



LUND UNIVERSITY

# **Adding Value Through Cross-Border M&A**

Evidence from the Netherlands

The Department of Business Administration

Master Thesis, Spring 2014

By

Abdullah Al Masud

Timon den Hertog

**Supervisor**

Maria Gårdängen

## **Acknowledgements**

During the writing of our thesis it was truly a pleasure to receive the help and support from Maria. Her knowledge, feedback, advice and most importantly her pleasant and positive personality made it a lot easier and enjoyable for us to work on this project. Through this way we would like to thank Maria for her important contribution to this final version of our thesis.

We would also like to use this moment to thank our family and friends for their support, motivation and feedback. In particular, we would like to thank our respective brothers – Nayeem and Gideon, for their valuable support and inspiring insights.

<b>Title</b>	Adding Value through Cross-Border M&A: Evidence from the Netherlands
<b>Course</b>	BUSN89: Degree Project in Corporate and Financial Management, 15ECTS
<b>Authors</b>	Abdullah Al Masud and Timon den Hertog
<b>Supervisor</b>	Maria Gårdängen
<b>Keywords</b>	Cross-Border; Mergers and Acquisitions (M&A); The Netherlands; Event Study; Cumulative Abnormal Returns (CAR); Determinants of Value Creation; Relative Deal Size; Legal Status of Target
<b>Purpose</b>	The aim of this thesis is to research corporate geographic diversification to determine if cross-border M&A involving Dutch acquirers and a selection of countries <sup>1</sup> are value-enhancing for Dutch acquirers. Moreover we will aim to identify variables which influence value-creation in Dutch cross-border M&A.
<b>Methodology</b>	This paper applies a deductive approach using theories and previous studies to form hypotheses for the purpose of the study. Event study and multiple linear regression analyses are used to test the hypotheses.
<b>Empirical Foundation</b>	Cross-Border M&A between Dutch-based acquiring firms with target firms from a selection of countries <sup>2</sup> were empirically studied between 01-01-1980 till 30-04-2014.
<b>Conclusion</b>	Our findings show that cross-border acquisitions by acquirers from the Netherlands generally create value. Looking at the source of value-creation from a country level perspective, we found evidence that value is mainly created in acquisitions of targets based in Germany, United Kingdom and the United States. Furthermore we found positive value creation for acquisitions of targets based in North America and Western Europe. Our results are in line with an existing study on Dutch cross-border acquisitions which found evidence of value creation in acquisitions of target firms from North America and Western Europe. Determinants found to influence value-creation were relative deal size and the legal status of the target firm (public vs. non-public). We did not find significant evidence for other determinants examined in this study.

---

<sup>1+2</sup> Target countries included in this study are Australia, Belgium, Brazil, Canada, China, Denmark, France,

# Table of Contents

1. INTRODUCTION .....	7
1.1 Background .....	7
1.2 Problem Discussion .....	9
1.3 Purpose and Problem Statement .....	11
1.4 Delimitations .....	11
1.5 Audience.....	12
1.6 Thesis Outline.....	13
2. THEORETICAL FRAMEWORK.....	14
2.1 Motivation for M&A .....	14
2.1.1 M&A Motivated by Value-Creation .....	14
2.1.2 Other Motivations for M&A .....	14
2.2 Additional Challenges and Opportunities in Cross-Border M&As.....	16
2.2.1 Challenges in Cross-Border M&As.....	16
2.2.2 Opportunities in Cross-Border M&As .....	19
2.3 Deal- and Company Specific Factors Affecting Value Creation in M&A.....	23
2.3.1 Takeover Characteristics .....	23
2.3.2 Firm Characteristics.....	26
2.4 Value Creation in M&A .....	27
2.5 Comparing Value Creation in Domestic M&A and Cross-Border M&A .....	29
2.6 Critical Review .....	31
2.6.1 Summary of Literature on Cross-Border Value Creation in M&A .....	34
3. METHODOLOGY .....	35
3.1 Research Method.....	35
3.1.1 Common Research Methods for Analyzing Value Creation .....	35
3.1.2 Method used in this Study .....	36
3.2 Analytical Framework .....	37
3.2.1 Research Approach.....	37
3.2.2 Event Study Methodology .....	38
3.2.3 Significance Tests.....	40
3.3 Sample Selection .....	41
3.4 Dependent Variable .....	42
3.5 Explanatory Variables .....	43
3.5.1 Country Specific Factors .....	44

3.5.2 Deal Specific Factors.....	46
3.6 The Regression Model.....	50
3.7 Data Collection.....	50
3.8 Reliability and Validity .....	50
3.8.1 Reliability .....	50
3.8.2 Validity.....	51
4. EMPIRICAL FINDINGS AND ANALYSIS .....	53
4.1 Descriptive Statistics .....	53
4.2 Abnormal Return.....	57
4.3 Cumulative Abnormal Return .....	59
4.4 Regression Results .....	62
4.4.1 Testing Hypotheses on Explanatory Variables.....	63
4.5 Diagnostic Testing.....	67
5. CONCLUSION AND RECOMMENDATIONS FOR FURTHER RESEARCH .....	71
5.1 Conclusion.....	71
5.2 Recommendations for Further Research .....	72
REFERENCE LIST.....	74
APPENDICES.....	83

## **List of Tables**

Table 2.1: Summary of Literature on cross-border M&A.....	34
Table 3.1: Hypotheses Summarized .....	49
Table 4.1: Deals by Country .....	54
Table 4.2: Deals by Region .....	54
Table 4.3: Frequency Distribution of Acquisition by Industry .....	55
Table 4.4: Method of Payment .....	56
Table 4.5: Type of Diversification .....	57
Table 4.6: Average Abnormal Returns before and after Announcement Day .....	58
Table 4.7: CAR for Different Event Windows .....	59
Table 4.8: CAR by Country .....	60
Table 4.9: CAR by Region .....	62
Table 4.10: OLS Regression for Different Event Windows .....	63
Table 4.11: Regressions taking into account White heteroscedasticity-consistent standard errors.....	68

## List of Figures

Figure 1.1: Percentage of CFOs who expect M&A activity to increase/decrease in The Netherlands the next 12 months.....	8
Figure 4.1: Dutch Cross-Border M&A Deals in between 1984-2014.....	53
Figure 4.2: Average Abnormal Returns before and after Announcement Day.....	58

# 1. INTRODUCTION

---

*This chapter presents the background and problem discussion providing the basis on which the purpose of the study is built and the research questions defined. Delimitations and a short thesis outline are also presented.*

---

## 1.1 Background

A little over 15 years ago, 10 December 1999, CEO Wim Dik of Dutch telecom company KPN was glowing with confidence at the presentation of the billion-euro acquisition of German telecom company E-Plus, at that time the biggest acquisition in the history of The Netherlands. Earlier that year he had proclaimed a number of times that KPN should be present in the top-3 of telecom companies in Europe. At the day of the presentation, Wim Dik confidently stated the following: “In recent times it has been written that KPN would be too small for this kind of deal. However, we haven’t been snoring on the beach the last couple of months.”(Dagblad Trouw, Economic Press, 1999)

It goes without saying that Wim Dik was expecting a positive outcome of the deal, believing it to increase shareholder value. Truth be told, at time of the acquisition the Wim Dik wasn’t the only one: The deal made sense to most industry experts. Expansion into the German market offered high growth opportunities, with at that time less than 1 in 4 Germans owning a mobile phone. With E-Plus’ country-wide network already in place, there shouldn’t be a too high of a need for extra investments. It seemed as if KPN had acquired a potential cash cow. The rationale behind the acquisition was that E-Plus would enable KPN to accelerate growth and increase the possibilities for future acquisitions (de Rooij, 2013).

Little did people involved with the deal realize that two years later the dot-com bubble would burst. Not only was KPN heavily indebted at this time with a debt of over 23 billion euros, five times of what it was before the acquisition of E-Plus, moreover KPN had strongly overvalued E-Plus at time of the acquisition. In 2002 KPN decided to write down 13.7 billion on their acquisition. With short-term loans needing to be repaid and a decreased credit-risk rating from Moody’s, KPN was barely able to avoid bankruptcy (Meinema, 2013).

On 2 October 2013 E-Plus was sold to Spanish telecom company Telefónica for 5 billion euro in cash and a 20 percent stake in Telefónica Deutschland. This resulted in a total value of around 8.55 billion, less than half of the 18.5 billion (41 billion guilders) paid 14 years earlier. Although E-Plus developed itself from the 4<sup>th</sup> to the 2<sup>nd</sup> biggest player in the German telecom market and became KPN’s most profitable daughter firm, being responsible for over a quarter of KPN’s revenues and profits, KPN was forced to sell its crown jewel. According to KPN, the rationale for selling off E-Plus was a further focus on the Dutch and Belgium market. Besides this the sale of E-Plus provided KPN with more financial flexibility, taking into account the high debt-burden still present within KPN, caused by the acquisition itself back in 1999. Labelled by many as the most disastrous acquisition in the history of The Netherlands, the question arises what it is that makes some cross-border acquisitions successful, whereas other acquisitions fail to add value or even worse bring a company to the verge of going bankrupt (Meinema, 2013).

With the Netherlands having come out of the recession in the third quarter of 2013 (Eigenraam, 2014), and the World Bank (Reuters, 2014) raising its forecast for global economic growth for the first time in three years, there has been a lot of optimism among consumers, corporate officers, economists and researchers lately. Consequently, the most recent CFO Survey by Deloitte the Netherlands, published in the fourth quarter of 2013, showed a positive outlook by Dutch CFOs over the next

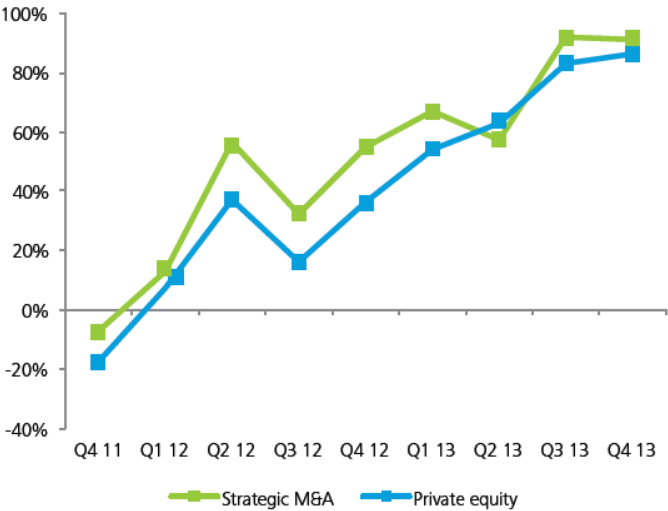


Figure 1.1 Percentage of CFOs who expect M&A activity to increase/decrease in The Netherlands the next 12 months

12 months (See Figure 1). No less than 86% of CFOs expect an increase in private equity activity in the next 12 months, equaling 2011 Q1’s highest level. Furthermore, 92% of CFOs expect corporate M&A to increase in the next 12 months, with 41% of them expecting their companies to make an acquisition (Deloitte Research & Market Intelligence, 2013).

With Dutch M&A activity expected to increase, and little possibilities for growth in the



relatively small Dutch market, Dutch companies need to look outside of their country's border for acquisitions. With the expected ongoing process of integration in the European market in which most Dutch-based acquisitions take place (Moschieri & Campa, 2013), increased knowledge on factors affecting the probability of success in cross-border mergers and acquisitions initiated by Dutch companies are becoming increasingly relevant.

## **1.2 Problem Discussion**

Cross-border M&As have been increasing over the last decades. According to UNCTAD<sup>2</sup> (2013), global cross-border M&A value has risen from \$49.8 billion in 1987 to a record high of \$1.02 trillion in 2007, whereas global M&A value in 2012 amounted to over 300 billion, and is expected to increase over the coming years with the global economy coming out of the financial crisis (World Bank, 2014).

Research by Grant Thornton (2013) also found that more and more companies decide to participate in cross-border acquisitions. Since 2008 the percentage of cross-border acquisitions as part of total acquisitions has increased by 56 percent, with an 18 percent increase in 2012 alone. On a global scale, 28 percent of all companies expect to participate in mergers and acquisitions in the coming three years. With 55 percent, this percentage is even higher in The Netherlands, out of which Dutch executives expect more than half to be cross-border deals. So why is it that companies decide to participate M&A, and more particular in cross-border acquisitions?

The starting point for both domestic and cross-border acquisitions is the same: Two firms will merge when combining them increases the value (or utility) from the perception of the acquiring firm's manager (Erel et al, 2011). According to Gaughan (2007) many motives prompt executives to acquire or merge with other organizations, growth and synergy being the most frequently mentioned. Other value-adding motives discussed are diversification, tax benefits and increased market power, among others.

Besides these general incentives to participate in M&A, additional benefits from cross-border as compared to domestic acquisitions make that an increasing amount of acquisitions take

---

<sup>2</sup> United Nations Conference on Trade and Development.

place across borders. Among those are governance-related differences, imperfect integration of capital markets, geographic expansion, limited domestic growth opportunities, the possibility of being able to exploit intangible assets in a number of markets and a more dynamic learning process (Danbolt and Maciver, 2012).

However, the literature is conflicting, with different arguments and evidence put forward as to whether cross-border acquisitions can be expected to create or destroy value, and whether the wealth effects of cross-border acquisitions will be greater or smaller than in domestic acquisitions (Eckbo and Thorburn, 2000; Moeller and Schlingemann, 2005, Feito-Ruiz and Menendez-Requejo, 2011; Danbolt and Maciver, 2012). Moreover, in spite of the vast amount of research on value creation through cross-border M&A, most of it focuses on the US and UK market (Goergen and Renneboog, 2004; Black *et al.*, 2007; Francis *et al.*, 2008; Danbolt and Maciver, 2012). To our knowledge, research on cross-border M&A by Dutch companies in specific has been limited to that of Corhay and Tourani Rad (2000), which researched the wealth effects of cross-border acquisitions by Dutch companies over the period 1990-1996. However, this research was limited to explaining for value creation by only taking into account size, relatedness, and international exposure. Furthermore, the results of this research are expected to be outdated, since Europe has changed significantly since the period 1990-1996. According to Campa and Hernando (2004), the integration of the national economies, the increase in deregulation of a large number of economic sectors and the recent listing of large European corporations previously controlled by their national governments have decreased the cost of making corporate acquisitions and transactions across European borders. This has strongly facilitated and influenced the restructuring of the European corporate sector. Furthermore, the introduction of the Euro as the single currency further increased the liquidity of the European capital market. Besides this, harmonization of M&A regulations across the EU members decreased transaction costs, thus further liquidizing the M&A market (Moschieri & Campa, 2013).

Summarizing, the research gap exists in the fact that although research on value-creation through European cross-border M&A has been increasing (Campa and Hernando, 2004; Martynova and Renneboog, 2011) most of the research has been focusing on the US and UK market. More importantly, studies on the Dutch M&A market is restricted to the research by Corhay and Tourani Rad (2000) which is outdated and only focuses on three value drivers, not accounting for other possible determinants of value-creation which have been identified in the

existing literature (Martynova and Renneboog, 2011). Moreover, the M&A success rate has not changed in the 30 years since research on these topics began (Marks and Mirvis, 2011) which signals there is still a lot to be gained concerning this field of research.

### **1.3 Purpose and Problem Statement**

Based on the previously identified research gap, the primary objective of this paper is to determine whether cross-border acquisitions provide positive cumulative abnormal returns for Dutch publicly trading companies. Besides focusing on whether acquiring companies abroad adds shareholder value for the acquiring firm, the aim of this paper will also be to determine those factors which significantly impact acquirer performance. Hypotheses will be formed based on existing theories on determinants for M&A success, which subsequently will be applied to the Dutch company setting. Taking into account the current developments and expectations in the Dutch M&A market, with more than half of acquisitions being expected to be cross-border, the aim is to provide Dutch executives with a framework which can help them to improve cross-border acquisition success. By executing deals with those factors which have been proven to positively affect Cumulative Abnormal Returns (CAR), and consequently forgoing deals with factors expected to negatively affect CAR, the aim of this paper is to help Dutch companies to improve their cross-border M&A success rate, making our paper not only theoretically, but also practically relevant.

