data on variables related to board independence. On average, about 43% (45% in group-affiliated firms) of board directors are categorized as independent non-executive directors. This percentage is above the one-third independent directors requirement set by the Malaysian Code on Corporate Governance (MCCG). However, the minimum value of 22% for the variable is below the MCCG requirement. The highest percentage of independent directors in the sample firms is 75% (71% in group-affiliated firms). The next three variables, INDP_CHR, INDP_ADT and H_INDP_B are dummy variables. The data shows that about 32% of the firms (32% in group-affiliated firms) have independent chairmen, about 32% of the firms (26% in group-affiliated firms) have their audit committee consisting of only independent directors, and only 22 or 7% of the firms are considered as having a 'highly independent board' (H_INDP_B).

⁷⁷ Claessens's *et al.* (2000) sample selection criterion is not based solely on family-controlled firms. Their sample includes all types of firms.

Table 5.5: Descriptive Statistics – Board Independence

| Board Independence | Mean | Median | Maximum | Minimum | Standard Deviation |
|---|------|----------|------------|-----------|--------------------|
| PrINED | 0.43 | 0.41 | 0.75 | 0.22 | 0.11 |
| PrINED (group-affiliated firms only) | 0.45 | 0.43 | 0.71 | 0.22 | 0.11 |
| Board Independence (Dummy Variables) | | Yes (1) | Percentage | No (0) | Percentage |
| INDP_CHR | | 99 Firms | 31.5% | 215 Firms | 68.5% |
| INDP_CHR (group-affiliated firms only) | | 48 Firms | 31.6% | 104 Firms | 68.4% |
| INDP_ADT | | 99 Firms | 31.5% | 215 Firms | 68.5% |
| INDP_ADT (group-affiliated firms only) | | 39 Firms | 25.7% | 113 Firms | 74.3% |
| H_INDP_B | | 22 Firms | 7.0% | 292 Firms | 93% |

Table 5.6 shows the descriptive statistics for the variables of control-enhancing means. The mean for the ratio of cash flow-to-control rights for the controlling family is 0.94. The median of 1.00 shows that the majority of firms do not have divergence in cash flow and control rights. The mean is higher than that of 0.85 reported in Claessens *et al.* (2000) but the median is the same as Claessens *et al.* (2000). The higher mean in this study is partly caused by the exclusion of the 11 firms whose CF/CONT ratio cannot be determined due to insufficient information on the highly complex pyramidal and cross-holding structures involved in these firms. Another likely reason for the difference in the mean value is the different sampling selection used by Claessens *et al.* (2000). Their sample of 236 Malaysian firms consists of the largest 100 Malaysian firms in terms of market capitalization. Group-affiliated firms with pyramidal structure tend to be larger in size compared to non-group firms.⁷⁸ Thus a sampling method that is skewed towards large firms tends to find more group-affiliated firms with divergence in cash flow to control rights.

⁷⁸ The difference in the size (by total sales) of group and non-group firms is shown in Table 5.8.

Table 5.6: Descriptive Statistics – Control-enhancing Means

| Family Control | Mean | Median | Maximum | Minimum | Standard Deviation |
|---------------------------------|---------|--------|---------|---------|--------------------|
| CF/CONT | 0.944 | 1.000 | 1.000 | 0.250 | 0.147 |
| FAMDIR | 0.27 | 0.29 | 0.83 | 0.00 | 0.20 |
| <hr/> | | | | | |
| Family Control (Dummy variable) | Yes (1) | | No (0) | | |
| CHR_CEO | 126 | | 188 | | |
| FAMONLY | 195 | | 119 | | |
| <hr/> | | | | | |
| Structure of Business Group | BG_S | BG_PS | BG_CS | Total | |
| Number of firms | 51 | 90 | 11 | 152 | |
| Number of business groups | 32 | 45 | 3 | 80 | |

Conversely, sampling in this study is carried out to ensure that selection of firms is balanced as far as firm size is concerned.⁷⁹ The exclusion of the 11 firms is however compensated by the use of BG_CS, the dummy variable that indicates ‘business groups with complicated structure’ whereby the 11 firms fall into the group. These 11 firms belong to three separate business groups from the total of 80 groups in the study.

Family business groups with pyramidal ownership structure are common in Malaysia, as the table shows, the majority of business groups in this study (45 out of 80 business groups or 56%) are associated with pyramidal structure (BG_PS). The number of firms affiliated to this type of business group is 90 (or 59% of group-affiliated firms). As for the business groups with simple structure (BG_S), 32 business groups (or 40% of the total number of business groups) belong to this category and the number of firms involved is 51 (or 34% of group-affiliated firms).

⁷⁹ Details of the sampling method are available in Section 4.4 in Chapter 4.

The next variable in the list is FAMDIR. On average, 27% of board directors are family directors (with median = 29%). The highest percentage of boards with family directors is 83% and the lowest is 0%. Dummy variables, CHR_CEO and FAMONLY, depict that 126 firms (or 40% of firms) have both the chairmanship and CEO positions occupied by family members and 195 firms (or 62% of firms) have the controlling family as the sole or only block-holder in the firm.

Table 5.7a shows the key statistical features of diverse measures of diversification used in this study. The mean (median) values of the Entropy, H Index and Number of Segments are 0.420 (0.360), 0.763 (0.813) and 2.69 (2.5) respectively. As a comparison, Zuaini and Napier (2006) report an Herfindahl Index of 0.71 and an average number of 2.36 segments from their sample of 355 Malaysian firms in 2001, whereas Ayoib *et al.* (2003) report an average number of 2.30 segments from their sample of 219 Malaysian firms in 1995. This suggests that the firm diversification scenario has changed little since before the 1997 Asian Financial Crisis.

Table 5.7a: Descriptive Statistics – Firm Diversification Data

| Variable | Mean | Median | Maximum | Minimum | Standard Deviation |
|--------------------------------------|--------------|--------|---------------|---------|--------------------|
| Entropy | 0.420 | 0.360 | 1.630 | 0.000 | 0.415 |
| Herfindahl | 0.763 | 0.813 | 1.000 | 0.225 | 0.235 |
| Number of Segments | 2.690 | 2.500 | 9.000 | 1.000 | 1.598 |
| Efficiency (asset turnover ratio) | 0.829 | 0.729 | 6.873 | 0.035 | 0.659 |
| Diversification Dummy | 1= 153 firms | | 0 = 161 firms | | |

The diversification dummy variable shows that 153 firms (or 49% of firms) are considered as diversified, whereas 161 firms (or 51% of firms) are considered as non-diversified or focused

firms. As a comparison over time, using 2001 data, Zuaini and Napier (2006) report that 55% of their 355 sample firms in Malaysia are diversified and 45% are focused, whereas Claessens *et al.* (2003) based on the data in the period 1990-1996 before the Asian Financial Crisis, discover that 70% of their sample firms from Malaysia are diversified. This may indicate that the percentage of focused firms has increased over the years since the AFC.

Efficiency (asset turnover ratio) is the output variable specifically applied in the hypothesis related to firm diversification. The statistics show that the average asset turnover ratio is about 0.83 (with maximum value = 6.87 and minimum value = 0.035). Asset turnover ratio depends substantially on the type of business sector; thus the inclusion of 'business sector' as a control variable in the regression analysis is crucial.

Table 5.7b describes the number of business segments among group-affiliated and non-group firms as well as firms in the full sample. It shows that the percentages of firms operating in one and two business segments are higher for non-group firms, compared to group-affiliated firms. Most of the diversified group-affiliated firms have three to four lines of business segments, whereas most of the diversified non-group firms operate within two to three business segments.

None of the non-group firms operate with seven or more segments whereas there are a couple of group-affiliated firms with seven segments and two group-affiliated firms each with eight and nine segments. There are no firms with ten or more business segments. The overall observation suggests that group-affiliated firms may be more diversified than non-group firms. This observation is consistent with Lin and Servaes (2002), who find that group firms are more likely to be diversified compared to non-group firms. It is intriguing to discover, via the multivariate analysis, whether there is a difference between the performance of diversified group firms and diversified non-group firms in Malaysia especially when the closer political connection in business groups may have an influence on the performance outcome of diversified group firms. Controlling families of business groups who enjoy political support may use firm diversification as a means of expropriation and cause the performance of affiliates to be adversely affected.

Table 5.7b: Descriptive Statistics – Firm Diversification Data: Group and Non-group Comparison

| Number of Segments | Non-group firms | | Group Firms | | Full Sample | | |
|--------------------|-----------------|-------|-------------|-------|-------------|-------|---------|
| | Number | % | Number | % | Number | % | Cumu. % |
| 1 | 55 | 33.9 | 47 | 30.9 | 102 | 32.5 | 32.5 |
| 2 | 37 | 22.8 | 18 | 11.8 | 55 | 17.5 | 50.0 |
| 3 | 31 | 19.1 | 28 | 18.4 | 59 | 18.8 | 68.8 |
| 4 | 26 | 16.1 | 33 | 21.7 | 59 | 18.8 | 87.6 |
| 5 | 9 | 5.6 | 14 | 9.2 | 23 | 7.3 | 94.9 |
| 6 | 4 | 2.5 | 6 | 3.9 | 10 | 3.2 | 98.1 |
| 7 | 0 | 0.0 | 4 | 2.6 | 4 | 1.3 | 99.4 |
| 8 | 0 | 0.0 | 1 | 0.7 | 1 | 0.3 | 99.7 |
| 9 | 0 | 0.0 | 1 | 0.7 | 1 | 0.3 | 100.0 |
| Total | 162 | 100.0 | 152 | 100.0 | 314 | 100.0 | 100.0 |

Note: Cumu. % = Cumulative %

5.6 Tests of Mean Difference and Median Difference between Group and Non-Group Firms

Table 5.8 presents the descriptive statistics for a variety of attributes of group-affiliated firms compared to non-group firms. It also presents the p-value of the t-test for the mean differences as well as the Wilcoxon-Mann-Whitney test for the median differences between group firms and non-group firms.

5.6.1 Ownership Structure

Panel A of the table shows the differences in ownership structure between group and non-group firms. It can be seen that the average ownership by controlling families (FAMOWN) in group firms is 35.56%, which is lower than the average family ownership of 40.23% for non-group firms. The difference is statistically significant at the 1% level. The significant difference implies that utilizing business groups allows controlling families to exercise

Table 5.8: Descriptive Statistics – Tests of Mean Difference and Median Difference Between Group and Non-Group Firms

| Variable | Non-Group | | | Group | | | t-test | Wilcoxon test |
|-----------------------------|-----------|---------|---------|-----------|---------|-----------|-----------------------------|-------------------------------|
| | Mean | Median | Std Dev | Mean | Median | Std Dev | p-value of mean differences | p-value of median differences |
| Panel A | | | | | | | | |
| FAMOWN (%) | 40.23 | 40.69 | 14.35 | 35.56 | 34.27 | 15.63 | 0.006*** | 0.003*** |
| STATE (%) | 0.36 | 0.00 | 2.55 | 1.39 | 0.00 | 4.60 | 0.014** | 0.257 |
| DOMII (%) | 3.46 | 0.00 | 5.94 | 3.74 | 0.00 | 5.84 | 0.675 | 0.371 |
| DOMPUBII (%) | 3.03 | 0.00 | 5.53 | 3.65 | 0.00 | 5.84 | 0.337 | 0.232 |
| FORGNII (%) | 1.06 | 0.00 | 3.69 | 1.13 | 0.00 | 4.03 | 0.875 | 0.928 |
| FORGN (%) | 0.39 | 0.00 | 2.90 | 1.16 | 0.00 | 4.62 | 0.077* | 0.353 |
| AUXFAM (%) | 7.49 | 0.00 | 10.18 | 5.00 | 0.00 | 8.16 | 0.017** | 0.059* |
| Panel B | | | | | | | | |
| CF/CONT | 1.00 | 1.00 | 0.00 | 0.88 | 1.00 | 0.20 | 0.000*** | 0.000*** |
| FAMDIR | 0.30 | 0.33 | 0.21 | 0.24 | 0.25 | 0.19 | 0.004*** | 0.003*** |
| CHR_CEO | 0.47 | -- | -- | 0.33 | -- | -- | 0.011** | -- |
| FAMONLY | 0.60 | -- | -- | 0.64 | -- | -- | 0.403 | -- |
| Panel C | | | | | | | | |
| Entropy | 0.37 | 0.34 | 0.36 | 0.47 | 0.37 | 0.46 | 0.048** | 0.122 |
| Herfindahl | 0.78 | 0.82 | 0.21 | 0.74 | 0.81 | 0.25 | 0.127 | 0.171 |
| Num of Segments | 2.44 | 2.00 | 1.37 | 2.96 | 3.00 | 1.77 | 0.004*** | 0.020** |
| DVSF_D | 0.47 | -- | -- | 0.50 | -- | -- | 0.663 | |
| Efficiency (asset turnover) | 0.91 | 0.89 | 0.57 | 0.74 | 0.58 | 0.74 | 0.017** | 0.000*** |
| Panel D | | | | | | | | |
| Sales (RM '000) | 436,998 | 235,999 | 665,161 | 1,215,027 | 466,531 | 2,007,369 | 0.000*** | 0.000*** |
| Age (years) | 18.26 | 14.5 | 11.60 | 31.15 | 29.50 | 19.81 | 0.000*** | 0.000*** |
| Gearing | 0.21 | 0.18 | 0.18 | 0.25 | 0.25 | 0.16 | 0.088* | 0.039** |
| Panel E | | | | | | | | |
| Lag (ROA) (%) | 11.10 | 10.69 | 7.20 | 9.74 | 9.32 | 7.52 | 0.103 | 0.093* |
| Lag (Tobin's Q) | 1.10 | 0.91 | 0.55 | 1.13 | 0.96 | 0.52 | 0.731 | 0.360 |
| ROA (%) | 9.74 | 10.13 | 7.62 | 8.96 | 8.40 | 6.88 | 0.341 | 0.100* |
| Tobin's Q | 0.83 | 0.74 | 0.33 | 0.84 | 0.78 | 0.32 | 0.608 | 0.395 |

Note: * significant at 10%; ** significant at 5%; ***significant at 1%

control over affiliated firms without having to invest too much equity capital compared to the investment in non-group firms as explained in sub-section 2.6.1.1 in Chapter 2.

As for the ownership of other types of block-holder, direct involvement of the state (STATE) in the equity holdings of family firms on average (mean) is higher in group firms compared to non-group firms. However, group firms have a lower percentage of shareholdings by unrelated or auxiliary families (AUXFAM). AUXFAM holds on average 5% of the shares of group firms compared to 7.49% for non-group firms and the difference is statistically significant at the 5% level.

In contrast, group firms have a higher percentage of shareholdings by FORGN (foreign corporations/government ownership) compared to non-group firms but the mean difference is only statistically significant at the 10% level. Finally, group firms do not seem to be different from non-group firms in shareholdings by all three categories of institutional investors' holdings (DOMII, DOMPUBII and FORGNII). It suggests that institutional investors, regardless of whether foreign or domestic, do not have a preference for group firms over non-group firms and *vice versa* in making their investments in family-controlled firms.

5.6.2 Control-Enhancing Means

In Panel B, statistics comparison of various control-enhancing means is made between group firms and non-group firms. The mean and median for the cash flow-to-control rights (CF/CONT) for group firms is statistically different from non-group firms. The reason for the difference is straightforward: divergence of cash flow rights to control rights is the result of pyramidal ownership structure. By definition, independent firms do not contain a pyramidal structure. Pyramidal structure⁸⁰ is a feature that exists only in some business groups.

In contrast, controlling families in non-group firms are able to enhance their control by having, on average, a larger proportion of family directors (FAMDIR) compared to group firms. On average, 30% of board directors in non-group firms are family directors (with

⁸⁰ In other words, pyramidal structure is a subset of business groups. See sub-section 4.7.2 for an elaboration on pyramidal structure and the various structures of business groups.

median=33%) compared to the average of 24% (with median=25%) in group firms. The differences are statistically significant at the 1% level. The lower mean for group-affiliated firms may simply result from family members dispersing and joining the boards of different affiliates in the group.

Controlling families of non-group firms also have greater power concentration compared to group firms, in terms of the mean percentage of family members monopolising both the board chairmanship and CEO positions simultaneously (CHR_CEO) (47% for non-group firms compared to 33% for group firms). The mean difference is statistically significant at the 5% level. The lower CHR_CEO in group firms might be caused by controlling families appointing more non-family close allies into those positions where family members are unable to monitor all the affiliates or member firms in the group. Finally, on average, controlling families in 60% of non-group firms and 64% of group firms, enhance their ownership by acting as the sole block-holder of firms. The mean difference is statistically insignificant.

5.6.3 Firm Diversification

Panel C shows the comparison of diversification measures between group and non-group firms. The mean (median) values of Entropy for group and non-group firms are 0.47 (0.37) and 0.37 (0.34) respectively. The mean difference is statistically significant at 5% level. This indicates that group firms, on average, are more diversified than non-group firms. The comparison is consistent with the finding by Chakrabarti *et al.* (2007) that group-affiliated firms in Malaysia and Indonesia are more diversified than non-group firms by Entropy, in their study across six Asian countries including Malaysia. However, their study also shows that group firms in Thailand are more focused than non-group firms, whereas in Singapore both types of firm are similar in terms of diversification.

Group firms are also more diversified than non-group firms according to the 'Number of Segments' measure. On average, each group firm has 2.96 segments (with median=3) compared to 2.44 segments for a non-group firm (with median=2). Both the mean and median difference is statistically significant at the 5% level. The Herfindahl Index and

Diversification Dummy also show that group firms are more diversified than non-group firms though their mean difference is statistically insignificant.

Overall, the diversification measures show that, in Malaysia, group firms are more diversified than non-group firms. Lins and Servaes (2002) in their study of seven Asian countries in 1995, also find a significant difference between the percentage of group firms in their sample that are diversified (31.5%) and the percentage of non-group firms that are diversified (25.8%). A similar conclusion is also reached in Claessens's *et al.* (1999c) study on minority shareholders' expropriation and firm diversification in East Asia. All findings that group-affiliated firms are more diversified than non-group firms cast doubt on group-affiliated firms' motives to diversify. As explained by Lins and Servaes (2002), since group affiliation already provides the benefits of an internal market, and if a firm diversifies to create an internal market, then less and not more diversification at the *firm* level should be expected from group-affiliated firms.

The final variable in Panel C is the 'efficiency' variable. Group firms are found to have statistically significantly lower efficiency in terms of their asset turnover ratio compared to non-group firms. Inferences on whether the lower efficiency in group firms is related to agency-driven diversification, as proposed by Singh *et al.* (2007), will be confirmed in the multivariate analysis.

5.6.4 Control Variables

Panel D exhibits that group firms on average are larger in size, as measured by the total sales, compared to non-group firms. The median value of firm size for group firms is almost twice the median value of non-group firms. The mean difference and median difference for group and non-group firms are statistically significant at the 1% level. The noticeably large variation in the size of group firms (as measured by the standard deviation) indicates that business groups on average consist of a mixture of large and small affiliates.

Group firms are also relatively older than non-group firms with an average age of 31 years (with median=30 years) compared to only 18 years (with median=15 years) for non-group firms. This suggests that controlling families on average need a longer time to develop their businesses from a small independent firm to a business group. The findings of larger size and older age for group firms compared to non-group firms are consistent with those in Khanna and Palepu (2000a) for firms in India. Natural log transformation is applied to the firm size and age variables in the multivariate analysis of this study to accommodate their non-normal distribution (as indicated by the large difference between the mean and the median). Finally group firms, on average, are also found to have higher debts than non-group firms.

5.6.5 Firm Performance

Despite the various types of significant differences as reported above between group and non-group firms, there is generally a lack of significant difference in the performance of these two types of firms. In Panel E, the mean (median) ROA and the mean (median) Tobin's Q for the affiliated firms are 8.96% (8.40%) and 0.84 (0.78) respectively. The comparable figures for non-group firms are 9.74% (10.13%) and 0.83 (0.74). Except for the difference in the median ROA, all other performance comparisons between group and non-group firms are statistically insignificant. The results from the comparison between the lagged values of ROA and Tobin's Q between group and non-group firms are qualitatively similar to the results of ROA and Tobin's Q. Khanna and Palepu (2000a) also find no difference in the mean performance of group firms compared to non-group firms in India in terms of ROA and Tobin's Q.

5.7 Further Analysis on Business Groups and the Group-affiliated Firms

Table 5.9a exhibits the distribution of firms and groups according to three different group sizes. The group size is determined by the number of listed firms in a business group. The highest percentage of firms (37%) are affiliated to GR_A (small business groups with two listed firms) followed by GR_B (intermediate business groups with three to four listed firms) (34%) and GR_C (large business groups with at least five listed firms) (29%). As for the

distribution of groups across the three group sizes, the majority of business groups (41 out of the total of 80 business groups or 51.25%) belong to GR_A, 28 groups or 35% belong to GR_B and 11 groups or 13.75% belong to GR_C.

Table 5.9a: Descriptive Statistics – Size of Business Groups

| Group Size | Firms | | Groups | |
|---------------|--------|------------|--------|------------|
| | Number | Percentage | Number | Percentage |
| GR_A – Small | 56 | 36.84 | 41 | 51.25 |
| GR_B - Medium | 52 | 34.21 | 28 | 35.00 |
| GR_C – Large | 44 | 28.95 | 11 | 13.75 |
| Total | 152 | 100.00 | 80 | 100.00 |

Table 5.9b presents the performance statistics of group-affiliated firms based on group heterogeneity. Two aspects of group heterogeneity are examined: group size and group complexity. In terms of group size, GR_B (the intermediate size business group) has the highest mean of ROA while GR_C has the highest mean of Tobin’s Q.

Table 5.9b: Descriptive Statistics - Group Size and Group Complexity with Firm Performance

| Group Size | Mean | | Median | | Standard Deviation | |
|------------------|------|------|--------|-------|--------------------|------|
| | ROA | Q | ROA | Q | ROA | Q |
| GR_A | 8.91 | 0.75 | 8.57 | 0.70* | 5.88** | 0.29 |
| GR_B | 9.34 | 0.89 | 8.22 | 0.80* | 6.90 | 0.31 |
| GR_C | 8.55 | 0.91 | 8.12 | 0.82* | 8.07 | 0.34 |
| Group Complexity | | | | | | |
| BG_S | 8.96 | 0.80 | 8.41 | 0.73 | 6.11** | 0.34 |
| BG_PS | 8.99 | 0.86 | 8.43 | 0.80* | 6.89 | 0.29 |
| BG_CS | 8.66 | 0.90 | 4.90 | 0.76 | 10.24 | 0.45 |
| Non-group firms | 9.74 | 0.83 | 10.13 | 0.74 | 7.62 | 0.33 |

Note: 1. * significant at 10%; ** significant at 5%; ***significant at 1%

2. Comparisons of mean, median and standard deviation are made with non-group firms. The mean difference is tested with the t-test, the median difference with the Wilcoxon-test and standard deviation difference with the F-test.

Non-group firms are included in the table for comparison purposes. The comparison shows that the difference in mean and median for ROA between each of the sub-groups and the non-group firms are statistically insignificant while the differences in mean and median for Tobin's Q are statistically significant at the 10% level.

The second part of the table presents the performance comparison in terms of complexity of group structure. Overall, the mean and median ROA as well as Tobin's Q for firms in all three levels of group complexity are relatively close and their differences with the non-group firms are mostly statistically insignificant.

Table 5.9c depicts the statistics of diversification in group firms according to group size and group complexity. In terms of group size, firms in GR_B are more diversified than firms in GR_A and GR_C according to all diversification measures. The mean, median and standard deviation of various diversification measures in GR_B are statistically significantly (at various significance levels) greater than for non-group firms.

Table 5.9c: Descriptive Statistics – Group Size and Group Complexity with Firm Diversification

| | Mean | | | Median | | | Std Dev | | |
|------------------|---------|------------|-----------|---------|------------|-----------|---------|------------|-----------|
| | Entropy | Herfindahl | # Segment | Entropy | Herfindahl | # Segment | Entropy | Herfindahl | # Segment |
| Group Size | | | | | | | | | |
| GR_A | 0.38 | 0.79 | 2.54 | 0.34 | 0.84 | 2.00 | 0.40 | 0.23 | 1.37 |
| GR_B | 0.58*** | 0.68*** | 3.42*** | 0.69*** | 0.60*** | 3.50*** | 0.49** | 0.27* | 1.84** |
| GR_C | 0.44 | 0.76 | 2.95** | 0.32 | 0.83 | 3.00 | 0.48** | 0.25 | 2.02*** |
| Group Complexity | | | | | | | | | |
| BG_S | 0.42 | 0.77 | 2.86** | 0.37 | 0.81 | 3.00** | 0.40 | 0.23 | 1.34 |
| BG_PS | 0.48** | 0.73* | 2.94** | 0.40 | 0.81 | 3.00 | 0.48*** | 0.26** | 1.93*** |
| BG_CS | 0.60* | 0.70 | 3.55*** | 0.34 | 0.81 | 4.00* | 0.57 | 0.29 | 2.16 |
| Non-group firms | 0.37 | 0.78 | 2.44 | 0.34 | 0.82 | 2.00 | 0.36 | 0.21 | 1.37 |

Note: * significant at 10%; ** significant at 5%; ***significant at 1%. # Segment = Number of Segments. Comparisons of mean, median and standard deviation are made with non-group firms. The mean difference is tested with the t-test, the median difference with the Wilcoxon-test and standard deviation difference with the F-test.

In terms of group complexity, a general trend of diversification is observed in that the level of diversification increases as the business group structure becomes more and more complex. Specifically, non-group firms have the lowest diversification level, followed by firms in business groups with simple structure (BG_S), followed by firms in business groups with pyramidal structure (BG_PS). Firms affiliated to business groups with complicated structure (BG_CS) are the most diversified of all. The observation is inconsistent with the ‘substitution proposition’ that diversification at the *group* level (having affiliates operating in different industries) is able to substitute diversification at the *firm* level and thus group-affiliated firms do not need to diversify as the task can be more effectively fulfilled at the group level (Charkrabarti *et al.*, 2007). It is thus intriguing to find out in the multivariate analysis whether the more diversified nature of group firms compared to non-group firms is associated with lower performance. Statistical evidence of lower performance in this case may indicate that the diversification is agency-driven and the decision to diversify is more likely an act of expropriation (Lins and Servaes, 2002).

The section concludes with statistics related to the breakdown of controlling family ownership (FAMOWN) into low (FAMOWN1) and high (FAMOWN2) ownership levels in group-affiliated firms. Table 5.10 shows that 123 of 152 group-affiliated firms (or 80.92%) have family ownership of below 50% and only 29 group firms (or 19.08%) have family ownership of 50% and above.

Table 5.10: Descriptive Statistics – Family Ownership Classification for Group-affiliated Firms

| FAMOWN | Firms | |
|---------|--------|---------------------|
| | Number | Percentage of Total |
| FAMOWN1 | 123 | 80.92 |
| FAMOWN2 | 29 | 19.08 |
| Total | 152 | 100.00 |

5.8 Pearson Correlation Matrix

Tables 5.11a to 5.11c present the Pearson Correlation Matrix for the full sample in the study. The correlation matrix is performed before the multiple regression analysis is conducted with the purpose of checking for potential multicollinearity as well as the ‘one-to-one relationship’ between firm performance and the explanatory variables. Similar matrices for the sub-sample of group firms are available in Appendix 5.

The tables depict that overall, the correlations between the explanatory variables are low. Only a small number of explanatory variables show comparatively higher correlations between themselves. Variance Inflation Factors (VIFs) will be computed for these variables before the multiple regression analysis is conducted and any serious multicollinearity as indicated by the VIF value will be appropriately addressed.

Table 5.11a shows that the ROA is significantly positively related to FAMOWN, DOMPUBII and Log Sales and significantly negatively related to gearing at the 5% significance level (shaded area). As for Tobin’s Q, it is significantly positively related to STATE, FORGNII and Log Sales (shaded area). However, these relationships need to be tested again in the multivariate analysis as many other factors must be accounted for. The matrix in Table 5.11b shows that ROA is significantly positively (at the 5% level) related to FAMOWN1 as well as FAMDIR and CHR_CEO but negatively related to FAMONLY. As for Tobin’s Q, it is significantly negatively related to CF/CONT. As expected, the table also shows that both ROA and Q are highly correlated to their respective lagged value. Finally ROA in Table 5.11c is significantly related to Entropy and Herfindahl, indicating that diversification is inversely related to ROA.

Table 5.11a: Pearson Correlation Matrix (I) – Full Sample

| Variable | FAMOWN | Other BHS | STATE | DOMII | DOMPUBII | FORGNII | FORGN | AUXFAM | Log Sales | Log Age | Gearing | PrINED | INDP_CHR | INDP_ADT | H_INDP_B | ROA | Tobin's Q |
|-----------|--------------|-------------|--------------|--------------|-------------|-------------|-------------|--------------|-------------|--------------|--------------|-------------|-------------|--------------|----------|-------------|-----------|
| FAMOWN | 1.00 | | | | | | | | | | | | | | | | |
| Other BHS | -0.30 | 1.00 | | | | | | | | | | | | | | | |
| STATE | -0.03 | 0.20 | 1.00 | | | | | | | | | | | | | | |
| DOMII | -0.06 | 0.38 | -0.07 | 1.00 | | | | | | | | | | | | | |
| DOMPUBII | -0.06 | 0.38 | -0.06 | 0.96 | 1.00 | | | | | | | | | | | | |
| FORGNII | -0.11 | 0.26 | 0.03 | 0.01 | -0.02 | 1.00 | | | | | | | | | | | |
| FORGN | -0.04 | 0.21 | -0.04 | -0.06 | -0.05 | -0.03 | 1.00 | | | | | | | | | | |
| AUXFAM | -0.24 | 0.66 | -0.12 | -0.09 | -0.07 | -0.07 | -0.08 | 1.00 | | | | | | | | | |
| Log Sales | 0.07 | 0.00 | 0.07 | 0.11 | 0.17 | 0.09 | 0.15 | -0.21 | 1.00 | | | | | | | | |
| Log Age | -0.03 | -0.08 | 0.01 | -0.02 | 0.00 | 0.00 | 0.06 | -0.13 | 0.17 | 1.00 | | | | | | | |
| Gearing | -0.06 | -0.03 | 0.05 | -0.11 | -0.10 | 0.04 | 0.10 | -0.05 | 0.33 | 0.03 | 1.00 | | | | | | |
| PrINED | -0.09 | -0.08 | -0.02 | -0.06 | -0.09 | 0.06 | -0.02 | -0.07 | 0.01 | 0.04 | -0.01 | 1.00 | | | | | |
| INDP_CHR | -0.02 | -0.02 | -0.04 | -0.08 | -0.10 | 0.10 | -0.03 | 0.00 | 0.05 | -0.01 | 0.03 | 0.22 | 1.00 | | | | |
| INDP_ADT | -0.00 | -0.04 | 0.04 | -0.05 | -0.08 | -0.04 | 0.00 | -0.03 | -0.07 | -0.14 | -0.09 | 0.29 | 0.07 | 1.00 | | | |
| H_INDP_B | -0.12 | -0.01 | 0.00 | -0.03 | -0.06 | 0.03 | -0.03 | 0.01 | -0.07 | 0.03 | -0.03 | 0.38 | 0.40 | 0.40 | 1.00 | | |
| ROA | 0.15 | 0.05 | 0.10 | 0.10 | 0.11 | 0.07 | 0.00 | -0.06 | 0.27 | -0.05 | -0.25 | -0.06 | 0.00 | -0.03 | -0.05 | 1.00 | |
| Tobin's Q | 0.01 | 0.09 | 0.16 | 0.07 | 0.07 | 0.22 | -0.03 | -0.08 | 0.30 | 0.01 | 0.05 | -0.02 | 0.04 | -0.09 | -0.09 | 0.45 | 1.00 |
| Group | -0.15 | 0.00 | 0.14 | 0.02 | 0.05 | 0.00 | 0.10 | -0.13 | 0.27 | 0.34 | 0.10 | 0.17 | 0.00 | -0.12 | 0.03 | -0.05 | 0.03 |

Note: Correlation coefficients greater than or equal to 0.11 (bold figures in the table) are significant at $p < 0.05$

Table 5.11b: Pearson Correlation Matrix (II) - Full sample

| Variable | FAMOWN1 | FAMOWN2 | CF/CONT | FAMDIR | CHR_CEO | FAMONLY | H_INDP_B | Lag(ROA) | Lag (Q) | BG_S | BG_PS | BG_CS |
|-----------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| FAMOWN1 | 1.00 | | | | | | | | | | | |
| FAMOWN2 | -0.76 | 1.00 | | | | | | | | | | |
| CF/CONT | 0.17 | 0.26 | 1.00 | | | | | | | | | |
| FAMDIR | -0.02 | 0.17 | 0.14 | 1.00 | | | | | | | | |
| CHR_CEO | 0.01 | 0.12 | 0.13 | 0.37 | 1.00 | | | | | | | |
| FAMONLY | -0.07 | 0.21 | 0.02 | 0.15 | 0.09 | 1.00 | | | | | | |
| H_INDP_B | -0.06 | -0.01 | -0.02 | -0.20 | -0.22 | 0.01 | 1.00 | | | | | |
| Lag (ROA) | 0.21 | -0.09 | 0.08 | 0.12 | 0.06 | -0.08 | -0.08 | 1.00 | | | | |
| Lag (Q) | 0.11 | -0.13 | -0.12 | -0.06 | -0.03 | -0.07 | -0.11 | 0.51 | 1.00 | | | |
| BG_S | -0.03 | 0.11 | 0.17 | -0.02 | -0.03 | 0.02 | 0.08 | -0.08 | -0.08 | 1.00 | | |
| BG_PS | 0.01 | -0.14 | -0.58 | -0.14 | -0.16 | -0.03 | -0.04 | 0.00 | 0.09 | -0.28 | 1.00 | |
| BG_CS | 0.05 | 0.06 | NA | -0.05 | 0.06 | 0.15 | 0.02 | -0.09 | -0.01 | -0.08 | -0.12 | 1.00 |
| FAMOWN | -0.15 | 0.76 | 0.42 | 0.41 | 0.23 | 0.19 | -0.12 | 0.14 | -0.05 | 0.02 | -0.21 | 0.07 |
| STATE | 0.09 | -0.08 | -0.15 | -0.06 | -0.07 | -0.23 | 0.00 | 0.09 | 0.13 | 0.07 | 0.12 | -0.04 |
| DOMII | -0.05 | -0.04 | -0.08 | -0.04 | 0.05 | -0.30 | -0.03 | 0.10 | 0.12 | -0.05 | 0.10 | -0.06 |
| DOMPUBII | -0.06 | -0.03 | -0.10 | -0.03 | 0.05 | -0.30 | -0.06 | 0.11 | 0.12 | -0.05 | 0.12 | -0.06 |
| FORGNII | 0.07 | -0.14 | 0.07 | -0.08 | -0.07 | -0.09 | 0.03 | 0.06 | 0.23 | 0.04 | -0.01 | -0.04 |
| FORGN | 0.08 | -0.08 | -0.07 | -0.07 | -0.02 | -0.20 | -0.03 | 0.01 | -0.05 | 0.03 | 0.10 | -0.03 |
| AUXFAM | 0.08 | -0.18 | 0.12 | -0.18 | -0.12 | -0.49 | 0.01 | -0.06 | -0.08 | 0.00 | -0.10 | -0.12 |
| Log Sales | 0.12 | -0.02 | -0.10 | -0.05 | -0.03 | -0.00 | -0.07 | 0.24 | 0.27 | -0.10 | 0.32 | 0.15 |
| Log Age | -0.02 | 0.05 | -0.08 | 0.02 | 0.00 | 0.11 | 0.03 | -0.08 | -0.11 | 0.13 | 0.19 | 0.18 |
| Gearing | -0.04 | 0.03 | -0.01 | -0.04 | -0.10 | 0.05 | -0.03 | -0.16 | -0.04 | -0.08 | 0.12 | 0.12 |
| ROA | 0.16 | -0.01 | 0.05 | 0.14 | 0.13 | -0.11 | -0.05 | 0.66 | 0.44 | -0.02 | -0.03 | -0.02 |
| Q | 0.04 | -0.03 | -0.11 | 0.00 | -0.01 | -0.09 | -0.09 | 0.41 | 0.77 | -0.04 | 0.05 | 0.04 |

Note: Correlation coefficients greater than or equal to 0.11 (bold figures in the table) are significant at $p < 0.05$

Table 5.11c: Pearson Correlation Matrix (III) - Full Sample

| Variable | Entropy | Herf | # Segments | DVSF_D | PrINED | INDP_CHR | INDP_ADT | H_INDP_B |
|------------|--------------|--------------|-------------|-------------|--------------|--------------|--------------|--------------|
| Entropy | 1.00 | | | | | | | |
| Herf | -0.98 | 1.00 | | | | | | |
| # Segments | 0.80 | -0.73 | 1.00 | | | | | |
| DVSF_D | 0.84 | -0.86 | 0.65 | 1.00 | | | | |
| PrINED | 0.14 | -0.14 | 0.14 | 0.10 | 1.00 | | | |
| INDP_CHR | 0.03 | -0.05 | -0.05 | 0.05 | 0.22 | 1.00 | | |
| INDP_ADT | 0.00 | 0.00 | -0.01 | 0.04 | 0.29 | 0.07 | 1.00 | |
| H_INDP_B | 0.05 | -0.06 | 0.01 | 0.06 | 0.38 | 0.40 | 0.40 | 1.00 |
| FAMOWN | 0.07 | -0.08 | 0.01 | 0.13 | -0.09 | -0.02 | 0.00 | -0.12 |
| STATE | -0.09 | 0.09 | -0.05 | -0.10 | -0.02 | -0.04 | 0.04 | 0.00 |
| DOMII | -0.03 | 0.03 | -0.03 | 0.00 | -0.06 | -0.08 | -0.05 | -0.03 |
| DOMPUBII | -0.04 | 0.04 | -0.04 | -0.01 | -0.09 | -0.10 | -0.08 | -0.06 |
| FORGNII | -0.05 | 0.04 | -0.06 | -0.03 | 0.06 | 0.10 | -0.04 | 0.03 |
| FORGN | 0.00 | 0.01 | -0.03 | -0.02 | -0.02 | -0.03 | 0.00 | -0.03 |
| AUXFAM | -0.07 | 0.05 | -0.06 | -0.04 | -0.07 | 0.00 | -0.03 | 0.01 |
| CF/CONT | 0.17 | -0.17 | 0.12 | 0.19 | 0.00 | -0.01 | 0.14 | -0.02 |
| FAMDIR | -0.08 | 0.07 | -0.10 | -0.03 | -0.26 | -0.12 | -0.10 | -0.20 |
| CHR_CEO | -0.08 | 0.09 | -0.02 | -0.06 | -0.10 | -0.56 | -0.09 | -0.22 |
| FAMONLY | 0.06 | -0.06 | 0.05 | 0.04 | 0.11 | -0.01 | 0.05 | 0.01 |
| Log Sales | 0.17 | -0.12 | 0.31 | 0.11 | 0.01 | 0.05 | -0.07 | -0.07 |
| Log Age | 0.20 | -0.18 | 0.20 | 0.15 | 0.04 | -0.01 | -0.14 | 0.03 |
| Gearing | 0.12 | -0.12 | 0.12 | 0.13 | -0.01 | 0.03 | -0.09 | -0.03 |
| ROA | -0.14 | 0.14 | -0.09 | -0.09 | -0.06 | 0.00 | -0.03 | -0.05 |
| Q | -0.07 | 0.06 | -0.03 | -0.01 | -0.02 | 0.04 | -0.09 | -0.09 |

Note: Correlation coefficients greater than or equal to 0.11 (bold figures in the table) are significant at $p < 0.05$

5.9 Chapter Summary

This chapter reported various descriptive statistics and findings pertaining to the variables employed in this study. The variables are grouped into their respective types and the statistics for the variables are reported according to the types of variables. These include the firm performance, ownership, control variables and other relevant and governance-related variables such as board independence, control-enhancing means and firm diversification variables. The statistics presented include the mean, median, maximum and minimum values and the standard deviation for continuous variables and the number and percentage of occurrences for the dummy variables.

Since business group affiliation forms a substantial part of the study, the subsequent section presented the findings on the univariate tests of mean difference and median difference of the variables between group-affiliated firms and non-group firms. The mean difference is tested with the t-test and the median difference with the Wilcoxon-Mann-Whitney test. Comparing and inspecting the differences in the variables between group and non-group firms is among the first stages of analysis to comprehend the possible performance outcomes of the variables prior to being subjected to the multivariate analysis tests in the next chapter.

The next section presented further analyses of group affiliation by examining the heterogeneity of business groups. Two aspects of group heterogeneity are examined: group size and group complexity. Descriptive statistics of firm performance and diversification, based on various group sizes and group complexities, are examined and comparisons drawn with non-group firms.

The final section of the chapter examined and presented the results of the Pearson Correlation Matrix for the variables in the study. Examination of correlations between variables is the first step to diagnose potential multicollinearity problems prior to the multiple and moderated regression analyses performed in the next chapter.