Factors affecting cross-border M&A success we will be focusing on in our research are cultural difference, GDP growth rate difference, tax rate difference, relative deal size, method of payment, legal status of target firm, corporate control and diversification.

### **1.4 Delimitations**

This study will only focus on CAR for acquiring firms in cross-border acquisitions, since the evidence on CAR for target firms has been found to be unequivocal, finding positive CAR in the range of 20-30 percent (Campa and Hernando, 2004). Furthermore this study will only take into account acquiring firms which are publicly trading, and only those acquisitions which are of significant size to be expected to affect value for the acquiring firm's

shareholders. Furthermore, as a consequence of using the market study method in this study, this study is limited to publicly trading companies and leaves out Dutch private companies involved in Cross-Border M&A

To guarantee a sufficient sample size from individual countries, only those countries from which at least 10 acquisitions were made are included. Consequently, the countries involved in this study are: Australia, Belgium, Brazil, Canada, China, Denmark, France, Germany, Italy, Luxembourg, Norway, Poland, Russia, South Korea, Spain, Sweden, Switzerland, Turkey, United Kingdom and United States of America. Together these countries make for 89 percent of total deals.

In this paper, an event study will be used to assess CAR, which assumes that the capital market accurately reflects the implication of an announced event for the firm in question. On the short-term however, some developments are hard to anticipate on (For example the bursting of the Dot.com bubble as discussed in the background section) which can lead to very different results in CAR depending on choosing either a short term or long term window.

## **1.5 Audience**

The main audience for this study is practitioners at Dutch publicly trading companies involved in cross-border acquisitions, as well as practitioners in cross-border M&A based in other countries. Although this study is focused on acquirers from developed markets and targets from developed and developing markets, the results might still apply to other markets since hypotheses in this study were formed and tested based on finance theories and empirical results from different markets. Furthermore, this study is also relevant for students and academics interested in the research of corporate finance and more specifically in mergers and acquisitions.

## **1.6 Thesis Outline**

The remainder of this thesis is divided into the following four chapters

### *Chapter 2 – Theoretical Framework*

This chapter provides an overview of previous literature on M&A and Cross-Border M&A in specific, as means to provide the reader with a theoretical framework used in the rest of this study. Motivation for M&A, additional challenges and opportunities in cross-border M&A and determinants affecting Cross-Border M&A are all discussed, as well as value-creation in M&A. The chapter concludes with a comparison of value-creation between domestic- and cross-border M&A followed by a literature review in which all preceding literature is summarized and critically discussed.

### *Chapter 3 - Methodology*

This chapter begins by providing the reader an idea about the common research methods used for similar topics. Then detailed description of analytical framework and justification for choosing the framework is provided. The procedure of the sample selection is described in detail as well as the sources, followed by the brief descriptions of the dependent variable and explanatory variables. Within the variables, hypotheses are formed based on theory and previous empirical findings, which will be tested with later relevant tests. The chapter ends with the justification supporting reliability and validity of methodology and data.

### *Chapter 4 – Empirical Findings & Analysis*

This chapter starts with describing the sample statistics. After this the reader is provided the empirical findings of this study on both the hypothesis concerning the dependent variable as well as the hypotheses on the independent variables. Simultaneously, the chapter provides analysis and interpretation of the empirical results.

### *Chapter 5 – Conclusions and Recommendations for Further Research*

The study concludes with the overall conclusion of our study as well as suggestions for further research.

## **2. THEORETICAL FRAMEWORK**

---

*This chapter provides an overview of previous literature on M&A and Cross-Border M&A in specific, as means to provide the reader with a theoretical framework which will be used in the rest of this study.*

---

### **2.1 Motivation for M&A**

#### **2.1.1 M&A Motivated by Value-Creation**

Whether it concerns a domestic or cross-border acquisition, the overarching reason for participating in a merger or acquisition with another organization is that the union will enable a firm to attain strategic goals more quickly and inexpensively than if a company would strive to attain the same results by itself.

According to Gaughan (2007) many motives prompt executives to acquire or merge with other organizations, growth and synergy being the most frequently mentioned. Other value-adding motives discussed are diversification, tax benefits and increased market power, among others.

More recently, in a global survey conducted in 2013 by KPMG, over 1000 M&A experts believed that the main reasons to initiate a deal in 2014, beyond increasing revenues or cutting costs, is to introduce new products, enter into new lines of business, expand geographic reach, expand customer base and opportunism due to for example the sudden availability of a target (KPMG, 2013). What springs out is that most of these motives seem to focus on cross-border acquisitions.

#### **2.1.2 Other Motivations for M&A**

Besides the above mentioned cases in which the decision to acquire or merge with another company is motivated by strategic intent, the literature also extensively discusses those cases in which hubris (Roll, 1986), agency problems (Fama and Jensen, 1983) and herding (Devenow and Welch, 1996) are found to influence the decision to engage in M&As.

### *Manager hubris*

The hubris hypothesis implies that managers seek to acquire firms for their own personal motives and that the pure economic gains to the acquiring firm are not the sole motivation or even the primary motivation in the acquisition (Gaughan, 2007). Instead, overconfident managers overestimate the creation of synergetic value and are likely to overestimate their abilities to manage an acquisition, caused by excessive confidence, arrogance and pride (Roll, 1986).

### *Herding*

Devenow and Welch (1996) describe herding as the belief that investors are influenced by the decisions of other investors. It is built on the idea that imitation and mimicry are amongst the most basic human instincts. Consequently, this can lead to sub-optimal acquisition decisions instead of the best aggregate choice. They argue that herding can be closely linked to the existence of bubbles, with managers not wanting to miss out on possible opportunities seen by the rest of the market. The first successful takeovers encourage other companies to undertake similar transactions.

### *Agency problems*

Frequently mentioned agency problems, surfacing as a result of poor corporate governance, are empire-building and diversification. In the case of empire building, managers have a large amount of excess cash at their disposal. Self-interested managers, instead of returning the excess cash to their shareholders, choose for empire building instead. The excess cash makes it possible for managers to make poor acquisitions when they have run out of good ones (Jensen, 1986; Martynova and Renneboog, 2008). Besides empire building, in some cases managers are suspected to participate in M&A in order to decrease their companies' earnings volatility, which enhances corporate survival and protects their own positions (Amihud and Lev, 1981). Lastly, empirical evidence has shown that rewards to top managers are driven by firm size rather than by performance, and as such this forms an extra incentive for managers to put their own interests before their shareholders' (Schmidt and Fowler, 1990).

### *M&A Failure*

Often, the deals that fail to create value or even destroy value are motivated by one of these three above mentioned reasons: Hubris, herding and managerial self-interest enabled by agency problems. When companies engage in acquisitions motivated by one of these three

reasons, the reasons for eventually failing to create value are buying the wrong company, making the deal at the wrong time, or paying the wrong price (Mark and Mirvis, 2011). The latter is often explained to be the result of the *winner's curse*, the hypothesis which states that bidders who overestimate the value of a target will most likely win a bidding. According to this hypothesis, the reason they win the bidding is because they outbid rivals who more accurately value the target (Baserman and Samuelson, 1983). Furthermore, through a 30 year research program, evidence showed that the processes used to put companies together are integral to a deal's success versus failure, which encompasses the formation and operations of the buying team, how the firms are integrated, and learning from current deals to better manage future ones (Marks and Mirvis, 2010). Additionally, Hitt et al. (1998) found that high or extraordinary debt played an important role in the lack of success in 21 of the 24 acquisitions they studied.

Although the preceding is true for both domestic and cross-border acquisitions, the latter differentiates itself from domestic acquisitions through a number of unique challenges and opportunities.

## **2.2 Additional Challenges and Opportunities in Cross-Border M&As**

The dynamics of cross-border M&A are largely similar to those of domestic M&A. However, due to their international nature, they also offer some additional opportunities which motivate to participate in cross-border M&A, and involve unique challenges which also need to be taken into consideration. In this paragraph the focus will be on international factors affecting value in M&As. In the following paragraph, deal- and firm specific factors will be considered as well.

### **2.2.1 Challenges in Cross-Border M&As**

Two frequently mentioned challenges in cross-border M&A are double-layered acculturation (Barkema *et al.*, 1996) and liability of foreignness (Zaheer, 1995), both negatively affecting the value-creation in cross-border acquisitions.



### *Liability of Foreignness*

To start with the latter, Zaheer (1995) describes liability of foreignness (LOF) as all additional costs a firm operating in a market overseas incurs that a local firm would not incur, and focuses on the following four sources of these costs:

- 1 Costs directly associated with spatial distance, such as the costs of travel, transportation, and coordination over distance and across time zones.
- 2 Firm-specific costs based on a particular company's unfamiliarity with and lack of roots in a local environment.
- 3 Costs resulting from the host country environment, such as the lack of legitimacy of foreign firms and economic nationalism.
- 4 Costs from the home country environment, such as the restrictions on high-technology sales to certain countries.

Eden and Miller (2004) extended the research on LOF by defining it as the key component of the cost of doing business abroad (CDBA). They separate CDBA into two major categories: economic market-based activity costs and LOF.

#### *1. Activity-Based Costs*

These economic costs include transportation and communications costs, trade barriers (tariffs, entry and license fees) and costs associated with foreign exchange transactions, all costs not faced by a local firm in the host country. They are overwhelmingly economic, driven by geographic distance and can be anticipated and quantified.

#### *2. Liability of Foreignness*

Eden and Miller (2004) describe this as being a stranger in a strange land. Zaheer (2002), building on her earlier study mentioned above from 1995, argues that LOF can be decomposed into three hazards that affect foreign firms disproportionately to local firms in the host country.

##### *i. Unfamiliarity Hazards*

These reflect the lack of knowledge or experience in the host country, which places the foreign firm at a disadvantage compared to local firms. A shorter presence in the host country causes unfamiliarity hazards, which are measured by the additional costs

that companies must incur to achieve the same level of host-market knowledge as a local firm (Zaheer, 2002).

*ii. Discrimination Hazards*

This is defined as the discriminatory treatment inflicted on the foreign firm relative to local firms in the host country, and can arise from differential treatment by the host governments, consumers or the general public in the host country (Zaheer, 2002). Eden and Miller (2004) describe it as the costs of the challenges of obtaining external legitimacy. Being treated as an outsider by consumers and the local politics can negatively affect the value-creation for foreign firms.

*iii. Relational Hazards*

These include costs associated with a foreign firm's network position in the host country and its linkages to important local actors, which are both likely to be less developed relative to those of a local firm. This results in poorer access to local information and resources (Zaheer 2002).

*Cultural Differences*

Another challenge when acquiring a company abroad concerns double-layered acculturation, which entails the combination of two companies with different organizational cultures that are embedded in different national cultures. In these situations the acquired company not only has to adapt to an unfamiliar organizational culture, but also to a new national culture. The inability to adjust to these new cultures has the potential to decrease the success of the acquisition (Barkema *et al.*, 1996). However, the existing evidence on the effect of cultural difference between two countries on shareholder returns is divided. On the one hand it is argued that national cultural distance between firms tends to result in culture classes resulting into conflicts decreasing the value of the deal (Datta and Puia, 1995; Jemison and Sitkin, 1986). On the other one hand it is argued that the national cultural distance improves cross-border acquisition performance by providing access to the target's and the acquirer's diverse set of routines embedded in their respective national cultures (Hofstede, 1980; Kogut and Singh, 1988; Chakrabarti *et al.*, 2009).

Summarized, differences in national culture, customer preferences, business practices, and institutional forces, such as government regulations, can hinder firms from fully realizing their strategic objectives. Uncertainty and information asymmetry in foreign markets make it difficult for firms to adjust and learn from both the local market and target firm, as countries have different economic, institutional and cultural structures (Shimizu *et al*, 2004). With these challenges present it is useful to also have a closer look at possible benefits derived from cross-border M&A.

### **2.2.2 Opportunities in Cross-Border M&As**

A number of opportunities to create value exist in cross-border M&A in particular as compared to domestic M&A, such as country-level governance differences, differences in valuation in the form of relative currency increases and international tax differences.

In a more general view on firms' motives to pursue international expansion, Madura (2012) proposes *comparative advantage*, *product cycle*, and *imperfect markets* as the main motivation for international expansion.

#### *Theory of Comparative Advantage*

This theory is built on the reasoning that specialization by countries can increase production efficiency, for example advantages in technology or labor costs. Since these advantages cannot be easily transported, countries tend to use their advantages to specialize in the production of goods that can be produced with relative efficiency. When a country decides to specialize in certain products or services, it may not be able produce other products efficiently, so trade between countries is essential. Summarized, comparative advantage motivates companies to expand abroad since it allows them to increase production efficiency.

#### *Product Cycle Theory*

According to this theory, firms become established in the home market as a result of some perceived advantage over existing competitors, such as a need by the market for at least one more supplier of the product. Foreign demand for the product will at first be accommodated by exporting. As time passes and competition grows, the firm may feel the only way to retain its advantage over competition in foreign countries is by producing the product in the foreign markets, thereby reducing its transportation costs.

### *Imperfect Markets Theory*

In a world with perfect capital markets, factors of production would be easily transferable, and labor and other resources would flow wherever they would be in demand. This unrestricted mobility of factors would create equality in costs and returns and remove the comparative cost advantage discussed before. However, in reality the market suffers from imperfect conditions where factors of production are immobile to a certain extent. Therefore, there are costs and restrictions related to the transfer of labor and other resources used for production. As a result, factors of production, exchange rates, tax rates and interest rates differ around the globe (Erel *et al.*, 2012). Consequently, it pays off for companies to search for cross-border opportunities to acquire and take advantage of these imperfections. By actually acquiring companies in foreign markets, they are able to decrease the transaction costs normally involved in cross-border operations.

Within the above mentioned school of thought of imperfect markets, there exist three competing theories trying to explain cross-border acquisitions also worth mentioning here: International diversification theory, internalization theory and exchange rate theory.

#### *1. International Diversification Theory*

Starting with the first, the international diversification theory states that the main motive for expanding operations into foreign countries is to take advantage of imperfections in the financial markets as described above, and by doing so maximize returns. Due to various governmental restrictions on the individual portfolio investment and because of information asymmetry on the part of the individual investor, corporate diversification is favored over individual diversification. Furthermore international diversification helps to reduce variability in earnings (Kohli and Mann, 2011).

#### *2. Internalization Theory*

According to this theory, the main motivation for expanding globally is to internalize intangible assets. The reason for this, according to Morck & Yeung (1991) is that these assets are based on the proprietary information and are difficult to organize externally. The value of these assets enhances in direct proportion to the scale of the company's operations, which in turn can be increased by increasing the number of markets in which it operates. As a result, companies strive to create avenues for optimum utilization of such assets by expanding abroad and taking over companies across the geographies (Kohli and Mann, 2011). At the

same time, recent international business literature has begun to consider a reverse-internalization argument. The argument is that instead of pushing the home-country's technological and organizational advantages to the host-country, the acquirer pulls the assets of the target firm- which range from technical skills, to market understanding, to supplier relationships, to government ties- out of the host country. In this view, multinational corporations do not only exploit their current skills and expertise, but also profit from the target's advantages (Anand *et al.*,2005).

### 3. *Exchange Rate Theory*

This theory states that the value creation in cross-border acquisitions is influenced by frictions in the exchange rate markets. Erel *et al.* (2012) found that given the fact that markets in different countries are not perfectly integrated, this can also motivate cross-border acquisitions. Currency increases in the acquirer's home-country would make targets relatively inexpensive, leading to some potential acquisitions to be profitable that would not have been profitable under the old exchange rates. This form of opportunism can lead to value-decreasing deals however, since deals are made pure because of the relative low price of the target, instead of looking at value-adding potential (Gaughan, 2007).

Lastly existing literature on cross-border M&A also frequently mentions geographic reach and organizational learning, the market for corporate control and taxes as motives to participate in cross-border M&As, as well as factors influencing the value of those deals.

#### *Market for corporate control in target firm country*

La Porta *et al.* (1998) argue that the quality of legal protection of shareholders helps determine ownership concentration, accounting for the higher concentration of ownership in the French civil law countries (CIA Factbook, 2013).<sup>3</sup> Their results support the idea that heavily concentrated ownership results from, and perhaps substitutes for, weak protection of investors in a corporate governance system. In that line of reasoning, higher ownership concentration in countries with poor shareholder protection is valuable and can be expected to increase acquiring shareholders' wealth gains. Chari *et al.* (2004) found evidence that the acquirer's returns increase significantly whenever a majority stake is transferred from the target to the acquiring firm.

---

<sup>3</sup> Most countries from the European Union, except for the UK, Ireland and Cyprus belong to this legal system.

### *Geographic Reach and Organizational Learning*

Anand *et al.* (2005) discuss location opportunities to gain access to geographically distributed knowledge. Foreign target firms, and especially those operating in multiple countries, provide immediate opportunities for extensive market expansion. In addition, such targets provide opportunities to gain new knowledge. Scholars focusing on the knowledge creation potential of the multinational firm stress the ability of foreign subsidiaries to generate innovations based on resources resident in the heterogeneous, host country environment (Kogut and Zander, 1995; Birkinshaw, 1997; Frost, 2001). Through their ongoing interaction with their host country environment, firms with greater multinational scope develop networks of relationships with universities, firms, suppliers and public agencies. According to Kostova and Zaheer (1999) participation in external networks in different countries provides firms with a greater capability to scan the environment, screen new technologies and ideas, gain access to local resources and leverage institutional contacts.

### *Tax rate*

Jensen and Ruback (1983) suggest that financial reasons could motivate mergers. Firms could be attracted by the opportunity to fully utilize tax shields, increase leverage, and exploit other tax advantages, with the last being most relevant in cross-border acquisitions. Coeurdacier *et al.* (2009) found in a study on the European market that a 10 percentage point decrease in the differential in effective average corporate taxes between target and acquiring countries would increase the outflows of manufacturing equity investment<sup>4</sup> in the same sector by 68%, suggesting that changes in corporate taxes are an efficient tool to attract foreign capital. Manzon *et al.* (1994) found in a macroeconomic analysis of the different tax systems among different countries, focusing on the U.S. market, that if the target firm has a high-tax system, U.S. acquirers have higher abnormal returns than if they acquire a target from a low-tax country. However, Cakici *et al.* (1996) found that tax effects were not relevant as a factor explaining changes in wealth effects.

As could be seen, cross-border acquisitions differ from domestic acquisitions in a number of significant ways, and as a consequence it is to be expected that value creation in both types of acquisitions have been found to differ as well. The remaining of this chapter will be used to review the existing literature on factors affecting value creation, both deal and company

---

<sup>4</sup> According to Hijzen *et al.* (2008), manufacturing accounts for approximately 40 percent of cross-border acquirers and targets.

specific and evidence on value-creation through M&A. Lastly, the ability of both domestic M&A and cross-border M&A to generate returns for shareholders of the acquiring firm will be compared to one another, followed by a critical review and summary of the literature discussed in this chapter.

## **2.3 Deal- and Company Specific Factors Affecting Value Creation in M&A**

Previous studies on M&A have shown that a variety of factors affect the takeover announcement returns. Both attributes of the M&A transaction and the characteristics of the bidding and target firm affect the value-creation for shareholders (Martynova and Renneboog, 2008; Jensen and Ruback, 1983).

### **2.3.1 Takeover Characteristics**

According to Martynova and Renneboog (2011) several transaction attributes are likely to affect bidder's and target's takeover returns. Besides the geographical scope of the bid as discussed earlier in this paper the following attributes have been identified by existing literature on M&A to be affecting bidder's and target's returns: The form of and the attitude towards the deal, the legal status of the target firm, the industry relatedness of the bidding and target firm, the type of acquisition, the means of payment, deal transparency, and the timing of the takeover.

#### *Form and attitude towards the deal*

Hostile takeovers as well as opposed tender offers are frequently associated with lower takeover wealth effects to the bidder's shareholders (Franks and Mayer, 1996; Goergen and Renneboog, 2004). Goergen and Renneboog (2004) found that the abnormal return on the announcement day were 2.2% and 2.43% for mergers and unopposed acquisitions, respectively. However, on average, the bidder's shareholders received an abnormal negative return of 2.5% in hostile acquisitions. The rationale behind this is that when the target refuses the first offer, the premium that needs to be paid to provide the target with an acceptable offer would become too high for the acquisition to become successful. In the same way, for a bidding firm to acquire another company through a tender offer, often high premiums need to

be paid to make the bid successful. As a result, shareholders of the bidding company are afraid that the increased offer premium will erode any existing synergy gains.

#### *Legal status target firm*

The way in which the legal status of a firm affects the wealth effect for the bidder's shareholders differs. Bradley and Sundaram (2004) found evidence that acquisitions of private targets lead to a decrease in the takeover wealth since low disclosure requirements for privately held firms may lead to a higher information asymmetry. However, Faccio *et al.* (2006) found the opposite to be true reason being that the shares of privately-held firms are by definition illiquid, creating a price discount. Furthermore, takeover negotiations with the owners of private firms may have a better chance of succeeding than when a public tender offer has to be launched for a widely-held firm (Martynova and Renneboog, 2011).

#### *Industry relatedness*

Diversification by companies through the acquisition of companies in unrelated industries, are expected to trigger lower takeover returns to the bidder's shareholders (Maquiera *et al.*, 1998; Doukas *et al.*, 2002). The fundamental argument made against unrelated diversification is that it increases agency problems. If managers tend to overinvest when the firm has excess cash, then access to an internal market for capital in a diversified firm simply provides a greater opportunity to overinvest (Martin and Sayrak, 2003). Furthermore, diversification may lead to decreased efficiency as a result of information asymmetry problems between the firm's central management and the management of the operating divisions. Although the existing research hints mostly to the idea unrelated diversification is value-destroying, a study on the Dutch market by Corhay and Tourani Rad (2000) found the exact opposite for Dutch firms. Their rationale for this counter-intuitive result is that the risk-reducing diversification effects of going into an unrelated business dominate the synergy effects of staying within the same industry.

#### *Type of acquisition*

Although receiving little attention in the existing literature (Martynova and Renneboog, 2011) partial acquisitions may be used by bidding firms as an instrument to transfer wealth from the target's minority shareholders to themselves, and in such a way increase the bidder's shareholder wealth. In their study, Martynova and Renneboog (2011) found lower returns



associated with partial acquisitions, reflecting concerns that a transfer of control will lead to expropriation of the remaining minority shareholders.

### *Means of payment*

Evidence on the method of payment and its effect on value-creation is found to be mixed. Myers and Majluf (1984) argue that shareholders of both the bidding- and target firm might interpret payment in stock as a signal that the bidder's shares are overpriced. At the same time, a cash offer is interpreted as a positive signal about the target firm's quality, as the bidding firm is buying out the target's shareholders and is hence not willing to share future value increases with them (Martynova and Renneboog, 2011). While this holds for studies on the US market, studies on Canada and Europe provide a different result.

Dutta *et al.* (2013) in their study on cross-border M&A on the Canadian market find that stock deals have important advantages such as monitoring by existing shareholders of the target firm, mitigating information asymmetry and corporate memory retention. This is in line with earlier findings on the Canadian market by Eckbo and Thorburn (2002). In a study on the European market, Goergen and Renneboog (2004) show that bidders' CAR in all-equity deals significantly exceed those in all-cash deals. A possible explanation for this is offered by Eckbo *et al.* (1990) who point out that all-cash payments require taxes on capital gains to be paid immediately by the target firm's shareholders. It is hypothesized that to compensate for this, bidders must raise the offer premium to compensate target shareholders for the tax penalty associated with this particular method of payment. All of this implies that the choice to make an all-equity offer does not per se suggest to the market that the bidder's equity is overvalued.

However, Goergen and Renneboog (2004) only studied large deals. As an effect, a possible realization by the bidder's shareholders is that the company's choice of payment might be restricted, and as such is sometimes forced to make use of stock. A third possibility is a combined method of payment, a combination of both cash and stock. According to an empirical study by Eckbo *et al.* (1990) payment through a combination of stock and cash offers more return than only cash and only stock deals. He argued that since two-sided information asymmetry affects both acquirer and target, a combination of stock and cash in the deal is more optimal.

### *Lack of deal transparency*

The lack of deal transparency has been found to negatively affect bidder's shareholders' returns. Such lack of information is expected to make investors pessimistic about the expected synergy value that accrues to the bidder. Also, the fact that their company has chosen to conceal some information makes investors concerned that the deal will be worse than their initial expectations. Martynova and Renneboog (2011) found significantly lower returns for deals in which deal information was undisclosed. The CAR for shareholders of the acquiring firm was found to be 5.57% lower on average than in those deals in which information was disclosed.

### *Timing*

Takeover returns to the bidder's shareholders have been found to decline during and after takeover wave peaks. A great example of how this is able to happen is described by Gaughan (2007). In his book he narrates how in the period 1998-2001, at the peak of the 5<sup>th</sup> merger wave, 87 deals lost over 1 billion dollars of its shareholders' money. During this time, hubris-filled executives thought that these high valuations were the product of their managerial expertise rather than the fact that their company, and most of the market, was riding an irrational wave of overvaluation. As a result, it was hard for boards of companies to tell their CEO that his or her merger proposals were unsound and irresponsible, which lead to acquisitions taking place on the basis of manager hubris and managerial self-interest, instead of focusing solely on creating value for its shareholders.

## **2.3.2 Firm Characteristics**

Firm characteristics mentioned by Martynova and Renneboog (2011) and Moeller *et al.* (2004) which are likely to have an impact on the wealth effects of bidder firm's shareholders are the bidder's firm size, leverage, cash flows, and the relative size of the target.

### *Firm size acquirer*

Moeller *et al.* (2004) studied the effect of firm size on the wealth effect of shareholders in bidder firms. They found that acquiring-firm shareholders of relatively smaller firms received CAR of roughly two percentage point higher than larger firms<sup>5</sup> Moeller *et al.* (2004) believe

---

<sup>5</sup> Defined as having market capitalization of over the 25<sup>th</sup> percentile on the NYSE.

that larger acquirers tend to overpay in takeovers, and as such firm size can be considered as a proxy for managerial hubris (Roll, 1986). This is in line with more recent evidence found by Feito-Ruiz and Menendex-Requejo (2011).

#### *Cash flow and leverage*

The free cash flow theory (Jensen, 1986) implies that managers of firms with unused borrowing power and large free cash flows are more likely to undertake low-benefit or even value-destroying mergers. As such, higher free cash flows and lower leverage negatively affect shareholders of the bidding firms. However, high cash flow and low leverage at the target firm positively affect the bidder's shareholder wealth creation. (Martynova and Renneboog, 2008).

#### *Relative size of the target*

Evidence on the effects of relative size of the target is mixed. Some studies report positive effects of a relatively larger target size, which is argued to be caused by the fact that the larger the relative size of the target firm, the more information there will be available on it, and as a result of that fewer adverse selection problems when valuing it (Moeller and Schlingemann, 2005; Feito-Ruiz and Menendex-Requejo, 2011). Others however argue that the larger the relative size of the target compared to the acquirer, the lower the expected bidder's shareholder returns. The rationale behind this is that larger firms generally require a more complex management structure to operate effectively, and as such the post-acquisition integration of a relatively large target may be a difficult and more costly process, negatively affecting possible synergy realizations (Hansen, 1987; Martynova and Renneboog, 2011).

## **2.4 Value Creation in M&A**

With the abundance of motives suggested by both practitioners and academics to participate in M&A, and with the number of M&A increasing the coming years, it appears that both acquirers and targets expect M&A to add value to their operations. Previous research however has not been conclusive on this matter and has shown differing results. The public consensus when reviewing literature which focuses on both domestic- and cross-border acquisitions as a whole seems to be that most mergers and acquisitions do not succeed in creating shareholder value for the acquiring firm's shareholders. According to Christensen et al (2011) a staggering

amount of between 70 percent and 90 percent fails to create value. Bauer and Matzler (2014) estimate the average failure rate lower, in between 40 percent and 60 percent, which is in line with failure rates up to 50 percent found by Craninckx and Huyghebaert (2011) in an intra-European sample. In 2000, focusing on cross-border acquisitions in specific, KPMG found that 83 percent of all deals failed to deliver shareholder value, with 53 percent actually destroying value. Georgen and Renneboog (2004) focusing on Cross-Border M&A in Europe and studying 148 deals found 119 out of the total to be adding value for the acquirer firm's shareholders, resulting in a more optimistic success rate compared to the above studies, of 76 percent.

When reviewing the literature, a large number of scholars and practitioners come to a more positive conclusion, advocating the belief that mergers and acquisitions do add value to the target as well as the acquiring party.

Campa and Hernando (2004) compared 13 studies on cumulative abnormal returns (CAR) for target firms with each other, and 15 studies on CAR for acquiring firms.

#### *Target Firm Shareholders' Returns*

Target firm shareholders were found to receive CAR which were on average significantly positive in almost all cases, in the range of 20-30 percent. This is in line with previous research by Jensen and Ruback (1983), Datta *et al.* (1992) and Bruner (2001).

#### *Acquiring Firm Shareholders' Returns*

The evidence found for acquiring firms' shareholders, based on 15 previous studies on CAR for buyer firms, is less conclusive. The evidence is evenly distributed between studies that report negative CAR and those that report zero and slightly positive CAR. Those studies that did report positive CAR consisted of very small positive CAR in most cases, especially when compared to the reported CAR to target firms. What needs to be stressed is that these findings for shareholder value at the acquiring firm are mostly based on returns around the announcement date. Studies that analyze long-term returns to shareholders of acquiring firms tend to find significantly negative CAR to acquirers. Aw and Chatterjee (2004) for example reported an average acquiring shareholder loss of about 12% up to two years following the deal announcement for a sample of 79 large UK acquirers during 1991-96.

### *Total value creation: Target and Acquirer Returns Combined*

Several studies have looked at the total value creation by combining the CAR of both shareholders of the acquiring- and target firm (Mulherin and Boone, 2000; Mulherin, 2000; Houston *et al.*, 2001; Kuipers *et al.*, 2002; Beitel *et al.*, 2002; Aktas *et al.*, 2001). Almost all of these studies report positive combined CAR, with only the study of Aktas *et al.* showing negative combined CAR in some cases depending on the event window chosen. For all cases in which there is a positive combined CAR found, they are relatively low, with a maximum of 6% in all observations.

When focusing solely on combined value creation in cross-border acquisitions the results are mixed, with both studies arguing value-creation (Doukas and Travlos, 1988; La Porta *et al.*, 2000) as well as value destruction (Denis *et al.*, 2002; Moeller and Schlingemann, 2005). However, studies on European M&A for periods following the 1990s show positive CAR in most cases (Antoniou *et al.*, 2007; Conn *et al.*, 2005; Martynova and Renneboog, 2008).

## **2.5 Comparing Value Creation in Domestic M&A and Cross-Border M&A**

As has been discussed earlier, both additional benefits and costs come into play when companies decide to acquire cross-border instead of domestic. This has led many researchers to investigate possibly existing differences between domestic M&A on the one side and cross-border on the other. Although the findings on this topic have been found to differ, more recent research suggests that both target and bidding company shareholders on average earn significantly higher abnormal returns in cross-border than in domestic acquisitions. This chapter is restricted to evaluating value-creation for shareholders of the acquiring firm, since that is what our study will focus on.

### *Bidder returns in domestic and cross-border acquisitions compared*

There have been several studies comparing the performance of bidders in cross-border acquisitions to that of domestic acquirers which found domestic acquisitions to add more value compared to cross-border ones. In studies on the US market, Eckbo and Thorburn (2000) found US bidders to gain less than Canadian bidders in acquisitions of Canadian firms, and Starks and Wei (2004) found foreign bidders to gain less than US bidders in acquisitions of US firms. More generally, Moeller and Schlingemann (2005) and Black *et al.* (2007) found

announcement returns to US bidders in cross-border acquisitions to be significantly lower than in domestic acquisitions. Although Francis *et al.* (2008) found the same results they also found that cross-border effects for US bidders turned insignificantly positive during the late 1990s and early 2000s. More recent evidence argues an opposing view, having found significantly more positive returns for cross-border acquisitions compared to domestic deals. A study by Dutta *et al.* (2013), focusing on 1300 completed deals by Canadian acquirers in between 1993-2002, found that shareholders prefer cross-border acquisitions over domestic deals. Even though research on the US market is most extensive, our study will mainly look at acquisitions within Europe since that is where most acquisitions by Dutch firms have taken place over the years.