Chapter 6 – Findings and Discussions II – Multivariate Analysis

6.1 Chapter Outline

This chapter builds on the initial analysis of the descriptive statistics undertaken in the preceding chapter.⁸¹ The main purpose of this chapter is to present the analyses and findings of the study based mainly on the multiple and moderated regressions. Statistical inferences from the regression analyses and subsequent discussions are drawn and offered together with implications within the context of relevant theories and literature in response to the research questions.

Commonly encountered regression problems including normality, multicollinearity and heteroscedasticity etc. are diagnosed with a standard statistical process. Detection of problems will be addressed and rectified accordingly prior to the regression. In order to ensure the presentation of analysis is straightforward and focused, most of the statistical tables presented in this chapter report results that are directly related to the hypothesis being tested. Additional information on the results is available in Appendix 6 at the end of the thesis.

The multiple and moderated regression analyses are carried out in accordance with the sequence of the 13 Model Specifications as discussed in Section 4.9 in Chapter 4. Specifically, the chapter is organized into sections based on the four main themes of study as introduced in Chapter 1. For the ease of comprehension, a ‘section summary’ that summarizes the main findings from the section is presented at the end of each theme. Again, it should be noted that all four major themes in the study (Theme I, II, III and IV) are directed towards a common aim: to examine the direct, as well as moderating (indirect), influence of ownership structure and underlying firm activities/strategies or practices on the performance of family-controlled firms.

⁸¹ As such, readers are advised to refer to the descriptive statistics in Chapter 5 before proceeding with the multivariate analysis in this chapter.

The next section begins with the findings and discussions of Theme I, i.e. the influence of ownership structure and associated moderating influence of board independence. Upon presenting the summary for the section, the chapter proceeds with the findings and discussions of Theme II – business group affiliation and other control-enhancing means – and its corresponding section summary. This is then followed by Theme III – profit redistribution issues – and its corresponding section summary.

The findings and discussions on the final theme of study, Theme IV (firm diversification-related issues) are presented in two sections. The first section deals with the association between firm diversification, efficiency and performance in group and non-group firms. Since large business groups are more likely to be associated with politics/government, the effects of group size are also given due attention. The second section deals with the associated moderating influence of other governance-related variables such as ownership structure and board independence on the diversification-performance link.

The chapter concludes with a section summarizing the main findings (with implications) from all four themes of study.

The next section discusses the findings from Theme I.

6.2 Theme I: Influence of Ownership Structure and Board Independence Moderating Effects on Firm Performance

The results of the multiple regression for *Specification 1*⁸² are presented in Tables 6.1a and Table 6.1b. Sector dummies are included in all five models in the tables [Model (1) to Model (5)] to account for any sector-specific factors that could influence firm performance. Heteroscedasticity is diagnosed by the White-test⁸³ and any heteroscedasticity problems in the regression, the standard errors will be corrected using ‘White’s Heteroscedasticity-consistent Standard Errors’.

⁸² The model specifications are discussed in Section 4.9 in Chapter 4.

⁸³ Heteroscedasticity is present when the χ^2 statistic of homoscedasticity is rejected at the 5% significant level (Griffiths *et al.*, 2011; Gujarati, 2004). The statistical software helps in identifying the significant level.

Table 6.1a: Influence of Ownership Structure on ROA

| Explanatory Variable | (1) | (2) | (3) | (4) | (5) |
|-------------------------|------------|------------|------------|------------|------------|
| FAMOWN | | 0.054** | 0.055** | 0.218** | 0.219** |
| FAMOWN ² | | | | -0.002* | -0.002* |
| Other BHS | | 0.038 | | | |
| STATE | | | 0.138* | 0.133* | 0.132* |
| DOMII | | | 0.035 | 0.031 | |
| DOMPUBII | | | | | 0.021 |
| FORGNII | | | 0.144* | 0.133* | 0.134* |
| FORGN | | | -0.006 | -0.021 | -0.022 |
| AUXFAM | | | 0.021 | 0.013 | 0.012 |
| Log Sales | 2.251*** | 2.175*** | 2.140*** | 2.131*** | 2.133*** |
| Log Age | -0.950** | -0.875* | -0.884* | -0.854* | -0.858* |
| Gearing | -16.121*** | -15.643*** | -15.756*** | -15.984*** | -16.038*** |
| Sector Effect | | | | | |
| Included | Yes | Yes | Yes | Yes | Yes |
| Adjusted R ² | 0.258 | 0.265 | 0.263 | 0.266 | 0.265 |
| F-statistic | 13.080*** | 11.234*** | 8.430*** | 8.079*** | 8.067*** |
| Observations | 314 | 314 | 314 | 314 | 314 |

Table 6.1b: Influence of Ownership Structure on Tobin's Q

| Explanatory Variable | (1) | (2) | (3) | (4) | (5) |
|-------------------------|----------|----------|----------|----------|----------|
| FAMOWN | | 0.000 | 0.000 | 0.001 | 0.000 |
| FAMOWN ² | | | | 0.000 | |
| Other BHS | | 0.002 | | | |
| STATE | | | 0.008* | 0.008* | 0.008* |
| DOMII | | | 0.003 | 0.003 | |
| DOMPUBII | | | | | 0.002 |
| FORGNII | | | 0.015** | 0.015** | 0.015** |
| FORGN | | | -0.005 | -0.005 | -0.005 |
| AUXFAM | | | -0.001 | -0.001 | -0.001 |
| Log Sales | 0.071*** | 0.071*** | 0.066*** | 0.066*** | 0.066*** |
| Log Age | -0.006 | -0.004 | -0.005 | -0.005 | -0.006 |
| Gearing | -0.066 | -0.062 | -0.056 | -0.057 | -0.059 |
| Sector Effect | | | | | |
| Included | Yes | Yes | Yes | Yes | Yes |
| Adjusted R ² | 0.140 | 0.138 | 0.172 | 0.169 | 0.170 |
| F-statistic | 6.680*** | 5.564*** | 5.320*** | 4.972*** | 5.287*** |
| Observations | 314 | 314 | 314 | 314 | 314 |

Notes to Table 6.1a and Table 6.1b: * significant at 10%; ** significant at 5%; ***significant at 1%. The values in the table show the coefficients of the variables.

Model (1) is the base model with only control variables included. It shows that the accounting-based performance, ROA and market-based performance, Tobin's Q, are both significantly positively related to firm size, as measured by log sales; thus the larger the firm size, the better the firm performance. Firm performance is only significantly negatively related to the age of firms and the gearing ratio in terms of ROA. This suggests that younger

firms outperform older firms and firms with higher debt levels underperform firms with lower debt. The F-test indicates that the explanatory variables are overall statistically significant in explaining firm performance in the model. The adjusted R^2 in the range of 10% to 30% in both the ROA and Q measures is comparable to past studies in similar areas such those by Andres (2008) and Charkrabarti *et al.* (2007).

6.2.1 Controlling Family

Model (2) shows the results of including the controlling family's ownership level (FAMOWN) and all other types of block-holder (Other BHS) in the analysis. It is observed that the FAMOWN coefficient is positive and statistically significant according to the ROA performance measure. The coefficient of 0.054 can be interpreted as: an increase of 1% in the ownership of controlling families will lead to a 0.054% increase in the ROA, in other words, a family-controlled firm with an ownership level of 10% higher will have an improved ROA of 0.54%. However, a similar relationship is not significant when firm performance is measured by Tobin's Q.

Thus the finding based on ROA supports the idea that the advantages brought about by family ownership, namely the 'incentive or alignment of interest effect' from agency theory, as well as the distinct qualities of 'personalism' and 'particularism' as suggested by Carney (2005) and Poza (2010), are more prevalent than the costs associated with family ownership, namely expropriation and entrenchment effects. The finding in this study is also consistent with that of Haniffa and Hudaib (2006) in their study on the positive relationship between the combined ownership of the top five shareholders and firm performance in Malaysia. In conclusion, *Hypothesis (1a)* is partially supported in this study as the positive family ownership-performance link is found to be significant only by the ROA measure but not the Tobin's Q measure. The difference in the performance outcome between ROA and Tobin's Q may reflect that market (as represented by Tobin's Q) may have a different perception towards family ownership than what is indicated by the accounting measure (ROA).

As for the 'Other BHS' variable, though its coefficients in both the ROA and Q measures show the correct positive sign as predicted by *Hypothesis (1d)*, it is insignificant. Thus the

hypothesis that the combined ownership level of all other types of block-holders in family-controlled firms positively affects firm performance is not supported. This suggests that by combining the ownership level of all block-holders and treating them as a homogenous group of block-holders, without differentiating their identity, may not help to explain their effects on firm performance, as different types of block-holders have different shareholding objectives (Thomsen and Pederson, 2000; Pedersen and Thomsen, 2003).

6.2.2 State Ownership

In Model (3), the block-holders are split into five different types according to their identity in order to examine the effect of each type of block-holder on firm performance. The result shows that both the ROA and Q have a significant positive relationship with STATE at the 10% significant level. This supports (albeit weakly) *Hypotheses (1i)* that ownership by the state in family-controlled firms improves the performance of the firms. State holdings in family-controlled firms can be indicative that the state is serious about forming ‘partnerships’ with controlling families who are seen as more committed in their management of the firm, compared to the professional managers of state-controlled firms.

For instance, in an educational article by the CFA Malaysia⁸⁴ published in the *New Straits Times* (a major local English language newspaper) on the 11 December 2006, the author (an industry practitioner) highlights that one of the factors that leads to the success of Far East Holding Berhad, one of the good-performing family-controlled firms, is the firm’s unique shareholding structure in which the state government is the second largest shareholder. Though the company is linked to the state, it is managed by a family which also acts as the largest shareholder. The partnership between the state and the family is mutually beneficial, reinforcing each other’s strengths and compensating for each other’s weaknesses. From resource-based view (RBV), family firms with the state as the major partner have better access to government resources and such partnerships also help to remove the inefficiency often associated with state-run corporations.

⁸⁴ CFA Malaysia is an association of local investment professionals. It is one of the CFA Institute member societies.

6.2.3 Foreign Institutional Investors' Ownership

Apart from STATE, firm performance is also significantly positively related to FORGNII by both the ROA (at the 10% level) and Tobin's Q (at the 5% level) [see Models (3), (4) and (5)]. The significant relationship between Tobin's Q and FORGNII may imply that foreign institutional investors are more concerned about their market returns and thus cherry-pick the firms with higher Tobin's Q. This vein of argument is provided, for instance, by Douma *et al.* (2006) who find that in India, shareholdings by foreign institutional investors are only related to the market-based performance measure and not the accounting-based performance measure.

However, the finding in this study is not fully consistent with Douma's *et al.* (2006) argument, as the ROA in this study (besides Tobin's Q) is also positively significantly related to FORGNII (though at a lower significance level). This may imply that foreign fund managers may not only cherry-pick the 'winners' but, as contended by Young *et al.* (2008), collectively they (with their 'pressure-resistant' status) could form an important force, able to influence and pressurize owner-managers to improve the firm's corporate governance and transparency in corporate dealings. In essence, the superior monitoring ability of these foreign investors is associated with decreased agency costs and thus improved ROA. The finding is consistent with McKinsey & Company's (2002) global survey that foreign institutional investors are willing to pay a 22% premium for a well-governed company in Malaysia. Overall, *Hypothesis (1g)* is supported.

6.2.4 Foreign Corporations' Ownership

This study does not find any significant relationship between the shareholdings of foreign corporations (FORGN) in family-controlled firms and the performance of these firms. Hence, *Hypothesis (1h)* is not supported. Thus there is a lack of evidence to suggest that partnership with foreign corporations enhances the performance of family-controlled firms. The reason or purpose for foreign corporations to establish joint ventures or become equity partners with

local firms varies (Harrigan, 2003) and may not be based on the profitability of the local partner *per se*. For instance, partnership through equity participation could give foreign corporations the advantage of accessing scarce resources or raw materials which would otherwise be difficult to obtain. In this case, the benefits are afforded to the foreign corporation but not the local partner. Partnership with local firms could also be a strategy for foreign corporations to penetrate the local market (Harrigan, 2003). This again may benefit the foreign corporations but not necessarily the local partner.

6.2.5 Unrelated Family Ownership

No significant relationship is found between the shareholdings of auxiliary/unrelated families (AUXFAM) and firm performance in this study. The finding suggests that auxiliary families may be merely passive block-holders and do not monitor nor participate in the management of the company. Alternatively, their relationship with the controlling families could be rather subtle and their influence on firm performance is thus not easily observable. Overall, *Hypothesis (1j)* is not supported.

6.2.6 Domestic Institutional Investors' Ownership

Findings in this study also show that both domestic institutional investors' shareholdings (DOMII) and domestic public institutional investors' shareholdings (DOMPUBII) are not significantly related to firm performance [see Models (3), (4) and (5)]. Therefore, the assertion that pressure-resistant groups, such as public institutional investors, are able to exert their influence and monitoring capabilities to improve firm performance and shareholders' value, as argued by Gomez-Mejia *et al.* (2003), is not supported by this study. It can be contended that monitoring activities and shareholder activism (if any) of public institutional investors in Malaysia, including their combined efforts in the Minority Shareholder Watchdog Group (MSWG), thus far have not been translated into noticeable improvement in the performance of the firms in which they invested. The finding is consistent with Choi and Cho's (2003) finding in Korea that institutional investor activism is neither harmful nor beneficial to firms' financial performance.

The failure to improve performance by these investors through effective monitoring could be related to some of the constraints they faced. For instance, the establishment of PNB is a product of the NEP which is related to the government's objective of increasing Bumiputera's ownership and control in corporations. PNB may thus be more inclined towards an ethnic-based investment style⁸⁵ and invests in firms which are politically-connected rather than firms which have good governance and performance.

Being the largest institutional investors with the most extensive investments in existence in Malaysia, the EPF⁸⁶, in contrast, faces a different set of problems in that its massive fund size complicates and curtails its investment flexibility in the relatively small capital market of Malaysia. Comments by the research head of a securities firm in Malaysia aptly describe the dilemma faced by EPF, "*...it is no use being the biggest fish in a small pond....When this happens, your strategy is very limited and you cannot liquidate easily. It is difficult to get out as you always need to be holding the baby. The result is sub-par performance*" (The Star, 6 April 2010). Thus, as far as EPF's investment is concerned, it has a limited range of firms to choose from. In other words, whether they 'like it or not', EPF needs to invest in these firms and thus 'cannot be too particular' about the monitoring aspects and performance of these firms.⁸⁷

6.2.7 Non-linearity Issue

The square term of FAMOWN is included in Model (4) in the table to examine the potential non-linear relationship of FAMOWN and firm performance. The use of the square term to measure the non-linear relationship is consistent with past studies such as Andres (2008), Mak and Yusnadi (2005), Anderson and Reeb (2003) and McConnell and Servaes (1990). The result shows that there exists only weak evidence of a non-linear relationship between the controlling family's shareholdings (FAMOWN) and ROA. Specifically, the ROA improves as FAMOWN increases, up to a level beyond which the relationship is reversed, in

⁸⁵ The Malaysian Prime Minister, Najib Razak, announced in July 2009 that the ethnic-based investment laws were to be altered to reduce preference being given to the local ethnic Malay elite in the ownership of companies (<http://xml.wsws.org/articles/2009/jul2009/mala-j24.shtml>, accessed 27 April 2011).

⁸⁶ The fund size for EPF was RM260 billion in December 2005, making it one of the largest institutional investors in the Asian region.

⁸⁷ EPF is heavily restricted to invest in firms listed in overseas exchanges.

which ROA begins to decline with further increases in FAMOWN. The inflection point of FAMOWN is found at 50.82% which is computed based on the maximization rule.⁸⁸ However, no evidence of non-linear relationship is found between FAMOWN and Tobin's Q.

The next sub-section examines the moderating effects of board independence on the ownership-performance link.

6.2.8 Board Independence Moderating Effect

Tables 6.2a and 6.2b present the results for the moderating influence of board independence on the ownership-performance link. Four attributes of board independence (PrINED, INDP_CHR, INDP_ADT and H_INDP_B) are used for the purpose. In Model (1), interaction term (FAMOWN' *PrINED) is used to test the moderating effect of PrINED. Since the use of interaction term increases the chances of multicollinearity, all regression models are first checked for multicollinearity by calculating the VIF. The calculation shows that multicollinearity in Model (1) is high with the VIF value exceeding 10.0. Thus the variable FAMOWN is replaced by FAMOWN' which is equal to (FAMOWN - mean value of FAMOWN) and PrINED is replaced with PrINED' which is equal to (PrINED - mean value of PrINED).⁸⁹ The recalculation of VIF using these centred variables shows that VIF has declined to only 1.23, an acceptable level.⁹⁰

The results for all four models [Model (1) to Model (4)] in the table show that all four interaction terms are statistically insignificant for both ROA and Tobin's Q measures. Thus it can be concluded that overall, board independence does not have any moderating effect on the ownership-performance link. Thus *Hypothesis (1c)* is not supported.

⁸⁸ Maximization rule is performed by first taking the differentiation of ROA with respect to FAMOWN [$d(\text{ROA})/d(\text{FAMOWN})$] and then the maximum (inflection) point of FAMOWN can be found by equating the equation to 0 and solving for FAMOWN.

⁸⁹ 'Mean-centring' is recommended as a way to alleviate the multicollinearity problem involving interaction terms (Aiken and West, 1991; Jaccard and Turrisi, 2003).

⁹⁰ $\text{VIF} = 1 / (1 - R_j^2)$ where R_j^2 is the coefficient of determination of the 'auxiliary regression' that includes all the explanatory variables except the j th explanatory variable. As a comparison, regressions were first run using the original interaction terms (FAMOWN*PrINED) and then re-run using the 'centred variables' (FAMOWN' *PrINED') and the results were compared. The results from the comparison shows that the coefficient value of the interaction term and its corresponding p-value remain much the same.

Table 6.2a: Moderating Influence of Board Independence on ROA

| Explanatory Variable | (1) | (2) | (3) | (4) |
|-------------------------|----------|----------|----------|----------|
| FAMOWN' | 0.050 | 0.048* | 0.052** | 0.049** |
| FAMOWN' *PrINED' | 0.000 | | | |
| FAMOWN' *INDP_CHR | | 0.022 | | |
| FAMOWN' *INDP_ADT | | | 0.008 | |
| FAMOWN' *H_INDP_B | | | | 0.053 |
| PrINED' | -5.688* | | | |
| INDP_CHR | | 0.076 | | |
| INDP_ADT | | | -0.591 | |
| H_INDP_B | | | | -0.321 |
| Adjusted R ² | 0.264 | 0.258 | 0.259 | 0.259 |
| F-statistic | 7.619*** | 7.405*** | 7.439*** | 7.430*** |
| Observations | 314 | 314 | 314 | 314 |

Table 6.2b: Moderating Influence of Board Independence on Tobin's Q

| Explanatory Variable | (1) | (2) | (3) | (4) |
|-------------------------|----------|----------|----------|----------|
| FAMOWN' | -0.002 | 0.000 | 0.000 | 0.000 |
| FAMOWN' *PrINED' | 0.004 | | | |
| FAMOWN' *INDP_CHR | | 0.001 | | |
| FAMOWN' *INDP_ADT | | | -0.001 | |
| FAMOWN' *H_INDP_B | | | | -0.002 |
| PrINED' | -0.175 | | | |
| INDP_CHR | | -0.001 | | |
| INDP_ADT | | | -0.054 | |
| H_INDP_B | | | | -0.119** |
| Adjusted R ² | 0.170 | 0.166 | 0.172 | 0.174 |
| F-statistic | 4.765*** | 4.673*** | 4.830*** | 4.873*** |
| Observations | 314 | 314 | 314 | 314 |

Notes to Table 6.2a and Table 6.2b:

1. * significant at 10%; ** significant at 5%; ***significant at 1%.
2. The values in the table show the coefficients of the variables.
3. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above). A similar table but one which contains all variables used in the regression is available in Appendix 6.

The findings complement the prior study by Zunaidah and Fauzias (2008) in Malaysia who investigate the moderating effects of board duality, board independence and board size on the effects of three types of ownership (government, foreign and managerial) on firm value. Overall, the findings in this study are consistent with Zunaidah and Fauzias (2008), who also report a statistically insignificant moderating effect of board independence on the effects of government, foreign, and managerial ownerships respectively on firm value.

The insignificant role of the above four attributes of board independence in moderating the effects of ownership on firm performance renders dubious the independent status and capacity of independent directors.⁹¹ Specifically, many scholars and practitioners have been questioning whether independent directors, especially in the emerging economies, are truly independent and capable of monitoring controlling shareholders.

For instance, the professional body for investment professionals, the CFA Institute, admits that the lack of truly independent directors on corporate boards is a major issue throughout Asia and they elaborate that “*(t)his problem originates in the substantial power a controlling shareholder has to influence director nomination and appointment*” (CFA Institute, 2010, p.5). The fact that some independent directors have been serving for over three decades, as is the case with about 20 listed firms in Malaysia, is seen as a governance issue as “*the risk that independence may be undermined by long tenure cannot be disregarded,*” as noted by the Securities Commission Malaysia in its Capital Market Masterplan 2 (The Star, 18 June 2011). Moreover, since most of the controlling families in Malaysia also occupy at least one of the two senior positions in their firms (CEO or board chairmanship), an independent director will be “*completely at the will of the owner and has no effective way to override (the family’s) decisions*” (Kennon, 2004, p.2).

6.3 Summary on Theme I

The main findings thus far from Theme I of the study can be summarized as follows:

- The extent of controlling families’ ownership positively influences firm performance (ROA) at least up to the point where the controlling families begin to attain a majority ownership level (50%). The finding implies that the benefits of family ownership outweigh the principal-principal problems associated with family ownership.

⁹¹ Policy implications based on this issue are discussed in Section 7.3 in Chapter 7.

- There is mild evidence to suggest that excessive family ownership (and thus control) is detrimental to firm performance (ROA). Specifically, ownership is considered as excessive when families obtain majority ownership control.
- There is a positive relationship between the extent of state ownership in family-controlled firms and firm performance. Greater state ownership improves the performance of family-controlled firms.
- The extent of foreign institutional investors' ownership in family-controlled firms is also found to positively influence firm performance. However, the ownership of foreign corporations is found to be unrelated to firms' performance.
- Ownership by domestic institutional investors including its subset ownership, the domestic public institutional investors' ownership in family-controlled firms is unrelated to firm performance. This finding may imply limited ability and effort on the part of domestic institutional investors in Malaysia, as well as constraints faced by them, to exert effective monitoring to reduce the principal-principal related agency costs and improve firm performance.
- All four different attributes of board independence, namely proportion of independent directors, independent board chairmen, a fully independent audit committee and a 'highly independent board' are found to be insignificant in influencing the family ownership-performance relationship. This finding may have an implication on the issue of truly independent directors in Malaysia.

The next section examines the second theme of the study – the influence of family-controlled business groups and other control-enhancing means.

6.4 Theme II: Influence of Business Group Affiliation and Other Control-enhancing Means on Firm Performance

6.4.1 Influence of Business Group Affiliation

In order to discover whether group-affiliated firms outperform or underperform their non-group counterparts, *Specification 3* is estimated and the findings are presented in Tables 6.3a and 6.3b.

Three different regression models [Model (1) to Model (3)] are presented in each table to accommodate different configurations of variables. In Model (1), the regression is estimated without including the ownership variables. A similar model but consists of ownership variables is presented in Model (2).

Both Models (1) and (2) of Table 6.3a show that group-affiliated firms significantly underperform non-group firms when performance is measured by ROA. The estimated negative coefficients for group-affiliated firms suggest that the ROA for these firms on average is 1.9% to 2.0% lower than their non-group counterparts.

The lower performance of group-affiliated firms found in this study is consistent with the findings by Joh (2003) with data from the period 1993-1997 in Korea and George and Kabir (2008) with data from 2000 in India (studies with the ‘new data’) but is in contradiction to the findings by Chang and Choi (1988) with data from the period 1975-1984 in Korea and Khanna and Palepu (2000a) with data from 1993 in India (studies with the ‘old data’), who find that group-affiliated firms outperform non-group firms. Following Chang (2006) and Peng *et al.* (2005), a possible interpretation of such an observation is as follows:

Table 6.3a: Influence of Business Group Affiliation and Group Size on ROA

| Explanatory Variable | (1) | (2) | (3) |
|-------------------------|-----------|----------|----------|
| FAMOWN | | 0.045** | 0.046** |
| Group | -1.992** | -1.911** | |
| GR_A | | | -1.358 |
| GR_B | | | -1.752 |
| GR_C | | | -3.024** |
| Adjusted R ² | 0.271 | 0.274 | 0.273 |
| F-statistic | 12.625*** | 8.380*** | 7.538*** |
| Observations | 314 | 314 | 314 |

Table 6.3b: Influence of Business Group Affiliation and Group Size on Tobin's Q

| Explanatory Variable | (1) | (2) | (3) |
|-------------------------|----------|----------|----------|
| FAMOWN | | 0.000 | 0.000 |
| Group | -0.039 | -0.047 | |
| GR_A | | | -0.097** |
| GR_B | | | -0.021 |
| GR_C | | | 0.003 |
| Adjusted R ² | 0.141 | 0.173 | 0.176 |
| F-statistic | 6.119*** | 5.093*** | 4.708*** |
| Observations | 314 | 314 | 314 |

Notes to Table 6.3a and Table 6.3b:

1. * significant at 10%; ** significant at 5%; ***significant at 1%.
2. The values in the table show the coefficients of the variables.
3. Model (1) does not include any ownership variables. Models (2) and (3) include all ownership variables. Control variables and sector effects are included in the regression (not shown above). A similar table but one which contains all variables used in the regression is available in Appendix 6.

The time lapse between the data used in Joh (2003) and Chang and Choi (1988) for Korea is roughly 10 years and in George and Kabir (2008) and Khanna and Palepu (2000a) for India is roughly seven years. Thus the findings in this study that are consistent with the 'new data' studies but which contradict the 'old data' studies (as elaborated in sub-section 3.3.1 in Chapter 3) may suggest that Malaysia's external markets, including its capital market, have progressed and are already operating at a relatively more efficient and developed stage and as such the roles of the 'internal markets' of business groups may have shrunk and their advantages dissipated. This is especially so when a country such as Malaysia is in the midst of undergoing a liberalization and globalization process. The relatively more developed capital market in Malaysia compared to many other emerging economies is acknowledged by authors such as Singh and Zainal (2005) and Claessens *et al.* (2000).

In short, the findings based on ROA do not support the ‘institutional voids hypothesis’⁹² but are instead more inclined towards supporting the ‘conflict of interests and expropriation’ hypothesis. The findings suggest that intra-group transactions among affiliates of business groups may be inefficient and group affiliates may be subject to higher degrees of expropriation by controlling families. The Tobin’s Q of group-affiliated firms is also lower than non-group firms (though statistically insignificant) as shown by the negative coefficients of the ‘group’ variable in Models (1) and (2) in Table 6.3b.

6.4.2 Influence of Group Size

In order to discover the effects of group size on firm performance, group-affiliated firms are categorized into three sub-groups in Model (3) based on the size of business groups: small (GR_A), intermediate (GR_B) and large (GR_C). Based on the ROA, the findings show that firms in all three sizes of business group underperform the non-group firms as shown by their negative coefficients. Their respective ROAs are found to be 1.36%, 1.75% and 3.02% lower than in non-group firms. It shows that the larger the business group, the lower the ROA of the affiliated firms. Nonetheless, only the coefficient of GR_C is statistically significant.

The findings suggest that firms affiliated to large business groups have the worst performance of all. The findings are consistent with Joh (2003) but they are opposed to Khanna and Palepu (2000a) who find that firms affiliated to large business groups outperform firms affiliated to small and medium size business groups, and George and Kabir (2008) who do not find any difference in the performance of firms belonging to different group sizes.

From the findings in this study, it could therefore be interpreted that affiliates belonging to large business groups in Malaysia may be more likely to succumb to the ‘governance problems’ of business groups, with firm performance suffering as a result. For instance, large business groups may be subject to a greater lack of transparency in their business deals and

⁹² ‘Institutional voids’ give rise to economic advantages for internal markets of business groups when the external markets are relatively more underdeveloped. See Section 3.3 in Chapter 3 for more explanation of business groups’ internal markets.

transactions. The greater and enhanced power gained by controlling families from controlling the larger business group, such as greater accessibility to more resources and political connections, may not be utilized by the families for the benefits of the affiliated firms or the minority shareholders. Instead, the business group may be ‘exploited’ by the controlling family to facilitate their private or family-interested agendas which may not necessarily be profit-maximization oriented but will instead serve other purposes such as empire building and tunnelling-related activities. This includes unjust related party transactions (Cheung *et al.*, 2006, 2009a, 2009b) as well as other unethical transactions (Young *et al.*, 2008) which may be linked to politicians.

Meanwhile, only firms affiliated to GR_A are found by Tobin’s Q to significantly underperform. Specifically, firms affiliated to GR_A are valued at a discount of 11.1% compared to non-group firms (calculated as the coefficient value of 0.097 divided by 0.87, the sample mean of Tobin’s Q). The finding may be interpreted as follows: as far as the market is concerned, firms in small business groups may inherit the ‘worst of both worlds’ – where affiliation to a business group is perceived by the market as being more prone to the controlling family’s resource and wealth expropriation activities compared to non-group firms as “*controlling shareholders have more tools to divert firm resources through the transfer of assets from one subsidiary to another*” (Joh, 2003, p.288) and; being a small business group is perceived as inadequate in creating a feasible structure for the proper functioning of internal markets. Small business groups may also lack the political connections to be ‘eligible’ for preferential treatment and privileges.

6.4.3 Influence of Control-enhancing Means

The findings on the influence of control-enhancing means on ROA and Tobin’s Q are presented in Tables 6.4a and 6.4b respectively.

Table 6.4a: Influence of Control-enhancing Means on ROA

| Explanatory Variable | (1) | (2) | (3) | (4) | (5) | (6) |
|-------------------------|----------|----------|----------|----------|----------|-----------|
| FAMOWN | 0.053** | 0.053** | 0.019 | 0.040* | 0.045** | 0.041* |
| CF/CONT | 1.528 | | | | | |
| CF/CONT_DUM | | -0.624 | | | | |
| FAMDIR | | | 5.699*** | | | |
| CHR_CEO | | | | 0.784 | | |
| FAMONLY | | | | | -2.020** | |
| BG_S | | | | | | -1.484* |
| BG_PS | | | | | | -2.224*** |
| BG_CS | | | | | | -1.925 |
| Group | | | -1.649** | -1.806** | -1.843** | |
| Adjusted R ² | 0.253 | 0.253 | 0.291 | 0.274 | 0.279 | 0.270 |
| F-statistic | 7.385*** | 7.385*** | 8.546*** | 7.952*** | 8.142*** | 7.432*** |
| Observations | 303 | 303 | 314 | 314 | 314 | 314 |

Table 6.4b: Influence of Control-enhancing Means on Tobin's Q

| Explanatory Variable | (1) | (2) | (3) | (4) | (5) | (6) |
|-------------------------|----------|----------|----------|----------|----------|----------|
| FAMOWN | 0.002* | 0.001 | -0.001 | 0.000 | 0.000 | 0.000 |
| CF/CONT | -0.254 | | | | | |
| CF/CONT_DUM | | 0.076 | | | | |
| FAMDIR | | | 0.173* | | | |
| CHR_CEO | | | | 0.006 | | |
| FAMONLY | | | | | -0.035 | |
| BG_S | | | | | | -0.037 |
| BG_PS | | | | | | -0.057 |
| BG_CS | | | | | | -0.023 |
| Group | | | -0.039 | -0.047 | -0.046 | |
| Adjusted R ² | 0.165 | 0.160 | 0.179 | 0.170 | 0.171 | 0.168 |
| F-statistic | 4.727*** | 4.596*** | 5.019*** | 4.780*** | 4.809*** | 4.512*** |
| Observations | 303 | 303 | 314 | 314 | 314 | 314 |

Notes to Table 6.4a and Table 6.4b:

1. * significant at 10%; ** significant at 5%; ***significant at 1%.
2. The values in the table show the coefficients of the variables.
3. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above). A similar table but one which contains all variables used in the regression is available in Appendix 6.

6.4.3.1 Divergence of Cash Flow-to-Control Rights

The influence of the divergence of cash flow-to-control rights (CF/CONT) and its dummy variable (CF/CONT_DUM) on firm performance is shown in Models (1) and (2). The

coefficients in both Models (1) and (2) show that ROA are negatively affected by the divergence of cash flow-to-control rights, though the evidence lacks statistical support.⁹³

Meanwhile, Tobin's Q is found to be unrelated to the divergence of cash flow-to-control rights. This finding is consistent with Andres (2008) who also finds an insignificant relationship between the cash flow-to-control rights disparity and Tobin's Q for German firms, and Zuaini and Napier (2006) who find an insignificant relationship between the cash flow-to-control rights ratio and a firm's excess value. The finding in this study however contrasts with Claessens *et al.* (2002) who show that firms with a lower cash flow-to-control rights ratio have lower market value in East Asian countries.

6.4.3.2 Family Directors on Board

The influence of 'proportion of family directors on Board' (FAMDIR) as a control-enhancing means is examined in Model (3). The results show that FAMDIR positively affects firm performance in both ROA and Tobin's Q. *Hypothesis (2e)* is thus supported. This suggests that the higher the proportion of family directors on the board, the higher the performance of the firm. This contradicts the findings by Prabowo and Simpson (2011).

The finding in this study thus implies that the call to increase the proportion of independent non-executive directors (INED) in Malaysian family-controlled firms should be carefully considered before proceeding with the idea. It should be noted that an increase in the proportion of INED on the board indicates a direct decrease in the proportion of family directors.⁹⁴ The Malaysian Code on Corporate Governance's (MCCG) current requirement, and the listing requirement to have at least one-third of the board consist of INED may be sufficient currently and any call to increase the proportion to one-half, as practiced by some Anglo-Saxon nations such as the US, the UK and Australia, should be examined with prudence. In other words, more studies need to be carried out before any conclusions can be drawn regarding the debate on the correct proportion of independent directors. Moreover, the

⁹³ The lack of statistical evidence could be caused by the exclusion of the 11 firms with an indeterminate cash flow-to-control rights ratio as explained in Chapter 4.

⁹⁴ This is because family directors are non-independent.

readiness of a country to have more independent directors in firms is also an issue for discussion as highlighted in the paragraph below.

As far as the ‘market for independent directors’ is concerned, Malaysia is at a different stage of development compared to the US and the UK. The market for independent directors in Malaysia is rather small and confined to mostly retired politicians, retired senior government officials, retired army personnel, police and members of the royal family⁹⁵, compared to the US where the boards of many listed firms in the New York Stock Exchange are studded with business/corporate leaders such as finance and investment wizards, dons of leading universities, successful businessmen and current CEOs of other listed companies. Thus it is suggested that more training opportunities are needed for independent directors in Malaysia in order to increase the supply of ‘credible’ independent directors in the future, to prepare for increases in the proportion of independent directors on company boards. Simply increasing the number for the sake of greater proportion is ineffective in Malaysia currently as this is likely to lead to compliance in ‘form’ but not in ‘substance’ of good governance.

Thus the concern in Malaysia is more about the quality⁹⁶ of independent directors than the quantity. The finding suggests that as far as the prevalence of family directors is concerned, this control-enhancing means is not necessarily a bad thing. By concentrating board control and equity ownership, family members will have the will (incentive/commitment), ability (decision making) and large capacity (voting rights) to achieve, through which their ‘personalism’ and ‘particularism’ qualities will be fully realized.

6.4.3.3 Family (i) Occupying Board Chairmanship and CEO Positions, (ii) Acting as Sole Block-holder

Control-enhancing means from the perspectives of power concentration and ownership concentration is examined in Model (4) and Model (5) respectively. Power concentration is achieved if family members serve in the two most senior corporate positions, namely Board

⁹⁵ Compared to one royal house in most countries with a monarchy system, Malaysia has nine royal houses from the nine Malay states of Malaysia. Many members of these royal families are involved in businesses and company boards of directors.

⁹⁶ See, for instance, Gallo (2005) for a discussion on the issue of the quality of independent directors.

Chair and CEO (CHR_CEO), whereas ownership concentration is enhanced if no other block-holders are present in the firm besides the controlling family (FAMONLY). The findings show that the coefficient of CHR_CEO is statistically insignificant. Thus there is no evidence to suggest that the power concentration achieved by the controlling family occupying the highest positions has a detrimental effect on firm performance.

In contrast, both ROA and Tobin's Q are found to be negatively related to FAMONLY. However, the relationship is only significant in ROA (at the 5% level).⁹⁷ The coefficient shows that ROA is 2.02% lower in family firms without the presence of a second block-holder. The finding is thus consistent with the explanation posed by Claessens *et al.* (2000) that a 10% ownership by the second block-holder is adequate to undermine controlling families' control over their firms, potentially causing more caution in their business decisions and policies.

6.4.3.4 Complexity of Business Group Structure

Findings related to the complexity of group structures are presented in Model (6). The overall finding shows that all three variables of group structure complexity (BG_S, BG_PS and BG_CS) have negative coefficients as expected in both the ROA and Tobin's Q measures. However, only the BG_S and BG_PS coefficients are statistically significant according to the ROA measure. The coefficient for BG_CS is statistically insignificant. Although there is a lack of statistical evidence of direct influence of BG_CS on firm performance, performance-reducing expropriation activities can still occur in this type of group structure through its influence on other aspects of firm activities such as diversification. This is to be examined in the subsequent section.

The overall observation of the different types of family control-enhancing means from Model (1) to Model (6) suggests that all have very different influences on firm performance in terms of the direction and magnitude of influence. It also infers that not all control-enhancing means are harmful to firm performance.

⁹⁷ Model (5) is also re-run (not reported) without the inclusion of the ownership variables of the non-largest block-holders. The coefficient of FAMONLY remains significant at the 5% level.

6.5 Summary on Theme II

The main findings thus far from Theme II of the study can be summarized as follows:

- Firms affiliated to family-controlled business groups underperform (in ROA) unaffiliated or non-group family-controlled firms. The finding illuminates the more serious principal-principal agency problems in business groups that outweigh the diminished benefits of their internal markets (as the external capital market in Malaysia progresses and is deemed more advanced than many other emerging economies).
- In terms of group sizes, firms affiliated to large business groups have the poorest performance (in ROA) than all other firms in the sample. The finding suggests that large business groups may be subject to the greatest amount of governance problems that reduce firm performance, including a greater lack of transparency in business deals that facilitate expropriation activities such as ‘tunnelling’. The closer connection of large business groups to politics and political interference may lead to the ‘selective imposition of rules and regulations’ that shields controlling families from facing the consequences of any unethical or illegal business activities.
- The proportion of family directors on a company board is found to positively influence the performance of family-controlled firms. This finding may have an implication for the debate on the correct proportion of independent directors on a board, particularly in Malaysia where the commitment and contributions of family directors may well be greater than those of a less true, less qualified independent director.
- More training is thus needed to improve the quality of independent directors including the quality of true independence so that the ‘market for credible independent directors’ will expand and the country will be better prepared to increase the proportion of independent directors.

- The performance of family-controlled firms deteriorates in firms where the controlling families act as the sole block-holder (with no presence of a second block-holder). This finding implies that a second block-holder may be able to alleviate the principal-principal agency problems in family-controlled firms and thus improve firm performance.

The next section examines the theme of issues related to profit redistribution in business groups.

6.6 Theme III: Issues on Profit/Resource Redistribution and Firm Performance

The findings on the effects of profit redistribution in group-affiliated firms are presented in Table 6.5a. As asserted by Lincoln *et al.* (1996, 2004), profit redistribution is facilitated by the extent or strength of family control. In Models (1) and (4), the strength of family control is proxied by the controlling family's ownership level (FAMOWN). FAMOWN', which equals to (FAMOWN - mean value of FAMOWN), is used in substitution of FAMOWN to alleviate the multicollinearity problem.

It is observed that the coefficients of the interaction terms in Model (1) and Model (4) are insignificant. Thus there is no evidence to suggest that 'family ownership' is used to facilitate the redistribution of profits in business groups.

The divergence of cash flow-to-control rights can enhance a family's control over its firms (Andres, 2008) and greater divergence of cash flow-to-control rights is associated with stronger incentives to expropriate (Bertrand *et al.*, 2002). In Model (2) and Model (5), the strength of family control is proxied by such divergence (CF/CONT). Similarly, as in the case of FAMOWN, multicollinearity is substantially reduced to an acceptable level by employing CF/CONT' which equals to (CF/CONT - mean value of CF/CONT).⁹⁸

⁹⁸ For comparison, regression is run with CF/CONT and re-run with CF/CONT'. It is found that the significant level of the interaction term remains unaffected.