In a study of European acquisitions, Campa and Hernando (2004) found bidders in domestic acquisitions to perform better in domestic than in cross-border acquisitions, although the difference is only significant for a long pre-announcement window. Aw and Chatterjee (2004) found similar results for UK firms. However, more recently Feito-Ruiz and Menendez-Requejo (2011) studied 469 M&As of European listed firms (221 cross-border and 248 domestic). They found that shareholders of acquiring firms place greater value on cross-border M&A announcements than on domestic ones. Their results showed CAR of 1.38% for cross-border deals compared to 0.64% for domestic ones.

Different from all prior research, which restricts analyses to either targets or bidders, or to focus purely on the difference between domestic and cross-border acquisitions without comparing cross-border acquisitions to similar domestic acquisitions, Danbolt and Maciver performed the following research in 2012: They studied 251 cross-border targets (of which 174 were targets in cross-border acquisitions into the UK and 77 were overseas targets acquired by the UK firms) and 146 cross-border bidders (81 in the UK and 65 overseas). Both bidders and targets were then matched to a similar company involved in a comparable domestic acquisition, with matching based on country, year, industry and size.

Using this methodology they found both target and bidding company shareholders on average to earn significantly higher abnormal returns in cross-border than in domestic acquisitions. Additional gains for cross-border targets as compared to targets in similar domestic acquisitions amounted to a highly significant 10.1% CAR over a 3-day period centered on the day of the bid announcement. Besides the gains for target-firms, bidding companies also

perform better. While bidding companies in domestic acquisitions on average suffered negative abnormal returns of -1.8% CAR, returns to bidders in cross-border acquisitions are insignificantly different from zero with -0.3%, leading to a significant cross-border effect of 1.5 percentage points. As in previous research, gains generally accrued to target rather than to bidding company shareholders. Furthermore, Danbolt and Maciver (2012) found that cross-border effects of both target and bidding company have been increasing over the last decades, with higher effects during the early 2000s as compared to the 1980s and 1990s.

## 2.6 Critical Review

With cross-border M&A increasing over the last three decades (World Bank 2014), so has the literature on cross-border M&A. However, academic research on this type of strategic action has not kept pace with the changes (Shimizu *et al.*, 2004). Although, scholars have been conducting research on this topics for 30 years (Marks and Mirvis, 2011) there have only been modest improvements in the M&A success rate (Schoenberg, 2006).

When reviewing previous research on cross-border M&A in the period 1998-2004, Campa and Hernando (2004) found that evidence on value-creation is evenly distributed between studies that report negative CAR and those that report zero and slightly positive CAR, while finding a positive significant CAR of 0.59 percent for acquiring firm's shareholders themselves. More recent studies show positive CAR in most cases (see Table 2.1).

Research on cross-border M&A as being preferable to domestic M&A is also mixed. Although more recent studies (Feito-Ruiz and Menendex-Requejo, 2011; Kohli and Mann, 2011; Danbolt and Maciver, 2012; Dutta *et al.*, 2013) found evidence on excess value-creation through cross-border M&A, others (Eckbo and Thorburn, 2000; Stark and Wei, 2004; Moeller and Schlingemann, 2005; Black *et al.*, 2007) found the opposite to be true with cross-border M&As failing to create excess value compared to domestic deals. The only study done so far on cross-border M&A by Dutch firms (Corhay and Tourani Rad, 2000) shows mixed results with small and insignificant negative CAR for the 40-day period before and after the announcement days in West European (-1,05) and East European acquisitions (-3,74), but positive and significant CAR in US acquisitions. However, on shorter time-periods closer to the announcement day differing results are found for all three areas (See Table 2.1).

Through this study we will try to contribute to the existing studies on value-creation through cross-border M&A and more specific form the basis for more research on Dutch-based cross-border M&A which is still scarce.

Factors affecting value-creation in cross-border M&A, another aspect we will be focusing on in this study, have also been thoroughly examined in the existing research, again with mixed results. Consensus seems to exist on hostile takeovers, diversification and the lack of deal transparency, firm size of the acquirer and the target, and amount of free cash. All of these were generally found to negatively affect value (Franks and Mayer, 1996; Goergen and Renneboog, 2004; Bradley and Sundaram; 2004; Maquiera *et al.*, 1998; Doukas *et al.*, 2002; Martin and Sayrak, 2003; Martynova and Renneboog, 2011) (See Table 2.1).

On other factors such as means of payment and legal status the evidence is more dispersed and less conclusive (Myers and Majluf, 1984; Goergen and Renneboog, 2004; Eckbo *et al.*, 1990; Martynova and Renneboog, 2011; Bradley and Sundaram, 2004; Faccio *et al.*, 2006). Studies trying to explain value-creation by including macroeconomic factors are also multiple (Datta and Puia, 1995; Markides and Ittner, 1994; Manzon *et al.*, 1994), again providing mixed results (see Table 2.1).

In a previous study on the Dutch M&A cross-border market, Corhay and Tourani Rad (2000) restricted their research to the moderating effect of size, industry relatedness and international exposure, without taking into account any macroeconomic factors which could possibly explain differences in value-creation across countries. Corhay and Tourani Rad (2000) found a negative effect of -1.5% for companies already enjoying foreign exposure and a positive effect of diversification, contradicting the majority of existing research on diversification arguing the opposite, which is a negative effect on value-creation. They found no significant effect of deal size on value creation.

No research has been done so far on differing macro-economic conditions between countries affecting cross-border acquisitions by Dutch companies. This is notable since it could be of significant relevance to practitioners in the field of M&A deciding on two similar deal opportunities arising in different countries. Taking this into account, the focus of this study will be on macroeconomic differences between countries affecting value-creation for bidding



shareholders. Macroeconomic factors we will be focusing on are national cultural differences, differences in tax rates and GDP growth. Besides this we will also investigate the effect of deal size, for which no significant effects were found in the study by Corhay and Tourani Rad (2000) as well as the method of payment and legal status on which the existing research has been relatively inconclusive compared to the other factors mentioned earlier. Lastly, we will also investigate industry relatedness. Although the existing research hints mostly to the idea unrelated diversification is value-destroying because it increases agency problems, the study by Corhay and Tourani Rad (2000) found the exact opposite to be true for Dutch firms.

## 2.6.1 Summary of Literature on Cross-Border Value Creation in M&A

### Table 2.1: Summary of Literature on cross-border M&A

Year	Author	Period	Market	Sample Size (Domestic/Cross Border)	Event Window (days)	CAR Acquirer	Superior Performance (Domestic/Cross-Border)	Independent Factors found to explain value-creation
1994	Markides and Ittner	1975-1988	US	NA/276	[-1,0] [-1,+3] [-2,+3]	0,32 0,54 0,49	Cross-Border <sup>8</sup>	Unrelated Diversification (-), Strength of Local Currency (+), Prior International Exposure (+), Acquirer Profitability (-), Advertisement Expenditure (+), Relative Size Target (+)
1995	Datta and Puia	1978-1990	US	NA/112	[-1,0] [-5,+5] [-15,+15] [-20,+20]	-0,42 -0,72 -1,39 -1,90	N/A	Cultural Distance (-)
2000	Corhay and Tourani Rad	1990-1996	Dutch	NA/111	[-40,+40] <sup>9</sup> [-5,+5] <sup>10</sup> [-5,+5] <sup>11</sup> [-5,+5] <sup>12</sup>	4,83 0,68* 1,44 -0,87*	N/A	Prior International Exposure (-), Unrelated Diversification (+)
2000	Eckbo and Thorburn	1964-1983	Canada/US	1261/394	[-30,0] [0,+30]	0,49* -0,17*	Domestic	Stock Financing of Deal (+), Relatively Smaller Equity Size Bidder (+)
2004	Campa and Hernando	1998-2000	EU	182/80	[-30,+30]	0,56	Domestic	Degree of Regulation (-)
2004	Chari, Quimet, Tesar	1988-2003	US/Global	NA/221	[-7,+7]	1,79	N/A	Acquisition of Majority Control (+)
2004	Georgen and Renneboog	1993-2000	EU	142	[-1,0] [-2,+2]	0,70 1,18	Domestic	Hostile Bid (-) Stronger Effect of Stock Financing compared to Cash Financing, Market-to-Book Ratio (-)
2004	Stark and Wei	1980-1998	US	5056/371	[-5,+5]	0,86	Domestic	Corporate Governance Quality Acquirer's Country (+), Unrelated Diversification (-)
2005	Moeller and Schlingemann	1985-1995	US	4047/383	[-1,+1]	0,31	Domestic	Shareholder Protection Target Country (+), Previous Takeover Activity in Target Country (+)
2007	Black, Carnes, Jandik, Henderson	1985-1995	US	1285/360	[-5,+1] [-5,+5]	0,90 1,50	Domestic	Accounting Data Value Relevancy (-)
2008	Francis, Hasan, Sun	1990-2003	US	7612/1491	[-1,+1]	0,96	Domestic <sup>14</sup>	Cost of Capital Acquirer (-)
2011	Feito-Ruiz and Menendex-Requejo	2002-2006	EU	248/221	[-1,+1]	1,38	Cross-Border	Legal and Institutional Environment Acquirer's Country (+) and Target Country (-), Size Acquirer (-), Relative Size Target (+), Listed Target (-)
2011	Kohli and Mann	1997-2008	India	66/202	[-1,+1]	2,23	Cross-Border	Size Acquiring Firm (-)
2011	Martynova and Renneboog	1993-2001	EU	1681/738	[-1,+1] [-5,+5]	0,47 0,84	Domestic Cross-Border	Deal Hostility (+) Legal Status Target is Private/Non Public (+), Stock Financing of Deal (-)
2012	Danbolt and Maciver	1980-2008	UK	397/397	[-1,+1]	-0,3	Cross-Border	Previous Takeover Activity in Target Country (+)
2013	Dutta, Saadi, PenCheng	1993-2002	Canada	755/545	[-1,+1] [-2,+2] [-5,+5]	1,88 2,34 1,98	Cross-Border	Stock Financing of Deal (+), Amount of Combined Intangible Resources (+)

<sup>8</sup> Based on previous research by the same authors, <sup>9+10</sup> US target firms, <sup>11</sup> Western-European target firms, <sup>12</sup> Eastern-European target firms

<sup>13</sup> Between the periods 1990-1995 and 1996-2003 the cross-border CAR increased from 0,93 to 1,04, and the cross-border effect decreased from -0,47 to -0,30, evidencing a narrowing gap between domestic and cross-border value-creation.

\*not significant but relevant for our research based on the fact that we focus on Dutch-based Cross-Border M&A and this is the only study on the Dutch market.

## 3. METHODOLOGY

---

*This chapter provides the reader with the methodological approach used, as well as hypotheses to be tested later in this study.*

---

### 3.1 Research Method

In this section we will describe the common research methods used to assess value-creation in M&A and present and explain the reasoning for the method used in this study.

#### 3.1.1 Common Research Methods for Analyzing Value Creation

Value creation in M&A can be measured using several different methods. Bild (1998) makes a distinction between the Incremental Cash Flow Method, Accounting Method, Interview Method and Market Method. The respective advantages and disadvantages of all four methods will be briefly discussed, as well as the choice for the method used in this study.

##### *Incremental Cash Flow Method*

To determine the value creation using the Incremental Cash Flow Method, the incremental cash flows created by the deal are transformed to a present value by a discount rate, which takes into consideration the risk of the incremental cash flows and the time value of money. To add value, these adjusted incremental cash flows need to exceed the purchase price for the target company. The return on invested capital can then serve as a measure of value creation (Halpern, 1983; Mueller, 1987).

##### *Accounting Method*

The Accounting Method derives the degree of success of a takeover by either using an absolute performance approach or a relative performance approach (Ikeda and Doi, 1983). In both these approaches different measures of accounting return are used, such as return on equity, return on assets, return on capital employed and return on sales.

### *1. Absolute performance approach*

In this approach the accounting returns of the consolidated company are compared to the two merging companies had the deal not taken place. This means that an approximation needs to be made on how the merging parties would have done without the takeover (Bild 1998).

### *2. Relative performance approach*

The relative performance approach compares the consolidated company's average performance to that of a control sample of similar companies that didn't participate in a merger. When using this approach, the control sample needs to be representative of the development that the merging companies might have faced in the absence of the takeover (Mueller, 1980; Cosh *et al.*, 1980; Healey *et al.*, 1992; Manson *et al.*, 1994).

### *Interview Method*

In the interview method, interviews take place with the merging firms' managers, who are asked whether the takeovers their companies participated in are viewed upon as successes or failures. These interviews take place some time after the event, when the implications of the decision have begun to appear (Bild, 1998).

### *Market Method*

The Market Method is stooled on the hypothesis about efficient capital markets, which states that all prices fully reflect all relevant information, and that stock prices adjust instantaneously to new information. Provided that the market is efficient, the expected future benefits of a corporate acquisition should be fully reflected in the stock price at the first public announcement of the takeover, to the extent that they can be predicted (Mandelker, 1974; Langetieg, 1978).

## **3.1.2 Method used in this Study**

Besides the advantages and disadvantages which can be identified in all four different methods, in our research we are first and foremost bound by the practical applicability of the different methods. Because of time constraints as well as the lack of access to internal company data, both the interview method, accounting method and incremental cash flow method are not feasible to execute in the given time for this thesis. For the latter, the

identification of the incremental cash flows and separating these particular incremental cash flows from other cash flows are very time consuming.

Instead we will apply the market method in this thesis, which offers certain important advantages. First of all, the data is freely available and easily accessible through databases such as Thomson Reuters Eikon, Zephyr and DataStream. Because of the significantly reduced time constraint and easily accessible data, it is moreover possible to compare and contrast inter- and intra-industrial samples as well as national and international patterns, both relevant in our study. A downside of this method is that our research will be restricted to publicly trading acquirer companies, since this method uses abnormal stock returns as a measure of success.

## **3.2 Analytical Framework**

Our analysis is twofold. Firstly, we apply event study to check, whether our sample and sub-samples of Dutch acquirers show significant value creation from cross border acquisitions. Secondly, we run regression analysis for different event windows to find out the influence of explanatory factors on shareholder value.

### **3.2.1 Research Approach**

The research approach used in this thesis is a deductive approach (Bryman and Bell, 2011). We will form hypotheses based on the literature on finance theory and from previous empirical studies. When reviewing theory and going through the empirical studies, it became clear to us that there is a research gap on the performance and determinants of cross-border acquisition by Dutch companies, therefore we aim to contribute to the research in this area.

In this study, we want to research whether cross-border acquisitions create value for Dutch companies and assess the impact of some of the country-specific and deal-specific factors of cross-border acquisitions that possibly affect the value creation. To determine whether value is created and to find out the impact of the factors that influences acquirer companies' shareholder value, we will form hypotheses based on existing theories and see if those hypotheses apply to Dutch acquirer firms.

### 3.2.2 Event Study Methodology

For this analysis, we are going to apply standard event study methodology to assess the impact of cross-border acquisition announcements on shareholder wealth. The assumption of event study is that the capital market accurately reflects the implication of the an announced event for the firm in question. In other words, event study assumes the market to be efficient at semi-strong level and assumes that the security prices adjust to new information quickly (Brown and Warner, 1980).

The event of interest in our analysis is the announcement day of cross-border acquisitions. We define announcement day as the day when the press release is publicly available. Considering event study assumption holds, we will use the stock prices of individual companies as a measure of shareholder value and assess price reaction to the announcement (event) of cross-border acquisitions.

The logic of using event study on the acquisition announcement is best described by Linn and Rozeff (1984):

“The immediate stock price reaction to an acquisition announcement can be regarded as conveying market perception of the long-run cash flow effects of the acquisition. That perception may not prove to be accurate, but it will be ‘unbiased’- that is neither too high, nor too low on average.”

#### *Event window*

Next we have to identify the event window, which is defined as the period for which individual firm’s stock prices will be analyzed. Research articles on M&A have used diverse sets of event windows, either short event windows, long event windows, or both. Short term indicates days or months around the announcement of the bid, while long term indicates months or years (Tuch and O’ Sullivan, 2007). Short term event studies provided the most statistically significant results according to Andrade *et al.* (2001) and Markides and Ittner (1994). An advantage of a short term event window is that it is less likely to be affected by noise: Using a long term event window may make it harder to distinguish the impact of a particular acquisition deal from other company specific events (Tuch and O’Sullivan, 2007). To increase the validity of our results, we would like to use multiple event windows. We

initially focused on multiple short term event windows, [-1,+1], [-3,+3], [-5,+5], covering 3, 7 and 11 day event period, respectively, including the announcement day. However, such short event windows, though commonly used, may not capture the effect of acquisitions if there is bid speculation, information leakage prior to formal announcement or if market overreacts initially to the acquisition information and then subsequently adjusts to correct pricing (Danbolt and Maciver, 2012). Therefore, we also analyze stock prices over slightly longer periods of 21 and 41 days, i.e. event windows of [-10,+10] and [-20,+20] respectively.

### *Abnormal Return*

To be able to assess what impact the event has on the stock price, we need to estimate the abnormal return. The abnormal return is the actual return subtracted by the normal return in the event window. Normal return is the expected return without the occurrence of the event (MacKinlay, 1997). The abnormal return for firm  $i$  at time  $t$  is:

$$AR_{it} = R_{it} - E(R_{it}|X_t)$$

Where  $R_{it}$  is the actual return,  $E(R_{it}|X_t)$  is the expected or normal return for the time period  $t$ .

In estimating the normal return, the assumption is that the security return is stable and linearly related to market return. That is why we use the market model to estimate normal return. Most event study methodologies used are based on the market model explained by Fama (1976). The Market model is used to calculate a firm's expected or normal return given historical linear relationship of the market return and the individual stock return (Markides and Ittner, 1994). The other alternative for estimating normal return is the Constant Mean Return Model (MacKinley 1997). It is a simple model which assumes that the mean return of a specific stock remains constant through time. According to MacKinley (2007), the market model represents an improvement over the constant mean return model, because in the market model, by removing the portion of the stock return related to market return, the variance of abnormal return is reduced. This allows for an increase of the ability to identify any event impact. Because of this superior attribute, we will use the market model for estimating normal or expected return in our analysis. Normal return according to the market model is:

$$R_{it} = \alpha_i + \beta_i \cdot R_{mt} + \varepsilon_{it}$$

Where:  $R_{it}$  = return on the stock of firm  $i$  at time  $t$ ;  
 $R_{mt}$  = return on the market index at time  $t$ . In our study, we use the return on the Amsterdam Exchange index (AEX);  
 $\alpha_i$  and  $\beta_i$  = parameters of relationship between individual stock return and market return; and  
 $\varepsilon_{it}$  = residual of the relationship at time  $t$ , assumed to be normally distributed with a zero (0) mean, a constant variance over all values of  $R_{mt}$  ( $\varepsilon_{it}$  - i.i.d.  $N(0, s^2)$ ).

The calculations of the normal return start with the calculation of the parameters- alpha ( $\alpha_i$ ) and beta ( $\beta_i$ ). We calculated both the parameters for each stock  $i$  for the period of -270 to -20 trading days, being the *estimation period* which covers a full year of 250 trading days. For the model, we assume that the parameters remain constant during the estimation period and the event windows. We will use the parameters along with the benchmark ( $R_{mt}$ ) to estimate expected return over the test period for each stock.

Next we calculate the abnormal return ( $AR_{it}$ ), which is calculated by:

$$AR_{it} = R_{it} - (\hat{\alpha}_i + \hat{\beta}_i * R_{mt}), \text{ where } \hat{\alpha}_i \text{ and } \hat{\beta}_i \text{ are estimated parameters of firm } i.$$

To draw inferences, we aggregate abnormal returns for each observation. When aggregating abnormal returns through time and across observations, we assume that there is no correlation among abnormal returns of different firms (Campbell et al., 1997). Abnormal returns are independent across observations when there is no overlap in event windows, according to Campbell *et al.* (1997). Therefore we excluded deals which had overlap in event windows.

### 3.2.3 Significance Tests

To attain the objective of this thesis and contribute to the research of cross-border acquisition, it is essential to test event study results to check their statistical significance. We will use the most commonly used test in similar studies which is the *student's t-test*. We assume the abnormal returns to be independent, identically distributed and normal (Brown and Warner, 1985) which is a requirement for the student's t-test.



### 3.3 Sample Selection

For the analysis, the M&A data is collected from *Thomson Reuters Eikon*. To be included in the final sample, each cross-border acquisition announcement had to meet certain criteria. First of all, we chose all the deals by Dutch acquiring companies which are publicly listed for the purpose of event study. Then, we filtered out those cross-border deals which had disclosed value of deal size. Consequently, any deal that did not have a deal value in the database was excluded as we use relative deal size as a variable. At this point, we had 799 cross border M&A deals by publicly listed Dutch acquiring companies remaining in our sample.

Afterwards, we removed deals which were relatively small compared to bidding firms. We excluded deals which comprised of less than 5% of the market capitalization of bidding firms. Market capitalizations 1-month prior to the announcement are chosen, which is in line with the work done by Conn *et al.* (2003) and Walker (2000) in which they exclude deals with sizes below 5% and 10% of the 3-month-prior and 1-month prior market capitalization respectively. Market capitalizations of the bidding firms are collected from *Data Stream*. 458 deals had a size of below 5% of the value of the bidding firms; all these deals were excluded from the sample. In doing the above process, we found that *Data Stream* did not have market capitalization data 1-month prior to the announcement in the case of 57 deals, as some of the acquiring companies had insufficient trading history to have 1-month prior announcement value. For this reason, those deals were excluded from the sample as well. We also disregard cross-border deals made by companies in Real Estate Investment Trusts (REITs) industry as their business model is based on acquiring real estate assets irrespective of industries they belong to, which is in conflict with our hypothesis of the unrelated diversification. Finally, another 25 deals were excluded, some of which because bidding firms had insufficient price data for the estimation period and the others because bidding firms had another deal being announced within same event window. Finally our sample was reduced to a number of 227 clean observations of Dutch cross-border acquisitions from 20 target countries spanning 1984 to 2014.

### 3.4 Dependent Variable

As dependent variable in the multiple regression we will use Cumulative Abnormal Return (CAR). Since we analyze five event windows, we will have five regression analyses where each event window has individual CARs for deals. As mentioned earlier, the event windows we will be analyzing are: [-1,+1], [-3,+3], [-5,+5], [-10,+10] and [-20,+20].

The aggregate abnormal return for an event window  $[\tau_1, \tau_2]$  is referred to as the cumulative abnormal return (CAR), which is calculated as:

$$CAR_i(\tau_1, \tau_2) = \sum_{t=\tau_1}^{\tau_2} AR_{it}$$

Apart from the regression, the CARs will be used to assess whether cross-border acquisition decision taken by Dutch companies have significant impact on their stock prices. Positive CARs imply that the stock market expects the cross-border acquisition to create shareholder value. Alternatively, negative CARs indicate that the acquisitions are expected to destroy value.

Recent studies (Feito-Ruiz and Menendex-Requejo, 2011; Kohli and Mann, 2011; Danbolt and Maciver, 2012; Dutta *et al.*, 2013) have found cross-border acquisitions to create significant value for acquiring firms. In line with these studies, we hypothesize that the cross-border acquisition information can bring positive CAR for acquirers.

*Hypothesis 1: CAR is positive in cross-border acquisition*

Where

$$H_0: CAR \leq 0$$

$$H_1: CAR > 0$$

We will test abnormal returns and CAR with a one-sided t-test on different event windows, countries and regions. We will initially look at average abnormal return on each day from 20 days before and after the announcement day for all deals. We will check the Dutch market reaction to cross-border acquisitions around the announcement day and test whether average abnormal returns are significantly positive by checking p-values of the averages.

To test the mean CAR, we will first calculate average CAR of all observation for each event window, for each individual country and for each individual sub-region. For the sample of N securities, the cumulative average abnormal return is estimated by:

$$\overline{CAR(\tau_1, \tau_2)} = \frac{1}{N} \sum_{t=1}^N CAR_i(\tau_1, \tau_2)$$

We will then calculate the standard deviation which is used in the calculation of the t-stat for the average CAR using the following formula (Markides and Ittner, 1994):

$$t = \frac{\overline{CAR(\tau_1, \tau_2)}}{S_{CAR_i(\tau_1, \tau_2)}/\sqrt{N}}$$

where,  $S_{CAR_i(\tau_1, \tau_2)}$  = standard deviation of the CARs, and N= number of deals in the sample.

Subsequently we will calculate the probability or p-value for the corresponding t-statistic using Excel. We will check whether average CAR is significantly positive at the 1%, 5%, and 10% level. When significant for all event windows, we can then reject  $H_0$  and confirm that CAR is positive in cross-border acquisitions.

### 3.5 Explanatory Variables

We have selected a set of country-specific and deal-specific explanatory variables that we test in our regression analysis. In choosing explanatory variables for this study, our focus is mainly on the variables which were found to be significant in similar studies. We also include variables that other studies used, but did not find to be significant, but they are still used since this study is being applied on a different market. In addition, most studies mainly worked with target firms which are public. We wanted to see the impact of acquisition of both public and non-public target firms; as such we use those deal-specific variables from previous studies which are applicable to all target firms.

The explanatory variables are described in the following section:

### 3.5.1 Country Specific Factors

#### *Cultural Difference:*

Cultural Difference is a proxy variable for the cultural distance between bidder and target country. As a measure of cultural fit, we will be using four cultural dimensions (Datta and Puia, 1995) identified by Hofstede (1980) which are: power distance, uncertainty avoidance, individualism, and masculinity/femininity. According to Datta and Puia (1995), the first dimension, power distance indicates the nature of distribution of power in the organization system; the second dimension, uncertainty avoidance is a measure of a country's intolerance level for ambiguity or uncertainty; the third dimension, individualism, relates to how a person perceives his or her relationship with collectivity or other people in the environment; lastly, the fourth dimension, masculinity/femininity, can be divided up in two parts. Masculinity refers to whether society is formed based on the values of competition, achievement and success. Femininity deals with the values of caring for others and quality of life, and regards quality of life as the sign of success (Hofstede, 1980). Following the methodology of Kogut and Singh (1988), we use Hofstede's (1980) index of four dimensions to form a composite index. The composite index takes into account the deviation along each of the four cultural dimensions for each target country from that of the Netherlands. The deviations were corrected for differences in the variances of each dimension and then were averaged by the number of dimensions used. The index used for this algebraically is as follows:

$$CD_j = \sum_{i=1}^4 \frac{\{(I_{ij} - I_{in})^2 / V_i\}}{4}$$

where,  $I_{ij}$  and  $I_{in}$  = index for  $i$ -th cultural dimension for  $j$ -th country (target),  $V_i$  is the variance of the index in the  $i$ -th dimension,  $n$  indicates the Netherlands, and  $CD_j$  is the cultural difference of the  $j$ -th country from the Netherlands.

We will use the value calculated by the above formula for each target country within our sample. The data for country-wise cultural dimension and differences with the Netherlands are included in the appendix (Appendix 1). Study by Datta and Puia (1995) has found an inverse relationship of cultural difference with shareholder return. We will assess that

hypothesis in our analysis both to see if there is an inverse relationship, and whether it is significant enough.

*Hypothesis 2: CAR is inversely related to cultural difference between target's and acquirer's country*

#### *GDP Growth Difference between Target's and Acquirer's Country*

The GDP Growth difference consists of GDP Growth in the target's country minus the growth in GDP of the Netherlands. For GDP growth of the country of both target and bidder we take the average of GDP growth in the previous three years of the country prior to the announcement year. A positive number in this variable indicates that GDP in the target country is growing at a higher rate than that in the Netherlands. Doukas and Travlos (1988) found positive impact of this variable on value creation for US bidding firms, whereas Markides and Ittner (1994) used this variable in their study on international diversification on the same market, but found insignificant impact on CAR. We are going to apply this variable in our analysis of Dutch bidding firms and test if the positive difference in GDP growth between target and acquirer country provide significantly positive abnormal returns to the bidding firm.

*Hypothesis 3: CAR is positively related to the GDP growth difference between a target's and acquirer's country*

#### *Tax Rate Difference*

Intuitively it can be said from the Imperfect Markets Theory (Madura, 2012) that if an acquirer takes over a company in a country with a lower tax rate, it will cause a wealth transfer of merger gains from the government entity to the merged firms. Scholes and Wolfson (1992) indicate however that the benefits from lower foreign taxes abroad are mainly illusory and argue that, in equilibrium, (risk-adjusted) after-tax returns in different countries should be equal. According to a study on US acquisitions by Manzon *et al.* (1994), investments in relatively high-tax countries earn normal after-tax returns because they earn higher pretax returns. The return is mainly generated from foreign tax credits (FTC) from repatriation of foreign income. Manzon *et al.* (1994) argued that repatriation of income from countries with a lower tax rate than US may attract further US tax, unless the parent company has foreign tax credits (FTC). Conversely, income repatriation from high tax countries will

generate excess FTCs rather than attracting additional taxes. We are assuming such FTCs from relatively high-tax rates in target country will have positive impact on the returns of the acquirer. So, for capturing the FTC, we take the difference in tax rates between the target and the Netherlands.

*Hypothesis 4: CAR is positively related to differences in tax rates between a target's and acquirer's country*

We obtained the tax information for different countries from the 'paying taxes' database of the Easy of Doing Business project of the World Bank. We used the available data for overall taxes paid for doing business in a country, which includes corporate income tax, capital gain tax, labor tax, and vehicle and road taxes.

### **3.5.2 Deal Specific Factors**

#### *Corporate Control*

By corporate control, we indicate the ownership stake that the acquiring firm announces to acquire in the target firm. As a measure of corporate control, we will use information on the percentage acquired mentioned during the announcement of cross-border acquisition by Dutch firms. According to La Porta et al. (1998) majority ownership is acquired to shield the acquirer from the problem of weak investor protection. Chari *et al.* (2004) studied the impact of the acquisition of emerging market targets by developed market acquirers and found significant value creation coming from majority control. We want to test whether there are significant positive returns from having higher corporate control of the target firm in cross-border acquisitions.

*Hypothesis 5: CAR is positively related to higher corporate control over the target firm*

#### *Relative Deal Size*

Relative deal size is the value of the deal divided by the market value of the bidding firm. Feito-Ruiz and Menendex-Requejo (2011) found a positive relationship on abnormal returns and relative deal size when analyzing the European market. In line with this article and also since we are assuming cross-border acquisitions to produce positive abnormal returns, as

stated in an earlier hypothesis, we hypothesize that higher deal size (relative to market value of the bidder) leads to higher abnormal return for the bidder.

*Hypothesis 6: CAR is positively related to the relative deal size*

*Method of Payment:*

Method of payment in the announced deal is a categorical variable in our analysis comprising of 3 categories: Only cash, only stock, and combined (both cash and stock). Here, one of three categories is to be chosen as control or reference group, as where for the other two categories dummy variables are to be defined (Ramanathan, 1997). We choose the combined payment category as our control or reference group. The regression coefficient of the two dummy variables will be used to compare whether each dummy's impact on CAR will be more or less than the control group. The two dummy variables for the other two payment categories will be:

$$\text{Cash} = \begin{cases} 1 & \text{if only cash is announced to be used as method of payment} \\ 0 & \text{if otherwise} \end{cases}$$
$$\text{Stock} = \begin{cases} 1 & \text{if only stock is announced to be used as method of payment} \\ 0 & \text{if otherwise} \end{cases}$$

The deals with combined method of payment will take on the value of 0 in both only cash and only stock dummies.