Table 6.5a: Profit Redistribution Effects and Firm Performance

| Explanatory Variable | (1) ROA | (2) ROA | (3) ROA | (4) Tobin's Q | (5) Tobin's Q | (6) Tobin's Q |
|-------------------------|----------|----------|----------|------------------|------------------|------------------|
| Lag (ROA) | 0.371*** | 0.389*** | 0.332*** | | | |
| Lag (Q) | | | | 0.455*** | 0.468*** | 0.529*** |
| FAMOWN' | 0.007 | 0.040 | 0.043 | -0.004 | 0.001 | 0.001 |
| FAMOWN' * Lag (ROA) | 0.003 | | | | | |
| FAMOWN' * Lag (Q) | | | | 0.004 | | |
| CF/CONT' | | 1.421 | | | -0.647*** | |
| CF/CONT' * Lag (ROA) | | -0.232 | | | | |
| CF/CONT' * Lag (Q) | | | | | 0.468*** | |
| CF/CONT_DUM | | | -1.023 | | | 0.268*** |
| CF/CONT_DUM* Lag (ROA) | | | 0.166 | | | |
| CF/CONT_DUM* Lag (Q) | | | | | | -0.222*** |
| Adjusted R ² | 0.427 | 0.417 | 0.423 | 0.624 | 0.642 | 0.643 |
| F-statistic | 7.614*** | 6.563*** | 6.703*** | 15.770*** | 14.967*** | 15.006*** |
| Observations | 152 | 141 | 141 | 152 | 141 | 141 |

Note: 1.* significant at 10%; ** significant at 5%; ***significant at 1%.

2. The values in the table show the coefficients of the variables.

3. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above). A similar table but one which contains all variables used in the regression is available in Appendix 6.

It is observed that the interaction term in Model (2) is statistically insignificant but that the interaction term in Model (5) is statistically significant at the 1% level. This finding infers that a group affiliate with greater (poorer) Tobin's Q in one year experiences a decline (an increase) in Tobin's Q in the following year. Specifically, when the divergence of cash flow-to-control rights increases; the more likely a decline (which is statistically significant) in Tobin's Q will occur in the case of firms with previous higher Tobin's Q and the more likely an improvement (which is statistically significant) in Tobin's Q will occur in the case of firms with previously lower Tobin's Q.

The significant finding of profit redistribution with Tobin's Q which is insignificant with ROA does not come as a total surprise. As it was already been reported in Chapter 5 (see Appendix 5a), the correlation between both performance measures is only 0.42 for the sub-sample of group-affiliated firms. Both measures are thus not closely correlated. As Tobin's Q depends on market perception (and also market sentiment) of what the management of a firm is capable of doing in the coming years (which in turn depends on factors such as

macroeconomic outlook), it is therefore distinguishable from ROA which is solely based on the earnings generated from past firm activities and market condition. The failure of ROA to capture profit redistribution might also be due to the practice of ‘earnings management’ to mask the effect of such redistribution.

Based on the theoretical models of Lincoln *et al.* (1996) and Gedajlovic and Shapiro (2002), the above finding is considered consistent with evidence of profit redistribution from good-performing affiliates to poor-performing affiliates. Adopting the explanation put forward by Bertrand *et al.* (2002), the finding indicates that the market, to some extent, recognizes and ‘prices in’ the practice of profit/resources redistribution. In other words, even though ROA failed to reflect the practice of profit redistribution in this study, the market (i.e. Tobin’s Q) may still be aware (and probably has long been aware) of such practice of tunnelling out of resources from good performing firms and transferring them to (prop up) weak performing firms. In this case, the awareness and anticipation of the market toward profit redistribution may not be necessarily formed or created based on the reported accounting figures but instead on the market’s ability to recognize profit redistribution which may be learned from experience, anecdotal evidence or dissemination of information through media.⁹⁹ Ultimately, firms with good (poor) previous performance that have more resources/profit tunnelled out (tunnelled in) are valued less (more) by the market in the current period. The finding is overall consistent with the ‘tunnelling and propping’ hypothesis suggested in the literature (Friedman *et al.*, 2003; Cheung *et al.*, 2009b).

The above finding remains qualitatively similar when the variable CF/CONT is substituted with a dummy variable (CF/CONT_DUM). It suggests that in firms that are associated with divergence of cash flow-to-control rights (dummy value is 1), a decline in Tobin’s Q will be observed in the case of firms with previously higher Tobin’s Q, while an improvement in Tobin’s Q will be observed in firms with previously lower Tobin’s Q. The use of a dummy variable (CF/CONT_DUM) in this case is comparable to the use of the business group dummy variable in Estrin’s *et al.* (2009) model. The finding is consistent with Estrin *et al.*

⁹⁹ The Genting’s case as highlighted in sub-section 1.3.2 is an example of such public awareness (as spearheaded by the MSWG) of the potential profit redistribution.

(2009) who also obtain a statistically significant result for profit redistribution in business groups in Russia.

6.6.1 Group Size Effect and Family Ownership Effect

Tables 6.5b and 6.5c present further findings on the issue of profit redistribution by examining the relationship between different sizes of business group and profit redistribution. Models (1) to (3) utilize FAMOWN as the measure of family control whereas Models (4) to (6) and Models (7) to (9) use CF/CONT and the dummy of CF/CONT respectively to measure enhanced family control.

Key interest lies in the interaction terms in each of the nine models in the tables.¹⁰⁰ The results show that the interaction terms in all nine models are statistically insignificant based on the ROA measure. However, the interaction terms involving the large group size (GR_C) are statistically significant based on Tobin's Q [see Models (3), (6) and (9)]. Thus, the findings from the three models imply that a greater strength of family control, as proxied by the FAMOWN and CF/CONT variables, facilitates profit redistribution in large business groups. The finding that large business groups are more inclined towards profit redistribution is consistent with George and Kabir (2008) who find similar results. Overall, with the significant findings in Tobin's Q but not in ROA, *Hypothesis (3b)* is partially supported.

As earlier findings evidence that large business groups (GR_C) are involved in profit redistribution, it is thus important to examine whether such profit redistribution in large business groups is associated with different strengths in family control. For this purpose, family ownership (FAMOWN) is split into two variables: FAMOWN1 (family ownership below 50%) and FAMOWN2 (family ownership of 50% and above) as shown in Table 6.5d.¹⁰¹

¹⁰⁰ The models in the tables were estimated without the inclusion of the ownership variables of the non-largest block-holders (STATE, FORGNII etc.). As a robustness test, the regressions were re-run with the complete set of ownership variables included. The results remained qualitatively similar and thus were not presented.

¹⁰¹ Piecewise method as per Morck *et al.* (1988) is used in grouping FAMOWN1 and FAMOWN2.

Table 6.5b: Profit Redistribution and ROA – Group Size Effect

| Explanatory Variable | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|------------------------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| Lag (ROA) | 0.365*** | 0.401*** | 0.312*** | 0.414*** | 0.399*** | 0.399*** | 0.399*** | 0.413*** | 0.385*** |
| FAMOWN | 0.036 | 0.045* | 0.033 | 0.056** | 0.056** | 0.055** | 0.054** | 0.056** | 0.056** |
| CF/CONT' | | | | -1.429 | -2.937 | -2.006 | | | |
| CF/CONT_DUM | | | | | | | 0.682 | 1.350 | 0.762 |
| GR_A | 1.077 | 1.238 | | 1.528 | 1.454 | | 1.083 | 1.494 | |
| GR_B | 1.669 | 2.710* | 0.353 | 2.003* | 2.050* | 0.641 | 2.006* | 2.307* | 0.630 |
| GR_C | | | -2.788* | | | -1.420 | | | -1.898 |
| FAMOWN* Lag (ROA)*GR_A | 0.000 | | | | | | | | |
| FAMOWN* Lag (ROA)*GR_B | | -0.003 | | | | | | | |
| FAMOWN* Lag (ROA)*GR_C | | | 0.004 | | | | | | |
| CF/CONT' * Lag (ROA)*GR_A | | | | -0.407 | | | | | |
| CF/CONT' * Lag (ROA)*GR_B | | | | | 0.175 | | | | |
| CF/CONT' * Lag (ROA)*GR_C | | | | | | -0.094 | | | |
| CF/CONT_DUM * Lag (ROA)*GR_A | | | | | | | 0.118 | | |
| CF/CONT_DUM * Lag (ROA)*GR_B | | | | | | | | -0.084 | |
| CF/CONT_DUM * Lag (ROA)*GR_C | | | | | | | | | 0.116 |
| Adjusted R ² | 0.436 | 0.440 | 0.445 | 0.431 | 0.428 | 0.427 | 0.431 | 0.430 | 0.433 |
| F-statistic | 9.324*** | 9.475*** | 9.637*** | 8.070*** | 7.985*** | 7.969*** | 8.063*** | 8.036*** | 8.113*** |
| Observations | 152 | 152 | 152 | 141 | 141 | 141 | 141 | 141 | 141 |

Note: 1.* significant at 10%; ** significant at 5%; ***significant at 1%.

2. The values in the table show the coefficients of the variables.

3. Control variables and sector effects are included in the regression (not shown above). A similar table but one which contains all variables used in the regression is available in Appendix 6.

Table 6.5c: Profit Redistribution and Tobin's Q – Group Size Effect

| Explanatory Variable | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Lag (Q) | 0.399*** | 0.452*** | 0.477*** | 0.448*** | 0.473*** | 0.494*** | 0.457*** | 0.458*** | 0.500*** |
| FAMOWN | -0.001 | 0.001 | 0.002* | 0.002* | 0.002* | 0.002** | 0.002 | 0.002* | 0.002* |
| CF/CONT' | | | | -0.155 | 0.084 | -0.265 | | | |
| CF/CONT_DUM | | | | | | | 0.045 | -0.019 | 0.085* |
| GR_A | -0.165** | -0.025 | | -0.012 | -0.021 | | 0.004 | -0.019 | |
| GR_B | 0.036 | 0.063 | 0.072* | 0.071 | 0.063 | 0.066* | 0.071 | 0.021 | 0.070* |
| GR_C | | | 0.156* | | | 0.031 | | | 0.084* |
| FAMOWN* Lag (Q)*GR_A | 0.004 | | | | | | | | |
| FAMOWN* Lag (Q)*GR_B | | 0.000 | | | | | | | |
| FAMOWN* Lag (Q)*GR_C | | | -0.003** | | | | | | |
| CF/CONT' * Lag (Q)*GR_A | | | | 0.183 | | | | | |
| CF/CONT' * Lag (Q)*GR_B | | | | | -0.372 | | | | |
| CF/CONT' * Lag (Q)*GR_C | | | | | | 0.374*** | | | |
| CF/CONT_DUM * Lag (Q)*GR_A | | | | | | | -0.044 | | |
| CF/CONT_DUM * Lag (Q)*GR_B | | | | | | | | 0.132 | |
| CF/CONT_DUM * Lag (Q)*GR_C | | | | | | | | | -0.143*** |
| Adjusted R ² | 0.639 | 0.619 | 0.629 | 0.622 | 0.639 | 0.653 | 0.617 | 0.630 | 0.645 |
| F-statistic | 20.116*** | 18.524*** | 19.272*** | 16.335*** | 17.529*** | 18.552*** | 16.066*** | 16.864*** | 17.921*** |
| Observations | 152 | 152 | 152 | 141 | 141 | 141 | 141 | 141 | 141 |

Note: 1.* significant at 10%; ** significant at 5%; ***significant at 1%.

2. The values in the table show the coefficients of the variables.

3. Control variables and sector effects are included in the regression (not shown above). A similar table but one which contains all variables used in the regressions is available in Appendix 6

The findings show that only the interaction terms associated with FAMOWN2 [see Model (2) and Model (4) in Table 6.5d] are statistically significant. The negative coefficients indicate that firms with good (poor) previous performance experience a decline (an improvement) in their performance the following year. The interaction terms associated with FAMOWN1 [Model (1) and Model (3)] are statistically insignificant. This observation suggests that the occurrence of profit redistribution is prevalent in firms that are members of large business groups (GR_C) where the controlling families have outright (majority) control of firms. The finding is in line with Anderson and Reeb's (2003, p.1324) argument that the potential for entrenchment is the greatest "when families have the greatest control of the firm". Overall, the finding is consistent with *Hypothesis (3b)* that greater strength of family control facilitates profit redistribution.

**Table 6.5d: Profit Redistribution– Large Group Size and Family Ownership
Classification Effects**

| Explanatory Variable | (1) | (2) | (3) | (4) |
|-------------------------|-----------|-----------|-----------|-----------|
| | Tobin's Q | Tobin's Q | Tobin's Q | Tobin's Q |
| Lag (Q) | 0.450*** | 0.437*** | 0.456*** | 0.434*** |
| FAMOWN1 | 0.000 | 0.000 | 0.000 | 0.000 |
| FAMOWN2 | 0.001 | 0.002* | 0.000 | 0.001 |
| GR_B | 0.077* | 0.078** | 0.063 | 0.066* |
| GR_C | 0.030 | 0.062 | 0.036 | 0.052 |
| FAMOWN1*Lag(Q)*GR_C | 0.000 | | -0.001 | |
| FAMOWN2*Lag(Q)*GR_C | | -0.003** | | -0.003** |
| Adjusted R ² | 0.617 | 0.627 | 0.617 | 0.626 |
| F-statistic | 17.226*** | 17.887*** | 13.186*** | 13.616*** |
| Observations | 152 | 152 | 152 | 152 |

Note: 1.* significant at 10%; ** significant at 5%; ***significant at 1%.

2. The values in the table show the coefficients of the variables.

3. Models (1) and (2) exclude 'other types of block-holders' variables. Models (3) and (4) include all 'other types of block-holders' variables. Control variables and sector effects are included in all regression (not shown above). A similar table but one which contains all variables used in the regression is available in Appendix 6.

6.6.2 Efficiency of Profit/Resource Redistribution and Board Independence Moderating Effect

6.6.2.1 Firm Efficiency Issue

Findings on the efficiency of profit redistribution are presented in Table 6.6a. The comparison of the CAPEX Ratio between group and non-group firms shows that the mean values of CAPEX Ratio for group-affiliated firms with ‘high’ and ‘low’ ROA (Tobin’s Q) are 5.71% (5.64%) and 4.57% (4.64%) respectively. The mean difference is statistically insignificant in both performance measures. In contrast, the equivalent mean values for the non-group firms with ‘high’ and ‘low’ ROA (Tobin’s Q) are 7.11% (8.47%) and 5.05% (3.69%) respectively. The mean difference is statistically significant in both performance measures.

**Table 6.6a: Firm Performance and Capital Expenditure Ratio – Comparison
Between Group and Non-group Firms**

| Firm Performance: ROA | Group Firms | | | Non-Group Firms | | |
|--|-----------------|----------|-------------------------|-----------------|----------|-------------------------|
| | Number of firms | Mean ROA | CAPEX Ratio: Mean value | Number of firms | Mean ROA | CAPEX Ratio: Mean value |
| Firms with High ROA | 76 | 14.13% | 5.71% | 81 | 15.59% | 7.11% |
| Firms with Low ROA | 75 | 3.79% | 4.57% | 81 | 3.89% | 5.05% |
| p-value (mean difference between high and low performing firms) | | | 0.157 | | | 0.036** |
| Firm Performance: Tobin’s Q | | | | | | |
| Firms with High Q | 76 | 1.069 | 5.64% | 81 | 1.056 | 8.47% |
| Firms with Low Q | 75 | 0.619 | 4.64% | 81 | 0.594 | 3.69% |
| p-value (mean difference between high and low performing firms) | | | 0.187 | | | 0.000*** |

Note: 1.* significant at 10%; ** significant at 5%; ***significant at 1%.

2. CAPEX Ratio = Capital Expenditures/Total Assets

It can thus be interpreted that the lack of significant difference in the CAPEX Ratio between the high-performance and the low-performance *group-affiliated* firms suggests considerable inefficiency in the allocation of resources in group-affiliated firms. The finding thus justifies and complements the earlier finding of underperformance of group-affiliated firms. Specifically, the underperformance of group-affiliated firms can be partly explained by the inefficient redistribution of resources from the more deserving (high-performing) affiliates to the less deserving (low-performing) affiliates. The finding thus supports *Hypothesis (3c)*.

6.6.2.2 Board Independence Moderating Effect

The findings on the influence of board independence on the CAPEX Ratio of high performance and low performance firms in group-affiliated firms are shown in Table 6.6b. Three attributes of board independence are examined, namely proportion of independent directors (PrINED), independent chairman (INDP_CHR) and all independent audit committee members (INDP_ADT). The results are presented in three separate panels (Panels A, B and C) in the table.

In Panel A, the mean of CAPEX Ratio in firms with ‘high’ performance (High ROA as well as High Q) is statistically significantly (at the 5% level for ROA and the 10% level for Tobin’s Q) higher than the mean of CAPEX Ratio in the firms with ‘low’ performance (Low ROA as well as Low Q) in the firms associated with a high proportion of independent directors (50% and above) (shaded in the table). In comparison, no such significant difference is found in firms associated with low proportion of independent directors (below 50%).

Table 6.6b: Firm Performance and Capital Expenditure Ratio in Group-affiliated Firms– Board Independence Moderating Influence

| <i>Panel A: Proportion of Independent Director</i> | | | | |
|--|-----------------|-------------------------|-----------------|-------------------------|
| | 50% and above | | Below 50% | |
| | Number of firms | CAPEX Ratio: Mean value | Number of firms | CAPEX Ratio: Mean value |
| Firms with High ROA | 32 | 6.99% | 43 | 4.76% |
| Firms with Low ROA | 32 | 2.70% | 44 | 5.94% |
| p-value (mean difference between high and low performing firms) | | 0.016** | | 0.414 |
| Firms with High Q | 34 | 6.46% | 41 | 4.97% |
| Firms with Low Q | 30 | 3.01% | 46 | 5.70% |
| p-value (mean difference between high and low performing firms) | | 0.054* | | 0.611 |
| <i>Panel B: Independent Chairman</i> | | | | |
| | Yes | | No | |
| | Number of firms | CAPEX Ratio: Mean value | Number of firms | CAPEX Ratio: Mean value |
| Firms with High ROA | 23 | 5.37% | 52 | 5.86% |
| Firms with Low ROA | 24 | 5.97% | 52 | 3.93% |
| p-value (mean difference between high and low performing firms) | | 0.769 | | 0.158 |
| Firms with High Q | 25 | 5.83% | 50 | 5.55% |
| Firms with Low Q | 22 | 5.50% | 54 | 4.29% |
| p-value (mean difference between high and low performing firms) | | 0.869 | | 0.357 |
| <i>Panel C: Independent Audit Committees</i> | | | | |
| | Yes | | No | |
| | Number of firms | CAPEX Ratio: Mean value | Number of firms | CAPEX Ratio: Mean value |
| Firms with High ROA | 20 | 4.59% | 55 | 6.12% |
| Firms with Low ROA | 18 | 5.65% | 58 | 4.24% |
| p-value (mean difference between high and low performing firms) | | 0.589 | | 0.168 |
| Firms with High Q | 15 | 4.03% | 60 | 6.05% |
| Firms with Low Q | 23 | 5.78% | 53 | 4.14% |
| p-value (mean difference between high and low performing firms) | | 0.383 | | 0.163 |

Note: 1.* significant at 10%; ** significant at 5%; ***significant at 1%.

2. CAPEX Ratio = Capital Expenditures/Total Assets

Thus the finding suggests that a corporate board containing a majority of independent directors is able to positively moderate the allocation of resources in group-affiliated firms in which affiliates that are more deserving (good-performing affiliates)¹⁰² receive more allocation on capital expenditures and affiliates that are less deserving (poor-performing affiliates) receive less allocation. In other words, boards with a majority of independent directors may be able to alleviate the inefficient allocation of resources in business groups as found in sub-section 6.6.2.1.

However, all other mean differences in CAPEX Ratio between ‘high’ and ‘low’ performance firms in Panel B (Independent Chairman) and Panel C (Independent Audit Committees) are statistically insignificant. Overall, out of the three attributes of board independence, since only ‘Proportion of Independent Directors’ exhibits the statistically significant moderating effect, it can thus be concluded that there is an overall lack of support for *Hypothesis (3d)*.

6.7 Summary on Theme III

The main findings from Theme III of the study can be summarized as follows:

- The findings on the occurrence of inefficient profit redistribution (profit being redistributed from good-performing affiliates to poor-performing affiliates within a business group) are mixed. No evidence on profit redistribution is found when ROA is used as the performance measure. However, a significant result on profit redistribution is found when Tobin’s Q is used as the performance measure (in which the divergence of cash flow-to-control rights positively moderates redistribution).
- The incidence of profit redistribution implies an expropriation act that adversely affects the performance of high-performing affiliates and their shareholders’ interests.
- Group size analysis reveals that profit redistribution is mainly associated with large business groups. Both the extent of family ownership and the divergence of cash

¹⁰² Good-performing firms deserve higher allocation of capital expenditure because they are more capable of finding and investing in projects with greater positive NPVs that in turn lead to the firm’s improved performance.

flow-to-control rights are shown as facilitating profit redistribution. Further examination shows that profit redistribution is found mostly in large business groups where the strength of family control is greater, not lesser and where the family's greater strength of control is outright (majority) family ownership.

- Inefficient profit redistribution is explained by an inefficient allocation of capital expenditure in group-affiliated firms, exhibited by a lack of significant difference between the capital expenditure ratio of high-performing affiliates and low-performing affiliates. In contrast, this difference is significant in non-group affiliated firms, indicating that without business group-driven profit redistribution, efficient allocation of capital expenditure can be attained.
- Of the three different attributes of board independence, only the proportion of independent directors on the board is found to be significant in moderating the allocation of capital expenditure between high-performing and low-performing group-affiliated firms. This finding again may have an implication on the issue of truly independent directors in Malaysia.

The subsequent sections discuss the findings on the effects of firm diversification on efficiency and performance as well as the moderating influence of other governance-related firm activities or practices on the diversification-performance link.

6.8 Theme IV.I: Issues on Firm Diversification, Efficiency and Performance

6.8.1 Firm Diversification and Performance

The association between firm diversification and performance is examined and presented in Table 6.7a. Four measures of firm diversification are employed for the purpose. All four diversification measures show that firm performance (in both ROA and Tobin's Q) is negatively related to firm diversification. As shown in the table, evidence of the negative

relationship is sufficiently strong, statistically, in Tobin's Q, but is rather weak in the ROA measure.

Table 6.7a: Firm Diversification and Performance

| Variable | ROA | | | | Tobin's Q | | | |
|-------------------------|----------|----------|----------|----------|-----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| ENTROPY | -1.220* | | | | -0.087** | | | |
| HERF | | 2.034 | | | | 0.119* | | |
| NUM_SEG | | | -0.354* | | | | -0.026** | |
| DVSF_D | | | | -0.155 | | | | -0.015 |
| Group | -1.848** | -1.864** | -1.833** | -1.913** | -0.043 | -0.045 | -0.042 | -0.048 |
| FAMOWN | 0.047** | 0.047** | 0.044** | 0.045** | 0.000 | 0.000 | 0.000 | 0.000 |
| Adjusted R ² | 0.276 | 0.275 | 0.276 | 0.272 | 0.181 | 0.177 | 0.184 | 0.171 |
| F-statistic | 8.005*** | 7.993*** | 8.028*** | 7.864*** | 5.067*** | 4.954*** | 5.140*** | 4.790*** |
| Observations | 314 | 314 | 314 | 314 | 314 | 314 | 314 | 314 |

Note: 1.* significant at 10%; ** significant at 5%; ***significant at 1%.

2. The values in the table show the coefficients of the variables.
3. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above). A similar table but one which contains all variables used in the regression is available in Appendix 6.

The finding suggests that market-based performance (Tobin's Q) is more susceptible to firm diversification compared to accounting-based performance (ROA). It also implies that the market does not respond well to firm diversification and will react negatively to an increase in the level of firm diversification by marking down the value of firms with higher diversification. The market may suspect that diversification is practiced mainly to enhance the interest of controlling families, for instance, by reducing the risk of their undiversified family wealth. In other words, the reduction in firm and industry-specific risks as a result of firm diversification mainly benefits the controlling family and not the minority shareholders as they can always reduce their exposure to firm-specific risks through *portfolio* diversification (Claessens *et al.*, 1999c). In addition, the market may also be concerned about controlling families using diversification to extract private benefits at the expense of minority shareholders (Claessens *et al.*, 1999c). The act of diversification is seen as an entrenched behaviour of controlling families.

The effect of firm diversification on performance can be quantified by using the coefficients reported in the table. For instance, the NUM_SEG coefficient of -0.354 (-0.026) with ROA (Tobin's Q) as the performance measure means that every additional increase in the number

of business segments reduces ROA (Tobin's Q) by 0.354% (0.026). Thus, ROA (Tobin's Q), for a firm with five business segments, for instance, will be 1.77% (0.13) lower than firms with a single business segment.¹⁰³ This is translated into ROA (Tobin's Q) of 19% (15%) lower than firms with a single business segment.¹⁰⁴

It should also be noted that the insignificance of diversification dummy (DVSF_D) in both ROA and Tobin's Q suggests that performance of firms is not related to whether a firm is categorized as a focused firm or a diversified firm *per se*. It is rather the *level* of firm diversification that has an important impact on firm performance. The fact that a firm with nine business segments is treated as equivalent to a firm with two business segments in the DVSF_D dummy (both are assigned dummy value =1) may explain the insignificance of DVSF_D on firm performance. Thus, the overall finding supports *Hypothesis (4b)* but does not support *Hypothesis (4a)*.

The finding is consistent with the call by some researchers such as Chang (2006) that business groups and their affiliates should limit their business portfolios in order to maintain focus on their core business area.¹⁰⁵ This is an important lesson for family-controlled business groups as well as independent firms in Malaysia because as the institutional settings, including the capital markets, are improving, it will be increasingly difficult to reap the alleged benefits of diversification. As reasoned by Charkrabarti *et al.* (2007), positive outcomes of firm diversification are only possible in the most underdeveloped institutional environments. Thus, the fact that Malaysia's capital market is more developed (compared to many other emerging economies such as Thailand and Indonesia) (Singh and Zainal, 2005; Claessens *et al.*, 2000) may offer an explanation for the negative outcome of diversification in this study.

The negative diversification-performance link, which is believed to be caused largely by principal-principal agency problems is further examined in the next section.

¹⁰³ Five business segments x 0.354% = 1.77% for ROA; five business segments x 0.026 = 0.13 for Tobin's Q.

¹⁰⁴ The calculation is based on the mean ROA (mean Tobin's Q) of 9.19% (0.87) in the sample: (1.77%/9.19%) = 0.19 for ROA and (0.13/0.87) = 0.15 for Tobin's Q.

¹⁰⁵ It is evidenced from descriptive statistics in Table 5.7b in Chapter 5 that firms affiliated to business groups are more diversified than firms without group affiliation.

6.8.2 Firm Diversification and Efficiency

The findings on whether firm diversification is agency-driven are presented in Tables 6.7b and 6.7c. It should be noted that asset turnover ratio or asset utilization (as a proxy to agency costs) is used as the dependent variable in this case (Ang *et al.*, 2000; Florackis, 2008).

Table 6.7b: Influence of Firm Diversification on Firm Efficiency

| | (1) | (2) | (3) | (4) |
|-------------------------|-----------|-----------|-----------|-----------|
| ENTROPY | -0.405*** | | | |
| HERF | | 0.641*** | | |
| NUM_SEG | | | -0.098*** | |
| DVSF_D | | | | -0.244*** |
| ROA | 0.034*** | 0.034*** | 0.034*** | 0.035*** |
| GROUP | -0.266*** | -0.272*** | -0.265*** | -0.287*** |
| FAMOWN | -0.002 | -0.002 | -0.003 | -0.002 |
| Adjusted R ² | 0.579 | 0.574 | 0.573 | 0.565 |
| F-statistic | 24.885*** | 24.367*** | 24.285*** | 23.542*** |
| Observations | 314 | 314 | 314 | 314 |

Note: 1.* significant at 10%; ** significant at 5%; ***significant at 1%.

2. The values in the table show the coefficients of the variables.

3. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above). A similar table but one which contains all variables used in the regression is available in Appendix 6.

Table 6.7c: Firm Diversification and Efficiency – Comparison between Group and Non-group Firms

| Variable | Group | | | | Non-Group | | | |
|-------------------------|---------------|--------------|---------------|-----------|-----------|-----------|-----------|-----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| ENTROPY | -0.439 *** | | | | -0.156* | | | |
| HERF | | 0.714 *** | | | | 0.234* | | |
| NUM_SEG | | | -0.108 *** | | | | -0.024 | |
| DVSF_D | | | | -0.331*** | | | | -0.095 |
| ROA | 0.046*** | 0.046*** | 0.046*** | 0.048*** | 0.027*** | 0.027*** | 0.026*** | 0.027*** |
| FAMOWN | -0.006 | -0.006 | -0.007 | -0.005 | 0.002 | 0.002 | 0.002 | 0.002 |
| Adjusted R ² | 0.463 | 0.455 | 0.454 | 0.446 | 0.748 | 0.747 | 0.745 | 0.747 |
| F-statistic | 8.616*** | 8.355*** | 8.340*** | 8.111*** | 29.117*** | 29.008*** | 28.741*** | 28.978*** |
| Observations | 151 | 151 | 151 | 151 | 162 | 162 | 162 | 162 |

Note: 1.* significant at 10%; ** significant at 5%; ***significant at 1%.

2. The values in the table show the coefficients of the variables.

3. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above). A similar table but one which contains all variables used in the regression is available in Appendix 6.

All four measures of firm diversification in Table 6.7b show that there is a highly significant negative relationship between asset utilization and firm diversification. In other words, the higher the firm diversification, the less efficient is the asset utilization. The finding thus offers an explanation for the negative performance outcome of diversification found in sub-section 6.8.1. The negative influence of firm diversification on asset utilization suggests that severe wastages of assets/resources caused by agency problems occur alongside firm diversification (Ang *et al.*, 2000; Fleming *et al.*, 2005 and Chu, 2007). Instances of resource expropriation, manager-owners' entrenchment and other activities that enhance only the interests of controlling families cause adverse effects on firm efficiency and performance.

A controlling family may try to convince its shareholders that there is a need to diversify but instead use diversification activities to justify the move to retain more earnings¹⁰⁶ and invest in considerable amounts of assets to increase opportunities to expropriate the assets/resources of the firm. These include asset tunnelling and asset transfer, asset purchase and asset selling at non-market price, assets swap and other unfair insiders' asset transactions.

6.8.2.1 Group Firms versus Non-group Firms

Splitting the sample into group-affiliated firms and non-group firms in Table 6.7c reveals that the negative relationship between firm diversification and asset utilization stems mainly from group-affiliated firms, as the relationship is highly significant at 1%, compared to a much weaker significant level in non-group firms. The finding implies that group-affiliated firms are more prone to greater agency-driven diversification than non-group firms. This may provide an explanation for the underperformance of group-affiliated firms compared to non-group firms, as found in sub-section 6.4.1. It is also consistent with arguments posed by researchers such as Young *et al.* (2008), Claessens *et al.* (2006), La Porta *et al.* (2003) and Khanna and Rivkin (2001) that the more complex ownership structures of business groups over non-group firms provide more opportunities for controlling families to capture more private benefits (through diversification).

¹⁰⁶ Another perspective of examining expropriation according to Faccio *et al.* (2001) is from the dividends payouts. This perspective believes that the reluctance to pay higher dividends and the tendency to retain more earnings among firms in Asia indicates their readiness to expropriate.

For instance, diversification by acquisitions among Korean business groups (*chaebols*) is used by controlling shareholders as a way to increase their own wealth at the expense of other shareholders (Bae *et al.*, 2002). Expropriatory intra-group and insiders' asset transactions that lead to lower efficiency of asset utilization occur more frequently in group-affiliated firms than in non-group firms. Overall, this finding, together with the previous finding, supports *Hypothesis (4c)*.

The next section continues with findings on whether group affiliation and group size influences the diversification-performance outcome.

6.8.3 Moderating Influence of Group Affiliation on Firm Diversification-Performance Link

It is observed from Panel A in Table 6.8a that when the firms are split into group and non-group firms, no significant relationship is found between the four diversification measures and the ROA of non-group firms but a significant (at the 10% level) negative relationship is found for the group firms (except for the diversification dummy, DVSF_D). The finding offers an explanation for the lower ROA of group-affiliated firms than non-group firms as found in sub-section 6.4.1. *Hypothesis (4d)* is thus supported according to ROA.

The finding is consistent with that of Lins and Servaes (2002) that the 'diversification discounts' found in their study involving seven emerging markets in East Asia come mainly from group-affiliated firms rather than non-group firms. It is also consistent with the finding by Claessens *et al.* (1999c) regarding nine East Asian countries that group-affiliated firms are associated with poorer diversification performance compared to non-group firms.

Table 6.8a: Firm Diversification and Performance – Comparison between Group and Non-group Firms

| <i>Panel A: ROA</i> | | | | | | | | |
|---------------------------|----------|----------|----------|----------|-----------|----------|----------|----------|
| Variable | Group | | | | Non-Group | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| ENTROPY | -1.693* | | | | -0.139 | | | |
| HERF | | 2.734* | | | | 0.307 | | |
| NUM_SEG | | | -0.459* | | | | -0.229 | |
| DVSF_D | | | | -0.850 | | | | 0.548 |
| Adjusted R ² | 0.315 | 0.313 | 0.314 | 0.307 | 0.269 | 0.269 | 0.271 | 0.270 |
| F-statistic | 5.332*** | 5.290*** | 5.329*** | 5.174*** | 4.706*** | 4.706*** | 4.732*** | 4.728*** |
| Observations | 152 | 152 | 152 | 152 | 162 | 162 | 162 | 162 |
| <i>Panel B: Tobin's Q</i> | | | | | | | | |
| Variable | Group | | | | Non-Group | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| ENTROPY | -0.066 | | | | -0.076 | | | |
| HERF | | 0.071 | | | | 0.099 | | |
| NUM_SEG | | | -0.022* | | | | -0.031* | |
| DVSF_D | | | | -0.001 | | | | -0.001 |
| Adjusted R ² | 0.173 | 0.168 | 0.177 | 0.165 | 0.271 | 0.268 | 0.278 | 0.265 |
| F-statistic | 2.973*** | 2.905*** | 3.029*** | 2.866*** | 4.737*** | 4.690*** | 4.880*** | 4.619*** |
| Observations | 152 | 152 | 152 | 152 | 162 | 162 | 162 | 162 |

Note: 1. * significant at 10%; ** significant at 5%; ***significant at 1%.

2. The values in the table show the coefficients of the variables.

3. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above). A similar table but one which contains all variables used in the regression is available in Appendix 6.

This study thus far has proven that group firms are found to be more diversified than non-group firms. Diversifications are in turn associated with poorer firm performance because of the agency costs associated with them. It can therefore be concluded that the poorer performance of group firms is partly due to the greater agency-driven diversification in these firms compared to non-group firms. The finding that diversification is detrimental to the performance of group-affiliated firms is consistent with the earlier finding of prevalent inefficiency of asset utilization in these firms as found in sub-section 6.8.2.

Moreover, as reasoned by Lins and Servaes (2002), the finding implies that since some of the advantages of diversification can be captured through a group structure, it is hard for affiliated firms to justify their diversification and thus if they do diversify, the decision to diversify is more likely to be made by the controlling families to serve their own interests and not those of the minority shareholders.

It should also be noted that the findings in this study do not support the ‘spill-over benefits of group affiliation to firm level diversification’ hypothesis [as explained in Charkrabarti *et al.* (2007)] but are instead more consistent with the expropriation hypothesis as explained above. Claessens *et al.* (1999c) also find in their study that evidence of diversification discounts associated with group-affiliated firms is consistent with the expropriation hypotheses.

As for the Tobin’s Q measure, the findings from Panel B show that overall there is no difference between group and non-group firms in terms of their diversification-performance link. Most of the diversification measures in both group and non-group firms are statistically insignificant. Thus, group affiliation does not influence the diversification-performance link as far as Tobin’s Q is concerned. A possible reason for the lack of statistical significance in this case could be the cancelling out of costs and benefits associated with firm diversification.

The next sub-section continues with the findings on the influence of group size on the diversification-performance link.

6.8.4 Group Size Effect on Firm Diversification-Performance Link

Further findings on the influence of group size on the performance outcome of diversification are shown in Table 6.8b. The key interest lies in the interaction terms involving the various group sizes in the table.

6.8.4.1 Small Business Groups (GR_A)

The findings regarding small business groups (GR_A) show that overall there is weak evidence to suggest that GR_A positively moderates the firm diversification-performance link [see the interaction terms in Model (1) and Model (4)].

The moderating influence of GR_A can be computed by adding the diversification measure variable and the interaction term variable together. For instance, the moderating influence of GR_A on the diversification-ROA link in Model (1) of Panel A can be computed as $(ENTROPY + ENTROPY*GR_A) = -3.237 + 4.225 = 0.988$ which can be interpreted as

Table 6.8b: Firm Diversification and Performance – Group Size Effect

| | ROA | | | Tobin's Q | | |
|---------------------------------------|----------|----------|----------|-----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Panel A: Entropy | | | | | | |
| ENTROPY | -3.237** | -1.452 | -1.033 | -0.121* | -0.088 | -0.003 |
| ENTROPY*GR_A | 4.225* | | | 0.168 | | |
| ENTROPY*GR_B | | -1.185 | | | 0.048 | |
| ENTROPY*GR_C | | | -3.131 | | | -0.232** |
| GR_A | 0.741 | 2.387* | | -0.143* | -0.082 | |
| GR_B | 2.027 | 2.422 | -0.781 | -0.005 | -0.041 | 0.049 |
| GR_C | | | -1.025 | | | 0.177** |
| Adjusted R ² | 0.336 | 0.320 | 0.327 | 0.179 | 0.167 | 0.189 |
| F-statistic | 5.017*** | 4.741*** | 4.870*** | 2.731*** | 2.597*** | 2.852*** |
| Observations | 152 | 152 | 152 | 152 | 152 | 152 |
| Panel B: Herfindahl | | | | | | |
| HERF | 5.837** | 2.027 | 1.678 | 0.165 | 0.115 | -0.036 |
| HERF*GR_A | -7.778* | | | -0.264 | | |
| HERF*GR_B | | 2.830 | | | -0.100 | |
| HERF*GR_C | | | 5.833 | | | 0.435** |
| GR_A | 8.486** | 2.390** | | 0.127 | -0.083 | |
| GR_B | 2.049 | -0.232 | -0.788 | -0.011 | 0.049 | 0.046 |
| GR_C | | | -6.832* | | | -0.254 |
| Adjusted R ² | 0.335 | 0.319 | 0.325 | 0.171 | 0.162 | 0.184 |
| F-statistic | 5.004*** | 4.719*** | 4.829*** | 2.639*** | 2.540*** | 2.791*** |
| Observations | 152 | 152 | 152 | 152 | 152 | 152 |
| Panel C: Number of Segments | | | | | | |
| NUM_SEG | -0.626* | -0.582 | -0.333 | -0.032* | -0.033 | -0.006 |
| NUM_SEG*GR_A | 0.480 | | | 0.036 | | |
| NUM_SEG*GR_B | | 0.159 | | | 0.023 | |
| NUM_SEG*GR_C | | | -0.511 | | | -0.049* |
| GR_A | 1.072 | 2.285* | | -0.173 | -0.084 | |
| GR_B | 1.803 | 1.218 | -0.759 | -0.007 | -0.088 | 0.050 |
| GR_C | | | -0.889 | | | 0.217** |
| Adjusted R ² | 0.321 | 0.318 | 0.322 | 0.178 | 0.174 | 0.188 |
| F-statistic | 4.753*** | 4.714*** | 4.777*** | 2.719*** | 2.680*** | 2.844*** |
| Observations | 152 | 152 | 152 | 152 | 152 | 152 |
| Panel D: Diversification Dummy | | | | | | |
| DVSF_D | -1.895 | -0.257 | -0.616 | -0.108* | 0.001 | 0.075 |
| DVSF_D*GR_A | 2.548 | | | 0.263** | | |
| DVSF_D*GR_B | | -1.873 | | | -0.015 | |
| DVSF_D*GR_C | | | -1.034 | | | -0.299** |
| GR_A | 1.156 | 2.314* | | -0.194** | -0.083 | |
| GR_B | 1.628 | 2.588 | -0.820 | -0.014 | -0.021 | 0.034 |
| GR_C | | | -1.741 | | | 0.224** |
| Adjusted R ² | 0.316 | 0.312 | 0.309 | 0.199 | 0.158 | 0.202 |
| F-statistic | 4.678*** | 4.606*** | 4.558*** | 2.975*** | 2.492*** | 3.015*** |
| Observations | 152 | 152 | 152 | 152 | 152 | 152 |

Note: 1.* significant at 10%; ** significant at 5%; ***significant at 1%.

2. The values in the table show the coefficients of the variables.

3. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above).

follows: every 0.1 increase in the Entropy value¹⁰⁷ of firms affiliated to small business groups will lead to an improvement of ROA of the firms by approximately 0.1% ($0.1 \times 0.988\% = 0.0988\% \approx 0.1\%$). Similarly, the moderating influence of GR_A on Tobin's Q in Model (4) of Panel D is computed as $-0.108 + 0.263 = 0.155$ which is interpreted as follows: a diversified firm affiliated to a small business group has 0.155 greater Tobin's Q compared to a similar diversified firm not in GR_A. Thus, a small group size positively moderates the outcome of diversification in group-affiliated firms.

The findings on small size business groups do not support Khanna and Palepu's (2000a) observation in India that the majority of small and medium size business groups have issues such as incompetent management, serious agency problems and lack of advantages of political connection that prevent their firms from generating benefits from diversification. This inconsistency in findings could be due to the differences in the country-specific and institutional environment factors in both countries as these lead to variations in the nature of business groups in each country.