As discussed in the theoretical framework, different studies have found different impacts of choice of payment method on performance of the bidder firm. Eckbo *et al.* (1990) point out that all-cash payments require taxes on capital gains to be paid immediately by the target firm's shareholders. It is hypothesized that to compensate for this, bidders must raise the offer premium to compensate target shareholders for the tax penalty associated with this particular method of payment. For this reason, the market regards cash only deals as value destroying for bidders. Because of its inherent contingent pricing characteristics, stock-only offers can solve the problem of information asymmetry, another likely problem experienced in cash deals (Dutta *et al.*, 2013). On the other hand, Hansen (1987) and Fishman (1989) suggest information asymmetry affects stock deals from the perspective of target firms. Given the two sided information asymmetry, Eckbo *et al.* (1990) explains that combined method of payment

represents an equilibrium solution and found such deals to outperform cash and stock deals after studying Canadian acquirers' performance. In line with the above result, we also assume deals with combined method of payment should have superior impact on CAR than deals with cash and stock payment.

*Hypothesis 7a): Deals with cash payment have lower CAR than deals with combination of cash and stock*

*Hypothesis 7b): Deals with stock payment have lower CAR than deals with combination of cash and stock*

#### *Unrelated Diversification:*

By unrelated diversification, we indicate whether the bidding firm acquires a firm belonging to an unrelated industry as compared to the bidder's operation. It is a categorical variable, and as such we use a dummy variable to account for its impact. The reference category is the related diversification. The dummy variable, unrelated diversification is defined as:

$$\text{UNRELATED} = \begin{cases} 1 & \text{if the target's industry is unrelated to acquirer's industry} \\ 0 & \text{if industries are related} \end{cases}$$

As explained in 2.2.2 of Theoretical Framework, the theory of comparative advantage (Madura, 2012) suggests that firms can take advantages of technology or labor costs of specific countries and specialize by country to improve production efficiency. This advantage can be attained if the cross border acquisition is done within related industry. On the other hand, studies (Dos Santos et al., 2008; Maquiera *et al.*, 1998; Doukas *et al.*, 2002) have found unrelated cross-border acquisitions to destroy value, mainly caused by probable information asymmetry with the foreign target in an unrelated industry. On the other hand, Corhay and Tourani Rad (2000) in their study on Dutch cross-border acquisitions found the opposite result, having significantly positive value creation from unrelated diversification in a foreign country. Since the majority of the articles found a negative relation between value-creation and unrelated diversification, we are going to hypothesize the same. Since we are using a dummy variable, we assume that an acquisition of a foreign company in an unrelated industry will create less value for the acquirer as compared to a comparable acquisition in a related industry.



*Hypothesis 8: Unrelated diversification deals have lower CAR than related diversification deals*

*Legal Status of Target Company:*

Legal status of Target Company, i.e. whether the target is a public or private firm, can have an impact on the market performance of the acquiring company. Bradley and Sundaram (2004) found evidence of acquisitions of private targets leading to a decrease in takeover wealth for acquirers active in the US market. In their study they identified high information asymmetry coming from lower disclosure requirement for private firms as a possible explanation. We will test the alternative hypothesis in the Dutch scenario, checking whether acquiring a publicly trading target creates more value for acquirers' shareholders than private target firms.

*Hypothesis 9: Acquiring public firms bring higher CARs than acquiring non-public firms*

We use the information included in the Thomson Reuters Eikon database for the legal status of target firms. It is a categorical variable, so we use a dummy variable for this factor, where the reference category is the non-public target firms.

$$\text{PUBLIC} = \begin{cases} 1 & \text{if the target's status was public at the time of announcement} \\ 0 & \text{if otherwise} \end{cases}$$

**Table 3.1: Hypotheses Summarized**

Hypothesis	Description
Hypothesis 1	CAR is positive in cross-border acquisition
Hypothesis 2	CAR is inversely related to cultural difference between target's and acquirer's country
Hypothesis 3	CAR is positively related to GDP growth difference between target and acquirer country
Hypothesis 4	CAR is positively related to difference in tax rates between target's and acquirer's country
Hypothesis 5	CAR is positively related to higher corporate control over the target firm
Hypothesis 6	CAR is positively related to the relative deal size
Hypothesis 7a)	Deals with cash payment have lower CAR than deals with combination of cash and stock
Hypothesis 7b)	Deals with stock payment have lower CAR than deals with combination of cash and stock
Hypothesis 8	Unrelated diversification deals have lower CAR than related diversification deals
Hypothesis 9	Acquiring public firms bring higher CARs than acquiring non-public firms

### 3.6 The Regression Model

We test the above mentioned factors of value creation upon dependent variable CAR for event window  $(\tau_1, \tau_2)$  using the following multiple regression model:

$$\begin{aligned} CAR_i(\tau_1, \tau_2) = & \alpha + \beta_1 CULTURALDIF + \beta_2 GDPGROWTH + \beta_3 TAXDIF \\ & + \beta_4 CORPORATECONTROL + \beta_5 RDEALSIZE + \beta_6 CASH + \beta_7 STOCK \\ & + \beta_8 UNRELATED + \beta_9 PUBLIC + \varepsilon_i \end{aligned}$$

### 3.7 Data Collection

As mentioned before, cross-border acquisition data was collected from *Thomson Reuters Eikon* and market price and value related data from *Datastream*. The data for the cultural dimensions of different countries are collected from the website of *The Hofstede Centre*. The data for GDP growth was collected from *International Monetary Fund (IMF) World Economic Outlook Database* for each country of concern. The tax rates for different countries were collected from historical data of the Ease of Doing Business project from the World Bank. Data for deal characteristics such as means of payment, acquirer's and target's industry and operation, legal status of target firms and percentage of target's ownership acquired were collected from the database of *Thomson Reuters Eikon*.

### 3.8 Reliability and Validity

#### 3.8.1 Reliability

Reliability is making sure that temporary or random differences in the sample do not influence the results. It is also about producing data in a consistent way over similar samples and anyone following the outlined steps should be able to replicate the same results or findings (Bryman & Bell, 2011). A high reliability in that sense means that the same results can be generated if the study would be repeated. To assess the reliability of our study two main aspects are considered: The reliability of the collected data and of the methods used.

Data was collected from the databases of *Thomson Reuters Eikon* and *Datastream*, both reliable sources of data and as a result used in a large amount of comparable studies in the fields of business, economics and finance. In those cases in which additional information was needed or information was unclear, the data from both these data bases was double checked with the source to prevent any errors. Since the firm specific information on both *Thomson Reuters Eikon* and *Datastream* originate from companies' external reporting, reliability is easily verifiable by going back to the source. Since we only included publicly listed firms in our study and these firms are required to provide their annual reports under IFRS or US GAAP regulations, the reliability of our data is once more increased. Furthermore the data for the cultural dimensions of different countries were collected from the website of *The Hofstede Centre*, data for GDP growth was collected from the *International Monetary Fund (IMF) World Economic Outlook Database* and the tax rates for different countries were collected from historical data of the Ease of Doing Business project from the World Bank. All of the latter being renowned and internationally acknowledged institutions or experts in their field (Hofstede), it is believed that the information provided through these sources are reliable. Since all this data could be automatically exported and did not need to be entered into excel manually, again reliability was ensured. All data has been automatically filtered out in Excel according to our described methodology, and all regressions were run by using the econometric software EViews. As such, the statistical calculations made on the in this thesis described sample should be correct and reliable. Since the selection procedure of the sample is clearly stated and outlined in this thesis' methodology, the study can be easily replicated in future research.

### **3.8.2 Validity**

According to Bryman and Bell (2011), validity is the concern regarding the truthfulness of the conclusions which can be drawn from a research study. Validity is divided into four main classifications by the authors: measurement validity, internal validity, external validity, and ecological validity. As ecological validity only applies to questionnaire-based studies, we will not discuss it in the thesis.

In a quantitative research, measurement validity is a very important concern (Bryman and Bell, 2011). A question to be raised regarding this validity is whether the study actually measures the research question in concern (Bryman and Bell, 2011). As the objective of this

study is to analyze the cross-border acquisition announcement effect on the shareholder value creation, a key question is how we measure shareholder value creation. We use event study methodology in our study, so we assume that the event (announcement) impact will be immediately reflected through the abnormal return of the stock of the acquirer firm. We estimate a normal return, which is the expected return without the event taking place (MacKinlay, 1997), based on the market model. We obtain the abnormal return of a stock from the difference between the actual and normal of the stock. As discussed before, the choice of market model over constant mean model was made to improve validity of the study (MacKinley, 2007). Moreover, the market model is a commonly used model in similar event studies (e.g. Brown and Warner, 1980; Markides and Ittner, 1994), which also impacted our decision.

Internal validity refers to the causality in the relationship between two variables:  $x$  and  $y$  (independent and dependent variable) (Bryman and Bell, 2011). This validity raises the question whether it is valid to draw the conclusion that  $x$  causes variation in  $y$ , or that other variables can affect the relationship (Bryman and Bell, 2011). As mentioned earlier, the study assumes a semi-strong market efficiency (Fama, 1970) which means the price of a security reflects all publicly available information, e.g. the cross-border acquisition announcement. It is possible that events other than the acquisition announcement can affect stock price, and if that happens, our result may become invalid. However, the market model used in the study reduces the variation in the abnormal return by accounting for fluctuations of the market return which improves validity of our study. Moreover, we use five event windows in this study:  $[-1,+1]$ ,  $[-3,+3]$ ,  $[-5,+5]$ ,  $[-10,+10]$ , and  $[-20,+20]$ . These windows are commonly used in similar studies (e.g. Datta and Puia, 1995; Feito-Ruiz and Menendex-Requejo, 2011; Dutta, Saadi, PenCheng, 2013). We mainly used the shorter event windows as the impact of the event will be larger in shorter periods (Andrade *et al.*, 2001) and also because longer event windows increase the likelihood of other price-sensitive events (Tuch and O'Sullivan, 2007).

External validity refers to the representativeness of the sample, whether results can be generalized (Bryman and Bell, 2011). To ensure external validity in our study, it is important that the sample is representable for the Dutch market. Our method of sample selection is discussed under section 3.7.

## 4. EMPIRICAL FINDINGS AND ANALYSIS

---

*This chapter will first discuss the descriptive statistics, followed by empirical findings and analysis of those findings.*

---

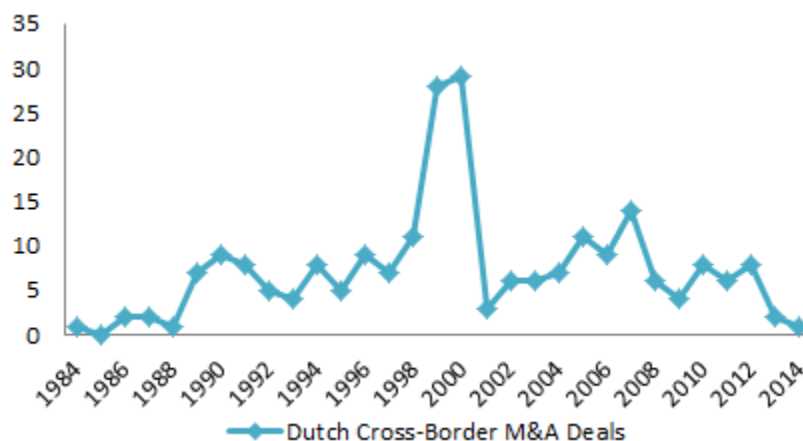
### 4.1 Descriptive Statistics

In this section the statistics of the sample used in this study will be discussed, and where relevant compared to the existing literature.

#### *Development Deal Frequency*

The amount of deals per year are found to be following the trend of M&A waves worldwide, with the fifth (1993-2000) and sixth (2003-2007) M&A wave (Martynova and Renneboog, 2011) both clearly distinguishable in the graph in Figure 4.1. Out of the 227 deals from our sample, 68 deals (30%) took place in the period 1998-2000 (see Figure 4.1 and Appendix 6), the peak of the fifth merger wave.

**Figure 4.1: Dutch Cross-Border M&A Deals in between 1984-2014**



#### *Distribution per Country and Region*

When looking at the distribution of Dutch M&A per country (See Table 4.1) it springs out that those countries with the closest geographical proximity to The Netherlands show a higher deal-total in comparison to those countries with a larger geographical proximity. This is in line with Di Giovanni (2005) and Hijzen *et al.* (2008) who found that international investment decreases with distance. In addition to that finding, and in accordance with our data, Hijzen *et al.* (2008) found that a substantial amount of European firms acquire US firms

and vice versa. This explains the only exception to the theory on geographical proximity. Moreover, most deal activity in our sample takes place in Europe and North America which accounts for 96,04 percent of the total (See Table 4.2), a substantially higher percentage than the 70 percent found by Hijzen *et al.* (2008).

**Table 4.1: Deals by Country**

<b>Country</b>	<b>Count</b>	<b>Percentage</b>	<b>Cumulative Percentage</b>
United States	76	33,5%	33,5%
United Kingdom	40	17,6%	51,1%
Germany	22	9,7%	60,8%
Belgium	17	7,5%	68,3%
France	13	5,7%	74,0%
Sweden	9	4,0%	78,0%
Switzerland	7	3,1%	81,1%
Norway	6	2,6%	83,7%
Canada	5	2,2%	85,9%
Italy	5	2,2%	88,1%
Spain	5	2,2%	90,3%
Denmark	4	1,8%	92,1%
Poland	4	1,8%	93,8%
Australia	3	1,3%	95,2%
Brazil	3	1,3%	96,5%
Luxembourg	3	1,3%	97,8%
China (PRC)	2	0,9%	98,7%
Russia	1	0,4%	99,1%
South Korea	1	0,4%	99,6%
Turkey	1	0,4%	100,0%
<b>Total</b>	<b>227</b>	<b>100%</b>	<b>100,0%</b>

**Table 4.2: Deals by Region**

<b>Region</b>	<b>Count</b>	<b>Percentage</b>	<b>Cumulative Percentage</b>
Western Europe	131	57,71%	57,71%
North America	81	35,68%	93,39%
Eastern Europe	6	2,64%	96,04%
Australasia	3	1,32%	97,36%
North Asia	3	1,32%	98,68%
South America	3	1,32%	100,00%
<b>Total</b>	<b>227</b>	<b>100,00%</b>	<b>100,00%</b>

### *Distribution per Industry*

The acquisitions in our sample took place in 44 different industries (See Table 4.3). When dividing up the acquisitions in our sample by industry it springs out that the more IT focused industries such as IT consulting & Services, Internet Software, Wireless and Other High Technology are underrepresented in our sample, even though 30 percent of our sample consists out of M&A deals that took place during the Internet/High Tech Bubble which found its peak in the period 1998-2000, the peak of the fifth merger wave (Martynova and Renneboog, 2011). Furthermore, the strong presence of Dutch companies in the Food and Beverage industry (CSM, Unilver, Heineken, Grolsch, Royal Dutch Ahold) leads it to be the leading industry when it comes to Dutch cross-border M&A. Lastly, all M&A in the Food & Beverage Retailing industry was performed by Royal Dutch Ahold. Over this entire period Royal Dutch Ahold was led by Dutch CEO Cees van der Hoeven, who's hubris led him to follow a path of acquisitions, eventually almost leading to the downfall of Royal Dutch Ahold (de Jong *et al.*, 2007).