6.8.4.2 Intermediate and Large Business Groups (GR_B and GR_C)

The findings on intermediate business groups (GR_B) show that there is an insignificant influence of GR_B on the performance outcome of diversification (all the interaction terms involving GR_B are statistically insignificant) [see Model (2) and Model (5)].

The findings on large business groups (GR_C) show that GR_C negatively moderates the diversification-performance link. The moderating influence is statistically significant in the case of Tobin's Q though it lacks the statistical significance in ROA [see the interaction terms in Model (3) and Model (6)].

The moderating influence of large group size can be quantified as follows: as an illustration, the influence of GR_C in Model (6) of Panel B is computed as $-0.036 + 0.435 = 0.399$ which

¹⁰⁷ Increases in Entropy equals increases in the diversification level.

can be interpreted as follows: for every 0.1 decrease in Herfindahl¹⁰⁸ of firms affiliated to GR_C, the Tobin's Q of the firms will decline by about 0.04 ($0.1 \times 0.399 = 0.0399 \approx 0.04$).

This observation implies that market-based performance of firms deteriorates as the diversification level increases for firms affiliated to large business groups. In other words, the higher the diversification level of firms affiliated to large business groups, the more they will see their value being marked down by the market. The market does not buy the idea of operating across various industries for a firm that is part of a much larger network of listed firms under the control of a single family. Again, the finding does not support Khanna and Palepu's (2000a) observation in India that large business groups have more advantages that enhance the performance outcome of firm diversification compared to small and medium size business groups.

6.8.4.3 The Presence of Trend Across the Moderating Influence of Various Group Sizes

The overall finding suggests the presence of an overall trend in the moderating effects of group sizes on the firm diversification-performance link. Specifically, the moderating influence tends to be positive in small business groups, neutral in intermediate business groups and, negative in large business groups. Possible reasons for this trend could be proposed as follows; first, when the business group is small (for instance with only two listed affiliates), firm diversification is able to complement and contribute to the task of creating internal markets in the group and the affiliates enjoy the benefits brought about by those internal markets. This infers that without firm-level diversification, there could be a capacity limit for a small business group to create a sufficiently large internal market to benefit the group and the firms therein. In addition, small business groups as defined in this study have up to only two listed firms in the group. The group structure is therefore straightforward and uncomplicated and without a complex pyramidal or cross-holdings structure, reduces the groups' exposure to expropriation through diversification compared to larger business groups. For instance, the move to diversify or to further increase the diversification level of a member firm in a small business group cannot be as easily concealed and remain

¹⁰⁸ Increases in Herfindahl equals decreases in the diversification level.

undiscovered as in large, complicated groups. Thus, 'ill-intended' diversification could be reduced.

However, as business groups grow from small to intermediate (groups with three to four listed affiliates), the 'complementary' role of firm-level diversification on the formation of the internal market of the group begins to decrease. At the same time, group structure becomes more complicated and divergence of cash flow-to-control rights can now be found in some group affiliates. Thus the benefits and costs of firm diversification for such business groups may well cancel each other out and result in neutral influence on the diversification-performance link.

Finally, as business groups progress from intermediate to large (with five or more listed affiliates), the motive of controlling families to diversify or increase the diversification level of member firms becomes questionable. Thus, as opposed to small business groups, agency-led diversification in firms affiliated to large groups will be more pervasive as the large, more complicated group structure network provides a suitable condition for controlling families to expropriate through diversification. The low transparency that is often associated with large business groups helps to conceal the groups' activities (Khanna and Palepu, 2000b). Moreover, large and agglomerate business groups often have more complicated pyramidal or cross-holding structures and thus agency costs through diversification are greater, as the costs that controlling families incur will be less than any personal gain or utility from expropriation (Claessens *et al.*, 2006).

6.8.4.4 Corporate Environment in Malaysia

The corporate environment in Malaysia may exacerbate the situation as many large business groups are closely linked, either formally or informally, to the ruling party or senior government officials (Gomez and Jomo, 1997). The negative outcome of diversification associated with firms belonging to large business groups may suggest that they are not taking advantage of the political connections they have in order to improve the outcome of that diversification. One possible reason could be that close political connection is used by controlling families to advance diversification activities for personal or family interests rather

than the interests of other shareholders. Personal interest, wealth, or utility gained by controlling families from diversification activities in this case outweighs the wealth that controlling families need to forgo due to poor diversification results (i.e. reduced firm performance) (Lins and Servaes, 2002).

For instance, a firm affiliated to a large business group may choose to enter into a diversification deal involving a director or his crony (for instance the firm may decide to acquire a director-owned private company operating in a different business sector¹⁰⁹) who has close political contacts, rather than an arm's length diversification deal even though the deal with the director or his crony is not the best deal.¹¹⁰ This is because the close relationship with the director may facilitate more rent-seeking activities¹¹¹ for the controlling family and provide opportunities to secure future contracts, credit or other benefits from the ruling political party.

It is reported by Claessens *et al.* (2000) that, in Malaysia, the top 15 families control corporate assets worth 76.2% of the country's GDP compared to only 2.1% in Japan and 2.9% in the US.¹¹² This percentage is one of the highest in Asia and suggests that families with large business groups could be highly influential and 'lobby' the government into implementing policies that are in their favour and 'interfere' in policies that are 'unfriendly' to them, such as a stricter takeover policy that may hinder their self-interested takeover-and-diversify activities. In addition, Johnson and Mitton (2003) state that there is a greater chance for the owner-managers of politically-connected firms, particularly in large business groups, to misappropriate the firm's resources. A diversified structure undeniably facilitates such misappropriation. All the above reasons may thus contribute to the poor results of diversification in firms affiliated to the large business groups in this study.

6.9 Summary on Theme IV.I

The main findings from Theme IV.I of the study can be summarized as follows:

¹⁰⁹ The firm diversification level increases after acquiring the private company from the director.

¹¹⁰ A deal with someone who is politically well-connected, in exchange for 'rents', is a rent-seeking behaviour.

¹¹¹ Corruption is conduct that is sometimes associated with rent-seeking is corruption.

¹¹² Appendix 3 provides a list of the 40 richest Malaysians and their main sources of wealth.

- In general, the level of firm diversification is found to have a significant negative relationship with firm performance. This finding may imply that firm diversification is more of an act of owner-manager entrenchment and an extraction of private benefits. It may also imply diminished benefits of diversification as the institutions and external markets in Malaysia improve.
- The extent of firm diversification is significantly negatively related to the efficiency of asset utilization. Thus the declining efficiency in asset utilization as firm diversification increases may offer an explanation to the negative diversification-performance relationship.
- Further analysis reveals that inefficient asset utilization related to firm diversification is more prevalent in group-affiliated firms than in non-group firms. This finding subsequently explains the more significant negative relationship between diversification and firm performance in group-affiliated firms as opposed to non-group firms.
- Compared to non-group firms, the more significant finding on the negative relationship between firm diversification and efficiency and performance in group-affiliated firms implies that agency-driven diversification is more prevalent in group-affiliated firms.
- Further examination of group-affiliated firms suggests the existence of an overall trend in the influence of various group sizes on the performance outcome of firm diversification. Specifically, the weak positive moderating influence found in firms affiliated to small business groups develops into a neutral moderating influence in firms affiliated to intermediate business groups and eventually into a negative moderating influence in firms affiliated to large business groups.
- The above trend may imply that the benefits (agency costs) of firm diversification are greater (smaller) in small business groups than in intermediate and large business

groups. However the benefits diminish while agency costs rise and the trend continues as business groups expand and become larger.

- Agency costs are greater and more prevalent in the firm diversification of large business groups than in small and intermediate business groups due to the various governance problems that are more profound in large business groups. These include lower transparency, a larger and more complex network of affiliates and closer political ties that facilitate and provide more opportunities to the controlling families to practice diversification-related expropriation.

The next section discusses the findings on the moderating influence of various governance-related mechanisms and practices on the firm diversification-performance link.

6.10 Theme IV.II: Moderating Influence on the Firm Diversification-Performance Link

6.10.1 Moderating Influence of Ownership Structure on the Firm Diversification-Performance Link

Results for the moderating influence of ownership structure on the performance outcome of firm diversification for the full sample and the sub-sample of group-affiliated firms are shown in Tables 6.9a and 6.9b.

The key interest lies in the interaction term in each model. The findings show that although all interaction terms involving controlling family ownership (FAMOWN) are negative (indicating the negative moderating influence of family ownership on the diversification outcome); they are insignificant and the magnitudes of the coefficients are small in relation to the coefficients of the diversification measures [see Model (1) and Model (3) in both tables].¹¹³ Thus both *Hypotheses (4f) and (4h)* are not supported.

¹¹³ The regression is also run using Herfindahl and diversification Dummy (DVSF_D) and the results are qualitatively similar (and thus not reported).

Table 6.9a: Firm Diversification and Tobin's Q – Influence of Ownership Structure

| | Group | | Full Sample | |
|-----------------------------|----------|----------|-------------|----------|
| | (1) | (2) | (3) | (4) |
| Panel A: Entropy | | | | |
| ENTROPY | -0.066 | -0.049 | -0.089** | -0.072* |
| ENTROPY* FAMOWN' | -0.001 | | -0.001 | |
| ENTROPY*DOMPUBII | | -0.006 | | -0.006 |
| FAMOWN' | -0.001 | -0.001 | 0.001 | 0.000 |
| DOMPUBII | 0.000 | 0.002 | 0.000 | 0.004 |
| Adjusted R ² | 0.167 | 0.168 | 0.176 | 0.177 |
| F-statistic | 2.777*** | 2.795*** | 4.943*** | 4.973*** |
| Observations | 152 | 152 | 314 | 314 |
| Panel B: Number of Segments | | | | |
| NUM_SEG | -0.024* | -0.027* | -0.028** | -0.026** |
| NUM_SEG* FAMOWN' | -0.001 | | -0.001 | |
| NUM_SEG*DOMPUBII | | 0.001 | | 0.000 |
| FAMOWN' | 0.001 | -0.001 | 0.002 | 0.000 |
| DOMPUBII | -0.001 | -0.005 | 0.002 | 0.002 |
| Adjusted R ² | 0.173 | 0.172 | 0.182 | 0.179 |
| F-statistic | 2.857*** | 2.847*** | 5.105*** | 5.019*** |
| Observations | 152 | 152 | 314 | 314 |

Table 6.9b: Firm Diversification and ROA – Influence of Ownership Structure

| | Group | | Full Sample | |
|-----------------------------|----------|----------|-------------|----------|
| | (1) | (2) | (3) | (4) |
| Panel A: Entropy | | | | |
| ENTROPY | -1.719 | -1.595 | -1.330 | -1.369 |
| ENTROPY* FAMOWN' | -0.031 | | -0.015 | |
| ENTROPY*DOMPUBII | | -0.032 | | 0.007 |
| FAMOWN' | 0.062 | 0.046 | 0.062* | 0.056** |
| DOMPUBII | -0.032 | -0.021 | 0.019 | 0.016 |
| Adjusted R ² | 0.310 | 0.309 | 0.262 | 0.262 |
| F-statistic | 4.998*** | 4.979*** | 7.550*** | 7.544*** |
| Observations | 152 | 152 | 314 | 314 |
| Panel B: Number of Segments | | | | |
| NUM_SEG | -0.477 | -0.319 | -0.401* | -0.300 |
| NUM_SEG* FAMOWN' | -0.004 | | -0.004 | |
| NUM_SEG*DOMPUBII | | -0.037 | | -0.027 |
| FAMOWN' | 0.053 | 0.043 | 0.063 | 0.054** |
| DOMPUBII | -0.044 | 0.050 | 0.014 | 0.076 |
| Adjusted R ² | 0.309 | 0.311 | 0.263 | 0.264 |
| F-statistic | 4.981*** | 5.018*** | 7.581*** | 7.607*** |
| Observations | 152 | 152 | 314 | 314 |

Notes to Table 6.9a and Table 6.9b:

1. * significant at 10%; ** significant at 5%; ***significant at 1%.
2. The values in the table show the coefficients of the variables.
3. All other block-holders ownership variables, control variables and sector effects are included in the regression (not shown above).

The findings also show that all the interaction terms involving the ownership of public institutional investors (DOMPUBII) are insignificant [see Model (2) and Model (4) in both

tables]. Thus there is no evidence to suggest that the so-called ‘pressure-resistant’ institutional investors (such as the EPF and PNB) are able to exert effective monitoring over controlling families to curb performance-reducing diversification as found in Theme IV.I. The creation by the five prominent public institutional investors in Malaysia of the Minority Shareholder Watchdog Group (MSWG) as a non-profitable organisation demonstrates that they are willing to engage in shareholder activism. However, it is possible that these investors lack the ability (even if they have the will) to effectively influence owner-managers to be prudent in their diversification activities. In confronting more dominant controlling families, the institutional investors have, in fact, limited power to interfere in their pursuit of their diversification plan. Overall, *Hypothesis (4g)* is not supported.

Overall, this study does not find any evidence of ownership structure moderating the diversification outcome in family-controlled firms in Malaysia. This finding is inconsistent with George (2007) who finds that corporate and director ownerships interact with firm diversification to positively affect firm performance. It is also contradictory with Fauver *et al.* (2003) who find that a lower (higher) firm value is recorded for a diversified firm compared to a focused firm at the lower (higher) level of individual and institution ownership. The finding in this study is however consistent with Lane *et al.* (1998) who find little relationship between ownership concentration and firm diversification, and Anderson *et al.* (2000) who do not find any association between ownership structure and diversification discount.

6.10.2 Moderating Influence of Board Independence on the Firm Diversification-Performance Link

The examination of the moderating role of board independence on the diversification outcome shows that of the four different attributes of board independence, only ‘All Audit Committee Members are Independent Directors’ (INDP_ADT) proves to be statistically significant in positively moderating the influence of diversification on firms’ ROA [see the interaction terms in Model (3) in Table 6.10a]. The other two attributes of board independence; Proportion of Independent Directors (PrINED) and Independent Chairman (INDP_CHR) are found to be insignificant in moderating the diversification-performance link [Models (1) and (2) in Tables 6.10a and 6.10b]. Finally, Highly Independent Board

Table 6.10a: Firm Diversification and ROA – Influence of Board Independence

| | (1) | (2) | (3) | (4) |
|------------------------------------|----------|----------|----------|----------|
| Panel A: Entropy | | | | |
| Entropy | -1.109 | -2.075** | -2.397** | -1.603* |
| Entropy*Pr_INED' | -2.462 | | | |
| Entropy*INDP_CHR | | 2.287 | | |
| Entropy* INDP_ADT | | | 3.904** | |
| Entropy* H_INDP_B | | | | 3.644 |
| Pr_INED' | -3.915 | | | |
| INDP_CHR | | -0.931 | | |
| INDP_ADT | | | -2.218* | |
| H_INDP_B | | | | -2.298 |
| Adjusted R ² | 0.266 | 0.264 | 0.271 | 0.263 |
| F-statistic | 7.291*** | 7.233*** | 7.476*** | 7.211*** |
| Observations | 314 | 314 | 314 | 314 |
| Panel B: Number of Segments | | | | |
| NUM_SEG | -0.323 | -0.459* | -0.697** | -0.473* |
| NUM_SEG *Pr_INED' | 0.899 | | | |
| NUM_SEG*INDP_CHR | | 0.249 | | |
| NUM_SEG*INDP_ADT | | | 1.274*** | |
| NUM_SEG* H_INDP_B | | | | 1.679* |
| Pr_INED' | -7.480 | | | |
| INDP_CHR | | -0.706 | | |
| INDP_ADT | | | -3.957** | |
| H_INDP_B | | | | -5.234* |
| Adjusted R ² | 0.267 | 0.262 | 0.277 | 0.268 |
| F-statistic | 7.324*** | 7.162*** | 7.669*** | 7.358*** |
| Observations | 314 | 314 | 314 | 314 |

Table 6.10b: Firm Diversification and Tobin's Q – Influence of Board Independence

| | (1) | (2) | (3) | (4) |
|------------------------------------|----------|----------|-----------|-----------|
| Panel A: Entropy | | | | |
| Entropy | -0.083** | -0.080* | -0.102** | -0.097** |
| Entropy*Pr_INED' | -0.147 | | | |
| Entropy*INDP_CHR | | -0.032 | | |
| Entropy* INDP_ADT | | | 0.049 | |
| Entropy* H_INDP_B | | | | 0.143 |
| Pr_INED' | -0.062 | | | |
| INDP_CHR | | 0.013 | | |
| INDP_ADT | | | -0.073 | |
| H_INDP_B | | | | -0.171* |
| Adjusted R ² | 0.177 | 0.175 | 0.181 | 0.183 |
| F-statistic | 4.789*** | 4.689*** | 4.847*** | 4.900*** |
| Observations | 314 | 314 | 314 | 314 |
| Panel B: Number of Segments | | | | |
| NUM_SEG | -0.026** | -0.020* | -0.034*** | -0.030*** |
| NUM_SEG *Pr_INED' | -0.015 | | | |
| NUM_SEG*INDP_CHR | | -0.028 | | |
| NUM_SEG*INDP_ADT | | | 0.027 | |
| NUM_SEG* H_INDP_B | | | | 0.071* |
| Pr_INED' | -0.085 | | | |
| INDP_CHR | | 0.064 | | |
| INDP_ADT | | | -0.126* | |
| H_INDP_B | | | | -0.302** |
| Adjusted R ² | 0.179 | 0.181 | 0.187 | 0.190 |
| F-statistic | 4.797*** | 4.848*** | 4.998*** | 5.085*** |
| Observations | 314 | 314 | 314 | 314 |

Notes to Table 6.10a and Table 6.10b:

1. * significant at 10%; ** significant at 5%; ***significant at 1%.

2. The values in the table show the coefficients of the variables.

3. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above).

(H_INDP_B)¹¹⁴, an overall attribute of independence that combines all the other three attributes, is found to have an overall insignificant to weak positive moderating influence on the diversification-performance link [see Model (4) in Tables 6.10a and 6.10b].

6.10.2.1 All Audit Committee Members are Independent Directors (INDP_ADT)

The significant positive moderating influence of INDP_ADT as mentioned above is found to be capable of reversing the apparently negative relationship between diversification and performance. For instance, the Entropy coefficient of -2.397 [see Model (3) in Panel A of Table 6.10a] indicates that firm performance is negatively related to diversification. However, with the interaction term coefficient of 3.904, which is greater than 2.397, it suggests that when a firm's audit committee members are all independent directors, it is possible to reverse the negative relationship between firm diversification and performance to a positive one. The net effect is computed as $3.904 + (-2.397) = 1.507$ which can be interpreted as follows: for every 0.1 increase in the Entropy value, the ROA will improve by 0.15% in firms with INDP_ADT. Similarly, with 'Number of Business Segments' (NUM_SEG) as the diversification measure [see Model (3) of Panel B in Table 6.10a], the net effect of diversification (with INDP_ADT as the moderator) on firm performance is computed as $1.274 + (-0.697) = 0.577$ which can be interpreted as follows: an increase in every business segment is associated with an improved ROA of 0.58% in firms with INDP_ADT. The positive moderating influence of INDP_ADT is also found when Tobin's Q is used as the performance measure, but the influence is statistically insignificant [see Model (3) in Table 6.10b].

The findings suggest that a board's audit committee, composed entirely of independent directors, may be the solution to improve the diversification-ROA relationship. The finding is in parallel with Chen and Chen (2012) who find a significant positive relationship between audit committee quality and investment efficiency of diversified firms. Their study shows a reduced diversification discount in firms associated with high quality audit committees which

¹¹⁴ See Table 5.1 for the definition of H_INDP_B.

is proxied by two distinct measures, one of which is ‘audit committee composed entirely of independent directors’.

However, it is important to highlight that 99 firms in this study achieve the status of ‘audit committee consists of all independent directors’ on a voluntary basis. This indicates that these firms may be more genuinely committed to maintaining independence, at least in their audit committees. The outcome might be different if authorities were to force the rules that firms must have fully independent audit committees, as without firstly addressing the issue of objectivity in the nomination, appointment and removal process of independent directors, enforcing rules will only result in compliance with the form but not the substance of independence. This is consistent with the view of the CFA Institute (2010) that one of the major obstacles to finding truly independent directors in Asia is related to the current process of nominating and appointing independent directors which does not preclude controlling shareholders from interfering in the process.¹¹⁵

6.10.2.2 Issue of Board Independence Revisited

Various explanations or interpretations could possibly be arrived at from the several insignificant results shown in Tables 6.10a and 6.10b with regards to the moderating influence of board independence. Nonetheless, one particular reason that needs to be examined is the independent status of the directors appointed (whether an independent director or chairman is truly independent). Perhaps the independent status of the ‘independent chairman’ and thus his effectiveness to monitor management, is most questionable in Malaysia. A chairman that is ‘independent on paper’ may essentially be a figurehead for the board. It is not uncommon for controlling families to invite former ministers, ex-politicians, former government senior officials, ex-police chiefs, ex-army chiefs and the like to take on the role. As these chairmen are usually offered the post by controlling families, it will be an unpublicised appointment to protect the interests of the controlling families and as Monks (2006) [as cited in the CFA Institute (2010, p.32)] states: “*there is*

¹¹⁵ See CFA Institute (2010) for some proposals to increase the probability of appointing a truly independent director.

always reluctance to confront, embarrass and combat someone who has conferred a favour, there is always reluctance to join a club just to attack it, irrespective of the issues involved”.

In short, the above findings indicate that there is an overall lack of meaningful evidence to support the hypothesis that ‘board independence’ positively moderates the influence of firm diversification on performance. Thus, *Hypothesis (4j)* cannot be convincingly supported.

6.10.3 Moderating Influence of Control-enhancing Means on the Firm Diversification-Performance Link

The results on the moderating influence of the control-enhancing means available to controlling families show that they are mostly insignificant in moderating the performance outcome of firm diversification, except for the control-enhancing means pertaining to the complexity of business group structure (see the interaction terms in Model (1) to Model (4) in Tables 6.11a and 6.11b).

Thus as far as control-enhancing means are concerned (except for the complexity of business group structure), there is no evidence found in this study to suggest that they significantly moderate the influence of diversification on firm performance. Though the finding is unable to support the assertion in the literature, such as by Anderson and Reeb (2003) and Claessens *et al.* (2002), that firm performance may be affected by the higher tendency towards expropriation following the enhanced control of controlling families, it neither refutes it, as the occurrence of expropriation is not necessarily related to firm diversification.

Moreover, since activities of expropriation such as tunnelling of resources are deemed as unethical and are sometimes illicit, they normally occur in a subtle manner. As a result, attempting to find any empirical evidence of a relationship suggestive of expropriation is not easy. Alternatively, the benefits and costs of control-enhancing means may cancel each other out and firm performance is left unaffected. It should also be highlighted that not all control-enhancing means are ‘bad’. Some will still contribute in a positive way to firm performance despite the ‘costs’ that are often associated with them. For instance, as reasoned earlier, a

Table 6.11a: Firm Diversification and ROA – Influence of Control-enhancing Means

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|-----------------------------|----------|----------|----------|----------|----------|----------|----------|
| Panel A: Entropy | | | | | | | |
| Entropy | -0.622 | -0.394 | -0.615 | -0.288 | -1.289* | -1.734* | -0.874 |
| Entropy* CF/CONT' | -5.351 | | | | | | |
| Entropy* FAMDIR | | -2.380 | | | | | |
| Entropy* CHR_CEO | | | -1.758 | | | | |
| Entropy* FAMONLY | | | | -1.651 | | | |
| Entropy* BG_S | | | | | 0.494 | | |
| Entropy* BG_PS | | | | | | 1.375 | |
| Entropy* BG_CS | | | | | | | -4.906* |
| CF/CONT' | 3.577 | | | | | | |
| FAMDIR | | 7.046** | | | | | |
| CHR_CEO | | | 1.659* | | | | |
| FAMONLY | | | | -1.462 | | | |
| BG_S | | | | | -1.625 | -1.411 | -1.425 |
| BG_PS | | | | | -2.143** | -2.761** | -2.146** |
| BG_CS | | | | | -1.878 | -1.768 | 0.996 |
| Adjusted R ² | 0.252 | 0.282 | 0.266 | 0.272 | 0.269 | 0.271 | 0.274 |
| F-statistic | 6.655*** | 7.818*** | 7.314*** | 7.486*** | 6.767*** | 6.806*** | 6.900*** |
| Observations | 303 | 314 | 314 | 314 | 314 | 314 | 314 |
| Panel B: Number of Segments | | | | | | | |
| NUM_SEG | -0.290 | -0.192 | -0.315 | -0.313 | -0.438* | -0.488* | -0.306 |
| NUM_SEG * CF/CONT' | -0.720 | | | | | | |
| NUM_SEG * FAMDIR | | -0.467 | | | | | |
| NUM_SEG * CHR_CEO | | | -0.230 | | | | |
| NUM_SEG * FAMONLY | | | | -0.161 | | | |
| NUM_SEG * BG_S | | | | | 0.585 | | |
| NUM_SEG * BG_PS | | | | | | 0.280 | |
| NUM_SEG * BG_CS | | | | | | | -0.934 |
| CF/CONT' | 4.034 | | | | | | |
| FAMDIR | | 7.202** | | | | | |
| CHR_CEO | | | 1.663 | | | | |
| FAMONLY | | | | -1.772 | | | |
| BG_S | | | | | -2.959 | -1.271 | -1.342 |
| BG_PS | | | | | -2.165** | -2.970** | -2.240** |
| BG_CS | | | | | -1.756 | -1.723 | 1.362 |
| Adjusted R ² | 0.252 | 0.282 | 0.266 | 0.271 | 0.272 | 0.271 | 0.273 |
| F-statistic | 6.657*** | 7.834*** | 7.315*** | 7.466*** | 6.845*** | 6.824*** | 6.868*** |
| Observations | 303 | 314 | 314 | 314 | 314 | 314 | 314 |

Note: * significant at 10%; ** significant at 5%; ***significant at 1%. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above)

Table 6.11b: Firm Diversification and Tobin's Q –Influence of Control-Enhancing Means

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) |
|-----------------------------|----------|----------|----------|----------|-----------|----------|----------|
| Panel A: Entropy | | | | | | | |
| Entropy | 0.015 | -0.077 | -0.085* | -0.090 | -0.119*** | -0.096** | -0.068* |
| Entropy* CF/CONT' | -0.755 | | | | | | |
| Entropy* FAMDIR | | -0.014 | | | | | |
| Entropy* CHR_CEO | | | -0.012 | | | | |
| Entropy* FAMONLY | | | | -0.001 | | | |
| Entropy* BG_S | | | | | 0.214** | | |
| Entropy* BG_PS | | | | | | 0.025 | |
| Entropy* BG_CS | | | | | | | -0.276** |
| CF/CONT' | -0.038 | | | | | | |
| FAMDIR | | 0.169 | | | | | |
| CHR_CEO | | | 0.012 | | | | |
| FAMONLY | | | | -0.041 | | | |
| BG_S | | | | | -0.119* | -0.033 | -0.033 |
| BG_PS | | | | | -0.048 | -0.063 | -0.052 |
| BG_CS | | | | | -0.010 | -0.019 | 0.142 |
| Adjusted R ² | 0.177 | 0.183 | 0.175 | 0.176 | 0.183 | 0.173 | 0.180 |
| F-statistic | 4.599*** | 4.883*** | 4.684*** | 4.723*** | 4.504*** | 4.281*** | 4.445*** |
| Observations | 303 | 314 | 314 | 314 | 314 | 314 | 314 |
| Panel B: Number of Segments | | | | | | | |
| NUM_SEG | -0.006 | -0.018 | -0.029** | -0.032* | -0.032*** | -0.036** | -0.023** |
| NUM_SEG * CF/CONT' | -0.170 | | | | | | |
| NUM_SEG * FAMDIR | | -0.026 | | | | | |
| NUM_SEG * CHR_CEO | | | 0.003 | | | | |
| NUM_SEG * FAMONLY | | | | 0.007 | | | |
| NUM_SEG * BG_S | | | | | 0.045 | | |
| NUM_SEG * BG_PS | | | | | | 0.023 | |
| NUM_SEG * BG_CS | | | | | | | -0.062 |
| CF/CONT' | 0.269 | | | | | | |
| FAMDIR | | 0.235 | | | | | |
| CHR_CEO | | | 0.007 | | | | |
| FAMONLY | | | | -0.061 | | | |
| BG_S | | | | | -0.152 | -0.021 | -0.027 |
| BG_PS | | | | | -0.053 | -0.118** | -0.058 |
| BG_CS | | | | | -0.010 | -0.007 | 0.196 |
| Adjusted R ² | 0.180 | 0.186 | 0.178 | 0.180 | 0.181 | 0.179 | 0.182 |
| F-statistic | 4.676*** | 4.973*** | 4.767*** | 4.806*** | 4.464*** | 4.420*** | 4.475*** |
| Observations | 303 | 314 | 314 | 314 | 314 | 314 | 314 |

Note: * significant at 10%; ** significant at 5%; ***significant at 1%. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above)

higher proportion of family directors on the board (FAMDIR) might be better than a higher proportion of independent directors as far as Malaysia's current scenario is concerned.

6.10.3.1 Complexity of Business Group Structure

Having business groups particularly those with a pyramidal structure is one way to enhance control for controlling families. Moreover, as explained in Section 3.4 in Chapter 3, the controlling families of business groups may create complicated ownership structures to reduce the threat to their control and consequently their tendency to expropriate may increase as the group structure becomes more complex and as such less transparent. The moderating influence of the three different levels of group complexity (BG_S, BG_PS, and BG_CS) on the diversification outcome is shown in the interaction terms from Model (5) to Model (7) in Tables 6.11a and 6.11b.

An overall weak evidence of positive moderating influence of 'business groups with simple structure' (BG_S) is found in the study as all the interaction terms involving BG_S [see Model (5)] are positive with one of them statistically significant at 5%-level. Thus the findings, albeit weak, might suggest that not only small business groups (GR_A) have the potential positive moderating effect on the diversification outcome (as found in sub-section 6.8.4), business group with simple structure (BG_S) may also contribute towards better diversification-performance relationship. The absence of pyramidal and cross-holding structures in BG_S may imply a lower tendency towards expropriation and subsequently less value-destroying diversification. In comparison, no significant influence of 'business group with pyramidal structure' (BG_PS) is found in the study as all the interaction terms involving BG_PS [see Model (6)] are statistically insignificant.

On the contrary, the findings indicate that, overall, 'business groups with complicated structure' (BG_CS) negatively moderates the diversification outcome. All the interaction terms involving BG_CS [see Model (7)] in Table 6.11a and Table 6.11b are negative with two statistically significant at the 5% and 10% levels respectively. These findings are further supported by the significant results from the additional test as shown in Table 6.11c [see

Models (3) and (6) in the table] where the interaction terms are negatively statistically significant at the 5% level.

The descriptive statistics from Section 5.7 in Chapter 5 have shown that firms affiliated to BG_CS have the highest level of diversification among all the firms in the sample. The finding here therefore suggests that the high diversification observed in these firms is more value-destroying than value-adding and may thus be a reflection and manifestation of substantial occurrence of principal-principal problems in firms affiliated to BG_CS.

Another observation to be highlighted is that BG_CS, as defined in this study, is actually the smaller subset of GR_C which is defined as large business groups with at least five listed affiliates. Thus BG_CS can be considered as not only business groups with complicated structures and complex networks that link the affiliates but also business groups with a large number of listed affiliates. This is particularly the type of business group that, according to Lins and Servaes (2002), should not have a high level of *firm-level* diversification because the diversification needed to create the benefits of internal markets has already been provided at the *group-level* by the large number of listed member firms operating across various industries. Thus the poor diversification outcome of firms affiliated to BG_CS in this study is in parallel with the author's observations that high diversification at the firm level in business groups is more likely to be agency-driven.

Table 6.11c: Effect of Group Structure Complexity on the Diversification-Performance Link - Supplementary Test

| | ROA | | | Tobin's Q | | |
|-------------------------|----------|----------|----------|-----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| DVSF_D | -0.248 | -0.376 | 0.107 | -0.039 | -0.015 | 0.001 |
| DVSF_D * BG_S | 0.638 | | | 0.155 | | |
| DVSF_D * BG_PS | | 0.882 | | | 0.001 | |
| DVSF_D * BG_CS | | | -6.657** | | | -0.420** |
| BG_S | -1.774 | -1.491 | -1.472 | -0.107 | -0.037 | -0.036 |
| BG_PS | -2.226** | -2.651** | -2.213** | -0.058 | -0.058 | -0.057 |
| BG_CS | -1.908 | -1.853 | 2.326 | -0.017 | -0.023 | 0.245 |
| Adjusted R ² | 0.265 | 0.266 | 0.272 | 0.171 | 0.163 | 0.177 |
| F-statistic | 6.654*** | 6.667*** | 6.850*** | 4.222*** | 4.044*** | 4.361*** |
| Observations | 314 | 314 | 314 | 314 | 314 | 314 |

Note: 1.* significant at 10%; ** significant at 5%; ***significant at 1%.

2. The values in the table show the coefficients of the variables.

3. All other block-holder ownership variables, control variables and sector effects are included in the regression (not shown above).

The lack of transparency in firm activities including diversification-related activities due to complex group structures reinforces observations concerning the agency-driven nature of diversification. Moreover, the finding in this section provides further support to earlier findings and explanations that the close political connection of large family-controlled business groups does not help to improve the diversification outcome of their affiliates.

Finally the finding in this section also has an interesting link with the findings by Claessens *et al.* (1999c). According to these authors, not only is firm diversification found to be positively related to diversification discount but also firms with higher divergence of cash flow-to-control rights have higher diversification. The findings in this study are comparable to Claessens *et al.* (1999c) in that firms affiliated to BG_CS are firms whose cash flow-to-control rights are indeterminate in this study due to their highly complicated and complex group ownership structure. Though the firms in BG_CS may not be equivalent to the firms with high divergence of cash flow-to-control rights as in Claessens's *et al.* (1999c) study, the two control-enhancing means should be comparable as far as the inclination of the controlling families to use them to expropriate the firms' resources is concerned.

6.11 Summary on Theme IV.II

The main findings from Theme IV.II can be summarized as follows:

- The study does not find any significant moderating influence of family ownership and domestic public institutional investors' ownership on the performance outcome of firm diversification. The insignificant moderating influence of domestic institutional investors' ownership may again imply limited ability and effort on the part of public institutional investors in Malaysia and constraints faced by them to exert effective monitoring to curb agency-driven diversification.
- In general, of the four various attributes of board independence, only the 'All Audit Committee Members are Independent Directors' attribute is found to be significant in

positively moderating the firm diversification-performance link. This finding has two important implications:

- (i) An audit committee's fully independent status achieved on a voluntary basis implies a firm's commitment to a higher governance standard in not only form but substance also. The monitoring effort of such an audit committee is thus more effective in reducing agency-driven diversification and promoting prudent diversification decisions.
- (ii) The lack of significant findings from other board independence attributes may again have an implication on the issue of truly independent directors in Malaysia, including the interference of controlling families in the process of nomination, appointment and removal of independent directors.
- Except for 'complexity of business group structure', the study fails to find any significant moderating influence of the various control-enhancing means on the performance outcome of firm diversification.
- The complexity of business group structure shows that 'business groups with complicated structure' negatively moderates the performance outcome of firm diversification. Since firms affiliated to such business groups have the most extensive diversification, the finding implies that the extensive diversification is most likely to be agency-driven and thus performance-reducing.

6.12 Chapter Summary

The analysis and discussions from the entire chapter can be summarized into nine main findings and implications as follows:

1. The ownership level of controlling families by itself is not detrimental to firm performance. The finding shows that ownership level is positively significantly related to the ROA performance measure¹¹⁶ – indicating the beneficial effects of family ownership. Increasing ownership by controlling families not only helps to curb the traditional agency problem of dispersed ownership structure, but the ‘incentive or alignment of interest effects’ from concentrated ownership are more than offsetting the effects of owner-managers’ entrenchment and expropriation. In principle, higher family ownership indicates a higher commitment of controlling families to improve firm performance as their wealth increases in tandem with improved performance.

However, there is weak statistical evidence that the ROA performance measure is inversely related to the level of family ownership when controlling families have gained control of more than half of a firm’s ownership. In this case, controlling families are more likely to expropriate or intensify their expropriation activities at the expense of overall firm efficiency and performance. This finding is in line with Shleifer and Vishny’s (1997) observations that controlling shareholders that have ‘near full control’ of firms may be wealthy enough to prefer to make use of the firms to maximize the private benefits of control rather than their wealth.

2. In general, the identity of block-holders is somewhat important in influencing the performance of family-controlled firms. Specifically, two distinguished types of block-holders are found to be associated with greater performance of family-controlled firms: foreign institutional investors and state/government block-holders. The study however does not find any significant influence of other types of block-holders, namely domestic institutional investors, foreign corporations and

¹¹⁶ The finding though is insignificant according to Tobin’s Q performance measure.

auxiliary/unrelated family ownership, on firm performance. Meanwhile, this study lacks the evidence to suggest that ownership structure moderates the effects of firm diversification on performance.

3. The findings on the influence of control-enhancing means employed by or associated with controlling families are overall mixed. In other words, the findings show that control-enhancing means can be ‘bad’, ‘irrelevant’ or even (surprisingly) ‘good’ in influencing firm performance. Since the influence of each control-enhancing means on firm performance can be different, care should be taken not to categorize all as bad. The findings show that one of the family control-enhancing means, the proportion of family directors on the board is positively associated with firm performance.

In contrast, ‘controlling family as the sole block-holder’ as a control-enhancing means is negatively associated with the ROA performance measure. This suggests that unchecked family control (without the presence of a second block-holder) is bad for firm performance; this once again concurs with Shleifer and Vishny’s (1997) observations. The study however does not find any evidence that ‘family members occupying both the CEO and chairmanship positions’ is detrimental to firm performance.

4. Overall, ‘board independence’ does not interact with ownership structure to affect firm performance. In other words, there is no evidence to suggest that board independence influences the effects of ownership structure on firm performance. In the meantime, examination of the influence of board independence on the resource allocation (as measured by the capital expenditure ratio) of high-performing compared to low-performing firms in group-affiliated firms reveals that, among the three different attributes of board independence, only ‘proportion of independent directors’ is found to positively affect the relationship between firm performance and resource allocation. In other words, in firms with a high proportion of independent directors, good-performing (deserving) firms received a significantly greater capital expenditure ratio and conversely poor-performing firms are associated with a lower capital expenditure ratio. Such a relationship (of efficient allocation of resources)

does not exist in firms with a low proportion of independent directors. Thus, it is implied that a high proportion of independent directors is able to curb the generally inefficient allocation of resources associated with group-affiliated firms.

5. Among the three different attributes of board independence (proportion of independent directors, independent chairman and independent audit committee), only independent audit committee is found to positively moderate the effect of firm diversification on the ROA performance measure. In other words, the extent of diversification in firms associated with independent audit committees is positively related to ROA. Conversely, there is only weak evidence that a board with ‘an overall high degree of independence’ (from all three attributes combined) positively moderates the diversification-performance relationship.
6. Firms affiliated to family-controlled business groups are associated with poorer performance compared to firms without such affiliation (independent firms) particularly according to the ROA performance measure. Moreover, empirical evidence suggests that heterogeneity in family business groups, namely group size and group structure is important in explaining firm performance. Specifically, firms affiliated to large business groups and groups with pyramidal ownership structures perform worse than the remaining firms in the sample in terms of ROA. Moreover, allocation of resources as measured by the capital expenditure ratio is found to be inefficient in firms affiliated to business groups, whereas such inefficiency is not found in non-group firms. The inefficient allocation of resources may offer an explanation for the overall underperformance of group-affiliated firms compared to independent firms.
7. In terms of the profit/resource redistribution hypothesis, there are a few noteworthy findings. Firstly, inefficient profit redistribution is found to occur among group-affiliated firms whereby the divergence of cash flow-to-control rights positively moderates redistribution. This indicates that the higher the divergence of cash flow-to-control rights, the greater the enhanced family control over the affiliates to facilitate such redistribution within the business group. Inefficient profit/resource

redistribution occurs where profits/resources are redistributed or transferred from good-performing firms, as measured by high Tobin's Q, to poorer performing firms as measured by low Tobin's Q.

Secondly, the findings suggest that inefficient profit redistribution is concentrated mainly in large business groups rather than in small and intermediate size business groups, as far as Tobin's Q is concerned. The occurrence of profit redistribution within large business groups is 'facilitated' by the extent of family ownership as well as the divergence of cash flow-to-control rights. In other words, the greater the family ownership or the divergence of cash flow-to-control rights, the greater the strength of family control over the affiliates to facilitate the redistribution, and thus more such redistribution will occur. Finally, the finding shows that inefficient profit redistribution is most severe in large business groups in which the controlling families have outright (majority) control ownership of the affiliates.

In short, the finding implies that controlling families with excessive or enhanced control exploit their power to facilitate profit redistribution with the likely intention of stabilizing overall group profitability and thus the survivor of the group¹¹⁷ at the expense of the profitability of good-performing affiliates. This entrenched behaviour of controlling families adversely affects the interests of minority shareholders of good-performing affiliates.

8. With regards to the examination of the firm diversification-related hypotheses, firstly, it is found that overall the extent of firm diversification is negatively associated with firm performance. Not only does diversification negatively affect accounting performance (ROA), the market (Tobin's Q) also does not respond well to the diversification and hence the more extensive the diversification is, the more the firm value will be marked down by the market. When the firms are separated into group-affiliated and non-group affiliated categories, it is revealed that the underperformance of diversification in terms of ROA is associated mainly with group-affiliated firms

¹¹⁷ The continuing survivor of the entire business group will ensure continuous private benefits for the controlling families of large business groups.

and not unaffiliated firms. It is also found that firm diversification is inversely related to the efficiency of asset utilization which is measured by the asset turnover ratio. This means that the greater the diversification, the less efficient the asset utilization and this relationship is particularly more noticeable in group-affiliated firms than in non-group firms. It suggests greater agency costs associated with diversified group-affiliated firms compared to diversified non-group firms. This observation offers an explanation for the poorer performance of firms with extensive diversification, particularly those that are group-affiliated.

9. The findings also reveal that the poor outcome of firm diversification, as measured by Tobin's Q in group-affiliated firms, is concentrated mainly in firms affiliated to large business groups as opposed to small and intermediate business groups. The evidence also shows that there is a negative relationship between diversification and performance in firms affiliated to business groups with complicated group structure compared to firms affiliated to business groups without complicated group structure. On the contrary, there is weak evidence to suggest that diversification in firms affiliated to small business groups and business groups without pyramidal structure is positively related to firm performance. Overall, the evidence (albeit weak) indicates that the size and the complexity of business groups negatively moderate the diversification-performance link. In other words, the larger the business group and the more complicated the group structure, the more detrimental the diversification to the performance of affiliated firms. This observation thus supports the expropriation hypothesis that the controlling families of large, complicated business groups are more inclined to expropriate the firms' resources in the name of diversification.

The overall conclusion of the study is presented in the next chapter.

Chapter 7 – Conclusion

7.1 Chapter Outline

This chapter consists of five sections. Armed with new findings, the first section discusses and revisits the literature review. It intends to draw the reader's attention to two fundamental points of the research: the reason why the research is undertaken and how the main findings are assessed and justified against related prior studies. This is followed by a section which discusses the policy implications of the study. The section emphasizes why Malaysia should have its own set of corporate governance problems and solutions which are different from those of the West but that nonetheless, this should not deter policy-makers learning from the western experience. Another important section included in this chapter is the contribution of the study to professional practice. This section begins with some discussion on the influence of the study on the professionalism of the researcher. It is followed by discussions on how the findings and knowledge obtained from the study can contribute to professional practice where corporate governance-related issues are emphasized and applied.

Since no study is perfect, the last section of the chapter is devoted to discussion of the limitations of the study. The limitations are divided into 'methodological limitations' and other 'general limitations'. Some limitations also illuminate opportunities for further study. Thus, embedded in this section are suggestions for future research. The chapter ends with a section of concluding remarks.

7.2 Discussions and Literature Review Revisited

The review paper by Young *et al.* (2008) and the survey paper by Claessens and Fan (2002) point out that principal-principal conflicts in emerging economies and East Asia (including Malaysia) are exacerbated, among other factors, by extensive family ownership and control, weak legal protection of minority shareholders, low corporate transparency associated with a relationship-based corporate environment, and the prevalence of business group structures and extensive firm diversification that underlie concentrated ownership structure. Thus,

based on the sample of 314 publicly-listed firms in Malaysia, this study is an attempt to explore the concerns as highlighted by Young *et al.* (2008) and Claessens and Fan (2002).

Specifically, the study examined the influence of concentrated ownership and the underlying firm activities or practices on the performance of family-controlled firms. Both direct and moderating influences were examined by employing a multiple-regression analysis combined with the moderated regression technique. A number of noteworthy findings can be drawn from the study. To facilitate the discussion, the findings are grouped into the following divisions: findings surrounding concentrated ownership and control-enhancing issues; findings surrounding business group affiliation; findings surrounding diversification-related issues; and findings on the moderating role of board independence.

Issues of Ownership Structure and Control-enhancing Means

Firstly, the finding surrounding ownership and control issues shows that in general family ownership *per se* is beneficial to firm performance (as measured in ROA). This finding is consistent with the incentive or alignment of interest effects from agency theory (e.g. Jensen and Meckling, 1976; Morck, 1988; Shleifer and Vishny, 1997) as well as the personalism and particularism effects of resource-based view (Carney, 2005; Poza, 2010). Empirically, it is consistent with other family ownership-related studies such as Anderson and Reeb (2003) in the US and Andres (2008) in Germany. The finding in this study implies that improved firm performance derived from the advantages associated with family ownership can occur in both developed economies as well as emerging economies, such as Malaysia.

The finding is however inconsistent with that of Filatotchev *et al.* (2005) who assert that the cancelling out of entrenchment and incentive effects results in the 'non-relationship' finding in their study on family ownership and firm performance in Taiwan. Finally, the finding is also in line with Haniffa and Hudaib (2006) who find a significant positive relationship between the combined ownership of the top five shareholders and accounting performance (ROA) but not the market-based performance (Tobin's Q) in Malaysian corporations. The following interpretation by the authors of their findings is also relevant to the findings in this

study¹¹⁸: the ability of concentrated ownership to improve firm performance is reflected in the enhanced accounting performance of firms but the market perceives that concentrated ownership may lead to ineffective monitoring and it is also not ideal for an emerging market which is attempting to attract more investors. Thus a higher valuation may be given by the market to firms with more diffused, and not concentrated, ownership.

There is also evidence (albeit weak) from the findings in this study that supports the original proposal of Morck *et al.* (1988) and Stulz (1988) that when controlling shareholders have achieved a high level of effective control in their ownership, they will become more entrenched and more engaged in self-benefit or expropriation activities at the expense of firm performance. Other previous findings by authors such as Anderson and Reeb (2003) and McConnell and Servaes (1990) also support such an observation. In other words, the positive relationship of family ownership and firm performance may not be entirely linear, but may instead exhibit a concave downward relation especially towards the high end of family holdings when the deterioration of firm performance sets in. Nonetheless, other researchers, such as Andres (2008) and Chen *et al.* (2004), do not find a non-linear relationship between family ownership and firm performance. Thus, overall, it can be concluded that the presence of non-linearity in the ownership and performance relationship is an empirical issue that depends on the context in which the relationship is examined.

The study also found that state ownership is positively significantly related to the performance of family-controlled firms. The finding is inconsistent with the typical view and previous studies that state ownership or state-owned organisations in competitive markets are inferior to those in private ownership and that state ownership is subject to ‘double agency problems’ (Dewenter and Malatesta, 2001; Ramaswamy, 2001; Boycko *et al.*, 1996). However, the main difference in this study compared to previous studies is that it does not involve state-dominated ownership but rather state ownership in family-controlled firms. Few studies of situations where ownership is mixed between family and state have been undertaken in the past. One such study is by Sun *et al.* (2002) in China who found a positive relationship between state ownership and performance of firms which had just experienced

¹¹⁸ Because this study also finds a significant relationship with ROA but not with Tobin’s Q.

an ownership change from being purely state-owned to partially state-owned and partially family-owned.

The positive relationship between foreign institutional investors' shareholding and the performance of family-controlled firms found in this study is consistent with the literature that foreign institutional investors are seen as capable of exerting effective monitoring of owner-managers due to their 'special' status and 'pressure-resistant' status as explained in Young *et al.* (2008). The finding is also consistent with the practitioner survey conducted by McKinsey & Company (2002) on the foreign institutional investors' views on the association between their willingness to invest and the governance and performance of firms.

However, this study does not find any relationship between the shareholdings of domestic public institutional investors (mainly the EPF and the PNB)¹¹⁹ in family-controlled firms and their performance. It implies that thus far public institutional investors in Malaysia have not been effective in monitoring and improving the performance of family-controlled firms in which they hold substantial shares. The finding is inconsistent with the literature in that the 'pressure-resistant' status of some institutional investors such as pension funds and mutual funds lends itself to a more active monitoring role and also the higher possibility of challenging questionable decisions made by management (Brickley *et al.*, 1988; Gomez-Mejia *et al.*, 2003; Kochar and David, 1996). Such an expected outcome from supposedly 'pressure-resistant' investors in Malaysia does not materialize, possibly due to the 'unique situation' faced by these investors. Specifically, the PNB may be giving priority to achieving the objective of increasing the Bumiputera's corporate ownership and not monitoring for enhanced firm performance, whereas the EPF's investment is seriously limited by the relatively small number of firms and the small market capitalization of Bursa Malaysia compared to the sheer size of its investment fund.

The findings show that as far as the control-enhancing means are concerned, their influence on firm performance depends on the type of control-enhancing means employed. Specifically, two significant findings can be highlighted. First, the 'proportion of family directors on the board' is positively associated with firm performance. This implies that the benefits (based

¹¹⁹ See sub-section 3.2.2 for the background of EPF and PNB.

on resource-based view) derived from increased family participation on the board via family directors outweigh the agency costs associated with it. It suggests that controlling family directors are able to plough back more than they may have detracted from the firm (at least in the case of appointing family members as directors).

The finding however contradicts with the findings by Yeh and Woidtke (2005) and Prabowo and Simpson (2011) in Indonesia for instance that 'family directors on the board' is a control-enhancing means that is detrimental to firm performance. They contend their finding implies that the entrenchment effect due to family involvement in the board is greater than the 'alignment effect'. The finding from this study however proves otherwise. The contradictory findings of the two studies could be due to 'contextual factors' as firms in Malaysia and Indonesia are subject to many country-specific contexts such as legal systems, accounting, audit and disclosure standards, cultural and socio-economic status and the severity of corruption. In addition, a comparison of corporate governance country assessments conducted by the World Bank (2004, 2005) on Malaysia and Indonesia shows that the extent of the observance of good governance is higher in Malaysia than Indonesia in virtually all categories of corporate governance practices.

Second, family control that is enhanced by controlling families being the sole block-holder without the presence of a second block-holder is negatively associated with firm performance. This implies that expropriation of minority shareholders can be great without the presence of a second block-holder to monitor the controlling family. This finding is consistent (albeit weakly) with studies such as Dahya *et al.* (2008), Claessens *et al.* (2000), and Bennedsen and Wolfenzon (2000) who assert that a second block-holder particularly with a block-holding of at least 10% would be sufficient to balance the power and dominance of the controlling family.

The finding is however inconsistent with Yeh and Woidtke (2005) who do not find any significant relationship between the presence of a second large shareholder and firm performance. Their insignificant result could be due to the fact that they use a 5% shareholding as the acceptable level to acknowledge the presence of a second block-holder, whereas this current study and others, such as Dahya *et al.* (2008) and Claessens *et al.* (2000),

suggest a minimum of a 10% shareholding to be sufficient to ‘cause concern’ for the controlling families.

Business Group Affiliation and Related Issues

Findings surrounding group affiliation show that overall, firms affiliated to a business group perform worse than unaffiliated, freestanding firms. Firms affiliated to business groups also succumb to inefficient allocation of resources which may explain their underperformance compared to unaffiliated firms. This finding is consistent with Joh (2003) but is opposed to that of Chang and Choi (1988). These studies were conducted among Korean firms with more than a 10-year time lapse between the samples used in both studies. This study is also consistent with George and Kabir (2008) but is opposed to that of Khanna and Palepu (2000a). Again, these studies were conducted in the same country, India, but with a time lapse of seven years between the samples used in both studies. The above observations may imply that the time period is a crucial factor affecting the results of the studies; as proposed by Chang (2006) and Peng *et al.* (2005), as time passes, the economy progresses and institutions develop and improve and the ‘internal market’ benefits of business groups that could fill the ‘institutional voids’ in the economy gradually disappear. Therefore, Malaysia with its more developed external markets including its capital markets (compared to other emerging economies) (Claessens *et al.*, 2000; Singh and Zainal, 2005) and the poorer performance of group-affiliated firms as found in this study, looking to the future, justification for the existence of business groups in Malaysia could be undermined.

The more detailed analysis shows that firms affiliated to ‘large’ business groups perform worse than other firms in the sample. This finding is again consistent with Joh (2003) but inconsistent with Khanna and Palepu (2000a) and George and Kabir (2008). According to Khanna and Palepu (2000a), one of the reasons for the positive relationship between large business groups and firm performance in their study in India is that large business groups are able to derive economic benefits from their closer ties with politics and the government (e.g. better access to the state’s resources, contracts and trade protection).

However, the similarly close connections of large business groups with the ruling party and government in Malaysia (Gomez and Jomo, 1997; Searle, 1999; Nazli and Weetman, 2006; Yeoh, 2010) do not translate into improved, but instead poorer, firm performance. One possibility for such a discrepancy in both studies could be due to the much larger size of domestic market in India than Malaysia; the effects from its economic benefits (which are brought about by the political connections) are intensified by large economies of scale. Consequently, the benefits turn out to be greater than the costs associated with expropriation even though expropriation is likely to be more serious in business groups with political connections or protection. As a result, the performance of firms affiliated to large business groups improves in India. However, in Malaysia, such ‘synergy’ from the economic benefits of political connections and the resultant economies of scale is relatively small due to the small domestic market. As a result, the smaller economic benefits are outweighed by the agency costs of expropriation and thus firm performance suffers.

The evidence of profit redistribution in business groups in this study is mixed. There is significant evidence of profit redistribution from good-performing group affiliates to poor-performing affiliates when Tobin’s Q is used as the performance measure but not when the ROA is used. The significant finding with Tobin’s Q implies that the market is able to price in the practice of profit redistribution which is facilitated by the divergence of cash flow-to-control rights. The overall finding on profit redistribution in this study is thus partially in line with the significant evidence found in Lincoln *et al.* (1996), Gedajlovic and Shapiro (2002), Bertrand *et al.* (2002) and George and Kabir (2008). The finding is also consistent with the ‘propping up hypothesis’ of Friedman *et al.* (2003) and Cheung *et al.* (2006, 2009b) in which profits or resources are redistributed to ‘prop up’ underperforming firms.

Further analysis revealed that profit redistribution is found to be associated with large business groups rather than small and intermediate size business groups. The finding is consistent with George and Kabir (2008) who also find a similar result in India. It is found that the extent of family ownership positively moderates profit redistribution in large business groups, particularly when the controlling families have outright (majority) ownership control over the firms. It can be argued from the finding that since large business groups are generally more inclined to political connections, profit redistribution with the

intention to stabilize a group's profitability becomes more critical for large business groups because, as explained by Estrin *et al.* (2009), group stability would be seen as a means to maintain a group's (and thus its controlling family's) political power and political connections. It can therefore be suggested that profit redistribution serves more the agenda of controlling families at the expense of the performance of good-performing affiliates and their minority shareholders.

Firm Diversification and Related Issues

Findings surrounding firm diversification show that in general diversification is not beneficial to firm performance as increases in firm diversification are associated with deteriorating performance. This is particularly true for group-affiliated firms. The finding is in line with the explanation by Singh *et al.* (2007) that the probability of agency-driven and thus value-destroying diversification is greater in situations where the market for corporate control is inactive and where the corporate sector is dominated by family-controlled business groups and concentrated family ownership. The finding thus implies that principal-principal agency costs of diversification in family-controlled firms in Malaysia outweigh diversification benefits of resource-based view as explained by Martin and Sayrak (2003). The finding that diversification performance is worse in group-affiliated firms than in non-group firms is also consistent with Lins and Servaes's (2002) and Chakrabarti's *et al.* (2007) proposal that there is a lack of valid reasons to diversify at the firm level when the task can be more efficiently fulfilled at the group level.

Further evidence reveals that the poor performance outcome of firm diversification may be explained by the poor efficiency of asset utilization. This is consistent with Ang's *et al.* (2000) proposal [later followed by others such as Fleming *et al.* (2005) and Florackis (2008)] that a firm's agency costs can be measured by the efficiency of its asset utilization.

The findings in this study also highlighted that the effect of diversification on the performance of group-affiliated firms is negatively moderated by the size as well as the complexity of business groups. This infers that diversification is more detrimental to performance in firms affiliated to 'large' business groups and business groups with

‘complicated’ structures than small and intermediate size business groups and business groups without complicated structures. These findings are in line with the viewpoints of La Porta *et al.* (1999), Khanna and Palepu (2000b) and Young *et al.* (2008) that complicated business groups are sometimes formed by controlling shareholders to reduce the threat to their control and to enable them to engage in various questionable practices or business deals (including firm diversification) for expropriation purposes. Moreover, business groups, particularly those large in size or with complicated structures, are also more likely to be linked to the “*political apparatus in the country (that) also insulate them from external interference and monitoring*” (Khanna and Palepu, 2000b, p.265). In short, the findings support the idea that firm diversification in large or complicated business groups is likely to be used by controlling families to advance personal, family or political agendas to the detriment of firm performance.

Board Independence Issues

Finally, findings on the moderating roles of board independence show that, overall, the influence of board independence in moderating the effects of ownership and other underlying firm activities/governance-related variables on firm performance is rather limited. This observation is inconsistent, for instance, with Dahya *et al.* (2008) who find a significant positive relationship between the proportion of independent directors and Tobin’s Q based on their study across 22 countries, the majority of which were developed countries (such as the US, the UK, Japan, Canada and other western European countries) and a handful of emerging countries. The authors assert that a robust market for independent directors exists in the board membership of the firms in their sample. Also, as they contend, the independent directors in their sample have an incentive to monitor the controlling shareholders because “*failure to monitor could mean a loss in their human capital in terms of the lost opportunities for other board positions*” (Dahya *et al.*, 2008, p.96).

In contrast, and as discussed earlier, unlike developed countries, Malaysia lacks a credible market for independent directors. In fact, the pool of independent directors in Malaysia has always been confined to individuals with backgrounds that are associated with politics, government and royal families. It can thus be asserted that the above statement by Dahya *et*

al. (2008) is likely not the case in Malaysia because the appointment of these Malaysian directors is a result of their background. With many of them serving in the figurehead role, there is virtually no risk of forfeiting directorship opportunities in other firms even if their ‘monitoring’ is essentially non-existent. Thus, in general, the finding on the moderating influence of independent directors in Malaysia implies that they may not be truly independent from the controlling families, to exert effective monitoring for the enhancement of firm performance.

Only in two instances in this study is board independence able to exert positive moderating effects. First it is found that group-affiliated firms with a ‘high’ proportion of independent directors are associated with more efficient allocation of resources compared to their counterparts who have a ‘low’ proportion of independent directors. Second, firms in which the board’s audit committee is fully occupied by independent directors positively moderate the effect of firm diversification on ROA. This finding is comparable to Chen and Chen (2012) who find a significant positive relationship between the investment efficiency of diversified firms and an audit committee composed entirely of independent directors.

The above two instances suggest that it is not all bleak for the independent director role in Malaysia. It is believed that through proper implementation of trainings and enhanced public awareness, corporate Malaysia will be able to produce more credible independent directors in the future and a clearer relationship between greater board independence and enhanced firm performance will be observed.

The next section discusses the policy implications of the findings in this study.

7.3 Policy Implications

Some implications for policy-makers can be drawn from the findings in this study. Firstly, the findings reflect that corporate governance issues in emerging economies such as Malaysia may require different solutions from those produced by the conventional agency theory perspective that neglects institutional differences (Lubatkin *et al.*, 2005). Using policy

designed for developed countries may not necessarily be effective and may even be counterproductive for developing countries. For instance, using increasing ownership to solve the agency problem as suggested in the Jensen and Meckling hypothesis (1976) may not work in the case of principal- principal conflicts. The findings in this study indicate that giving more control to already powerful controlling families (e.g. when they have the majority ownership and control) may further enhance their ability to expropriate and cause firm performance to deteriorate.

However, the findings at the same time also point out that when controlling families do not have the absolute ownership and control over the firm (i.e. non-majority ownership); increasing their ownership level is actually beneficial to firm performance. Therefore, it is proposed that regulators formulate policies that are able to encourage controlling families to keep their ownership level below majority. For instance, incentive measures such as tax incentives can be considered for such purpose. At the same time, policy-makers should have a clear direction in addressing the ‘ownership-performance’ issue in family-controlled firms. It is therefore proposed that policy-makers should be striving towards exploiting the strength of family ownership as a governance mechanism. This can be done by directing policies and plans that help to curb the potential power-abusing of controlling families but nonetheless preserve the uniqueness/traits of ‘familiness’ and the positive characteristics of the family form of governance (such as personalism and particularism) that give advantages to family-controlled firms. For instance, as evidenced from this study, promoting a second blockholder with shareholding of at least ten percent or above in family-controlled firms is an example in which the dominance of controlling families can be counter-balanced with their ‘familiness’ remains intact.

Over reliance on corporate governance codes from the West should also be avoided as can be seen in the case of independent directors versus family directors in this study. The proposal by certain parties such as the Securities Commission Malaysia in their latest issue of the Malaysian Code on Corporate Governance 2012 (MCCG 2012) (that will take effect from 31 December 2012) to increase the minimum stipulated proportion of independent directors in

publicly listed firms from the current one-third to one-half of the board¹²⁰, as practiced in the US, might result in unexpected negative outcomes in firm performance. This is because increasing the number of independent directors on the board may only fulfil the requirement on paper and not in substance. Another alternative explanation for possible negative outcome is that the additional costs associated with more independence cause firm performance to be adversely affected. Moreover, an increase in the proportion of independent directors will directly affect the number of family directors. A lower proportion of family directors is associated with deteriorating firm performance as evidenced in this study. The implication to policy-makers such as the Securities Commission Malaysia is that they should recognize that future governance frameworks of organisations and corporate governance codes should be drafted to account for the fact that conceptualization of corporate governance should not be limited to the agency theory perspective only. Broader environmental influencing forces that can be conceptualized by other perspectives such as resource-based view should be considered so that the gap between theory and practice in corporate governance can be reduced.

Secondly, the policy-makers should formulate more strategies to attract more foreign institutional investors to invest in publicly-listed firms in Malaysia. Controlling families may realize that reducing their expropriation activities and improving their corporate governance is worthwhile as this will draw more foreign institutional investment into their stocks. The subsequent increase in their wealth due to the improving valuation of their stock will more than offset their forgone private gains from expropriation activities. Some of the strategies/policies that policy-makers can consider are as follows: First, improving the tax treatment to foreign institutional investors in respect of income from stocks and capital gains. It is a straight forward way to pull more foreign investors into the market. Second, further liberalization of capital market such as easing of the quota requirement for Bumiputera ownership in Malaysian listed firms should also be studied. Third, due to the nature of concentrated ownership structure, the free float level of stocks¹²¹ in Malaysia is rather low. According to the chief executive officer of Bursa Malaysia, the current free float level of 40-

¹²⁰ This proposal is currently targeted at firms with boards of directors where the chairman is not an independent director.

¹²¹ Free float refers to the proportion of shares that are held by minority shareholders who are likely to be willing to trade.

45% for the overall stock market in Malaysia should be further increased to 60% (The Edge, 1 July, 2009). Increasing the free float level is an important step to enhance the vibrancy of Bursa Malaysia and subsequently, attract more foreign investors. As far as family-controlled firms are concerned, under the current setting, policies should be directed to encourage those controlling families with majority ownership to dispose some of their shareholdings to free up more shares for foreign investors. A low level of free float tends to create liquidity problems that may deter foreign investors from investing in the market.

Though increasing foreign investors' ownership may contribute to improved corporate governance and performance, the same cannot be said to domestic public institutional investors even though they are also deemed as a group of 'pressure-resistant' investors. As already discussed in the earlier chapters, the constraints and political 'reality' faced by the top domestic institutional investors in Malaysia (i.e. EPF and PNB) could have prohibited them from exerting effective control and monitor on the owner-managers. Political will is thus needed to 'free' the domestic public institutional investors from being continually 'hijacked' by the ruling party for political agenda. For instance, the investment ideology of PNB should be updated in accordance with the economic development and improvement in the social status in the country. Likewise, EPF should not "*always need to be holding the baby*"¹²² (The Star, 6 April 2010) and instead should be allowed to increase their proportion of investment in overseas so that a more selective choice can be made in respect of their investment in Bursa Malaysia. The above suggestions will then make possible to both institutional investors (EPF and PNB) to be more engaged with owner-managers to improve their corporate governance. Malaysia will then be more ready to have a similar code as the UK Stewardship Code 2010 that releases the guidelines for institutional investors on how to enhance the quality of engagement with their investee companies.

Thirdly, the findings on group affiliation issues imply that regulators such as the Securities Commission should pay more attention to business group activities, particularly those carried out by business groups that are large in size and complicated in their group structure. Authorities such as Bursa Malaysia may need to revise their listing requirements and regulations to curb potential expropriation by controlling shareholders. One potential area of

¹²² See sub-section 6.2.6 for the first appearance of the phrase.

abuse, particularly by the controlling families of large and complex business groups, is related party transactions (RPTs). Profit redistribution is often an RPT. Due to the large number of affiliates and the complex relationships among them, transparency in RPTs may be low in large and complex business groups. Thus Bursa Malaysia needs to upgrade its regulations on RPTs in order to ensure that public shareholders and the affiliates of business groups will not be taken for granted by controlling shareholders in RPTs.

The experiences of the US and UK in dealing with pyramidal business groups by relying on takeover rules (in the case of the UK) and tax reform (in the case of the US) are illuminating. Pyramidal business groups persisted in the UK until the 1970s when the takeover rule was amended by the British government to 'get rid' of business groups, after pressure from institutional investors who were dismayed over corporate governance problems in business groups (Morck, 2005). In the US, pyramidal business groups disappeared from the corporate scene much earlier. It is believed that the existence of pyramidal business groups is one of the factors which lead to the 1929 Great Depression in the US (Morck, 2005). Business groups were prevalent in the US prior to the corporate tax reform by the Roosevelt Administration in 1935. The tax reform caused the earnings of firms at the lower tier of the pyramid to be taxed repeatedly as they moved up the multiple tiers of the pyramidal structure. This caused the structure to be unviable and pyramidal business groups were forced to sell off subsidiaries or buy them outright and consequently pyramids became extinct (Schneider, 2009).

Though drastic reform, as seen in the US and UK, to eliminate pyramidal business groups may not be practical in Malaysia for the foreseeable future due to the different institutional background, the lesson that can be learned is for government to consider minor reform initially, for example, of takeover rules or the tax policy to create incentives for business groups to retain a certain size or level of group structure complexity, or otherwise penalize them if their group structure exceeds a certain size or level of complexity. Since the findings in this study have shown that business groups that are large in size and complicated in group structure are associated with high agency problems and thus poorer firm efficiency and performance, a plausible solution is to control their group size and complexity. To achieve that objective, government reformers must be fully empowered to execute the task despite

expected resistance from certain groups such as political elites or government officials who are allies of the controlling families of the business groups. For that to happen, political will is important to first reform public governance in order to effectively control problems such as cronyism, corruption and money politics and to reduce political interference in businesses.

Fourthly, the issue of firm diversification is associated with takeover policy. The generally unfavourable outcomes of firm diversification in this study imply that diversification is pursued by controlling families for the consumption of private benefits which adversely impacts firm efficiency and performance. This suggests that there may be weaknesses in the regulation of takeovers and disclosure requirements on transactions between bidder and seller as well as the disclosure requirements of diversification. Controlling families could increase firm diversification through takeovers that increase the probability of minority shareholder oppression such as misallocation of resources, transfer pricing and insider trading. The finding that negative outcomes of diversification are more prevalent in firms affiliated to large business groups and business groups with complicated structures again implies that poor corporate transparency in these business groups leads to severe expropriation. This consequently reaffirms the researcher's earlier suggestion that the size, as well as the complexity of business group structures, is worthy of regulators' attention.

Finally, the findings on the moderating roles or influence of board independence in this study imply that the current process of nominating and appointing independent directors may need to be revised as it does not contain a proper system to prohibit controlling families from influencing the appointment of independent directors.¹²³ Thus more diligence is required to ensure that the independent directors appointed are truly independent. The weakness of the current appointment system often leaves public shareholders with little alternative but to approve the 'whole package' proposed by the controlling shareholders.

¹²³ For more details on the guideline in appointing independent directors to the board, see the Malaysian Code on Corporate Governance (Revised 2007), p.11.

7.4 Contribution to Professional Practice

As a full-time university academic in the field of finance who is also a CFA¹²⁴ charterholder, the author also practices freelance investment consulting. The findings in this study can be used to further enhance his career in both teaching (including research) and consulting. Corporate governance, as a standalone subject, has become an important taught course in business schools, an important element in corporate finance teaching lately and an important consideration in the investment arena. As discussed in earlier chapters, corporate governance concerns in Malaysia surround issues inherent in concentrated ownership structures. Thus the knowledge acquired from the study can be applied directly to classroom teaching and investment consultancy work. The author acknowledges frustration in relation to the failure of some teaching to provide students with knowledge of a real-world view and case studies of corporate Malaysia. As virtually all textbooks and references are written by authors from the US and UK, it is difficult to source teaching materials that reflect the corporate environment and practice in Malaysia. Therefore, the author plans to use as much material as possible from this study in his teaching of ‘Corporate Finance’ and ‘Corporate Governance’ modules for the final year undergraduate and postgraduate programmes offered within the business school of the university.

The emphasis of the dispersed ownership structure and the traditional principal-agent problem as the theoretical basis in writing corporate finance and corporate governance textbooks by US and UK authors [including the two popular corporate finance texts: *Principles of Corporate Finance* by Brealey *et al.* (2007) and *Corporate Finance* by Ross *et al.* (2010)] does not reflect the corporate reality in Malaysia, though they still serve well in equipping students with rigorous finance theories and applications from a Western perspective. This study helps to close the gap in corporate governance and finance teaching at university level in this country in several ways. The ‘literature review section’ can be used to enrich teaching materials relevant to Malaysian corporations. Many useful journal articles cited in the study can be compiled as suitable references for relevant courses. Most importantly, the ‘analysis and findings section’ in this study contributes to filling the gap of

¹²⁴ CFA stands for Chartered Financial Analyst. It is a professional qualification in finance and investment awarded by the CFA Institute. The details are available from the CFA Institute website.

discussing real-world Malaysian corporate governance-related issues in classroom teaching. The 'methodology section' of the study is useful as a reference for students who are interested in writing a research paper or dissertation in a similar area.

Since 2003, the author has been involved in conducting classes and providing training for investment professionals preparing for professional examinations. He plans to apply the knowledge acquired from this study to expand his teaching to encompass adult corporate training, involving corporate finance/governance, as there is an increasing demand for such training for company secretaries, executives and directors. With a doctorate in business, the author believes that it would be a good starting point for him to become an effective trainer for the corporate training and investor education programmes. Some of these training programmes are offered by the HRDB-registered Training Providers.¹²⁵ They include the training arms of regulators such as Bursa Malaysia and Companies Commission of Malaysia (CCM) and non-profit organizations such as the Malaysian Institute of Corporate Governance (MICG) and the Minority Shareholder Watchdog Group (MSWG). Likewise, the author may have more opportunities to join as a trainer/consultant at the University's Centre for Consultancy & Development (CCD) that provides company in-house training programmes and consultancy work. In short, the education and training gained by the author throughout his DBA research that emphasize on practicality are valuable in helping him to meet some of the challenges as a corporate trainer in the future. Finally, the study also contributes to the scholarly activities of the author. For instance, a paper co-written by the author and his supervisors at an earlier stage of the study was submitted on 31 October 2011 for consideration of journal publication.

This study makes a contribution to consulting firms providing corporate governance consultancy service to corporate clients in Malaysia. It informs corporate governance consultants, among others, about the most recent issues and concerns of corporate governance and development in the emerging economies of East Asia (including Malaysia). As previously unseen emphasis is now placed on corporate governance in the corporate sector, following development in advanced economies such as the US, corporate governance

¹²⁵ These are the training providers registered with the Human Resource Development Berhad (HRDB) of the Ministry of Human Resource, Malaysia.

consultancy work is expected to become more important in the future in emerging economies. Conventional corporate governance consultancy normally focuses on the issue of board governance and may overlook other aspects of corporate governance. As this study has shown, corporate governance of family-controlled firms in Malaysia is more complicated than the issue of board governance as it involves various governance issues that are linked to concentrated ownership structure. Thus the knowledge provided in this study illuminates how other governance issues are useful and can be incorporated into consultancy work. For instance, many poorly managed companies could be significantly improved if the knowledge of ownership structure and its related governance issues involving the use of control-enhancing means, business group affiliation, firm diversification and board independence were properly understood and utilized to brainstorm for better solutions to corporate strategy and governance issues faced by corporate clients.

Specifically, the findings reveal a few key dimensions of concentrated ownership structure that corporate governance consultants in Malaysia can (and should) be looking at: the transparency issue of firms affiliated to business groups, the sensibleness and disclosure issue of profit redistribution (including related party transactions), the mitigation of undue firm diversification, the quality of board independence, and the participation of a second blockholder. Even the most sensitive issue of ownership structure including the searching and fine-tuning for an appropriate level of family ownership can be explored together with the controlling families as the finding in this study has indicated their relevance to firm performance.

It is nonetheless acknowledged that solutions to corporate governance issues are potentially much more challenging in Malaysia compared to the US and UK due to the dominance of controlling families who may be reluctant to co-operate. However, not all the families are closed-minded on governance-related issues. It is not impossible to convince some controlling families in finding solutions to governance issues their firms face when they realize that they will be disadvantaged in the longer term by resisting the global movement of corporate governance. Moreover, with further liberalization in the capital market, global investor community has the ability to devise inducements that will encourage controlling families voluntarily to make some concessions to improve their corporate governance. Many

family-controlled firms that have just passed over the business to the next generation have also started to think about ‘professionalizing’ their firms. All of the above present opportunities for consulting firms to introduce the above mentioned ‘different dimensions’ of corporate strategy and governance plans for their clients.

This study helps investment professionals such as analysts and fund managers to understand not only how, but why, firm performance could be influenced by ownership structure and the underlying firm attributes and activities. Investment professionals will be informed by the findings as to how different firm structures determine corporate governance and the effects of those firm-level governance choices on firm performance. The oft-cited global survey by the renowned management consulting firm McKinsey & Company in 2002 shows that institutional investors value corporate governance and are willing to pay a premium for stocks of well-governed companies. Thus the knowledge from this study may help enhance the process of investment decision-makings, particularly the corporate governance risk assessment/analysis for investments such as ‘corporate governance screening process’, before a particular stock/firm is considered for investment. The findings could thus be used as a reference guide by the professionals to enhance or complement their existing corporate governance risk assessment/analysis. Such enhancement to the risk assessment is particularly relevant to investment professionals that are involved in long-term investment industries such as pension funds and insurance companies.

Specifically, it would be useful if the findings on the influence of concentrated ownership and its underlying ‘governance-concerned firm activities/strategies or practices’, together with their moderating effects, on firm performance, could be adopted into the governance risk assessment or screening process. This can increase the chances that firms selected into the investment portfolio are those that bear lower risk of expropriation and possess better overall governance structures to support sustainable growth over the long term. For instance, the negative findings of firms affiliated to business groups with opaque ownership structure, extensive firm diversification particularly when it occurs in group-affiliated firms, and firms without participation of a second block-holder could all well serve as among the key risks and potential red flags in the risk assessment of investment analysis. Conversely, the generally insignificant findings of the moderating roles of board independence (such as the

proportion of independent directors on the board) may indicate that the independence exists only ‘on paper’ and will thus have minimal bearing on firm performance. Therefore, investment analysts should be more cautious in using such criteria as ‘board independence’ in their ‘positive screening’¹²⁶ of stocks. The study reveals that more homework needs to be done by investment analysts than merely relying on what appears on the documentation. It informs the investment professionals what to look for in their governance assessment or screening process and what some of the important ownership and underlying firm activities are that need to be given due attention. In short, the findings indicate to investment professionals what matters and what does not really matter in Malaysia with respect to corporate governance analysis for investment decisions.

Discussion from the above paragraph suggests that the findings in this study could serve as a starting point for investment analysts to develop a series of indicators of the ‘potential risks of expropriation by controlling families’ and subsequently, class the firms into a few different groups based on the scores obtained from the indicators. Different weights can also be assigned to individual indicators by the analysts based on their assessment of each indicator’s overall importance to successful corporate governance, i.e. minimization of the potential expropriation risks. As an illustration, firms can either be classed as having high, moderate or low potential expropriation risks with respect to the total scores received. In this way, it helps the analysts to better identify firms where corporate governance is, or may be, problematic. It should nevertheless be reminded that such consideration given to the risk assessment does not mean that investment professionals should totally rule out the possibility of investing in family-controlled firms with a high risk of expropriation, but rather that they should ensure that they are fully aware of the risks associated with investing in such firms and have already explicitly considered the governance issues of these firms before investing.

Another related area of contribution is that the knowledge gained from the study helps investment professionals in introducing and managing various types of corporate governance-related investment funds; for instance, funds that are based on ownership structure and control or funds that take into consideration variables of governance concerned

¹²⁶ ‘Positive screening’ involves investing in firms with a commitment to responsible business practices such as favouring investments with best corporate governance practice, whereas ‘negative screening’ involves avoiding investments that do not meet certain criteria/standard of the investment policy statement.

such as group affiliation and firm diversification. This study is also useful for investment professionals to offer ‘shareholder engagement’¹²⁷ funds where firms selected into the fund will be engaged to improve their governance-related activities and policy. According to the Asian Corporate Governance Association (ACGA, 2007), one of the problems in introducing shareholder engagement corporate governance-related funds in Asia is a lack of experts who have both investment and corporate governance experience and competency to run such funds. The knowledge from this study contributes towards the management of such funds. Moreover, the knowledge from this study also contributes to introducing various types of ‘family-controlled’ funds – funds investing exclusively in stocks of family-controlled firms. Professionals from countries such as Germany have introduced such funds and received a good response from investors (Jaskiewicz and Klein, 2005).

7.5 Limitations of Study and Suggestions for Future Research

The results drawn from this study should be interpreted with the limitations in mind. Some limitations represent potential opportunities for further investigation in future studies. The limitations can be grouped into methodological limitations and other general limitations. Below are the points of discussion:

7.5.1 Methodological Limitations and Suggestions for Future Research

1. The analysis was conducted using cross-sectional data for a single year. Since collection of a full spectrum of ownership structure data is a highly time-consuming task, the time constraints of the study do not allow for multiple-year data collection. This limitation precluded the opportunity of employing panel data sets to perform a longitudinal/panel data analysis. Future study should attempt to employ a panel data study. As panel data integrate both cross-sectional and time-series data of the same variables, they can be more informative and can more easily illuminate effects or

¹²⁷ Shareholder engagement is an investment approach associated with ‘engagement with the firm’ rather than stock picking. Institutional investors directly engage with the company board/management to seek changes to company strategies/activities, policy, or even replacement of chairman or CEO (ACGA, 2007). CalPERS is among the pioneers that implement the ‘shareholder engagement’ approach in investment. More details are available from CalPERS’ official website.

measure relationships that simply cannot be detected in pure cross-section or pure time-series data analysis (Nazrul *et al.*, 2008; Gujarati, 2004). Thus the results might differ if analysis based on panel data is used.

2. Another caveat is related to the model specification used. Though the study has attempted to include relevant variables, including the control variables in the regression analysis (as guided by the literature), it should be disclosed that the specifications of model employed may not be completely error-free. One potential problem that is sometimes associated with cross-sectional regression is misspecification of model. For instance the specification employed might encounter the problem of a missing variable. The relationship (or non-relationship) observed in the regression might be caused by the unobserved excluded variable, causing the inferences from the regression to be biased.
3. Though this study highlighted the close relationship between business and politics in Malaysia, due to the unavailability of data, it is difficult to explicitly assign a variable as the proxy for the firms that have close political connection versus firms that do not. This however is partly compensated as, from the literature, for example, by Gomez and Jomo (1997), Johnson and Mitton (2003) and Gomez (2006), it can be perceived that generally, firms that are affiliated to 'large' and 'complex' business groups are more likely to be closely associated with senior government officials and politicians. Attention to business-political connections in this study is paid particularly to these firms whereby specific variables are assigned to represent them in the analysis. The caveat is that focusing on firms affiliated to large and complex business groups may falsely signal that political interference in business is not a concern in firms that do not belong to these groups. As discussed in the literature review section, due to its peculiar affirmative economic policy, political interference in Malaysian business is wide-ranging, regardless of the size of firms or business groups. The attention paid to firms affiliated to large and complicated groups only serves to indicate that political connection is more pronounced in these firms compared to other firms.
4. The study offered in the methodology chapter the reasons why endogeneity in the regression with the family ownership variable is unlikely to be serious. Endogeneity

is also unlikely in other variables such as group affiliation. In Malaysia, firms do not choose which business group they want to join; it is the controlling families who decide how they want to create their group structure. Thus the argument that group affiliation, including affiliation to certain group sizes, is affected by firm performance is unlikely. Nonetheless, since endogeneity problems may cause biased results and although they are unlikely to be serious in this study, the possibility of some level of endogeneity in some variables cannot be totally ruled out. In this case, future researchers may want to consider other more advanced statistical techniques such as the two-stage least square model (2SLS) to explicitly account for the possibility of endogeneity in the regressions.