**Table 4.3: Frequency Distribution of Acquisition by Industry**

<b>Industry Name</b>	<b>Count</b>	<b>Percentage</b>	<b>Cumulative Percentage</b>
Food and Beverage	20	8,8%	8,8%
Publishing	15	6,6%	15,4%
Transportation & Infrastructure	14	6,2%	21,6%
Insurance	13	5,7%	27,3%
Chemicals	12	5,3%	32,6%
Building/Construction	11	4,8%	37,4%
Food & Beverage Retailing	9	4,0%	41,4%
Machinery	9	4,0%	45,4%
Other Consumer Products	9	4,0%	49,3%
Metals & Mining	8	3,5%	52,9%
Software	8	3,5%	56,4%
Semiconductors	7	3,1%	59,5%
Computers & Peripherals	6	2,6%	62,1%
Oil & Gas	6	2,6%	64,8%
Banks	5	2,2%	67,0%
Discount and Department Store Retailing	5	2,2%	69,2%
Employment Services	5	2,2%	71,4%
Home Furnishings	5	2,2%	73,6%
Pharmaceuticals	5	2,2%	75,8%
Telecommunications Services	5	2,2%	78,0%
Textiles & Apparel	5	2,2%	80,2%

Advertising & Marketing	4	1,8%	81,9%
Electronics	4	1,8%	83,7%
Other Industrials	4	1,8%	85,5%
Paper & Forest Products	4	1,8%	87,2%
Automobiles & Components	3	1,3%	88,5%
Cable	3	1,3%	89,9%
Brokerage	2	0,9%	90,7%
Containers & Packaging	2	0,9%	91,6%
Hotels and Lodging	2	0,9%	92,5%
Motion Pictures / Audio Visual	2	0,9%	93,4%
Other Real Estate	2	0,9%	94,3%
Biotechnology	1	0,4%	94,7%
Construction Materials	1	0,4%	95,2%
Healthcare Equipment	1	0,4%	95,6%
Healthcare Providers	1	0,4%	96,0%
Household & Personal Products	1	0,4%	96,5%
Internet Software	1	0,4%	96,9%
IT Consulting & Services	1	0,4%	97,4%
Other Financials	1	0,4%	97,8%
Other High Technology	1	0,4%	98,2%
Other Retailing	1	0,4%	98,7%
Professional Services	1	0,4%	99,1%
Real Estate Management	1	0,4%	99,6%
Wireless	1	0,4%	100,0%
<b>Total</b>	<b>227</b>	<b>100,0%</b>	<b>100,0%</b>

#### *Method of Payment*

The preferred payment method by Dutch acquirers is cash, with 70,5 percent of payments done in only cash (See Table 4.4). This number is only slightly different from the 63 percent found in outgoing Canadian cross-border deals in the period 1993-2002 (Dutta *et al.*, 2013) and 77.4% of the outgoing cross-border deals in the UK (Danbolt and Maciver, 2012). Payment by stock only accounts for 7,0 percent (Canada: 10 percent, UK: 5.2 percent) with the remaining 22,5 percent (Canada: 27 percent, UK: 17,4) paid in a combination of stock and cash.

**Table 4.4: Method of Payment**

<b>Method of Payment:</b>	<b>Count</b>	<b>Percentage</b>
Only Cash	160	70.5%
Only Stock	16	7.0%
Combined	51	22.5%
<b>Total</b>	<b>227</b>	<b>100.0%</b>



### *Diversification*

Out of all deals in our sample only 10.6 percent, or 24 out of 227 deals, concerns unrelated diversification (See Table 4.5). This seems to be in line with the majority of research on unrelated diversification which has found it to be value-destroying (Maquiera *et al*, 1998; Denis *et al.*, 2002; Doukas *et al.*, 2002; Martin and Sayrak, 2003, Moeller and Schlingemann, 2005) . However, in a study on the European market by Martynova and Renneboog (2011) which covered the period 1993-2001, a significantly higher 35.6 percent of M&A concerned unrelated diversification.

**Table 4.5: Type of Diversification**

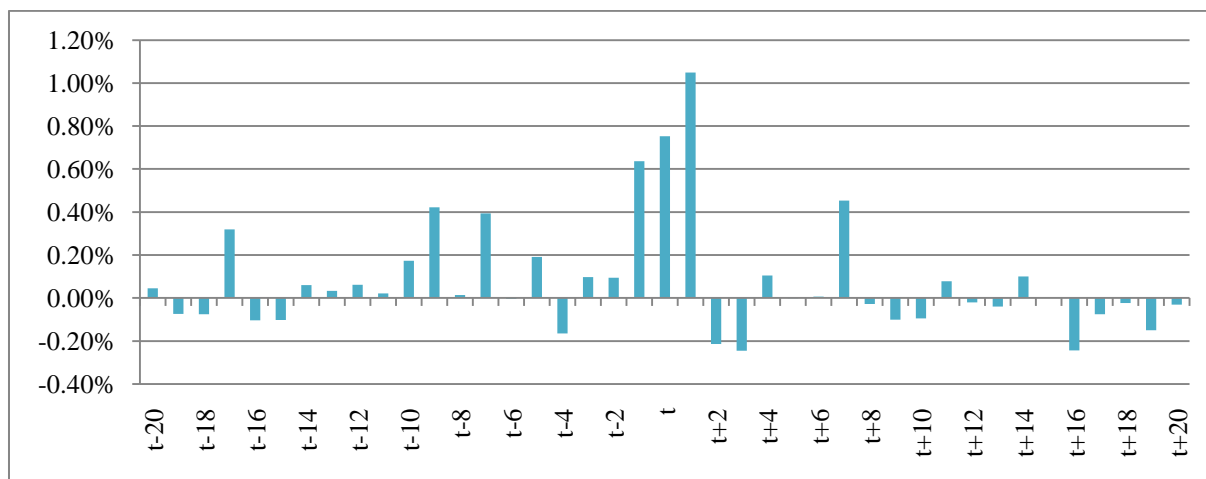
<b>Type of Diversification</b>	<b>Count</b>	<b>Percentage</b>
Related	203	89.4%
Unrelated	24	10.6%
<b>Total</b>	<b>227</b>	<b>100.0%</b>

### **4.2 Abnormal Return**

In this study we adopted the market mode to calculate abnormal returns. For 227 observations, we calculated the average abnormal maximum 41 days of abnormal return, including 20 days before and after the announcement day (t) of each deal. We also calculated p-values from the T-statistic of the one-tailed t-test. The abnormal returns were significantly positive on t-9 and t-7 at the 1% and 5% level respectively, indicating probable leakage of acquisition information. The possibility of leakage is also supported by the significantly positive return on t-1 at the 5% level (See Figure 4.2 and Table 4.6). On the announcement day (t) and t+1, we found average abnormal returns of 0.75% and 1.05% respectively, significant at 5% and 1% level. On t and t+1, we see immediate reflection of acquisition news in the price, which is consistent with the premise of the efficient market hypothesis. Afterwards, we found that abnormal returns decrease, indicating a possible correction. It is evident as we can see significantly negative abnormal returns on t+3 at the 10% level. That is why it is important to look at market reaction few days after the announcement day as well (Danbolt and Maciver, 2012). The daily average abnormal returns for all observations within the 41, 21, 11, 7, and 3 day period are 0.08%, 0.17%, 0.21%, 0.31%, and 0.81%, which are significant at the 5%, 5%, 10%, 10%, and 5% level, respectively. This evidence suggests that

daily average abnormal returns within different event windows are significantly positive, indicating that the Dutch market reacts positively to cross-border acquisitions in general.

**Figure 4.2: Average Abnormal Returns before and after Announcement Day**



**Table 4.6: Average Abnormal Returns before and after Announcement Day**

Day	Average Abnormal Return	p-value
t-20	0.05%	0.3777
t-19	-0.07%	0.3276
t-18	-0.08%	0.2899
t-17	0.32%	<b>0.0128**</b>
t-16	-0.10%	0.2203
t-15	-0.10%	0.1972
t-14	0.06%	0.3348
t-13	0.03%	0.4024
t-12	0.06%	0.3680
t-11	0.02%	0.4451
t-10	0.17%	0.1183
t-9	0.42%	<b>0.0057*</b>
t-8	0.01%	0.4514
t-7	0.39%	<b>0.0298**</b>
t-6	0.00%	0.4890
t-5	0.19%	0.1604
t-4	-0.16%	0.1286
t-3	0.10%	0.2811
t-2	0.09%	0.2627
t-1	0.64%	<b>0.0472**</b>
t (announcement day)	0.75%	<b>0.0108**</b>
t+1	1.05%	<b>0.0050*</b>
t+2	-0.21%	0.1217
t+3	-0.24%	<b>0.0592***</b>

t+4	0.11%	0.2101
t+5	0.00%	0.4954
t+6	0.01%	0.4818
t+7	0.45%	0.2101
t+8	-0.03%	0.4268
t+9	-0.10%	0.2532
t+10	-0.10%	0.2367
t+11	0.08%	0.2639
t+12	-0.02%	0.4390
t+13	-0.04%	0.3788
t+14	0.10%	0.2872
t+15	0.00%	0.4994
t+16	-0.24%	<b>0.0485**</b>
t+17	-0.08%	0.2875
t+18	-0.02%	0.4269
t+19	-0.15%	0.1506
t+20	-0.03%	0.4092

\* Significant at 1% level, \*\*Significant at 5% Level, \*\*\*Significant at 10% level

### 4.3 Cumulative Abnormal Return

We will be looking at the cumulative abnormal returns for different event periods in Table 4.7 to test the following hypothesis:

*Hypothesis 1: CAR is positive in cross-border acquisition*

**Table 4.7: CAR for Different Event Windows**

<b>Event window</b>	<b>CAR (-20,20)</b>	<b>CAR (-10,10)</b>	<b>CAR (-5,5)</b>	<b>CAR (-3,3)</b>	<b>CAR (-1,1)</b>
Average (%)	3.3151	3.5343	2.3012	2.1713	2.4389
Std. Dev (%)	18.9091	16.1734	11.0750	10.1873	11.1707
N	227	227	227	227	227
T-stat	2.6415	3.2924	3.1306	3.2112	3.2894
P-Value	0.0044*	0.0006*	0.0010*	0.0008*	0.0006*

\*significant at the 1% level

Table 4.7 lists the average CAR for different event windows. In the table, we can see that average CAR for all the short event windows in our analysis is significantly positive. Consequently, the null hypothesis,  $H_0: CAR \leq 0$ , is rejected and it is confirmed that according to our study, cross-border acquisitions create value for Dutch acquirers.

Table 4.8 lists the CAR by country for the Dutch acquirers. This gives us a better picture of the countries from which acquisitions by Dutch firms create more value and vice versa. We had deals from 20 countries in our sample. Of these countries, deals from the United States and United Kingdom comprised about 33% and 18% of the sample, respectively, followed by deals from Germany, comprising 10% of the sample.

According to our results, acquisitions from the United States and Germany had significant positive CARs for all five event windows, at most at the 10% level. Consequently, it can be said that the Dutch market reacts positively to cross-border acquisitions in those two countries. Our result for United States is in line with what Corhay and Tourani Rad (2000) found in their study on Dutch acquirers studying the period 1990-1996. They found that acquisitions from United States generated significantly positive CAR in both the long and short event windows.

**Table 4.8: CAR by Country**

Country	Deals		CAR (-20,20)	CAR(-10,10)	CAR(-5,5)	CAR(-3,3)	CAR(-1,1)
Australia	3	Mean	0.3103	(11.2628)	(15.6312)	(11.8931)	(8.4908)
		P- value	0.4830	0.2197	0.1819	0.2159	0.2579
Belgium	17	Mean	1.0063	(0.2214)	1.3491	0.6917	1.1602
		P- value	0.4006	0.4659	0.2190	0.3174	0.1635
Brazil	3	Mean	(1.7414)	(5.2857)	(2.6275)	(2.8583)	(0.4810)
		P- value	0.3712	0.1405	0.1446	0.1434	0.4359
Canada	5	Mean	(2.6965)	0.5668	2.6614	(0.7135)	0.4538
		P- value	0.2464	0.4472	0.1761	0.3900	0.4241
China (PRC)	2	Mean	80.1543	74.1501	10.9184	13.1429	28.6345
		P- value	0.2575	0.2732	0.2749	0.2565	0.2403
Denmark	4	Mean	5.9960	5.4434	3.9346	(0.4488)	3.5029
		P- value	0.2603	0.2216	0.3063	0.4366	0.2625
France	13	Mean	3.1145	2.1668	1.0837	1.7835	2.1452
		P- value	0.2724	0.3312	0.4096	0.3320	0.2339
Germany	22	Mean	3.6929	4.4785	3.8848	3.7685	2.4339
		P- value	**0.0377	**0.0353	**0.0206	**0.0197	***0.0527
Italy	5	Mean	(0.3216)	(1.9555)	(0.5651)	0.8021	2.6566
		P- value	0.4522	0.2113	0.2853	0.2845	***0.0908
Luxembourg	3	Mean	(1.0765)	6.5663	8.9694	9.6937	9.2834
		P- value	0.4828	0.3193	0.2892	0.2244	0.2360
Norway	6	Mean	8.0495	7.8325	4.7957	2.2835	0.8059
		P- value	0.1431	**0.0491	0.1168	0.1115	0.2433
Poland	4	Mean	(8.0954)	(0.6137)	0.4065	1.1638	3.8754

		P- value	**0.0340	0.4394	0.4417	0.3595	***0.0936
Russia	1	Mean	3.9679	(0.3112)	(0.0846)	(0.1896)	0.0484
		P- value	n/a	n/a	n/a	n/a	n/a
South Korea	1	Mean	6.8472	7.3480	5.0123	(0.4245)	4.1118
		P- value	n/a	n/a	n/a	n/a	n/a
Spain	5	Mean	(1.8200)	(2.8631)	0.9926	0.2514	0.3737
		P- value	0.2720	0.1536	0.2087	0.3974	0.4263
Sweden	9	Mean	15.5167	10.3138	10.2715	12.0223	15.6160
		P- value	0.1160	0.1752	0.1570	0.1305	0.1383
Switzerland	7	Mean	5.8609	7.7554	4.9989	4.5632	(0.8775)
		P- value	0.1687	***0.0699	0.1256	0.1309	0.3559
Turkey	1	Mean	(24.0059)	(0.2402)	1.8968	(3.1265)	5.1746
		P- value	n/a	n/a	n/a	n/a	n/a
United Kingdom	40	Mean	1.6276	1.6110	2.2820	2.4676	2.6151
		P- value	0.2026	***0.0681	**0.0143	*0.0011	*0.0001
United States	76	Mean	2.7975	3.9157	1.5631	1.4546	1.2389
		P- value	***0.0585	*0.0022	***0.0865	***0.0773	***0.0883

\* Significant at 1% level, \*\*Significant at 5% Level, \*\*\*Significant at 10% level

Acquisitions in the United Kingdom brought positive CAR on all but one (-20,+20) event window. In addition, deals from Switzerland, Italy, and Norway also had significantly positive CAR in one event window each, but since the sample size is small from these countries the results should be interpreted with caution as CAR may not be positive after all.

Poland has a significantly negative return in (-20,+20) event window, but has significantly positive return in the (-1,+1) event window. Again, since the sample size from Poland is small, the result should be interpreted with caution. Belgium and France, having a sample size of more than 10, have mostly positive CARs, but these are not significant enough to conclude that these deals create value. The numbers of deals from other countries are small in our sample. Furthermore these deals have CARs which are not significant according to the found p-values.

Looking at the CAR by regions in Table 4.9, average CAR is positive for deals from Western Europe and North America, at most at the 1% and 10% significance level, respectively in different event windows. This result is in line with Corhay and Tourani Rad (2000), who found that acquisitions from Western Europe generated significantly positive CAR for the event window (- 5, 0). Result from Eastern Europe was mixed at different event windows. This result also needs to be interpreted with caution due to its small sample size. Again, deals from other regions have a small sample size and generated insignificant CAR.