5. The size of business groups in this study is proxied by the number of publicly-listed firms affiliated to the group. However, the size of business groups can also be measured differently, such as by total value. It is possible that some business groups may be large in terms of their total group value but have few listed affiliates as most of the member firms are unlisted. Thus measuring business groups solely by the number of listed firms may not reflect the true size of the business group in terms of its total group value. The inability to include unlisted firms in the analysis may cause biased results. This is acknowledged by Claessens *et al.* (2002) who also only include the listed firms in their study of ownership and business groups in Asia. This limitation is however not believed to be serious as large business groups usually tend to have many member firms, therefore the chances of more member firms being listed in the exchange are also higher.
6. As far as profit redistribution in business groups is concerned, this study relies only on the analysis of a one-year interval. However, the assumption that the one-year gap is sufficient for finding evidence (if any) of profit redistribution may not be true for some affiliated firms as a gestation period longer than one year may be required. This means that the findings on profit redistribution may not capture all possibilities of profit redistribution that occur for longer than a single year.

7.5.2 General Limitations and Suggestions for Future Research

1. Since the 2008 data on firm performance is used in the analysis, the findings in this study may thus be more reflective of the slower pace of Malaysian economic growth of 4.6% recorded for that year than the stable economic growth of around 6% for the country.¹²⁸ Future research may investigate the finding differentials under different economic conditions. This is because according to Johnson and Mitton (2003) and Lins (2003), the inclination of controlling shareholders to expropriate a firm's resources will be higher during a period of economic downturn. Though the economic climate of 2008 for Malaysia is not considered as 'bad', it was by no means a satisfactory growth for the country. Thus by conducting further study for a different time period when economic growth is stable; comparison with the findings in this study can be drawn in order to verify whether they have changed or remain unaffected. This has an implication for our understanding of shareholder expropriation and firm performance.
2. The performance measures used in this study (i.e. ROA and Tobin's Q) depend on the reliability of financial statements as reported in company annual reports. However, the caveat is that the results of the study could be biased to the extent of 'earnings management' practices among controlling families. However it is widely recognized that Malaysia has one of the highest standards of financial reporting in Asia (for instance Malaysia's financial reporting standard is equal to that of Singapore) and thus the incidence and seriousness of earnings management will not be critical to the extent of 'mistrusting' of financial statements among investors.
3. The findings in this study should be interpreted with caution as the results of hypothesis testing by using the accounting-based performance, ROA and the market-based performance, Tobin's Q, in some instances do not support each other. In other words, a significant relationship based on ROA is accompanied by an insignificant relationship when performance is measured by Tobin's Q and *vice versa*, though in

¹²⁸ The slower economic growth in 2008 was due to global financial turmoil and the deterioration of the global economic environment.

many instances, the relationships observed from the regressions based on both the ROA and Tobin's Q measures are often similar. Claessens *et al.* (2006) opine that the potential benefits and costs of the issues involved, such as group affiliation, that are identified in the literature do not necessarily translate equally into the various measures of performance. Thus, there is a need for future empirical research to investigate the causes of such variations.

4. The measure of 'family' used in this study can also be fine-grained to provide more insight into the issues involved. Specifically, Miller *et al.* (2007) comment that a distinction can be made between family-controlled firms that are controlled by lone individuals in which no relatives of the individual are involved in the ownership or management, and 'true' family businesses in which multiple family members participate either as substantial shareowners or/and managers. In addition, family-controlled firms can also be refined based on whether the firms are run by the family members or professional managers. More and more family businesses have begun to recruit outside professional managers though the families are still the *de facto* controllers of the firms. It would thus be interesting for future study to examine the effects of the above 'variations' of family-controlled firms on the issues involved and in doing so adding to the diversity and richness of literature on family firms.
5. This study does not separate firm diversification into related and unrelated diversification. Since the unfavourable performance outcomes of diversification as reported in this study imply that diversification of firms is agency-driven, future work can examine whether such outcomes are sensitive to the separation of related and unrelated diversification. This illuminates whether unrelated diversification is more agency-driven than related diversification. Moreover, such separation allows the researcher to conduct a series of tests to examine whether ownership- and other governance-related variables influence the outcomes of why some diversified firms diversify more into related businesses and some diversify more into unrelated businesses. For instance, future study could examine whether there is a difference in the level of related and unrelated diversification between group-affiliated firms and unaffiliated firms. Such a finding may clarify why the diversification outcome of

group-affiliated firms is generally worse than that of non-group firms as found in this study.

6. The lack of evidence on the moderating role of board independence in this study may be due to the fact that many independent directors are not truly independent in exerting their monitoring roles. Future work can focus on collecting primary data to find out how an independent director is appointed. Some independent directors are appointed as they are recommended by the controlling family or its affiliates and some are appointed based on their connection to the government or politics. Thus it is intriguing to segregate these so-called independent directors from the rest and examine whether the moderating influence of independent directors is affected by such segregation. Future work can also extend the concept in this study of board independence to include other board qualities such as board integrity and diversity.

7.6 Concluding Remarks of the Study

This study examined how the performance of family-controlled firms can be influenced by a concentrated ownership structure and the firm activities/strategies or practices underlying the structure. As mentioned at the beginning of the thesis in Section 1.3 in Chapter 1, concentrated ownership structure, together with the legal system and the corporate board structure, form the three main pillars of the governance system that Malaysia has relied upon for many years. The overall finding in this study shows that concentrated ownership *per se* may not be harmful to firm performance and the interests of minority shareholders. However, the concern of the governance system is that concentrated ownership has become substantially more dominant than the other two pillars. This is attributable to the undue political interference in business that has contributed, to a certain extent, to weak enforcement of rules¹²⁹ as well as a lack of credible and truly independent board. This imbalance causes concentrated ownership and control to be unchecked and grants the

¹²⁹ Though weak enforcement of rules is one of the important issues affecting corporate governance in East Asia including Malaysia, it is not directly examined in this particular thesis. As the issue may have a profound impact on some of the research questions examined in this study, it would be interesting to consider it for future, post-doctoral research. A cross-country study with various level of enforcement (such as the ones in Appendix 2) may be able to provide more insight of how different level of enforcement would affect the findings to the research questions in this study.

controlling families opportunities, coupled with control-enhancing means including business groups practicing activities/strategies or practices such as diversification and resource redistribution, to expropriate firms' resources. This causes firm performance and minority shareholders' interests to be adversely affected.

As a way forward for family-controlled firms in Malaysia, the question of whether concentrated ownership will, and should, continue to persist in the future depends very much on the direction set forward by the policy-makers, which in turn will be influenced to a certain extent by the forces of global governance reform. One of the on-going debates in respect of global governance reform is the question of whether there should be a global convergence of corporate governance systems towards a unified system of Anglo-American corporate governance (that prioritises shareholders' protection through rules and effective enforcements; improvement of external governance mechanisms such as the markets for corporate control, professional executives, and independent directors; the dilution of concentrated ownership; and the dismantling of business groups). It is believed that total convergence may not be possible for most countries (including Malaysia) due to the different national policy, legal system, institutional setting and culture. Thus, the potential expropriation issues in the context of principal-principal conflict as investigated in this study will continue to persist in the foreseeable future. Consequently, policy-makers should strive towards developing a governance system that is capable of preventing the dominance of concentrated ownership and instead exploit its strength as a governance mechanism to help contribute towards one that leads to more efficient allocation of resources; to enhance the ability of firms to compete internationally and to subsequently promote more investment and higher economic growth and development in the country.

Appendices

Appendix 1: Firms Selected for the Study

| Group-affiliated Firms | | | |
|--|-----------------------|-------------------------|--------------------------|
| APL INDUSTRIES | LINEAR CORP BHD | EASTERN & ORIENTAL | PARKSON HOLDINGS |
| BOXPAK (MALAYSIA) | MWE HOLDINGS BERHAD | KURNIA SETIA BHD | SCOMI GROUP BHD |
| BREM HOLDINGS | AIC CORPORATION BHD | LINGUI DEVELOPMENT | SCOMI MARINE BHD |
| CEPATWAWASAN GRP | BOLTON BHD | SAPURA RESOURCES BHD | MALAYAN UNITED INDS |
| CHIN TECK PLANTATIONS | HEITECH PADU BERHAD | UNITED PLANTATIONS | PADIBERAS |
| DPS RESOURCES BHD | LCTH CORP BHD | HAP SENG CONSOLIDATE | PAN MALAYSIA CORP |
| EMIVEST BHD | MALPAC HOLDINGS BHD | HAP SENG PLANTATION | TRADEWINDS (M) BHD |
| EONMETALL GRP BHD | MULTIPURPOSE HOLDING | MALAYSIAN MOSAICS | YTL CEMENT BERHAD |
| FAVELLE FAVCO BERHAD | PARAMOUNT CORP BHD | RANHILL BERHAD | YTL CORPORATION |
| FIAMMA HOLDINGS BHD | SYMPHONY HOUSE BHD | SEG INTERNATIONAL | YTL LAND & DEVELOP |
| HIL INDUSTRIES BHD | UNITED MALAYAN LAND | SUNWAY HOLDINGS BHD | MUI PROPERTIES BHD |
| INTEGRAX BHD | WIJAYA BARU GLOBAL | ANCOM BHD | TRADEWINDS CORP BHD |
| IOI PROP | MIECO CHIPBOARD | BATU KAWAN | TRADEWINDS PLANTATION |
| KINSTEEL BHD | GUH HOLDINGS BHD | D&O VENTURES | ZELAN |
| KNUSFORD BHD | LEADER UNIVERSAL | GOLDIS BHD | MMC CORPORATION BHD |
| LEADER STEEL | PETRA PERDANA BERHAD | IGB CORPORATION BHD | MELEWARIndustr GROUP |
| LEONG HUP HOLDINGS | ASIAN PAC HOLDINGS | JAYA TIASA HOLDINGS BHD | MYCRON STEEL BHD |
| MUHIBBAH ENGINEERING | PELIKAN INT'L CORP | KRISASSETS HLDGS | BERJAYA CORP |
| PRESS METAL BHD | AMALGAMATED IND'L | MTD ACPI ENGINEERING | KELADI MAJU |
| PROGRESSIVE IMPACT | APM AUTOMOTIVE | MTD CAPITAL BHD | MARCO HOLDINGS BHD |
| SKPRES BHD | EKOWOOD INTN'L BHD | NAIM HOLDINGS BERHAD | MATRIX INTERNATIONAL |
| SOUTH MALAYSIA | FACB INDUSTRIES | NYLEX (M) BHD | THE STORE CORP |
| VERSATILE CREATIVE | GLENEALY PLANTATIONS | SUBUR TIASA HOLDINGS | BERJAYA LAND BHD |
| YEE LEE CORPORATION | JOHAN HOLDINGS BHD | UBG BHD | BERJAYA SPORTS TOTO |
| YNH PROPERTY BHD | KARAMBUNAI CORP BHD | KUALA LUMPUR KEPONG | DIJAYA CORPORATION |
| A & M REALTY BERHAD | KHEE SAN | MEGA FIRST CORP | GOH BAN HUAT BERHAD |
| CRESCENDO CORP BHD | LONDON BISCUIT | ADVANCE SYNERGY | MALAYSIA AICA |
| GROMUTUAL BERHAD | MEDA INCORPORATED | ASTRO ALL ASIA NETWORK | TMC LIFE SCI BHD |
| HUNZA PROPERTIES BHD | OSK PROPERTY HLDGS | MULPHA INTERNATIONAL | MALAYSIAN BULK |
| IOI CORPORATION | PUTRAJAYA PERDANA | SARAWAK PLANTATION | PPB GROUP BHD |
| KIAN JOO CAN FACTORY | SAPURA INDUSTRIAL | TA ANN HOLDINGS | TRANSMILE GROUP |
| KIM LOONG RESOURCES | SAPURACREST PETROLEUM | TANJONG PUBLIC LIIMITED | HONG LEONG INDUS BHD |
| METROD (MALAYSIA) | SUNWAY CITY BERHAD | LION CORP BHD | HUME IND |
| MHC PLANTATIONS BHD | TALIWORKS CORP | LION DIVERSIFIED | MSIAN PACIFIC INDUSTRIES |
| NEGRI SEMBILAN OIL | TAN CHONG MOTOR | RESORTS WORLD BHD | NARRA IND |
| PETRA ENERGY BERHAD | TSH RESOURCES BERHAD | ASIATIC DEVELOPMENT | SOUTHERN STEEL BHD |
| SUPERMAX CORP BHD | WARISAN TC HOLDINGS | GENTING | GUOCOLAND |
| TITAN CHEM CORP BHD | CAHYA MATA SARAWAK | LION INDUSTRIES CORP | TASEK CORPORATION |
| Independent (Non-group affiliated) Firms | | | |
| ADVENTA BHD | KIA LIM BERHAD | UNIMECH GROUP BHD | CNI HOLDINGS BERHAD |
| AHMAD ZAKI RES | KIM HIN INDUSTRY BHD | UNISEM (M) BERHAD | COUNTRY HEIGHTS |
| APB RESOURCE | KKB ENGINEERING | UNITED ULI CORPOR | DIALOG GROUP |
| APOLLO FOOD HOLDINGS | KOSSAN RUBBER | UPA CORP BHD | DUFU TECHNOLOGY CORP |
| ASAS DUNIA BERHAD | KSL HOLDINGS BHD | V.S. INDUSTRY | ENCORP BERHAD |
| ASIA FILE CORP BHD | KWANTAS CORP BHD | VOIR HOLDINGS BERHAD | FRONTKEN CORP BHD |
| BANENG HOLDINGS BHD | LATITUDE TREE | WHITE HORSE BERHAD | GOPENG BERHAD |
| BINA PURI HOLDINGS | LBS BINA GROUP BHD | XIAN LENG HOLDINGS | IQ GROUP HLDGS |
| BP PLASTICS HLDG BHD | LII HEN INDUSTRIES | YUNG KONG | KENCANA PETRO |
| CB IND PRODUCT HLDGS | LOH & LOH CORP | ZHULIAN CORPORATION | KONSORTIUM LOGISTIK |
| CHOO BEE METAL IND | MAH SING GROUP BHD | ANN JOO | KRETAM HOLDINGS BHD |
| CLASSIC SCENIC BHD | MALAYAN FLOUR MILLS | ASIA PACIFIC LAND | LCL CORPORATION BHD |
| CENTURY BOND BHD | MALAYSIAN AE MODELS | BLD PLANTATION BHD | LEWEKO RESOURCES BHD |
| COCOALAND HLDGS | MAMEEDOUBLE DECKER | COASTAL CONTRACTS | METRONIC GLOBAL BHD |
| COMPUGATES HLDGS | MENANG CORPORATION | DAIMAN DEVELOPMENT | MITRAJAYA HOLDINGS |
| CREST BUILDER HLDGS | MINHO (M) BERHAD | ENG TEKNOLOGI HLDGS | MUDAJAYA GROUP BHD |
| DEGEM BHD | MINTYE INDUSTRIES | ENGTEx GROUP BHD | NAIM INDAH CORP BHD |

| | | | |
|----------------------|-----------------------|----------------------|-----------------------|
| DELEUM BERHAD | MUDA HOLDINGS BERHAD | FARLIM GROUP | OCB BERHAD |
| DELLOYD VENTURES BHD | NEW HOONG FATT | KECK SENG (M) BHD | PATIMAS COMPUTERS |
| DKLS INDUSTRIES | NOTION VTEC BHD | KNM | PROTASCO BHD |
| DOLOMITE CORPORATION | NPC RESOURCES BHD | MAHAJAYA BERHAD | SRII BHD |
| DXN HOLDINGS BHD | NV MULTI | MALTON BHD | SUMATEC RESOURCES |
| EFFICIENT ESOL BHD | ORIENTAL HOLDINGS BHD | METRO KAJANG HLDGS | TANJUNG OFFSHORE BHD |
| ENG KAH CORPORATION | PADINI HOLDINGS BHD | MK LAND | TEXCHEM RESOURCES |
| EP MANUFACTURING | PENTAMASTER CORP | PANTECH GROUP | TRC SYNERGY BHD |
| FITTERS DIVERSIFIED | POH HUAT RES HLDGS | PINTARAS JAYA BHD | WCT BERHAD |
| GLOBETRONICS | PRINSIPTEK CORP BHD | SUIWAH CORPORATION | ANALABS RESOURCES BHD |
| GUAN CHONG BERHAD | PULAI SPRINGS BHD | TANCO HOLDINGS BHD | UCHI TECHNOLOGIES |
| HAIO ENTERPRISE | PW CONSOLIDATED BHD | TOP GLOVE | ORIENTAL INTEREST |
| HEVEABOARD BERHAD | QL RESOURCES BHD | WTK HOLDINGS BHD | ASTINO BHD |
| HEXZA CORP BHD | SARAWAK OIL PALMS | APEX HEALTHCARE BHD | SANBUMI HOLDINGS BHD |
| HIROTAKO HLDGS BHD | SPKSENTOSA CORP | YILAI BHD | HO WAH GENTING BHD |
| HOCK SENG LEE BERHAD | SUCCESS TRANSFORMER | EVERGREEN FIBREBOARD | DAIBOCHI PLASTIC |
| HUP SENG INDUSTRIES | SWEE JOO BHD | MAXTRAL INDUSTRY BHD | JOBSTREET CORP BHD |
| HYTEX INTEGRATED BHD | TEK SENG HLDGS BHD | JADI IMAGING HLDGS | FURQAN BUSINESS ORG |
| IBERHAD | THONG GUAN INDUS | MAXBIZ CORPORATION | FOUNTAIN VIEW DEVPMT |
| IPMUDA BERHAD | THREEA RESOURCES | SERN KOU RESRCS BHD | NOMAD GROUP |
| JOHORE TIN BERHAD | TOMEI CONS BHD | ORNAPAPER BHD | SALCON BERHAD |
| KBB RESOURCES BHD | TONG HERR RES | AIRASIA | NAM FATT CORP BHD |
| KBES BERHAD | TRIUMPHAL ASSOCIATES | AJIYA | |
| KEN HOLDINGS BERHAD | TSR CAPITAL BHD | ALAM MARITIM RESRCS | |

Appendix 2: Corporate Governance Practice – Scores on Regulations and Enforcement

Tables below show the comparisons between Malaysia, Singapore and Hong Kong in terms of the scores (over the scale of 10) of their corporate governance practices:

| Country | Score on regulations (2002) | Score on regulations (2003) | Score on regulations (2004) | Score on regulations (2005) | Score on regulations (2007) | Score on regulations (2010) |
|-----------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| HONG KONG | 8 | 8 | 6.6 | 6.4 | 6.0 | 5.9 |
| MALAYSIA | 9 | 9 | 7.1 | 5.9 | 4.4 | 4.9 |
| SINGAPORE | 8 | 8.5 | 7.9 | 7.4 | 7.0 | 6.5 |

| Country | Score on enforcement (2002) | Score on enforcement (2003) | Score on enforcement (2004) | Score on enforcement (2005) | Score on enforcement (2007) | Score on enforcement (2010) |
|-----------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| HONG KONG | 6 | 6.5 | 5.8 | 5.8 | 5.6 | 6.3 |
| MALAYSIA | 2.5 | 3.5 | 5.0 | 4.9 | 3.5 | 3.8 |
| SINGAPORE | 7 | 7.5 | 6.5 | 5.6 | 5.0 | 6.0 |

Sources: Low (2004) for 2002 to 2004 data and 2005 to 2010 data are extracted from ‘CG Watch 2005’, ‘CG Watch 2007’ and ‘CG Watch 2010’ reports which are downloadable from the Asian Corporate Governance Association (ACGA) website: <http://www.acga-asia.org>, accessed 24th January, 2011

Malaysia’s ‘scores on enforcement’ remained low and behind those of Singapore and Hong Kong and its ‘scores on regulations’ have declined more than that of Singapore and Hong Kong since 2005.

Appendix 3: 40 Richest Malaysians in Year 2008 and Their Main Sources of Wealth

| Ranking | Name | Wealth | Business Group | Independent Firm | Banking |
|---------|---------------------------------|-------------------|----------------|------------------|---------|
| 1 | Robert Kuok Hock Nien | RM 58.110 billion | ✓ | | |
| 2 | Tan Sri T. Ananda Krishnan | RM 19.625 billion | ✓ | | |
| 3 | Tan Sri Lee Shin Cheng | RM 14.943 billion | ✓ | | |
| 4 | Tan Sri Quek Leng Chan | RM 11.098 billion | ✓ | | |
| 5 | Tan Sri Syed Mokhtar Albukhary | RM 8.550 billion | ✓ | | |
| 6 | Tan Sri Teh Hong Piow | RM 8.06 billion | | | ✓ |
| 7 | Tan Sri Tiong Hiew King | RM 3.87 billion | ✓ | | |
| 8 | Tan Sri Vincent Tan | RM 3.40 billion | ✓ | | |
| 9 | Tan Sri Lim Kok Thay | RM 3.16 billion | ✓ | | |
| 10 | Tan Sri Azman Hashim | RM 2.87 billion | | | ✓ |
| 11 | Datuk Lee Yeow Chor | RM 2.33 billion | ✓ | | |
| 12 | Lee Yeow Seng | RM 2.29 billion | ✓ | | |
| 13 | Tan Sri Yeoh Tiong Lay | RM 1.74 billion | ✓ | | |
| 14 | Ong Beng Seng | RM 1.73 billion | | ✓ | |
| 15 | Tan Sri Jeffrey Cheah Fook Ling | RM 1.49 billion | ✓ | | |
| 16 | Datuk Yaw Teck Seng | RM 1.39 billion | ✓ | | |
| 17 | Datuk Seri Lee Oi Hian | RM 1.304 billion | ✓ | | |
| 18 | Datuk Lee Hau Hian | RM 1.301 billion | ✓ | | |
| 19 | Tan Sri Francis Yeoh Sock Ping | RM 0.99 billion | ✓ | | |
| 20 | Datuk Mokhzani Mahathir | RM 0.97 billion | | ✓ | |
| 21 | Datuk Yeoh Seok Hong | RM 0.883 billion | ✓ | | |
| 22 | Datuk Yeoh Seok Kian | RM 0.881 billion | ✓ | | |
| 23 | Datuk Micheal Yeoh Sock Siong | RM 0.87 billion | ✓ | | |
| 24 | Datuk Mark Yeoh Seok Kah | RM 0.86 billion | ✓ | | |
| 25 | Tan Sri Hamdan Mohamad | RM 0.85 billion | ✓ | | |
| 26 | Raja Eleena Raja Azlan Shah | RM 0.83 billion | | ✓ | |
| 27 | Tan Sri Dr Lim Wee Chai | RM 0.78 billion | | ✓ | |
| 28 | Tan Sri Kua Sian Kooi | RM 0.75 billion | | | ✓ |
| 29 | Puan Sri Chong Chook Yew | RM 0.71 billion | | ✓ | |
| 30 | Datuk Tony Tiah Thee Kian | RM 0.67 billion | | | ✓ |
| 31 | Datuk Tan Chin Nam | RM 0.61 billion | ✓ | | |
| 32 | Tan Sri Rozali Ismail | RM 0.59 billion | ✓ | | |
| 33 | Shaari Ismail | RM 0.57 billion | ✓ | | |
| 34 | Datuk Seri Panglima Lau Cho Kun | RM 0.533 billion | ✓ | | |
| 35 | Datuk Lin Yun Ling | RM 0.532 billion | | ✓ | |
| 36 | Datuk Seri Liew Kee Sin | RM 0.52 billion | | ✓ | |
| 37 | Ong Leong Huat | RM 0.50 billion | | | ✓ |
| 38 | Datuk Abdul Hamed Sepawi | RM 0.49 billion | ✓ | | |
| 39 | Datuk Tony Fernandes | RM 0.47 billion | | ✓ | |
| 40 | Kwan Ngen Chung | RM 0.40 billion | | ✓ | |

Source: *Malaysian Business* (February 2008 Issue)

Appendix 4: Statistical Problems, Diagnostic and Remedial Measures in Multivariate Regression

| | Statistical Problem | Diagnostic Measure | Remedial Measure (if problem exists) |
|----|---------------------|--|--|
| 1. | Non-Normality | <p>Histogram – visual examination of normal distribution</p> <p>Kurtosis and Skewness of Distribution – a normal distribution will have a value of 0 for skewness and 3 for kurtosis.</p> <p>Normal Probability Plot – a normal distribution forms a straight diagonal line, and the plotted data values are compared with the diagonal. If a distribution is normal, the line representing the actual data distribution closely follows the diagonal.</p> | <ul style="list-style-type: none"> • Data transformation (for instance, taking natural log of total sales and firm age). Such transformation also helps in achieving homoscedasticity. • Impacts due to sample size – larger sample sizes reduce the detrimental effects of non-normality. |
| 2. | Multicollinearity | <p>Correlation Matrix – shows the ‘one-to-one’ relationship between two independent variables. See Section 5.8 for the details.</p> <p>Variance Inflation Factor (VIF) – $VIF=1/(1-R_j^2)$ where R_j^2 is the coefficient of determination of the ‘auxiliary regression’ that includes all the explanatory variables except the jth explanatory variable. See next column for the interpretation.</p> | <ul style="list-style-type: none"> • Technically, the common cut-off threshold for VIF is 10.00. However, practically, the tolerance level in this study is set at 4.00. • A variable that causes multicollinearity will need to be removed from the regressions. • For multicollinearity involving interaction terms, see sub-section 6.2.8 for explanation. |
| 3. | Heteroscedasticity | <p>Examination of Residual Plots – the presence of heteroscedasticity is indicated by the plots of least squares residuals that are not constant against the explanatory/independent variable (e.g. increases or decrease).</p> <p>White Test – in this test, heteroscedasticity is present when the Chi-square (χ^2) statistic of homoscedasticity is rejected at the 5% significant level (Griffiths <i>et al.</i>, 2011; Gujarati, 2004). The statistical software helps in identifying the significant level.</p> | <ul style="list-style-type: none"> • Data transformation (see point 1 above). • ‘White’s Heteroscedasticity-Consistent Standard Errors’ is used to correct the standard errors in the presence of heteroscedasticity. |
| 4. | Correlated Errors | <p>Examination of Residual Plots – if the errors are serially correlated, then a large residual should generally be followed by another large residual; a small residual is likely to be followed by another small residual; and positive followed by positive and negative followed by negative. Thus, long runs of positive residuals or/and long runs of negative residuals indicate the presence of correlated errors.</p> <p>Durbin-Watson Test – following the general guide (Griffiths <i>et al.</i>, 2011), values of 1.6 or less are suggestive of correlated errors.</p> | <ul style="list-style-type: none"> • ‘Newey-West Standard-Errors’ is used to correct the standard errors in the presence of correlated errors. It was applied in some of the hypotheses in this study as a comparison to using only White’s standard errors. The outcomes are qualitatively similar in both methods. Thus only regressions with White’s standard errors are reported. |

Appendix 5 (a): Pearson Correlation Matrix (II) - Group Sub-Sample Only

| | FAMO WN1 | FAMO WN2 | CF/CO NT | FAMDI R | CHR_C EO | FAMO NLY | H_IND P_B | Lag(RO A) | Lag(Q) | DVSF_ D |
|-----------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|-------------|
| FAMOWN1 | 1.00 | | | | | | | | | |
| FAMOWN2 | -0.76 | 1.00 | | | | | | | | |
| CF/CONT | 0.17 | 0.26 | 1.00 | | | | | | | |
| FAMDIR | -0.02 | 0.17 | 0.13 | 1.00 | | | | | | |
| CHR_CEO | 0.01 | 0.12 | 0.11 | 0.52 | 1.00 | | | | | |
| FAMONLY | -0.07 | 0.21 | 0.04 | 0.17 | 0.28 | 1.00 | | | | |
| H_INDP_B | -0.06 | -0.01 | -0.01 | -0.21 | -0.20 | 0.06 | 1.00 | | | |
| Lag(ROA) | 0.21 | -0.09 | 0.07 | 0.04 | -0.08 | -0.13 | 0.00 | 1.00 | | |
| Lag(Q) | 0.11 | -0.13 | -0.18 | -0.04 | -0.06 | -0.03 | -0.11 | 0.51 | 1.00 | |
| DVSF_D | -0.13 | 0.26 | 0.31 | 0.02 | 0.00 | 0.05 | 0.00 | -0.08 | 0.01 | 1.00 |
| GR_A | -0.06 | 0.01 | 0.17 | 0.16 | 0.10 | 0.05 | 0.13 | 0.08 | -0.13 | -0.14 |
| GR_B | 0.06 | -0.08 | -0.04 | -0.04 | -0.15 | -0.07 | -0.06 | -0.09 | -0.02 | 0.14 |
| GR_C | 0.01 | 0.07 | -0.15 | -0.13 | 0.05 | 0.02 | -0.08 | 0.01 | 0.15 | 0.00 |
| FAMOWN | -0.15 | 0.76 | 0.55 | 0.23 | 0.19 | 0.24 | -0.07 | 0.07 | -0.09 | 0.26 |
| STATE | 0.09 | -0.08 | -0.11 | -0.10 | -0.11 | -0.34 | 0.01 | 0.13 | 0.21 | -0.13 |
| DOMII | -0.05 | -0.04 | -0.10 | 0.00 | -0.03 | -0.31 | -0.01 | 0.05 | 0.10 | 0.05 |
| DOMPUBII | -0.06 | -0.03 | -0.11 | 0.00 | -0.04 | -0.32 | 0.00 | 0.06 | 0.11 | 0.06 |
| FORGNII | 0.07 | -0.14 | 0.11 | -0.13 | -0.08 | -0.04 | 0.11 | -0.02 | 0.08 | 0.05 |
| FORGN | 0.08 | -0.08 | -0.03 | -0.16 | -0.10 | -0.24 | -0.03 | 0.02 | -0.07 | -0.05 |
| AUXFAM | 0.08 | -0.18 | 0.13 | -0.14 | -0.19 | -0.46 | -0.06 | 0.05 | -0.08 | -0.09 |
| Log Sales | 0.12 | -0.02 | 0.00 | -0.10 | 0.02 | -0.02 | -0.06 | 0.32 | 0.26 | 0.23 |
| Log Age | -0.02 | 0.05 | 0.07 | 0.09 | 0.08 | 0.13 | -0.02 | -0.05 | -0.05 | 0.20 |
| Gearing | -0.04 | 0.03 | 0.04 | -0.01 | 0.02 | 0.01 | -0.03 | -0.13 | -0.05 | 0.19 |
| ROA | 0.16 | -0.01 | 0.05 | 0.09 | -0.01 | -0.08 | -0.08 | 0.59 | 0.41 | -0.04 |
| Q | 0.04 | -0.03 | -0.17 | 0.00 | -0.03 | -0.04 | -0.09 | 0.35 | 0.77 | 0.06 |

(Continued)

| | GR_A | GR_B | GR_C | FAMOWN | STATE | DOMII | DOMPUBII | FORGNII | FORGN | AUXFAM | Log Sales | Log Age | Gearing | ROA |
|-----------|--------------|--------------|-------------|--------------|-------------|-------|----------|---------|-------|--------------|-------------|---------|--------------|-------------|
| GR_A | 1.00 | | | | | | | | | | | | | |
| GR_B | -0.55 | 1.00 | | | | | | | | | | | | |
| GR_C | -0.49 | -0.46 | 1.00 | | | | | | | | | | | |
| FAMOWN | -0.04 | -0.06 | 0.11 | 1.00 | | | | | | | | | | |
| STATE | -0.14 | 0.19 | -0.05 | -0.04 | 1.00 | | | | | | | | | |
| DOMII | 0.02 | -0.01 | -0.01 | -0.10 | -0.07 | 1.00 | | | | | | | | |
| DOMPUBII | 0.00 | 0.00 | 0.00 | -0.10 | -0.07 | 0.99 | 1.00 | | | | | | | |
| FORGNII | 0.09 | -0.02 | -0.08 | -0.13 | 0.07 | -0.04 | -0.04 | 1.00 | | | | | | |
| FORGN | -0.11 | 0.01 | 0.10 | -0.04 | -0.07 | -0.07 | -0.06 | -0.03 | 1.00 | | | | | |
| AUXFAM | 0.08 | 0.03 | -0.12 | -0.20 | -0.12 | -0.08 | -0.08 | -0.08 | -0.06 | 1.00 | | | | |
| Log Sales | -0.23 | 0.05 | 0.19 | 0.09 | 0.03 | 0.14 | 0.15 | 0.11 | 0.15 | -0.23 | 1.00 | | | |
| Log Age | -0.11 | -0.01 | 0.13 | 0.06 | -0.11 | -0.11 | -0.10 | 0.03 | 0.02 | -0.06 | 0.12 | 1.00 | | |
| Gearing | -0.11 | 0.05 | 0.07 | 0.00 | 0.01 | -0.07 | -0.06 | 0.10 | 0.14 | -0.11 | 0.39 | 0.13 | 1.00 | |
| ROA | 0.00 | 0.04 | -0.04 | 0.15 | 0.17 | 0.01 | 0.02 | -0.02 | -0.01 | -0.05 | 0.33 | 0.03 | -0.20 | 1.00 |
| Q | -0.23 | 0.10 | 0.13 | -0.02 | 0.24 | 0.00 | 0.01 | 0.01 | -0.06 | -0.11 | 0.32 | 0.06 | 0.05 | 0.42 |

Note: Correlation coefficients greater than or equal to 0.16 (bold figures in the table) are significant at $p < 0.05$

(b): Pearson Correlation Matrix (III) - Group Sub-Sample

| Variable | Entropy | Herf | # Segments | DVSF_D | PrINED | INDP_CHR | INDP_ADT | HJIND P_B | GR_A | GR_B | GR_C |
|------------|--------------|--------------|--------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------|
| Entropy | 1.00 | | | | | | | | | | |
| Herf | -0.99 | 1.00 | | | | | | | | | |
| # Segments | 0.81 | -0.75 | 1.00 | | | | | | | | |
| DVSF_D | 0.84 | -0.86 | 0.71 | 1.00 | | | | | | | |
| PrINED | 0.12 | -0.12 | 0.10 | 0.09 | 1.00 | | | | | | |
| INDP_CHR | 0.03 | -0.05 | -0.06 | 0.03 | 0.33 | 1.00 | | | | | |
| INDP_ADT | 0.00 | 0.01 | 0.00 | -0.02 | 0.30 | 0.09 | 1.00 | | | | |
| H_INDP_B | 0.00 | 0.00 | -0.05 | 0.00 | 0.36 | 0.43 | 0.50 | 1.00 | | | |
| GR_A | -0.14 | 0.13 | -0.18 | -0.14 | -0.02 | 0.04 | 0.05 | 0.13 | 1.00 | | |
| GR_B | 0.18 | -0.18 | 0.19 | 0.14 | 0.04 | -0.01 | 0.18 | -0.06 | -0.55 | 1.00 | |
| GR_C | -0.04 | 0.05 | 0.00 | 0.00 | -0.01 | -0.03 | -0.24 | -0.08 | -0.49 | -0.46 | 1.00 |
| FAMOWN | 0.22 | -0.23 | 0.15 | 0.26 | -0.05 | -0.02 | -0.01 | -0.07 | -0.04 | -0.06 | 0.11 |
| STATE | -0.13 | 0.13 | -0.06 | -0.13 | -0.04 | -0.05 | 0.13 | 0.01 | -0.14 | 0.19 | -0.05 |
| DOMII | 0.00 | -0.01 | -0.02 | 0.05 | -0.13 | -0.14 | 0.01 | -0.01 | 0.02 | -0.01 | -0.01 |
| DOMPUBII | 0.01 | -0.02 | -0.02 | 0.06 | -0.13 | -0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| FORGNII | 0.01 | -0.02 | -0.04 | 0.05 | 0.16 | 0.10 | 0.06 | 0.11 | 0.09 | -0.02 | -0.08 |
| FORGN | 0.00 | 0.01 | -0.06 | -0.05 | 0.00 | 0.02 | 0.04 | -0.03 | -0.11 | 0.01 | 0.10 |
| AUXFAM | -0.14 | 0.13 | -0.12 | -0.09 | -0.07 | 0.01 | 0.02 | -0.06 | 0.08 | 0.03 | -0.12 |
| CF/CONT | 0.31 | -0.30 | 0.27 | 0.31 | 0.10 | -0.01 | 0.17 | -0.01 | 0.17 | -0.04 | -0.15 |
| FAMDIR | 0.01 | -0.03 | -0.04 | 0.02 | -0.26 | -0.24 | -0.19 | -0.21 | 0.16 | -0.04 | -0.13 |
| CHR_CEO | -0.03 | 0.04 | 0.06 | 0.00 | -0.09 | -0.48 | -0.12 | -0.20 | 0.10 | -0.15 | 0.05 |
| FAMONLY | 0.09 | -0.08 | 0.08 | 0.05 | 0.13 | -0.03 | -0.00 | 0.06 | 0.05 | -0.07 | 0.02 |
| Log Sales | 0.24 | -0.22 | 0.38 | 0.23 | 0.06 | 0.06 | -0.07 | -0.06 | -0.23 | 0.05 | 0.19 |
| Log Age | 0.19 | -0.18 | 0.22 | 0.20 | 0.09 | -0.04 | -0.14 | -0.02 | -0.11 | -0.01 | 0.13 |
| Gearing | 0.16 | -0.14 | 0.21 | 0.19 | 0.01 | 0.00 | -0.14 | -0.03 | -0.11 | 0.05 | 0.07 |
| ROA | -0.08 | 0.08 | -0.02 | -0.04 | -0.02 | 0.01 | 0.02 | -0.08 | 0.00 | 0.04 | -0.04 |
| Q | -0.01 | -0.01 | 0.04 | 0.06 | 0.04 | 0.03 | -0.06 | -0.09 | -0.23 | 0.10 | 0.13 |

Note: Correlation coefficients greater than or equal to 0.16 (bold figures in the table) are significant at $p < 0.05$

Note to Appendix 5(a) and 5(b):

Matrix in Appendix 5(a) shows that ROA is significantly positively related to FAMOWN1, STATE and Log Sales and negatively related to Gearing whereas Tobin's Q is significantly positively related to STATE and Log Sales and negatively related to CF/CONT and GR_A (shaded area). Appendix 5(b) shows that Tobin's Q is significantly negatively related to GR_A (shaded area) whereas ROA is not significantly related to any explanatory variables in the sample of group-affiliated firms.

Appendix 6

(a): Appendix to Table 6.2a: Moderating Effects of Board Independence on ROA

| Explanatory Variable | (1) | (2) | (3) | (4) |
|-------------------------|------------|------------|------------|------------|
| FAMOWN' | 0.050 | 0.048* | 0.052** | 0.049** |
| FAMOWN' *PrINED' | 0.000 | | | |
| FAMOWN' *INDP_CHR | | 0.022 | | |
| FAMOWN' *INDP_ADT | | | 0.008 | |
| FAMOWN' *H_INDP_B | | | | 0.053 |
| STATE | 0.128 | 0.140* | 0.142* | 0.142* |
| DOMII | 0.026 | 0.035 | 0.032 | 0.034 |
| FORGNII | 0.149* | 0.148* | 0.141* | 0.147* |
| FORGN | -0.013 | -0.006 | -0.006 | -0.009 |
| AUXFAM | 0.014 | 0.021 | 0.019 | 0.020 |
| PrINED' | -5.688* | | | |
| INDP_CHR | | 0.076 | | |
| INDP_ADT | | | -0.591 | |
| H_INDP_B | | | | -0.321 |
| Log Sales | 2.149*** | 2.138*** | 2.137*** | 2.139*** |
| Log Age | -0.856* | -0.875* | -0.937* | -0.886* |
| Gearing | -15.897*** | -15.834*** | -15.934*** | -15.912*** |
| Sector Effect | Included | Included | Included | Included |
| Adjusted R ² | 0.264 | 0.258 | 0.259 | 0.259 |
| F-statistic | 7.619*** | 7.405*** | 7.439*** | 7.430*** |
| Observations | 314 | 314 | 314 | 314 |

(b): Appendix to Table 6.2b: Moderating Effects of Board Independence on Tobin's Q

| Explanatory Variable | (1) | (2) | (3) | (4) |
|-------------------------|----------|----------|----------|----------|
| FAMOWN' | -0.002 | 0.000 | 0.000 | 0.000 |
| FAMOWN' *PrINED' | 0.004 | | | |
| FAMOWN' *INDP_CHR | | 0.001 | | |
| FAMOWN' *INDP_ADT | | | -0.001 | |
| FAMOWN' *H_INDP_B | | | | -0.002 |
| STATE | 0.008 | 0.008* | 0.008* | 0.008 |
| DOMII | 0.002 | 0.003 | 0.003 | 0.003 |
| FORGNII | 0.015** | 0.015** | 0.014** | 0.015** |
| FORGN | -0.005 | -0.005 | -0.005 | -0.005 |
| AUXFAM | -0.001 | -0.001 | -0.001 | -0.001 |
| PrINED' | -0.175 | | | |
| INDP_CHR | | -0.001 | | |
| INDP_ADT | | | -0.054 | |
| H_INDP_B | | | | -0.119** |
| Log Sales | 0.067*** | 0.066*** | 0.066*** | 0.065*** |
| Log Age | -0.005 | -0.005 | -0.009 | -0.003 |
| Gearing | -0.061 | -0.059 | -0.071 | -0.059 |
| Sector Effect | Included | Included | Included | Included |
| Adjusted R ² | 0.170 | 0.166 | 0.172 | 0.174 |
| F-statistic | 4.765*** | 4.673*** | 4.830*** | 4.873*** |

(c): Appendix to Table 6.3a: Influence of Business Group-affiliation and Group Size on ROA

| Explanatory Variable | (1) | (2) | (3) |
|-------------------------|------------|------------|------------|
| FAMOWN | | 0.045** | 0.046** |
| STATE | | 0.161* | 0.161* |
| DOMII | | 0.039 | 0.037 |
| FORGNI | | 0.138* | 0.126** |
| FORGN | | 0.004 | 0.012 |
| AUXFAM | | 0.012 | 0.010 |
| Group | -1.992** | -1.911** | |
| GR_A | | | -1.358 |
| GR_B | | | -1.752 |
| GR_C | | | -3.024** |
| Log Sales | 2.426*** | 2.302*** | 2.357*** |
| Log Age | -0.593 | -0.561 | -0.495 |
| Gearing | -15.993*** | -15.721*** | -15.786*** |
| Sector Effect | Included | Included | Included |
| Adjusted R ² | 0.271 | 0.274 | 0.273 |
| F-statistic | 12.625*** | 8.380*** | 7.538*** |
| Observations | 314 | 314 | 314 |

(d): Appendix to Table 6.3b: Influence of Business Group-affiliation and Group Size on Tobin's Q

| Explanatory Variable | (1) | (2) | (3) |
|-------------------------|----------|----------|----------|
| FAMOWN | | 0.000 | 0.000 |
| STATE | | 0.009* | 0.008* |
| DOMII | | 0.003 | 0.003 |
| FORGNI | | 0.015** | 0.015** |
| FORGN | | -0.005 | -0.005 |
| AUXFAM | | -0.001 | -0.001 |
| Group | -0.039 | -0.047 | |
| GR_A | | | -0.097** |
| GR_B | | | -0.021 |
| GR_C | | | 0.003 |
| Log Sales | 0.075*** | 0.070*** | 0.066*** |
| Log Age | 0.001 | 0.003 | -0.001 |
| Gearing | -0.063 | -0.055 | -0.056 |
| Sector Effect | Included | Included | Included |
| Adjusted R ² | 0.141 | 0.173 | 0.176 |
| F-statistic | 6.119*** | 5.093*** | 4.708*** |
| Observations | 314 | 314 | 314 |

(e): Appendix to Table 6.4a: Influence of Control-Enhancing Means on ROA

| Explanatory Variable | (1) | (2) | (3) | (4) | (5) | (6) |
|-------------------------|------------|------------|------------|------------|------------|------------|
| FAMOWN | 0.053** | 0.053** | 0.019 | 0.040* | 0.045** | 0.041* |
| STATE | 0.151* | 0.147* | 0.169** | 0.168** | 0.071 | 0.160* |
| DOMII | 0.041 | 0.040 | 0.044 | 0.036 | -0.026 | 0.041 |
| FORGNII | 0.138* | 0.139* | 0.144* | 0.141* | 0.107 | 0.132* |
| FORGN | -0.003 | -0.003 | 0.021 | 0.003 | -0.071 | 0.003 |
| AUXFAM | 0.017 | 0.017 | 0.026 | 0.016 | -0.051 | 0.011 |
| CF/CONT | 1.528 | | | | | |
| CF/CONT_DUM | | -0.624 | | | | |
| FAMDIR | | | 5.699*** | | | |
| CHR_CEO | | | | 0.784 | | |
| FAMONLY | | | | | -2.020** | |
| BG_S | | | | | | -1.484* |
| BG_PS | | | | | | -2.224*** |
| BG_CS | | | | | | -1.925 |
| Group | | | -1.649** | -1.806** | -1.843** | |
| Log Sales | 2.032*** | 2.033*** | 2.328*** | 2.306*** | 2.293*** | 2.347*** |
| Log Age | -0.843* | -0.852* | -0.619 | -0.582 | -0.533 | -0.569 |
| Gearing | -15.454*** | -15.464*** | -15.902*** | -15.595*** | -15.588*** | -15.632*** |
| Sector Effect | Included | Included | Included | Included | Included | Included |
| Adjusted R ² | 0.253 | 0.253 | 0.291 | 0.274 | 0.279 | 0.270 |
| F-statistic | 7.385*** | 7.385*** | 8.546*** | 7.952*** | 8.142*** | 7.432*** |
| Observations | 303 | 303 | 314 | 314 | 314 | 314 |

(f): Appendix to Table 6.4b: Influence of Control-Enhancing Means on Tobin's Q

| Explanatory Variable | (1) | (2) | (3) | (4) | (5) | (6) |
|-------------------------|----------|----------|----------|----------|----------|----------|
| FAMOWN | 0.002* | 0.001 | -0.001 | 0.000 | 0.000 | 0.000 |
| STATE | 0.008 | 0.008* | 0.009* | 0.009* | 0.007 | 0.009* |
| DOMII | 0.003 | 0.003 | 0.003 | 0.003 | 0.002 | 0.003 |
| FORGNII | 0.016** | 0.016** | 0.015** | 0.015** | 0.014** | 0.014** |
| FORGN | -0.005 | -0.005 | -0.004 | -0.005 | -0.006 | -0.004 |
| AUXFAM | 0.000 | 0.000 | 0.000 | -0.001 | -0.002 | -0.001 |
| CF/CONT | -0.254 | | | | | |
| CF/CONT_DUM | | 0.076 | | | | |
| FAMDIR | | | 0.173* | | | |
| CHR_CEO | | | | 0.006 | | |
| FAMONLY | | | | | -0.035 | |
| BG_S | | | | | | -0.037 |
| BG_PS | | | | | | -0.057 |
| BG_CS | | | | | | -0.023 |
| Group | | | -0.039 | -0.047 | -0.046 | |
| Log Sales | 0.059*** | 0.060*** | 0.071*** | 0.070*** | 0.070*** | 0.071*** |
| Log Age | -0.004 | -0.003 | 0.001 | 0.002 | 0.003 | 0.002 |
| Gearing | -0.060 | -0.061 | -0.061 | -0.054 | -0.053 | -0.055 |
| Sector Effect | Included | Included | Included | Included | Included | Included |
| Adjusted R ² | 0.165 | 0.160 | 0.179 | 0.170 | 0.171 | 0.168 |
| F-statistic | 4.727*** | 4.596*** | 5.019*** | 4.780*** | 4.809*** | 4.512*** |
| Observations | 303 | 303 | 314 | 314 | 314 | 314 |

(g): Appendix to Table 6.5a: Profit Redistribution Effects and Firm Performance

| Explanatory Variable | (1) ROA | (2) ROA | (3) ROA | (4) Tobin's Q | (5) Tobin's Q | (6) Tobin's Q |
|-------------------------|-----------|----------|----------|---------------|---------------|---------------|
| Lag (ROA) | 0.371*** | 0.389*** | 0.332*** | | | |
| Lag (Q) | | | | 0.455*** | 0.468*** | 0.529*** |
| FAMOWN' | 0.007 | 0.040 | 0.043 | -0.004 | 0.001 | 0.001 |
| FAMOWN' * Lag (ROA) | 0.003 | | | | | |
| FAMOWN' * Lag (Q) | | | | 0.004 | | |
| CF/CONT' | | 1.421 | | | -0.647*** | |
| CF/CONT' * Lag (ROA) | | -0.232 | | | | |
| CF/CONT' * Lag (Q) | | | | | 0.468*** | |
| CF/CONT_DUM | | | -1.023 | | | 0.268*** |
| CF/CONT_DUM* Lag (ROA) | | | 0.166 | | | |
| CF/CONT_DUM* Lag (Q) | | | | | | -0.222*** |
| STATE | 0.127* | 0.167** | 0.177** | 0.003 | 0.004 | 0.004 |
| DOMII | -0.039 | -0.021 | -0.019 | -0.003 | -0.004 | -0.003 |
| FORGNII | -0.025 | -0.013 | -0.010 | -0.007 | -0.007 | -0.008 |
| FORGN | -0.044 | -0.033 | -0.038 | -0.002 | -0.001 | -0.001 |
| AUXFAM | -0.019 | -0.021 | -0.019 | -0.001 | 0.000 | 0.000 |
| Log Sales | 1.570*** | 1.069** | 1.062** | 0.020 | 0.014 | 0.014 |
| Log Age | 0.334 | 0.355 | 0.300 | 0.041* | 0.058*** | 0.059*** |
| Gearing | -9.129*** | -6.852** | -6.861** | 0.117 | 0.089 | 0.091 |
| Sector Effect | Included | Included | Included | Included | Included | Included |
| Adjusted R ² | 0.427 | 0.417 | 0.423 | 0.624 | 0.642 | 0.643 |
| F-statistic | 7.614*** | 6.563*** | 6.703*** | 15.770*** | 14.967*** | 15.006*** |
| Observations | 152 | 141 | 141 | 152 | 141 | 141 |

(h): Appendix to Table 6.5b: Profit Redistribution with ROA – Group Size Effect

| Explanatory Variable | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|------------------------------|-----------|-----------|-----------|----------|----------|----------|----------|----------|----------|
| Lag (ROA) | 0.365*** | 0.401*** | 0.312*** | 0.414*** | 0.399*** | 0.399*** | 0.399*** | 0.413*** | 0.385*** |
| FAMOWN | 0.036 | 0.045* | 0.033 | 0.056** | 0.056** | 0.055** | 0.054** | 0.056** | 0.056** |
| CF/CONT' | | | | -1.429 | -2.937 | -2.006 | | | |
| CF/CONT_DUM | | | | | | | 0.682 | 1.350 | 0.762 |
| GR_A | 1.077 | 1.238 | | 1.528 | 1.454 | | 1.083 | 1.494 | |
| GR_B | 1.669 | 2.710* | 0.353 | 2.003* | 2.050* | 0.641 | 2.006* | 2.307* | 0.630 |
| GR_C | | | -2.788* | | | -1.420 | | | -1.898 |
| FAMOWN* Lag (ROA)*GR_A | 0.000 | | | | | | | | |
| FAMOWN* Lag (ROA)*GR_B | | -0.003 | | | | | | | |
| FAMOWN* Lag (ROA)*GR_C | | | 0.004 | | | | | | |
| CF/CONT' * Lag (ROA)*GR_A | | | | -0.407 | | | | | |
| CF/CONT' * Lag (ROA)*GR_B | | | | | 0.175 | | | | |
| CF/CONT' * Lag (ROA)*GR_C | | | | | | -0.094 | | | |
| CF/CONT_DUM * Lag (ROA)*GR_A | | | | | | | 0.118 | | |
| CF/CONT_DUM * Lag (ROA)*GR_B | | | | | | | | -0.084 | |
| CF/CONT_DUM * Lag (ROA)*GR_C | | | | | | | | | 0.116 |
| Log Sales | 1.539*** | 1.534*** | 1.524*** | 1.101*** | 1.123*** | 1.105*** | 1.110*** | 1.112*** | 1.077*** |
| Log Age | 0.384 | 0.382 | 0.347 | 0.398 | 0.392 | 0.382 | 0.442 | 0.470 | 0.393 |
| Gearing | -9.085*** | -9.194*** | -9.142*** | -7.302** | -7.584** | -7.432** | -7.495** | -7.576** | -7.342** |
| Sector Effect | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Adjusted R ² | 0.436 | 0.440 | 0.445 | 0.431 | 0.428 | 0.427 | 0.431 | 0.430 | 0.433 |
| F-statistic | 9.324*** | 9.475*** | 9.637*** | 8.070*** | 7.985*** | 7.969*** | 8.063*** | 8.036*** | 8.113*** |
| Observations | 152 | 152 | 152 | 141 | 141 | 141 | 141 | 141 | 141 |

(i): Appendix to Table 6.5c: Profit Redistribution with Tobin's Q – Group Size Effect

| Explanatory Variable | (1) | (2) | (3) | 4 | 5 | 6 | 7 | 8 | 9 |
|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Lag (Q) | 0.399*** | 0.452*** | 0.477*** | 0.448*** | 0.473*** | 0.494*** | 0.457*** | 0.458*** | 0.500*** |
| FAMOWN | -0.001 | 0.001 | 0.002* | 0.002* | 0.002* | 0.002** | 0.002 | 0.002* | 0.002* |
| CF/CONT' | | | | -0.155 | 0.084 | -0.265 | | | |
| CF/CONT_DUM | | | | | | | 0.045 | -0.019 | 0.085* |
| GR_A | -0.165** | -0.025 | | -0.012 | -0.021 | | 0.004 | -0.019 | |
| GR_B | 0.036 | 0.063 | 0.072* | 0.071 | 0.063 | 0.066* | 0.071 | 0.021 | 0.070* |
| GR_C | | | 0.156* | | | 0.031 | | | 0.084* |
| FAMOWN* Lag (Q)*GR_A | 0.004 | | | | | | | | |
| FAMOWN* Lag (Q)*GR_B | | 0.000 | | | | | | | |
| FAMOWN* Lag (Q)*GR_C | | | -0.003** | | | | | | |
| CF/CONT' * Lag (Q)*GR_A | | | | 0.183 | | | | | |
| CF/CONT' * Lag (Q)*GR_B | | | | | -0.372 | | | | |
| CF/CONT' * Lag (Q)*GR_C | | | | | | 0.374*** | | | |
| CF/CONT_DUM * Lag (Q)*GR_A | | | | | | | -0.044 | | |
| CF/CONT_DUM * Lag (Q)*GR_B | | | | | | | | 0.132 | |
| CF/CONT_DUM * Lag (Q)*GR_C | | | | | | | | | -0.143*** |
| Log Sales | 0.014 | 0.011 | 0.012 | 0.002 | -0.002 | 0.002 | 0.003 | 0.000 | 0.001 |
| Log Age | 0.047** | 0.041* | 0.044** | 0.046** | 0.050** | 0.057*** | 0.047** | 0.050** | 0.055** |
| Gearing | 0.123 | 0.122 | 0.113 | 0.104 | 0.135 | 0.116 | 0.102 | 0.131 | 0.120 |
| Sector Effect | Included | Included | Included | Included | Included | Included | Included | Included | Included |
| Adjusted R ² | 0.639 | 0.619 | 0.629 | 0.622 | 0.639 | 0.653 | 0.617 | 0.630 | 0.645 |
| F-statistic | 20.116*** | 18.524*** | 19.272*** | 16.335*** | 17.529*** | 18.552*** | 16.066*** | 16.864*** | 17.921*** |
| Observations | 152 | 152 | 152 | 141 | 141 | 141 | 141 | 141 | 141 |

(j): Appendix to Table 6.5d: Profit Redistribution– Large Group Size and Family Ownership
Classification Effects

| Explanatory Variable | (1) Tobin's Q | (2) Tobin's Q | (3) Tobin's Q | (4) Tobin's Q |
|-------------------------|---------------|---------------|---------------|---------------|
| Lag (Q) | 0.450*** | 0.437*** | 0.456*** | 0.434*** |
| FAMOWN1 | 0.000 | 0.000 | 0.000 | 0.000 |
| FAMOWN2 | 0.001 | 0.002* | 0.000 | 0.001 |
| GR_B | 0.077* | 0.078** | 0.063 | 0.066* |
| GR_C | 0.030 | 0.062 | 0.036 | 0.052 |
| FAMOWN1*Lag(Q)*GR_C | 0.000 | | -0.001 | |
| FAMOWN2*Lag(Q)*GR_C | | -0.003** | | -0.003** |
| STATE | | | 0.004 | 0.004 |
| DOMII | | | -0.004 | -0.003 |
| FORGNII | | | -0.007 | -0.006 |
| FORGN | | | -0.001 | -0.002 |
| AUXFAM | | | -0.001 | 0.000 |
| Log Sales | 0.012 | 0.017 | 0.018 | 0.023 |
| Log Age | 0.040* | 0.041** | 0.041* | 0.042* |
| Gearing | 0.117 | 0.104 | 0.100 | 0.091 |
| Sector Effect | Included | Included | Included | Included |
| Adjusted R ² | 0.617 | 0.627 | 0.617 | 0.626 |
| F-statistic | 17.226*** | 17.887*** | 13.186*** | 13.616*** |
| Observations | 152 | 152 | 152 | 152 |

(k): Appendix to Table 6.7a: Firm Diversification and Performance

| Variable | ROA | | | | Tobin's Q | | | |
|-------------------------|------------|-----------|-----------|-----------|-----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| ENTROPY | -1.220* | | | | -0.087** | | | |
| HERF | | 2.034 | | | | 0.119* | | |
| NUM_SEG | | | -0.354* | | | | -0.026** | |
| DVSF_D | | | | -0.155 | | | | -0.015 |
| Group | -1.848** | -1.864** | -1.833** | -1.913** | -0.043 | -0.045 | -0.042 | -0.048 |
| FAMOWN | 0.047** | 0.047** | 0.044** | 0.045** | 0.000 | 0.000 | 0.000 | 0.000 |
| STATE | 0.149* | 0.150* | 0.152* | 0.160* | 0.008* | 0.008 | 0.008 | 0.008* |
| DOMII | 0.037 | 0.038 | 0.033 | 0.039 | 0.003 | 0.003 | 0.002 | 0.003 |
| FORGNII | 0.125* | 0.127* | 0.119 | 0.136* | 0.014** | 0.014** | 0.013** | 0.014** |
| FORGN | -0.004 | -0.003 | -0.012 | 0.003 | -0.005 | -0.005 | -0.006 | -0.005 |
| AUXFAM | 0.011 | 0.011 | 0.012 | 0.012 | -0.001 | -0.001 | -0.001 | -0.001 |
| Log Sales | 2.347*** | 2.328*** | 2.439*** | 2.306*** | 0.073*** | 0.072*** | 0.080*** | 0.071*** |
| Log Age | -0.451 | -0.460 | -0.460 | -0.545 | 0.011 | 0.009 | 0.010 | 0.004 |
| Gearing | -15.502*** | 15.457*** | 15.707*** | 15.665*** | -0.040 | -0.040 | -0.054 | -0.050 |
| Sector Effect | Included | Included | Included | Included | Included | Included | Included | Included |
| Adjusted R ² | 0.276 | 0.275 | 0.276 | 0.272 | 0.181 | 0.177 | 0.184 | 0.171 |
| F-statistic | 8.005*** | 7.993*** | 8.028*** | 7.864*** | 5.067*** | 4.954*** | 5.140*** | 4.790*** |
| Observations | 314 | 314 | 314 | 314 | 314 | 314 | 314 | 314 |

(l): Appendix to Table 6.7b: Effects of Firm Diversification on Firm Efficiency

| | (2) | (2) | (3) | (4) |
|-------------------------|-----------|-----------|-----------|-----------|
| ENTROPY | -0.405*** | | | |
| HERF | | 0.641*** | | |
| NUM_SEG | | | -0.098*** | |
| DVSF_D | | | | -0.244*** |
| ROA | 0.034*** | 0.034*** | 0.034*** | 0.035*** |
| GROUP | -0.266*** | -0.272*** | -0.265*** | -0.287*** |
| FAMOWN | -0.002 | -0.002 | -0.003 | -0.002 |
| STATE | -0.007 | -0.007 | -0.005 | -0.006 |
| DOMII | -0.002 | -0.001 | -0.003 | 0.000 |
| FORGNII | -0.016 | -0.015 | -0.017 | -0.014 |
| FORGN | 0.001 | 0.001 | -0.001 | 0.002 |
| AUXFAM | -0.001 | -0.001 | 0.000 | 0.000 |
| LN SALES | 0.313*** | 0.305*** | 0.336*** | 0.301*** |
| LNAGE | -0.095** | -0.100** | -0.151** | -0.106** |
| GEARING | -0.312 | -0.298 | -0.383 | -0.270 |
| Sector Effect | Included | Included | Included | Included |
| Adjusted R ² | 0.579 | 0.574 | 0.573 | 0.565 |
| F-statistic | 24.885*** | 24.367*** | 24.285*** | 23.542*** |
| Observations | 314 | 314 | 314 | 314 |

(m): Appendix to Table 6.7c: Firm Diversification and Efficiency – Comparison between Group and Non-group Firms

| Variable | Group | | | | Non-Group | | | |
|-------------------------|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| ENTROPY | -0.439*** | | | | -0.156* | | | |
| HERF | | 0.714*** | | | | 0.234* | | |
| NUM_SEG | | | -0.108*** | | | | -0.024 | |
| DVSF_D | | | | -0.331*** | | | | -0.095 |
| ROA | 0.046*** | 0.046*** | 0.046*** | 0.048*** | 0.027*** | 0.027*** | 0.026*** | 0.027*** |
| FAMOWN | -0.006 | -0.006 | -0.007 | -0.005 | 0.002 | 0.002 | 0.002 | 0.002 |
| STATE | -0.011 | -0.011 | -0.008 | -0.010 | 0.002 | 0.003 | 0.002 | 0.003 |
| DOMII | 0.003 | 0.004 | 0.001 | 0.005 | -0.004 | -0.004 | -0.004 | -0.004 |
| FORGNII | -0.006 | -0.005 | -0.010 | -0.003 | -0.020 | -0.020 | -0.019 | -0.020 |
| FORGN | 0.005 | 0.005 | 0.001 | 0.004 | 0.000 | 0.000 | 0.001 | 0.001 |
| AUXFAM | -0.004 | -0.003 | -0.003 | -0.002 | 0.000 | 0.001 | 0.001 | 0.001 |
| LNSALES | 0.185*** | 0.177*** | 0.208*** | 0.173*** | 0.472*** | 0.469*** | 0.477*** | 0.469*** |
| LNAGE | -0.122* | -0.129* | -0.118 | -0.130* | -0.076 | -0.077 | -0.086 | -0.080 |
| GEARING | 0.117 | 0.130 | 0.109 | 0.224 | -0.629*** | -0.623*** | -0.671*** | -0.619** |
| Sector Effect | Included | Included | Included | Included | Included | Included | Included | Included |
| Adjusted R ² | 0.463 | 0.455 | 0.454 | 0.446 | 0.748 | 0.747 | 0.745 | 0.747 |
| F-statistic | 8.616*** | 8.355*** | 8.340*** | 8.111*** | 29.117*** | 29.008*** | 28.741*** | 28.978*** |
| Observations | 151 | 151 | 151 | 151 | 162 | 162 | 162 | 162 |

(n): Appendix to Table 6.8a: Firm Diversification and Performance – Comparison between Group and Non-group Firms

| <i>Panel A: ROA</i> | | | | | | | | |
|---------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | Group | | | | Non-Group | | | |
| Variable | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| ENTROPY | -1.693* | | | | -0.139 | | | |
| HERF | | 2.734* | | | | 0.307 | | |
| NUM_SEG | | | -0.459* | | | | -0.229 | |
| DVSF_D | | | | -0.850 | | | | 0.548 |
| Log Sales | 2.554*** | 2.530*** | 2.665*** | 2.507*** | 2.087*** | 2.084*** | 2.150*** | 2.089*** |
| Log Age | 0.278 | 0.252 | 0.317 | 0.204 | -1.656** | -1.652** | -1.648** | -1.713** |
| Gearing | -13.347*** | -13.334*** | -13.387*** | -13.204*** | -16.634*** | -16.613*** | -16.753*** | -16.859*** |
| Sector Effect | Included | Included | Included | Included | Included | Included | Included | Included |
| Adjusted R ² | 0.315 | 0.313 | 0.314 | 0.307 | 0.269 | 0.269 | 0.271 | 0.270 |
| F-statistic | 5.332*** | 5.290*** | 5.329*** | 5.174*** | 4.706*** | 4.706*** | 4.732*** | 4.728*** |
| Observations | 152 | 152 | 152 | 152 | 162 | 162 | 162 | 162 |
| <i>Panel B: Tobin's Q</i> | | | | | | | | |
| | Group | | | | Non-Group | | | |
| Variable | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| ENTROPY | -0.066 | | | | -0.076 | | | |
| HERF | | 0.071 | | | | 0.099 | | |
| NUM_SEG | | | -0.022* | | | | -0.031* | |
| DVSF_D | | | | -0.001 | | | | -0.001 |
| Log Sales | 0.076*** | 0.075*** | 0.083*** | 0.073*** | 0.074*** | 0.073*** | 0.082*** | 0.073*** |
| Log Age | 0.035 | 0.032 | 0.038 | 0.029 | -0.011 | -0.012 | -0.014 | -0.017 |
| Gearing | -0.066 | -0.067 | -0.066 | -0.071 | 0.010 | 0.011 | -0.017 | -0.004 |
| Sector Effect | Included | Included | Included | Included | Included | Included | Included | Included |
| Adjusted R ² | 0.173 | 0.168 | 0.177 | 0.165 | 0.271 | 0.268 | 0.278 | 0.265 |
| F-statistic | 2.973*** | 2.905*** | 3.029*** | 2.866*** | 4.737*** | 4.690*** | 4.880*** | 4.619*** |
| Observations | 152 | 152 | 152 | 152 | 162 | 162 | 162 | 162 |

Note: All other ownership variables are included in all regressions but are not shown above.

References

- Adam, K. (1997) The Politics of Redress: South African Style Affirmative Action, *The Journal of Modern African Studies*, 35(2), 231-249.
- Agrawal, A. and Knoeber, C. R. (2001) Do Some Outside Directors Play A Political Role? *Journal of Law and Economics*, 44, 179-198.
- Aguilera, R. V. and Jackson, G. (2003) The Cross-National Diversity of Corporate Governance: Dimensions and Determinants, *Academy of Management Review*, 28(3), 447-465.
- Ahmad, P. I. (2006) Using EPF Savings for Illness Insurance, *Malaysian Business*, 16th March.
- Aiken, L. and West, S. (1991) *Multiple Regression: Testing and Interpreting Interactions*, Sage Publications, Newbury Park.
- Almeida, H. and Wolfenzon, D. (2006) A Theory of Pyramidal Ownership and Family Business Groups, *Journal of Finance*, 61(6), 2637-2680.
- Almeida, H., Park, S. Y., Subrahmanyam, M. G. and Wolfenzon, D. (2011) The Structure and Formation of Business Groups: Evidence from Korean *Chaebols*, *Journal of Financial Economics*, 99, 447-475.
- Amihud, Y. and Lev, B. (1981) Risk Reduction as a Managerial Motive for Conglomerate Mergers, *Rand Journal of Economics*, 12, 605-617.
- Amihud, Y. and Lev, B. (1999) Does Corporate Ownership Structure Affect Its Strategy towards Diversification? *Strategic Management Journal*, 20, 1063-1069.
- Anderson, R. C., Bates, T. W. and Bizjak, J. M. (2000) Corporate Governance and Firm Diversification, *Financial Management*, 29, 5-22.
- Anderson, R. C. and Reeb, D. M. (2003) Founding Family Ownership and Firm Performance: Evidence from the S&P 500, *Journal of Finance*, 58(3), 1301-1328.
- Anderson, R. C. and Reeb, D. (2004) Board Composition: Balancing Family Influence in S&P 500 Firms. *Administrative Science Quarterly*, 49, 209-237.
- Andres, C. (2008) Large Shareholders and Firm Performance- An Empirical Examination of Founding Family Ownership, *Journal of Corporate Finance*, 14, 431-445.
- Ang, J., Cole, R. and Lin, J. (2000) Agency Costs and Ownership Structure, *Journal of Finance*, 55(1), 81-106.
- Anson, M., White, T. and Ho, H. (2004) Good Corporate Governance Works: More Evidence from CalPERS, *Journal of Asset Management*, 5(3), 149-156.
- Ardalan, K. (2008) *On the Role of Paradigms in Finance*, Ashgate Publishing, Hampshire.

Asian Corporate Governance Association (ACGA) (2007) The Pros and Cons of Corporate Governance Funds in Emerging Markets, *Presentation at the KRX/KCGS International Symposium*, 10th October, Seoul.

Atanasov, V., Black, B. and Ciccotello, C. (2008) Unbundling and Measuring Tunneling, *Finance Working Paper*, European Corporate Governance Institute.

Ayoib, C. A., Ishak, Z. and Manaf, N. A. (2003) Corporate Governance, Ownership Structure and Corporate Diversification: Evidence from the Malaysian Listed Companies, *Asian Academy of Management Journal*, 8(2), 67-89.

Backman, M. (1999) *Asian Eclipse: Exposing the Dark Side of Business in Asia*, John Wiley and Sons (Asia), Singapore.

Barney, J. B. (1991) Firm Resources and Sustained Competitive Advantage, *Journal of Management*, 17, 99-120.

Barney, J. B. (2001) Resource-based Theories of Competitive Advantage: A Ten-year Retrospective on the Resource-based View, *Journal of Management*, 27, 643-650.

Bae, K. H., Kang, J. K., and Kim, J. M. (2002) Tunneling or Valued Added: Evidence from Mergers by Korean Business Groups, *Journal of Finance*, 62(6), 2695-2740.

Bebchuk, L. A. and Roe, M. (1999) A Theory of Path Dependence in Corporate Ownership and Governance, *Stanford Law Review*, 52, 127-170.

Beh, L. S. (2007) Reforms of Corporate Governance in Malaysia, *16th World Business Congress*, 4-8 July, Netherland.

Bennedsen, M., Nielsen, K. M., Perez-Gonzalez, F., and Wolfenzon, D. (2007) Inside the Family Firm: The Role of Families in Succession Decisions and Performance, *Quarterly Journal of Economics*, 122(2), 647-691.

Bennedsen, M., Perez-Gonzalez, F., and Wolfenzon, D. (2010) The Governance of Family Firms, in Anderson R. and Baker K. (Eds), *Corporate Governance*, John Wiley & Sons.

Bennedsen, M. and Wolfenzon, D. (2000) The Balance of Power in Closely Held Corporations, *Journal of Financial Economics*, 58, 113-139.

Berglöf, E. (1994) A Control Theory of Venture Capital Finance, *Journal of Law, Economics and Organization*, 10, 247-267.

Berkman, H., Cole, R. A. and Fu, L. J. (2010) Political Connection and Minority Shareholder Protection: Evidence from Security-Market Regulation in China, *Journal of Financial and Quantitative Analysis*, 6(45), 1392-1427.

Berle, A. and Means, G. (1932) *The Modern Corporation and Private Property*, MacMillan, New York.

Bertrand, M., Mehta, P. and Mullainathan, S. (2002) Ferreting Out Tunneling: An Application to Indian Business Groups, *Quarterly Journal of Economics*, 117, 121-148.

- Bertrand, M., Johnson, S., Samphantharak, K. and Schoar, A. (2008) Mixing Family with Business: A Study of Thai Business Groups and the Families Behind Them, *Journal of Financial Economics*, 88, 466-498.
- Bhagat, S., and Black, B. S. (2002) The Non-correlation between Board Independence and Long-term Firm Performance, *Journal of Corporation Law*, 27, 231-273.
- Bhaumik, S. K. and Gregoriou, A. (2010) Family Ownership, Tunneling and Earnings Management: A Review of the Literature, *Journal of Economic Surveys*, 24(4), 705-730.
- Bhupinder, S., Gurmeet, K., Chong, Y., Sze J. and Ridu, J. (2009) 40 Richest Malaysians, *Malaysian Business*, 16th February.
- Bonn, I., Yoshikawa, T. and Phan, P. H. (2004) Effects of Board Structure on Firm Performance: A Comparison between Japan and Australia, *Asian Business and Management*, 3(1), 105-125.
- Borghesi, R., Houston, J. and Naranjo, A. (2007) Value, Survival, and the Evolution of Firm Organizational Structure, *Financial Management*, 36(3), 5-31.
- Borokhovich, K., Brunarski, K., Harman, Y. and Parrino, R. (2006) Variation in the Monitoring Incentives of Outside Stockholders, *Journal of Law and Economics*, 49, 651-680.
- Boycko, M., Shleifer, A. and Vishny, R. (1996) A Theory of Privatization, *The Economic Journal*, 106, 309-319.
- Brealey, R., Myers, S. and Allen, F. (2007) *Principles of Corporate Finance*, 9th edition, McGraw Hill Education, Singapore.
- Brickley, J., Lease, R. and Smith, C. (1988) Ownership Structure and Voting on Anti Takeover Amendments, *Journal of Financial Economics*, 20, 267-291.
- Brown, P., Beekes, W. and Verhoeven, P. (2011) Corporate Governance, Accounting and Finance: A Review, *Accounting and Finance*, 51(1), 96-172.
- Brown, L. D. and Caylor, M. (2004) *Corporate Governance Study: The Correlation between Corporate Governance and Company Performance*, Institutional Shareholder Services (ISS).
- Bru, L. and Crespi-Cladera, R. (2006) Diversification of Family Business Groups and Board Control, *SSRN Working Paper*, Social Science Research Network.
- Bruton, G., Ahlstrom, D. and Wan, J. (2003) Turnaround in East Asian Firms: Evidence from Ethic Overseas Chinese Communities, *Strategic Management Journal*, 24, 519-540.
- Burrell, G. and Morgan, G. (1979) *Sociological Paradigms and Organizational Analysis*, Heinemann, London.
- Bursa Malaysia Securities Berhad Listing Requirements, available from http://www.klse.com.my/website/bm/regulation/rules/listing_requirements, accessed 7th April 2010.
- Burt, R. S. (1983) *Corporate Profits and Cooptation: Networks of Market Constraints and Directorate Ties in the American Economy*, Academic Press, New York.

Business Times (2010) *Still A Long Way to Go in Substance*, published 16th January, available from http://www.btimes.com.my/Current_News/BTIMES/articles/ctable-2/Article/#ixzz1YCj8BwMn, accessed 15th September 2011.

Carney, M. (2005) Corporate Governance and Competitive Advantage in Family-Controlled Firms, *Entrepreneurship: Theory and Practice*, 29(3), 249-265.

Cestone, G. and Fumagalli, C. (2005) The Strategic Impact of Resource Flexibility in Business Groups, *RAND Journal of Economics*, 36(1), 193-214.

CFA Institute (2005) *The Corporate Governance of Listed Companies – A Manual for Investors*, Centre for Financial Market Integrity, CFA Institute, Charlottesville.

CFA Institute (2009) *Related-Party Transactions: Cautionary Tales for Investors in Asia*, Asia-Pacific Office of the CFA Institute Centre for Financial Market Integrity, CFA Institute, Charlottesville.

CFA Institute (2010) *Independent Non-executive Directors: A Search for True Independence in Asia*, Asia-Pacific Office of the CFA Institute Centre for Financial Market Integrity, CFA Institute, Charlottesville.

Chakrabarti, A., Singh, K. and Mahmood, I. (2007) Diversification and Performance: Evidence from East Asian Firms, *Strategic Management Journal*, 28, 101-120.

Chang, S. J. (2003) Ownership Structure, Expropriation, and Performance of Group-affiliated Companies in Korea, *Academy of Management Journal*, 46, 238-253.

Chang, S. J. (2006) Business Groups in East Asia: Post-crisis Restructuring and New Growth, *Asia Pacific Journal of Management*, 23, 407-417.

Chang, S. J. and Choi, U. (1988) Strategy, Structure and Performance of Korean Business Groups: A Transactions Cost Approach, *Journal of Industrial Economics*, 37, 141-158.

Chang, S. J. and Hong, J. (2000) Economic Performance of Group-affiliated Companies in Korea: Intragroup Resource Sharing and Internal Business Transactions, *Academy of Management Journal*, 43, 429-488.

Chang, S. J. and Hong J. (2002) How Much Does the Business Group Matter in Korea? *Strategic Management Journal*, 23(3), 265-274.

Chen, S. S. and Chen, I. J. (2012) Corporate Governance and Capital Allocations of Diversified Firms, *Journal of Banking & Finance*, 36, 395-409.

Chen, Z., Cheung, Y. L., Stauraitis, A. and Wong, A. W. S. (2004) Ownership Concentration, Firm Performance, and Dividend Policy in Hong Kong, *Pacific-Basin Finance Journal*, 13, 431-449.

Chen, R., Dyball, C. M. and Wright, S. (2009) The Link between Board Composition and Corporate Diversification in Australian Corporations, *Corporate Governance: An International Review*, 2009, 17(2), 208-223.

Chen, S. S. and Ho, K. W. (2000) Corporate Diversification, Ownership Structure, and Firm Value: the Singapore Evidence, *International Review of Financial Analysis*, 9, 315-326.

- Cheong, K. S., Choo, K. and Lee, K. (2010) Understanding the Behavior of Business Groups: A Dynamic Model and Empirical Analysis, *Journal of Economic Behaviour & Organization*, 76, 141-152.
- Cheung, Y. L., Rau, P. R. and Stouraitis, A. (2006) Tunneling, Propping, and Expropriation: Evidence from Connected Party Transactions in Hong Kong, *Journal of Financial Economics*, 82, 343-386.
- Cheung, Y. L., Qi, Y., Rau, P. R. and Stouraitis, A. (2009a) Buy High, Sell Low: How Listed Firms Price Asset Transfers in Related Party Transactions, *Journal of Banking & Finance*, 33, 914-924.
- Cheung, Y. L., Jing, L., Lu, T., Rau, P. R. and Stouraitis, A. (2009b) Tunnelling and Propping Up: An Analysis of Related Party Transactions by Chinese Listed Companies, *Pacific-Basin Finance Journal*, 17, 372-393.
- Chibber, P. K. and Majumdar, S. K. (1999) Foreign Ownership and Profitability: Property Rights, Control and the Performance of Firms in Indian Industry, *Journal of Law and Economics*, 42, 209-238.
- Choi, W. Y. and Chu, S. H. (2003) Shareholder Activism in Korea: An Analysis of PSPD's Activities, *Pacific-Basin Finance Journal*, 11(3), 349-363.
- Christopher, J. (2010) Corporate Governance – A Multi-theoretical Approach to Recognizing the Wider Influencing Forces Impacting on Organizations, *Critical Perspectives on Accounting*, 21, 683-695.
- Chu, E. Y. (2007) *Ownership Structure, Rent Seeking and Performance: Evidence from the Malaysian Manufacturing Sector (1994-2000)*, Unpublished PhD Thesis, Universiti Sains Malaysia, Penang.
- Chu, E. Y. and Song, S. I. (2011) Large Shareholder, Capital Structure and Diversification: Evidence from Malaysian Manufacturing Firms, *African Journal of Business Management*, 5(14), 6005-6010.
- Claessens, S., Djankov, S. and Lang, L. H. P. (1998a) East Asian Corporates: Growth, Financing and Risks Over the Last Decade, *World Bank Working Paper Series*, World Bank.
- Claessens, S., Djankov, S. and Lang, L. H. P. (1999a) Expropriation of Minority Shareholders in East Asia, *World Bank Policy Research Paper*, World Bank.
- Claessens, S., Djankov, S. and Lang, L. H. P. (1999b) Who Controls East Asian Corporations? *World Bank Discussion Paper No. 2054*, World Bank.
- Claessens, S., Djankov, S. and Lang, L. H. P. (2000) The Separation of Ownership and Control in East Asian Corporations, *Journal of Financial Economics*, 58, 81-112.
- Claessens, S., Djankov, S., Fan, J. and Lang, L. H. P. (1998b) Diversification and Efficiency of Investment by East Asian Corporations, *World Bank Working Paper*, World Bank.
- Claessens, S., Djankov, S., Fan, J. and Lang, L. H. P. (1999c) Corporate Diversification in East Asia: The Role of Ultimate Ownership and Group Affiliation, *World Bank Policy Research Working Paper No. 2089*, World Bank.

- Claessens, S., Djankov, S., Fan, J. and Lang, L. H. P. (1999d) The Rationale for Groups: Evidence from East Asia, *Paper Presented at the William Davidson Institute / CIFRA Conference on Equity Market Development in Emerging and Transition Economies*, Amsterdam.
- Claessens, S., Djankov, S., Fan, J. and Lang, L. H. P. (2001) The Pattern and Valuation Effects of Corporate Diversification, *Discussion Paper No. 2001/127*, The United Nations University and World Institute for Development Economics Research.
- Claessens, S., Djankov, S., Fan, J. and Lang, L. H. P. (2002) Disentangling the Incentive and Entrenchment Effects of Large Shareholdings, *Journal of Finance*, 57(5), 2741-2771.
- Claessens, S., Djankov, S., Fan, J. and Lang, L. H. P. (2003) When Does Corporate Diversification Matter to Productivity and Performance? Evidence from East Asia, *Pacific-Basin Finance Journal*, 11, 365-92.
- Claessens, S. and Fan, J. (2002) Corporate Governance in Asia: A Survey, *International Review of Finance*, 3(2), 71-103.
- Claessens, S., Fan, J. and Lang, L. H. P. (2006) The Benefits and Costs of Group Affiliation: Evidence from East Asia, *Emerging Markets Review*, 7, 1-26.
- Coase, R. H. (1960) The Problem of Social Cost, *The Journal of Law and Economics*, 3, 1-69.
- Connelly, B. L., Hoskisson, R. E., Tihanyi, L. and Certo, S. T. (2010) Ownership as a Form of Corporate Governance, *Journal of Management Studies*, 47(8), 1561-1589.
- Cuervo-Cazurra, A. (2006) Business Groups and Their Types, *Asia Pacific Journal of Management*, 23, 419-437.
- Dahya, J., Dimitrov, O. and McConnell, J. J. (2008) Dominant Shareholders, Corporate Boards, and Corporate Value: A Cross-country Analysis, *Journal of Financial Economics*, 87(1), 73-100.
- Dalton, D. R., Daily, C. M., Ellstrand, A. E. and Johnson, J. L. (1998) Meta-analytic Reviews of Board Composition, Leadership Structure, and Financial Performance, *Strategic Management Journal*, 19(3), 269-290.
- Dalton, D. R., Hitt, M. A., Certo, S. T. and Dalton, C. M. (2007) Chapter 1: The Fundamental Agency Problem and Its Mitigation, *The Academy of Management Annals*, 1(1), 1-64.
- Dalziel, T., Gentry, R. J. and Bowerman, M. (2011) An Integrated Agency-Resource Dependence View of the Influence of Directors' Human and Relational Capital on Firms' R&D Spending, *Journal of Management Studies*, 48(6), 1217-1242.
- Demsetz, H. (1983) The Structure of Ownership and the Theory of the Firm, *Journal of Law and Economics*, 26(2), 375-390.
- Demsetz, H. and Lehn, K. (1985) The Structure of Corporate Ownership: Causes and Consequences, *Journal of Political Economy*, 93, 1155-1177.

- Denis, D. J., Denis, D. K. and Sarin, A. (1997) Agency Problems, Equity Ownership, and Corporate Diversification, *Journal of Finance*, 52, 135-160.
- Denis, D. J., Denis, D. K. and Sarin, A. (1999) Agency Theory and the Influence of Equity Ownership on Corporate Diversification Strategies, *Strategic Management Journal*, 20, 1071-1076.
- Dewenter, K. L. and Malatesta P. H. (2001) State-owned and Private-owned Firms: An Empirical Analysis of Profitability, Leverage, and Labor Intensity, *American Economic Review*, 91(1), 320-334.
- Dharwadkar, R., George, C. and Brandes, P. (2000) Privatization in Emerging Economies: An Agency Theory Perspective, *Academy of Management Review*, 25, 650-669.
- Douma, S., George, R. and Kabir, R. (2006) Foreign and Domestic Ownership, Business Groups, and Firm Performance: Evidence from a Large Emerging Market, *Strategic Management Journal*, 27, 637-657.
- Effiezal, A. A. W., How, J. C. Y. and Verhoeven, P. (2008) Corporate Governance and Institutional Investors: Evidence from Malaysia, *Asian Academy of Management Journal of Accounting and Finance*, 4(2), 67-90.
- Eisenhardt, K. (1989), Agency Theory: An Assessment and Review, *Academy of Management Review*, 14(1), 57-74.
- Ekanayake, S. (2004) Agency Theory, National Culture and Management Control Systems, *Journal of American Academy of Business*, 4, 49-54.
- Elyasiani, E. and Jia, J. (2010) Distribution of Institutional Ownership and Corporate Firm Performance, *Journal of Banking and Finance*, 34, 606-620.
- Estrin, S., Poukliakova, S. and Shapiro, D. (2009) The Performance Effects of Business Groups in Russia, *Journal of Management Studies*, 46(3), 393-420.
- Evans, D. S. (1987) The Relationships between Firm Growth, Size and Age: Estimates for 100 Manufacturing Industries, *Journal of Industrial Economics*, 35, 567-581.
- Faccio, M., Lang, L. H. P. and Young, L. (2001) Dividends and Expropriation, *American Economic Review*, 91, 54-78.
- Faccio, M. (2006) Politically Connected Firms, *American Economic Review*, 96(1), 369-386.
- Faccio, M., Masulis, R. W. and McConnell, J. J. (2006) Political Connections and Corporate Bailouts, *Journal of Finance*, 61(6), 2597-2635.
- Fahlenbrach, R., Low, A. and Stulz, R. M. (2010) The Dark Side of Outside Directors, *NBER Working Paper Series*.
- Fama, E. F. and Jensen, M. C. (1983) Separation of Ownership and Control, *Journal of Law and Economics*, 26(2), 301-325.
- Fan, J. P. H. and Wong, T. J. (2002) Corporate Ownership Structure and the Informativeness of Accounting Earnings in East Asia, *Journal of Accounting and Economics*, 33, 401-425.

- Fan, J. P. H., Rui, O. M., and Zhao, M. (2008) Rent Seeking and Corporate Finance: Evidence from Corruption Cases, *Journal of Comparative Economics*, 36(3), 343-364.
- Fatimah, A. B. (2001) Corporate Governance in Financial Troubled Companies, *Paper Presented at the Seminar on Corporate Governance: Issue and Challenges*, Universiti Utara Malaysia, Sintok.
- Fauver, J. H. and Naranjo, A. (2003) Capital Market Development, International Integration, Legal Systems, and the Value of Corporate Diversification: A Cross-country Analysis, *Journal of Financial and Quantitative Analysis*, 38(1), 135-157.
- Fazilah, A. S. (2002) Ownership Structure in the Malaysian Corporation Sector: Its Impact on Corporate Governance, Performance, Financing and Investment Patterns, *Working Paper Series*, 23, Centre on Regulation and Competition, University of Manchester, Manchester.
- Ferris, S. P., Kim, K. A. and Kitsabunnarat, P. (2003) The Costs (and Benefits?) of Diversified Business Groups: The Case of Korean Chaebols, *Journal of Banking & Finance*, 27, 251-273.
- Filatotchev, I., Lien, Y-C and Piesse, J. (2005) Corporate Governance and Performance in Publicly Listed Family-Controlled Firms: Evidence from Taiwan, *Asia Pacific Journal of Management*, 22(3), 257-283.
- Finance Committee on Corporate Governance (2007) *Malaysian Code on Corporate Governance (Revised 2007)*, Securities Commission of Malaysia, Kuala Lumpur.
- Fleming, G., Heaney, R. and McCosker, R. (2005) Agency Costs and Ownership Structure in Australia, *Pacific-Basin Finance Journal*, 13, 29-52.
- Florackis, C. (2008) Agency Costs and Corporate Governance Mechanisms: Evidence for UK Firms, *International Journal of Managerial Finance*, 4(1), 37-59.
- Foo, Y. B. and Mazlina, M. Z. (2010) Board Independence, Board Diligence and Liquidity in Malaysia: A Research Note, *Journal of Contemporary Accounting and Economics*, 6, 92-100.
- Fraser, D. R., Zhang, H. and Derashid, C. (2006) Capital Structure and Political Patronage: The Case of Malaysia, *Journal of Banking and Finance*, 30, 1291-1308.
- Friedman, E., Johnson, S. and Mitton, T. (2003) Propping and Tunneling, *Journal of Comparative Economics*, 31, 732-750.
- Gallo, M. A. (2005) Independent Board Directors: How to Improve Their Contribution to the Family Business, *IESE Working Paper*, University of Navarra.
- Gani, L. and Jermias, J. (2006) Investigating the Effect of Board Independence on Performance Across Different Strategies, *The International Journal of Accounting*, 41(3) 295-314.
- Gedajlovic, E. and Shapiro, D. M. (2002) Ownership Structure and Firm Profitability in Japan, *Academy of Management Journal*, 45, 565-575.
- George, R. (2007) Diversification and Firm Performance: The Moderating Influence of Ownership Structure and Business Group-Affiliation, *South Asian Journal of Management*, Jul-Sep.

- George, R. and Kabir, R. (2008) Business Groups and Profit Redistribution: A Boon or Bane for Firms? *Journal of Business Research*, 61, 1004-1014.
- Gleason, K., Kim, I., Kim, Y. H. and Kim, Y. S. (2012) Corporate Governance and Diversification, *Asia-Pacific Journal of Financial Studies*, 41(1), 1-31.
- Goergen, M., Martynova, M. and Renneboog, L. (2005) Corporate Governance Convergence: Evidence from Takeover Regulation Reforms in Europe, *Oxford Review of Economic Policy*, 21(2), 243-268.
- Gomes, A. (2000) Going Public without Governance: Managerial Reputation Effects, *Journal of Finance*, 55, 615-646.
- Gomez, E. T. (1999) *Chinese Business in Malaysia: Accumulation, Accommodation and Ascendance*, Curzon, Surrey.
- Gomez, E. T. (2006) Malaysian Business Groups: The State and Capital Development in the Post-currency Crisis Period, in *Business Groups in East Asia: Financial Crisis, Restructuring, and New Growth*, Chang S. (Ed.), Oxford University Press, Oxford.
- Gomez, E. T. and Jomo, K. S. (1997) *Malaysia's Political Economy: Politics, Patronage, and Profits*, Cambridge University Press, Cambridge.
- Gomez, E. T. and Jomo, K. S. (1999) *Malaysia's Political Economy: Politics, Patronage, and Profits*, revised edition, Cambridge University Press, Cambridge.
- Gomez-Mejia, L., Larraza-Kintana, M. and Makri, M. (2003) The Determinants of Executive Compensation in Family Controlled Public Corporations, *Academy of Management Journal*, 46, 226-237.
- Gomez-Mejia, L., Wiseman, R. M. and Dykes, B. J. (2005) Agency Problems in Diverse Contexts: A Global Perspective, *Journal of Management Studies*, 42(7), 1507-1517.
- Gordon, E. A., Henry, E. and Paliaa, D. (2004) Related Party Transactions: Associations with Corporate Governance and Firm Value, *SSRN Working Paper*, Social Science Research Network.
- Goto, A. (1982) Business Groups in a Market Economy, *European Economic Review*, 19, 53-70.
- Gramlich, J., Limpaphayom, P. and Rhee, S. (2004) Taxes, Keiretsu Affiliation, and Income Shifting, *Journal of Accounting and Economics*, 37, 203-228.
- Griffiths, W., Hill, R. and Lim, G. (2008) *Using Eviews for Principles of Econometrics*, 3rd edition, John Wiley & Sons Inc., USA.
- Griffiths, W., Hill, R. and Lim, G. (2011) *Principles of Econometrics*, 4rd edition, John Wiley & Sons Inc., USA.
- Guest, P. and Sutherland, D. (2010) The Impact of Business Group Affiliation on Performance: Evidence from China's 'National Champions', *Cambridge Journal of Economics*, 34, 617-631.
- Gujarati, D. (2004) *Basic Econometrics*, 4th edition, McGraw-Hill Education, Singapore.

- Gunasegaram, P. (2007a) Taking Miscreants to Task, *The Edge*, 11th June.
- Gunasegaram, P. (2007b) Question Time: High-profile Cases Still Waiting to be Resolved, *The Edge*, 12th May.
- Habbershon, T. and Williams, M. L., (1999) A Resource-based Framework for Assessing the Strategic Advantages of Family Firms, *Family Business Review*, 12(1), 1-22.
- Habbershon, T., Williams, M. L. and MacMillan, I. C. (2003) A Unified Systems Perspective of Family Firm Performance, *Journal of Business Venturing*, 18(4), 451-465.
- Hair, J. F., Black, W. C., Babin, B. J. and Anderson, R. E. (2010) *Multivariate Data Analysis: A Global Perspective*, 7th edition, Pearson, New Jersey.
- Haniffa, R. M. and Cooke, T. E. (2002) Culture, Corporate Governance and Disclosure in Malaysian Corporation, *Abacus*, 38(13), 317-349.
- Haniffa, R. M. and Hudaib, M. (2006) Corporate Governance Structure and Performance of Malaysian Listed Companies, *Journal of Business Finance and Accounting*, 33(7-8), 1034-1062.
- Harrigan, K. R. (2003) *Joint Ventures, Alliances, and Corporate Strategy*, Beard Books, Washington, D. C.
- Hartmann, F. G. and Moers, F. (1999) Testing Contingency Hypotheses in Budgetary Research: An Evaluation of the Use of Moderated Regression Analysis, *Accounting, Organizations and Society*, 24, 291-315.
- Haslindar, I. and Fazilah, A. S. (2009) Corporate Governance and Agency Costs: Evidence from Public Listed Family Firms in Malaysia, *SSRN Working Paper*, Social Science Research Network.
- Heng, P. K. (1997) The New Economic Policy and The Chinese Community In Peninsular Malaysia, *The Developing Economies*, 35(3), 262-292.
- Hermalin, B. E. and Weisbach, M. S. (2003) Boards of Directors as an Endogenously Determined Institution: A Survey of the Economic Literature, *FRBNY Economic Policy Review*, April, 7-26.
- Hillman, A. and Dalziel, T. (2003) Boards of Directors and Firm Performance: Integrating Agency and Resource Dependence Perspectives, *Academy of Management Review*, 28(3), 383-396.
- Horii, K. (1991) Disintegration of the Colonial Economic Legacies and Social Restructuring in Malaysia, *The Developing Economies*, 29(4), 281-313.
- Hoskisson, R. E., Johnson, R. and Moesel, D. (1994) Corporate Divestiture Intensity in Restructuring Firms: Effects of Governance, Strategy and Performance, *Academy of Management Journal*, 37, 1207-1251.
- Hoskisson, R. E., Johnson, R. A., Tinhanyi, L. and White, R. E. (2005) Diversified Business Groups and Corporate Refocusing in Emerging Economies, *Journal of Management*, 31, 941-965.
- Hoskisson, R. E. and Turk, T. (1990) Corporate Restructuring: Governance and Control Limits of the Internal Capital Market, *Academy of Management Review*, 15, 459-477.

- Idris, I. (2010) Stepping Up Transparency, *The Star*, 21st August.
- Jaccard, J. and Turrisi, R. (2003) *Interaction Effects in Multiple Regression*, 2nd edition, Quantitative Applications in the Social Science, Sage Publications, Newbury Park.
- Jacquemin, A. and Berry, C. (1979) Entropy Measure of Diversification and Corporate Growth, *Journal of Industrial Economics*, 27, 359-70.
- Jara-Bertin, M., Lopez-Iturriaga, F. J. and Lopez-de-Foronda, O. (2008) The Contest to the Control in European Family Firms: How Other Shareholders Affect Firm Value, *Corporate Governance*, 16(3), 146-159.
- Jaskiewicz, P. and Klein, S. B. (2005) Family Influence and Performance: Theoretical, Concepts, and Empirical Results, Proposal Paper, 2005 *Family Enterprise Research Conference*, Concordia University, Canada.
- Jensen, M. C. (1986) Agency Costs of Free Cash Flow, Corporate Finance, and Takeovers, *American Economic Review*, 76, 323-329.
- Jensen, M. C. (1989) The Eclipse of the Public Corporation, *Harvard Business Review*, 67, 61-74.
- Jensen, M. C. and Meckling, W. H. (1976) Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure, *Journal of Financial Economics*, 3(4), 305-360.
- Jian, M. and Wong, T. J. (2010) Propping Through Related Party Transactions, *Review of Accounting Studies*, 15, 70-105.
- Jiraporn, P., Kim, Y. S., Davidson, W. N. and Singh, M (2006) Corporate Governance, Shareholder Rights, and Firm Diversification: An Empirical Analysis, *Journal of Banking and Finance*, 30(3), 947-963.
- Joh, S. W. (2003) Corporate Governance and Firm Profitability: Evidence from Korea before the Economic Crisis, *Journal of Financial Economics*, 68, 287-322.
- John, K. and Senbet, L. (1998) Corporate Governance and Board Effectiveness, *Journal of Banking and Finance*, 22, 371-403.
- Johnson, S., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (2000) Tunneling, *American Economic Review*, 90, 22-27.
- Johnson, S. and Mitton, T. (2003) Cronyism and Capital Controls: Evidence from Malaysia, *Journal of Financial Economics*, 67(2), 351-382.
- Jomo, K. S. (1988) *A Question of Class: Capital, the State and Uneven Development in Malaya*, Oxford University Press, Singapore.
- Karpoff, J. M. (2001) The Impact of Shareholder Activism on Target Companies: A Survey of Empirical Findings, *Paper Presented at the Corporate Governance i praksis: Internasjonalt Seminar*, 10th September.

- Kennon, J. (2004) The Board of Directors Responsibility, Role, and Structure, *About.com Guide*, 14th July.
- Kennedy, J. C. (2002) YTL Corporation's CEO Tan Sri Dato' Francis Yeoh on Providing World-class Products at Third World Prices, *Academy of Management Executive*, 16(3), 27-30.
- Khan, M. H. (2000) Rent-seeking as Process, in Khan, M. H. and Jomo, K. S. (Eds.), *Rents, Rent-seeking and Economic Development: Theory and Evidence in Asia*, Cambridge University Press, Cambridge.
- Khan, T. (2006) Company Dividends and Ownership Structure: Evidence from UK Panel Data, *The Economic Journal*, 116(3), 172-189.
- Khanna, T. and Palepu, K. (2000a) Is Group Affiliation Profitable in Emerging Markets? An Analysis of Diversified Indian Business Groups, *Journal of Finance*, 55, 867-891.
- Khanna, T. and Palepu, K. (2000b) Emerging Market Business Groups, Foreign Intermediaries, and Corporate Governance, in *Concentrated Corporate Ownership*, University of Chicago Publication.
- Khanna, T. and Palepu, K. (2000c) The Future of Business Groups in Emerging Markets: Long Run Evidence from Chile, *Academy of Management Journal*, 43, 268-285.
- Khanna, T. and Rivkin, J. (2001) Estimating the Performance Effects of Business Groups in Emerging Markets, *Strategic Management Journal*, 22, 45-74.
- Khanna, T. and Yafeh, Y. (2005) Business Groups and Risk Sharing Around the World, *Journal of Business*, 78(1), 301-340.
- Khanna, T. and Yafeh, Y. (2007) Business Groups in Emerging Markets: Paragons or Parasites? *Journal of Economic Literature*, 45, 331-372.
- Khatri, Y., Leruth, L. and Piesse, J. (2002) Corporate Performance and Governance in Malaysia, *IMF Working Paper*, International Monetary Fund.
- Kim, H., Hoskisson, R. E. and Wan, W. P. (2004) Power Dependence, Diversification Strategy, and Performance in Keiretsu Member Firms, *Strategic Management Journal*, 25, 613-636.
- Kim, K. H., Al-Shammari, H., Kim, B. and Lee, S-H. (2008) CEO Duality Leadership and Corporate Diversification Behavior, *Journal of Business Research*, 62(11), 1173-1180.
- Kim, W. and Black, B. S. (2010) The Effect of Board Structure on Firm Value: A Multiple Identification Strategies Approach Using Korean Data, *SSRN Working Paper*, Social Science Research Network.
- Kochar, R. and David, P. (1996) Institutional Investors and Firm Innovation: A Test of Conflicting Hypotheses, *Strategic Management Journal*, 17, 73-84.
- Krejcie, R. and Morgan, D. (1970) Determining Sample Size for Research Activities, *Educational and Psychological Measurement*, 30, 607-610.
- Kutner, M., Nachtsheim, C. and Neter, J. (2004) *Applied Linear Regression Models*, 4th edition, McGraw- Hill Higher Education.

- La Porta, R., Lopez-De-Silanes, F. and Shleifer, A. (1999) Corporate Ownership around the World, *Journal of Finance*, 54(2), 471-517.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A. and Vishny, R. (2000) Investor Protection and Corporate Governance, *Journal of Financial Economics*, 58(1-2), 3-27.
- La Porta, R., Lopez-de-Silanes, F. and Zamarripa, G., (2003) Related Lending. *Quarterly Journal of Economics*, 118(1), 231-268.
- Lane, P. J., Cannella, A. A. and Lubatkin M. H. (1998) Agency Problems as Antecedents to Unrelated Diversification: Amihud and Lev Reconsidered, *Strategic Management Journal*, 19(6), 555-578.
- Lang, L. and Stulz, R. (1994) Tobin's Q, Corporate Diversification, and Firm Performance, *Journal of Political Economy*, 102, 1248-1280.
- Le Breton-Miller, I. and Miller, D. (2009) Agency vs. Stewardship in Public Family Firms: A Social Embeddedness Reconciliation, *Entrepreneurship: Theory and Practice*, 33(6), 1123-1169.
- Lee, K., Peng, M. and Lee, K. (2008) From Diversification Premium to Diversification Discount During Institutional Transitions, *Journal of World Business*, 43, 47-65.
- Leff, N. (1978) Industrial Organization and Entrepreneurship in the Developing Countries: The Economic Groups, *Economic Development and Cultural Change*, 26, 661-675.
- Lemmon, M. L. and Lins, K. V. (2003) Ownership Structure, Corporate Governance, and Firm Value: Evidence from the East Asian Financial Crisis, *Journal of Finance*, 58, 1445-1468.
- Lewellen, W. G. (1971) A Pure Financial Rationale for the Conglomerate Merger, *Journal of Finance*, 26, 527-537.
- Lichtenberg, F. (1992) Industrial De-diversification and Its Consequences for Productivity, *Journal of Economic Behavior and Organization*, 18, 427-438.
- Liew, C. Y., Fazilah, S. and Sa'adiah, M. (2011) Expropriation-related Variables and Firm Performance, *Paper presented at the 6th Accounting and Finance in Emerging Economies Workshop*, University of Sunderland.
- Lim, M. H. (1981) *Ownership and Control of the One Hundred Largest Corporations in Malaysia*, Oxford University Press, Kuala Lumpur.
- Lincoln, J. R., Gerlach, M. L. and Ahmadjian, C. L. (1996) Keiretsu Networks and Corporate Performance in Japan, *American Sociological Review*, 61, 67-88.
- Lincoln, J. R. and Gerlach, M. L. (2004) *Japan's Network Economy*, Cambridge University Press, Cambridge.
- Lins, K. V. (2003) Equity Ownership and Firm Value in Emerging Markets, *The Journal of Financial and Quantitative Analysis*, 38(1), 159-184.
- Lins, K.V. and Servaes, H. (1999) International Evidence on the Value of Corporate Diversification, *Journal of Finance*, 54, 2215-2239.

- Lins, K. V. and Servaes, H. (2002) Is Corporate Diversification Beneficial in Emerging Markets? *Financial Management*, 31, 5-31.
- Loh, L. H. and Ragayah, M. Z. (2007) Corporate Governance: Theory and Some Insights into the Malaysian Practices, *Akademika*, 71(July), 31-60.
- Low, C. K. (2004) A Road Map for Corporate Governance in East Asia, *Northwestern Journal of International Law & Business*, 25, 165-203.
- Lubatkin, M. H., Lane, P. J., Collin, S. and Very, P. (2005) An Embeddedness Framing of Governance and Opportunism: Towards A Cross-nationally Accommodating Theory of Agency, *Journal of Organizational Behavior*, 27, 1-16.
- Mak, Y. T. and Li, Y. (2001) Determinants of Corporate Ownership and Board Structure: Evidence from Singapore, *Journal of Corporate Finance*, 7, 235-256.
- Malaysia (1971) *Second Malaysia Plan, 1971-1975*, Kuala Lumpur: Government Printers.
- Martin, J. D. and Sayrak, A. (2003) Corporate Diversification and Shareholder Value: A Survey of Recent Literature, *Journal of Corporate Finance*, 9, 37-57.
- Masulis, R. W., Pham, P. K. and Zein, J. (2011) Family Business Group around the World: Financing Advantages, Control Motivations, and Organizational Choices, *The Review of Financial Studies*, 24(11), 3556-3600.
- Maury, B. (2006) Family Ownership and Firm Performance: Empirical Evidence from Western European Corporations, *Journal of Corporate Finance*, 12, 321-341.
- Maury, B. and Pajuste, A. (2005) Multiple Large Shareholders and Firm Value, *Journal of Banking & Finance*, 29, 1813-1834.
- McCahery, J. A., Sautner, Z. and Starks, L. T. (2010) Behind the Scenes: The Corporate Governance Preferences of Institutional Investors, *AFA 2011 Denver Meetings Paper*, Tilburg Law School Research Paper.
- McConnell, J. J. and Servaes, H. (1990) Additional Evidence on Equity Ownership and Corporate Value, *Journal of Financial Economics*, 27, 595-612.
- McEnally, R. T. and Kim, K. A. (2008) Corporate Governance, in Clayman, M., Fridson, M. and Troughton, G. (Eds.), *Corporate Finance: A Practical Approach*, CFA Investment Series, John-Wiley Publication.
- McKinsey & Company (2002) *Global Investor Opinion Survey: Key Findings*, McKinsey & Company.
- Miller, D. and Le-Breton Miller, I. (2006) Family Governance and Family Performance: Agency, Stewardship, and Capabilities, *Family Business Review*, 19(1), 73-87.
- Miller, D., Le-Breton Miller, I., Lester, R. H. and Cannella, A. A. (2007) Are Family Firms Really Superior Performers? *Journal of Corporate Finance*, 13, 829-858.

- Mitton, T. (2002) A Cross-firm Analysis of the Impact of Corporate Governance on the East Asian Financial Crisis, *Journal of Financial Economics*, 64, 215-241.
- Monks, B. (2006) The New Agenda for the ICGN: An Open Letter, *2006 ICGN Yearbook*, 34-36.
- Moore, J. (1998) The Deal Smelled Rotten-and It Was, *Business Week*, 8th June, 27.
- Morck, R. (2005) How to Eliminate Pyramidal Business Groups: The Double Taxation of Intercorporate Dividends and Other Incisive Uses of Tax Policy, *NBER/Tax Policy & the Economy*, 19(1), 135-179.
- Morck, R., Shleifer, A. and Vishny, R. (1988) Management Ownership and Market Valuation, *Journal of Financial Economics*, 20, 293-315.
- Morck, R., Stangeland, D. A. and Yeung, B. (2004) Inherited Wealth, Corporate Control, and Economic Growth: The Canadian Disease, in Morck R. (Ed.), *Concentrated Corporate Ownership*, University of Chicago Press, Chicago.
- Morck, R., Wolfenzon, D. and Yeung, B. (2005) Corporate Governance, Economic Entrenchment, and Growth, *Journal of Economic Literature*, 43(3), 655-720.
- Morck, R. and Yeung, B. (2003) Agency Problems in Large Family Business Groups, *Entrepreneurship Theory and Practice*, 27, 367-382.
- Myers, S. C. (1977) Determinants of Corporate Borrowing, *Journal of Financial Economics*, 5(2), 147-175.
- Nazli, A. M. G and Weetman, P. (2006) Perpetuating Traditional Influences: Voluntary Disclosure in Malaysia Following the Economic Crisis, *Journal of International Accounting, Auditing and Taxation*, 15, 226-248.
- Nazrul, H. A. R., Rubi, A. and Huson, J. A. (2008) Government Ownership and Performance: An Analysis of Listed Companies in Malaysia, *SSRN Working Paper*, Social Science Research Network.
- Nenova, T. (2003) The Value of Corporate Voting Rights and Control: A cross-country Analysis, *Journal of Financial Economics*, 68(3), 325-351.
- Ngui, C. Y. K. (2002) Asian Family Businesses: From Riches to Rags? *Malaysian Business*, 16th May.
- Nicholson, G. J. and Kiel, G. C. (2007) Can Directors Impact Performance? A Case-Based Test of Three Theories of Corporate Governance, *Corporate Governance: An International Review*, 15(4), 585-608.
- O'Leary, Z. (2009) *The Essential Guide to Doing Your Research Project*, Sage Publications, London.
- Oh, E. (2011) When CEOs become Independent, *The Star*, 18th July.
- Orden, O. D. and Garmendia, A. (2005) Does it Matter Ownership Structure? Performance in Spanish Companies, *Journal of European Financial Management*, 1-40.
- Organization for Economic Cooperation and Development (OECD) (2004) *OECD Principle of Corporate Governance*, OECD, Paris.

- Palepu, K. (1985) Diversification Strategy, Profit Performance and the Entropy Measure, *Strategic Management Journal*, 6(3), 239-255.
- Palich, L. E., Cardinal, L. B. and Miller, C. C. (2000) Curvilinearity in the Diversification Performance Linkage: An Examination of Over Three Decades of Research, *Strategic Management Journal*, 21, 155-174.
- Park, K. S. (2005) Stock-take of Developments in Corporate Governance in Asia, *Paper Presented at the 2005 Asian Roundtable on Corporate Governance*, Bali, Indonesia.
- Pedersen, T. and Thomsen, S. (2003) Ownership Structure and the Value of the Largest European Firms: The Importance of Owner Identity, *Journal of Management and Governance*, 7, 27-55.
- Peng, M. W., Lee, S-H. and Wang, D. (2005) What Determines the Scope of the Firm Over Time? A Focus on Institutional Relatedness, *Academy of Management Review*, 30, 622-633.
- Penrose, E. (1959) *The Theory of the Growth of the Firm*, John Wiley, New York.
- Pérez-González, F. (2006) Inherited Control and Firm Performance, *American Economic Review*, 96(5), 1559-1588.
- Phan, P. H. (2001) Corporate Governance in the Newly Emerging Economies, *Asia Pacific Journal of Management*, 18(2), 131-136.
- Porter, M. E. (1998) *The Competitive Advantage of Nations: With A New Introduction*, Plagrove, Hampshire.
- Poza, E. J. (2010) *Family Business*, 3rd edition, South-Western College Pub.
- Prabowo, M. and Simpson, J. (2011) Independent Directors and Firm Performance in Family Controlled Firms: Evidence from Indonesia, *Asian-Pacific Economic Literature*, 25(1), 121-132.
- Qian, M., Pan, H. and Yeung, B. Y. (2010) Expropriation of Minority Shareholders in Politically Connected Firms, *Finance and Corporate Governance Conference 2011 Paper*, Social Science Research Network.
- Qian, P. W., Wei, K. C. and Yang, Z. (2011) Tunneling or Propping: Evidence from Connected Transactions in China, *Journal of Corporate Finance*, 17(2), 306-325.
- Raj, A. P. (2009) Genting Malaysia Should Have Let Minority Shareholders Decide, *Business Times*, 16th December.
- Rajan, R. and Zingales, L. (1998) Financial Dependence and Growth, *American Economic Review*, 58, 559-586.
- Rakider, K. J. and Seth, A. (1995) Board of Directors and Substitution Effects of Alternative Governance Mechanisms, *Strategic Management Journal*, 16(2), 85-99.
- Ramaswamy, K. (2001) Organizational Ownership, Competitive Intensity, and Firm Performance: An Empirical Study of the Indian Manufacturing Sector, *Strategic Management Journal*, 22, 989-998.

- Ramaswamy, K., Li, M. F. and Veliyath, R. (2002) Variations in Ownership Behavior and Propensity to Diversify: A Study of the Indian Corporate Context, *Strategic Management Journal*, 23, 345-358.
- Ramdani, D. and Witteloostuijn, A. (2010) The Impact of Board Independence and CEO Duality on Firm Performance: A Quantile Regression Analysis for Indonesia, Malaysia, South Korea and Thailand, *British Journal of Management*, 21, 607-626.
- Roberts, J. (2009) Malaysian Government Alters Ethnic-based Investment Laws, World Socialist Web Site, 24th July, <http://xml.wsws.org/articles/2009/jul2009/mala-j24.shtml>, accessed 24th March, 2011.
- Robins, J. and Wiersema, M. (2003) The Measurement of Corporate Portfolio Strategy: Analysis of the Content Validity of Related Diversification Indexes, *Strategic Management Journal*, 24(1), 39-59.
- Ross, S. A. (1970) Economic Rent and the Industry Supply Curve, *Southern Economic Journal*, 37(2), 209-211.
- Ross, S. A., Westerfield, R. W. and Jaffe, J. (2010) *Corporate Finance*, 9th edition, McGraw-Hill International Edition, Singapore.
- Sahoo, N. (2010) Affirmative Action in Private Sector in Malaysia: Lessons for India, Paper Presented at the 10th Annual Asia Fellows Conference on Pluralism in Asia: Asserting Traditional Identities, Politics and Perspectives, 9-10th July, Bangkok.
- Salkind, N. J. (2010) *Encyclopedia of Research Design*, SAGE Publications, London.
- Sarkar, J. and Sarkar, S. (2000) Large Shareholder Activism in Corporate Governance in Developing Countries: Evidence from India, *International Review of Finance*, 1(3), 161-194.
- Scharfstein, D. and Stein, J. (2000) The Dark Side of Internal Capital Markets: Divisional Rent Seeking and Inefficient Investment, *Journal of Finance*, 55, 2537-2564.
- Schneider, B. R. (2009) A Comparative Political Economy of Diversified Business Groups, or How States Organize Big Business, *Review of International Political Economy*, 16(2), 178-201.
- Scott, R. W. (1995) *Institutions and Organizations*, Thousand Oaks, Sage, CA.
- Searle, P. (1999) The Riddle of Malaysian Capitalism: Rent-Seekers or Real Capitalists? ASAA Southeast Asia Publications Series, Allen & Unwin, Australia.
- Securities Commission (2007) *Malaysian Code on Corporate Governance (Revised 2007)*, Securities Commission of Malaysia, Kuala Lumpur.
- Securities Commission (2012) *Malaysian Code on Corporate Governance 2012*, Securities Commission of Malaysia, Kuala Lumpur.
- Sekaran, U. (2000) *Research Methods for Business: A Skill-building Approach*, 3rd edition, John Wiley & Sons, Inc., New York.
- Sharif, H. and Zaidansyah, S. (2004) *Corporate Governance in Asia*, The Global White Page, Asian Development Bank.

- Shin, H. and Park, Y. (1999) Financing Constraints and Internal Capital Markets: Evidence from Korean 'Chaebols', *Journal of Corporate Finance*, 5, 169-191.
- Shin, H. and Stulz, R. (1998) Are Internal Capital Markets Efficient? *Quarterly Journal of Economics*, 113, 531-552.
- Shleifer, A. and Vishny, R. (1986) Large Shareholders and Corporate Control, *Journal of Political Economy*, 94, 461-488.
- Shleifer, A. and Vishny, R. (1989) Management Entrenchment: the Case of Manager-specific Investments, *Journal of Financial Economics*, 25, 123-140.
- Shleifer, A. and Vishny, R. (1994) Politicians and Firms, *Quarterly Journal of Economics*, 109(4), 995-1025.
- Shleifer, A. and Vishny, R. (1997) A Survey of Corporate Governance, *Journal of Finance*, 52(2), 737- 783.
- Shleifer, A. and Vishny, R. (1998) *The Grabbing Hand: Government Pathologies and Their Cures*, Harvard University Press, Cambridge, Mass.
- Sieh, M. L. (1982) *Ownership and Control of Malaysian Manufacturing Corporations*, University of Malaya Cooperative Bookshop Publication, Kuala Lumpur.
- Singh, M., Nejadmalayeri, A. and Mathur, I. (2007) Performance Impact of Business Group Affiliation: An Analysis of the Diversification-performance Link in a Developing Economy, *Journal of Business Research*, 60, 339-347.
- Singh, M. and Davidson, W. N. III (2003) Agency Costs, Ownership Structure and Corporate Governance Mechanisms, *Journal of Banking & Finance*, 27, 793-816.
- Singh, R. and Zainal, Y. (2005) Development of the Capital Market in Malaysia, in *Capital Markets in Asia: Changing Roles for Economic Development*, Vandenbrink, D. and Hew, W. (Eds.), ISEAS Series, ISEAS.
- Snodgrass, D. R. (1980) *Inequality and Economic Development in Malaysia*, Oxford University Press, Kuala Lumpur.
- Startz, R. (2009) *Eviews Illustrated for Version 7*, QMS, USA.
- Stulz, R. M. (1988) Managerial Control of Voting Rights: Financing Policies and the Market for Corporate Control, *Journal of Financial Economics*, 20, 25-54.
- Stulz, R. M. (1990) Managerial Discretion and Optimal Financing Policies, *Journal of Financial Economics*, 26, 3-27.
- Sun, Q., Tong, H. S. and Tong, J. (2002) How Does Government Ownership Affect Firm Performance? Evidence from China's Privatization Experience, *Journal of Business Finance & Accounting*, 29(1) and (2), 1-27.
- Suto, M. (2003) Capital Structure and Investment Behaviour of Malaysian Firms in the 1990s: A Study of Corporate Governance before the Crisis, *Corporate Governance*, 11(1), 25-39.

- Tam, O. K. and Tan, Monica, G. S. (2007) Ownership, Governance and Firm Performance in Malaysia, *Corporate Governance*, 15(2), 208-222.
- Tat, H. K. (2007) Enforcement the Key, *The Edge*, 19th November.
- Tee, L. S. (2010) Fund Managers Echo PM View on EPF Trades, *The Star*, 6th April.
- Thillainathan, R. (1999) Corporate Governance & Restructuring in Malaysia - A Review of Markets, Mechanisms, Agents & the Legal Infrastructure, *Paper Prepared for the Joint World Bank/OECD Survey of Corporate Governance Arrangements in a Selected Number of Asian Countries*.
- Thomsen, S. and Pedersen, T. (2000) Ownership Structure and Economic Performance in the Largest European Companies, *Strategic Management Journal*, 2, 689-705.
- Tian, J. J. and Lau, C. (2001) Board Composition, Leadership Structures and Performance of Chinese Shareholding Companies, *Asia Pacific Journal of Management*, 18, 245-263.
- Tihanyi, L., Johnson, R., Hoskisson, R. and Hitt, M. (2003) Institutional Ownership Differences and International Diversification: The Effects of Boards of Directors and Technological Opportunity, *Academy of Management Journal*, 46, 195-211.
- Timothy, G. Habbershon, T., Williamsa, M. L. and MacMillanc, I. C. (2003) A Unified Systems Perspective of Family Firm Performance, *Journal of Business Venturing*, 18, 451-465.
- Verma, V. (2004) *Malaysia: State and Civil Society in Transition*, Malaysia. Lynne Rienner Publishers Inc.
- Villalonga, B. and Amit, R. (2009) How Are U.S. Family Firms Controlled? *Review of Financial Studies*, 22(8), 3047-3091.
- Williamson, O. E. (1981) The Modern Corporation: Origins, Evolution, Attributes, *Journal of Economic Literature*, 19, 1537-1568.
- Wintoki, M. B., Linck, J. S. and Netter, J. M. (2010) Endogeneity and the Dynamics of Corporate Governance, *SSRN Working Paper*, Social Science Research Network.
- Wiwattanakantang, Y. (2001) Controlling Shareholders and Corporate Value: Evidence from Thailand, *Pacific-Basin Finance Journal*, 9, 323-362.
- World Bank (1993) *The East Asian Miracle: Economic Growth and Public Policy*, Oxford University Press.
- World Bank (1999) Corporate Governance in Malaysia – An Assessment, *Conference on ‘Corporate Governance in Asia: A Comparative Perspective*, 3rd-5th March, Seoul.
- World Bank (2001) Report on the Observance of Standards and Codes (ROSC): Corporate Governance Country Assessment: Malaysia, available at: http://www.worldbank.org/ifa/rosc_cg_malaysia.html, accessed 17th November, 2009.

- World Bank (2004) Report on the Observance of Standards and Codes (ROSC): Corporate Governance Country Assessment: Republic of Indonesia, available at: http://www.worldbank.org/ifa/rosc_cg_malaysia.html, accessed 20th October, 2011.
- World Bank (2005) Report on the Observance of Standards and Codes (ROSC): Corporate Governance Country Assessment: Malaysia, available at: http://www.worldbank.org/ifa/rosc_cg_malaysia.html, accessed 17th November, 2009.
- Xu, N., Xu, X. and Yuan, Q. (2010) Political Connection, Financing Frictions, and Corporate Investment: Evidence from Chinese Listed Family Firms, *SSRN Working Paper*, Social Science Research Network.
- Yeh, Y. H. and Woidtke, T. (2005) Commitment or Entrenchment?: Controlling Shareholders and Board Composition, *Journal of Banking and Finance*, 29, 1857-1885.
- Yeoh, K. (2010) *The Behaviour of Individual Investors in Malaysia: A Governance Perspective*, Unpublished PhD Thesis, Newcastle Business School, University of Northumbria at Newcastle, United Kingdom.
- Young, M. N., Ahlstrom, D., Bruton, G. D. and Chan, E. (2001) The Resource Dependence, Service, and Control Functions of Boards of Directors in Hong Kong and Taiwanese Firms, *Asia Pacific Journal of Management*, 18, 233-43.
- Young, M. N., Peng, M. W., Ahlstrom, D., Bruton, G. D. and Yi, J. (2008) Corporate Governance in Emerging Economics: A Review of the Principal-Principal Perspective, *Journal of Management Studies*, 45(1), 196-220.
- Yiu, D., Bruton, G. D. and Yuan, L. (2005) Understanding Business Group Performance in an Emerging Economy: Acquiring Resources and Capabilities in order to Prosper, *Journal of Management Studies*, 42(1), 183-206.
- Yiu, W. D., Yuan, L., Bruton, G. and Hoskisson, R. (2007) Business Groups: An Integrated Model to Focus Future Research, *Journal of Management Studies*, 44(8), 1551-1579.
- Zhuang, J., Edward, D., Webb, D. and Capulong, M. V. (2000) *Corporate Governance and Finance in East Asia - A Study of Indonesia, Republic of Korea, Malaysia, Philippine and Thailand*, Volume 1, Asian Development Bank Publication.
- Zuaini, I. and Napier, C. (2006) Expropriation of Minority Interests and Corporate Diversification in Malaysia, *Asian Academy of Management Journal of Accounting and Finance*, 2, 85-113.
- Zunaidah, S. and Fauzias, M. N. (2008) Dividends, Ownership Structure and Board Governance on Firm Value: Empirical Evidence from Malaysian Listed Firms, *Malaysian Accounting Review*, 7(2), 55-94.