**Table 4.9: CAR by Region**

Sub-region	Deals		CAR (-20,20)	CAR(-10,10)	CAR(-5,5)	CAR(-3,3)	CAR(-1,1)
Australasia	3	Mean	0.310	-11.263	-15.631	-11.893	-8.491
		P-value	0.483	0.220	0.182	0.216	0.258
Eastern Europe	6	Mean	-8.737	-0.501	0.573	0.223	3.454
		P-value	**0.042	0.419	0.370	0.458	**0.042
North America	81	Mean	2.458	3.709	1.631	1.321	1.190
		P-value	***0.073	*0.002	***0.067	***0.086	***0.085
North Asia	3	Mean	55.719	51.883	8.950	8.620	20.460
		P-value	0.206	0.220	0.181	0.222	0.182
South America	3	Mean	-1.741	-5.286	-2.628	-2.858	-0.481
		P-value	0.371	0.140	0.145	0.143	0.436
Western Europe	131	Mean	3.381	3.045	3.166	3.076	3.069
		P-value	*0.010	*0.004	*0.001	*0.001	*0.002

\* Significant at 1% level, \*\*Significant at 5% Level, \*\*\*Significant at 10% level

## 4.4 Regression Results

We ran the following regression for five event windows in our analysis:

$$\begin{aligned}
 CAR_i(\tau_1, \tau_2) = & \alpha + \beta_1 CULTURALDIF + \beta_2 GDPGROWTH + \beta_3 TAXDIF \\
 & + \beta_4 CORPORATECONTROL + \beta_5 RDEALSIZE + \beta_6 CASH + \beta_7 STOCK \\
 & + \beta_8 UNRELATED + \beta_9 PUBLIC + \varepsilon_i
 \end{aligned}$$

Table 4.10 below shows the results of five regressions combined.

**Table 4.10: OLS Regression for Different Event Windows**

Dependent Variable	Regression 1		Regression 2		Regression 3		Regression 4		Regression 5	
	CAR (-1,+1)		CAR (-3,+3)		CAR (-5,+5)		CAR (-10,+10)		CAR (-20,+20)	
	Coefficient	Probability	Coefficient	Probability	Coefficient	Probability	Coefficient	Probability	Coefficient	Probability
C	3,0123	0,2501	3,2877	0,2300	5,0550	0,1118	1,8510	0,6967	-1,6040	0,7761
CULTURALDIF	1,3102	0,1068	1,0946	0,1971	0,5753	0,5580	1,9129	0,1941	1,6073	0,3580
GDPGROWTH	0,0023	0,9947	-0,5621	0,1242	-0,5395	0,2025	0,8152	0,1986	0,5271	0,4835
TAXDIF	0,0429	0,6105	-0,0880	0,3179	-0,1119	0,2733	0,2797	0,0681	0,2892	0,1120
CORPORATECONTROL	-0,0262	0,0812	-0,0143	0,3625	-0,0151	0,4059	-0,0237	0,3834	-0,0208	0,5197
RDEALSIZE	0,0486	0,0000	0,0366	0,0000	0,0335	0,0000	0,0368	0,0000	0,0440	0,0000
CASH	-2,9626	0,0382	-3,4220	0,0222	-3,6731	0,0341	-2,6472	0,3060	2,0492	0,5044
STOCK	-2,2363	0,3492	-2,2963	0,3579	-3,8307	0,1862	-2,3704	0,5844	-0,8394	0,8704
UNRELATED	2,3917	0,1732	1,5744	0,3906	1,5450	0,4672	9,1784	0,0043	9,5450	0,0122
PUBLIC	-4,0360	0,0015	-3,4701	0,0088	-3,6265	0,0180	-4,5151	0,0488	-4,7211	0,0826
R-squared	0,5043		0,3483		0,2592		0,2206		0,1953	
Adjusted R-squared	0,4837		0,3213		0,2285		0,1883		0,1619	

At first glance, we can see from the regression results that the regression which uses CAR on a shorter event window has more  $R^2$  or Adjusted  $R^2$ . It supports our choice to use short event windows. It is consistent with the views of previous literature that short event periods are less likely to be affected by noise, and as such provide more significant results (Andrade *et al.*, 2001; Markides and Ittner, 1994; Tuch and O'Sullivan, 2007).

#### **4.4.1 Testing Hypotheses on Explanatory Variables**

We will now test whether our hypotheses on explanatory variables hold for different regressions:

*Hypothesis 2: CAR is inversely related to cultural difference between target's and acquirer's country*

We did not find any evidence of the hypothesis that high cultural difference between a target's and acquirer's country (The Netherlands) negatively affects CAR or destroys acquirer value in cross-border acquisitions. Rather we found a positive relationship between CAR and CULTURALDIF, but those results were not significant. As discussed in the Theoretical Framework, the empirical results on the impact of cultural distance on value creation in cross-border acquisitions are mostly mixed. The fact that we found a positive relationship between CAR and CULTURALDIF, although not significant, is consistent with other studies (Kogut and Singh, 1988; Chakrabarti *et al.*, 2009). We can also explain the positive nature of the relationship by looking at the data of cultural difference (Appendix 1) and CAR by country results from Table 4.3. We can see that CAR from countries such as Germany, United States and United Kingdom are more positive. The random selection of the sample based on our criteria, resulted in 61% of cross-border deals in our sample to take place in one these three countries. Taking into account that the cultural difference between the Netherlands and these three countries are smaller compared to most other countries in the sample conclusion on the impact of cultural difference on acquirers' shareholders value creation requires more target country-specific studies.

*Hypothesis 3: CAR is positively related to GDP growth difference between target and acquirer country*

The results of the hypothesis that GDP growth difference between target and acquirer country positively affects CAR were not significant enough to draw conclusions. In regression 1, 4, and 5, we found positive coefficients, however coefficients were not significant enough. However, we found negative coefficients in the other two, also not significant though. As discussed before, Doukas and Travlos (1988) found significant impact of this variable on value creation for bidding firms' shareholders, but Markides and Ittner (1994) found insignificant impact. Apparently, the GDPGROWTH variable does not create value at a significant level for Dutch bidding firms' shareholders, which is in line with the conclusion of Markides and Ittner (1994).

*Hypothesis 4: CAR is positively related to differences in tax rates between target's and acquirer's country*

We found mixed results of the hypothesis that CAR is positively related to a tax rate difference between the target's and acquirer's country. In regression 4, we found that CAR (-10,+10) is positively related to the TAXDIF, significant at the 10% level. According to the regression, the TAXDIF leads to a 0.28% increase in CAR (-10,+10) for Dutch companies, which supports our hypothesis and is also consistent with the conclusion drawn by Manzon et al. (1994) that higher taxation in target countries is value-creating for acquirers. But the relationship cannot be substantiated by regressions based on other event windows, as coefficients for this variable on other regressions are not significant. That is why the result for this variable should be interpreted with caution.

*Hypothesis 5: CAR is positively related to higher corporate control over the target firm*

In our analysis of Dutch bidding firms, we did not find any evidence that corporate control positively affects CAR. Rather we found that for regression 1, corporate control has negative relationship with CAR (-1,+1), which is significant at the 10% level. The coefficients of



CORPORATECONTROL for other regressions are not significant. That is why the results of this variable should be interpreted with caution.

*Hypothesis 6: CAR is positively related to the relative deal size*

We found significant evidence of the hypothesis that relative deal size positively affects value for Dutch acquirers. The coefficients of this variable are significant at the 1% level across all event windows, suggesting relatively larger cross border deals or targets creating more abnormal returns for acquirers. It is consistent with the study by Feito Ruiz and Menendez-Requejo (2011) and Moeller and Schlingemann (2005) who found similar results analyzing EU and US acquirers, and who argued that relatively larger deals lead to lower adverse selection problems. Given the results of the regression, we fail to reject the hypothesis that CAR is positively related to relative deal size.

*Hypothesis 7a): Deals with cash payment have lower CAR than deals with combination of cash and stock*

We have found some evidence of the hypothesis that cross-border deals with cash as method of payment have less impact on CAR than deals having combination of cash and stock as method of payment. Since CASH is a dummy variable, we compare this variable with the reference variable – combined method of payment, by the coefficient of CASH. We found that in regression 1, 2, and 3, CASH has a negative coefficient, all significant at the 5% level, suggesting that the impact of CASH on CAR is less than that for combined deals, which is consistent with our hypothesis and in line with the results by Eckbo et al. (1990). However, for regressions with the longer event windows (-10, +10) and (-20, +20), we found that the coefficients are not significant. It suggests that for slightly longer term event windows, impact of CASH deals and combined deals on CAR may not be different after all. So the results of this variable should be interpreted with caution.

*Hypothesis 7b): Deals with stock payment have lower CAR than deals with combination of cash and stock*

We found that cross-border deals with stock as method of payment leads to underperformance of acquirers compared to deals with combination of cash and stock as the method of payment, but none of the coefficients were significant. For all the regression, we found that the coefficient of STOCK dummy variable is negative, which is consistent with our hypothesis and results by Eckbo et al. (1990). However, since none of the coefficients were significant enough, we fail to accept the assumed hypothesis.

*Hypothesis 8: Unrelated diversification deals have lower CAR than related diversification deals*

We did not find evidence of the hypothesis that unrelated diversification deals in cross border acquisitions have lower CAR than related diversification. Rather we found the opposite in regression 4 and 5, where we found unrelated diversification to create more value than related diversification for Dutch acquirers. This result is consistent with what Corhay and Tourani Rad (2000) found in their study on Dutch cross border acquisitions, in which they found significant evidence that unrelated diversification creates more value than related diversification. However, since most other studies on cross border acquisitions of developed countries have found unrelated diversification to have less value creation than related diversification, we hypothesized that this would apply to Dutch acquisitions as well.

For other regressions focusing on smaller event windows, the coefficients of the variable UNRELATED were positive but not significant. Concluding, the impact of this variable on CAR should be interpreted with caution.

*Hypothesis 9: Acquiring public firms bring higher CARs than acquiring non-public firms*

For the hypothesis that acquiring public firms create more value than acquiring non-public firms, we found the totally opposite results from the hypothesis. For all the regression, we found the coefficients of the PUBLIC dummy variable to be significantly negative, suggesting that Dutch acquirers actually create less value by acquiring public firms than by acquiring non-public firms. Though this result is not consistent with our hypothesis that information

asymmetry in non-public firms is seen negatively by market, it is consistent with the conclusions of Faccio et al. (2006), who reasoned that acquirers create value from the illiquidity discount they receive from acquiring non-public firms. Also Martynova and Renneboog (2011) argued that market reacts positively to acquisition of non-public firm as takeover negotiations of such firms may have better chance of succeeding than acquisition of widely-held public firms for which a public tender offer needs to be made. Given the results and findings of other studies, we conclude that cross border acquisition of public firms create less value than acquisition of non-public firms for Dutch cross-border acquisitions.

#### 4.5 Diagnostic Testing

In this section we will perform some diagnostic tests on results to find out whether any relevant OLS assumptions are violated and to check other problems exist with our data.

##### *Test of OLS Assumptions*

We will start by testing the appropriateness of relevant OLS assumptions for our regression analysis:

*Assumption 1:  $E(\varepsilon_i) = 0$  i.e. average value of error term is 0.*

Since we have a constant intercept term included in the regression, this assumption is not violated (Brooks, 2008).

*Assumption 2:  $\text{var}(\varepsilon_i) = \sigma^2 < \infty$ , i.e. variance of the errors,  $\sigma^2$ , is constant.*

This is also known as assumption of Homoscedasticity (Brooks, 2008). If the error variance is not constant, we have the problem of heteroscedasticity. To test the heteroscedasticity, we apply *White's* heteroscedasticity test in EViews (Brooks, 2008), which is a test with a null hypothesis of homoscedasticity. *White's* cross product terms are not accounted for since we have a large number of variables given our sample size (Brooks, 2008). After running the test, we found evidence of heteroscedasticity for all the regression, identified by p-values of less than 1% for F-tests and chi-square tests. We included the test results for all 5 regressions in Appendix 2. To correct our regressions for heteroscedasticity we used *White's* Heteroscedasticity-consistent standard error estimates in EViews in estimating new regression

for our datasets (Brooks, 2008). The effect of using this correction is that standard errors for the slope coefficients increase relative to usual OLS standard errors, making hypothesis testing more ‘conservative’ (Brooks, 2008).

In Table 4.11, we show the 5 regression results of our analysis after the regressions were run using Heteroscedasticity-consistent standard errors:

**Table 4.11: Regressions taking into account  
White heteroscedasticity-consistent standard errors**

Dependent Variable	Regression 1		Regression 2		Regression 3		Regression 4		Regression 5	
	CAR (-1,+1)		CAR (-3,+3)		CAR (-5,+5)		CAR (-10,+10)		CAR (-20,+20)	
	Coefficient	Probability	Coefficient	Probability	Coefficient	Probability	Coefficient	Probability	Coefficient	Probability
C	3,0123	0,4366	3,2877	0,4280	5,0550	0,3317	1,8510	0,8128	-1,6040	0,8557
CULTURALDIF	1,3102	0,1660	1,0946	0,2309	0,5753	0,6009	1,9129	0,4360	1,6073	0,5478
GDPGROWTH	0,0023	0,9967	-0,5621	0,2024	-0,5395	0,2484	0,8152	0,5899	0,5271	0,7419
TAXDIF	0,0429	0,7767	-0,0880	0,4687	-0,1119	0,4106	0,2797	0,4662	0,2892	0,4779
CORPORATECONTROL	-0,0262	0,1277	-0,0143	0,4879	-0,0151	0,5333	-0,0237	0,3880	-0,0208	0,5098
RDEALSIZE	0,0486	0,0000	0,0366	0,0000	0,0335	0,0000	0,0368	0,0000	0,0440	0,0000
CASH	-2,9626	0,1131	-3,4220	0,1012	-3,6731	0,1382	-2,6472	0,3664	2,0492	0,5518
STOCK	-2,2363	0,3960	-2,2963	0,4380	-3,8307	0,2576	-2,3704	0,5893	-0,8394	0,8860
UNRELATED	2,3917	0,3347	1,5744	0,4635	1,5450	0,5384	9,1784	0,0997	9,5450	0,1213
PUBLIC	-4,0360	0,0012	-3,4701	0,0173	-3,6265	0,0367	-4,5151	0,0209	-4,7211	0,0355
R-squared	0,5043		0,3483		0,2592		0,2206		0,1953	
Adjusted R-squared	0,4837		0,3213		0,2285		0,1883		0,1619	
Adjusted R-squared	0,4837		0,3213		0,2285		0,1883		0,1619	

From the regression results, we find that  $R^2$  values and the slope of coefficients of the explanatory variables have remained the same as expected, but probability-values have changed. We will now discuss the variables, which had changes in the level of significance of the betas, from the original regression results:

- The Tax Difference (TAXDIF) variable, which had significant beta on regression 4, is no longer significant on the regression.
- The beta for the variable Corporate Control (CORPORATECONTROL) was significant at 10% level in regression 1, which is also no longer significant at that

level.

- The Dummy variable - CASH had significant beta at regression 1 3, but those results no longer hold.
- The Dummy variable UNRELATED had a significant beta on regression 4 and 5. Now, its beta on regression 5 is no longer significant.

The results of other variables almost remained unchanged from the original regression:

- The Relative Deal Size (RDEALSIZE) variable still has significantly positive betas across all event windows, similar to the results of the original regression
- The Dummy variable PUBLIC had significantly negative betas across all event windows in the original regression, which still prevails in the new regression.
- The betas for CULTURALDIF and GDPGROWTH are still not significant.

Interestingly enough, almost all variables which had varying levels of significance across different event windows in the original regression and interpretation, which was treated with caution, no longer had significant coefficient in the Heteroscedasticity- consistent regressions. This supports the validity of analyzing value-creation for multiple event windows.

*Assumption 3: Explanatory variables are non-stochastic.*

This assumption is fulfilled if there is no correlation between the error term and the explanatory variables (Brooks, 2008). Appendix 3 shows the EViews results of the correlation coefficients. We found no correlation between the explanatory variables and residuals of the 5 regressions. Because of this it can be said that the explanatory variables in this analysis are non-stochastic.

*Assumption 4:  $\epsilon_t \sim N(0, \sigma^2)$  i.e. The errors are normally distributed.*

We can check normality assumption of errors by the Jarque-Bera test (Brooks, 2008). In Appendix 4, we put the results of the normality test run in EViews for each regression. The null hypothesis of the Jarque-Bera test is that of normality. According to the probability-values of the test, the assumption of normality is rejected. As a consequence the distribution of error terms in the regressions is non-normal.

We have a large sample size of 227 observations. According to Brooks (2008), violation of the normality assumption is virtually inconsequential for sample sizes that are sufficiently large. It derives this argument from the central limit theorem, suggesting that for large samples, test statistic will asymptotically follow the appropriate distributions even in the absence of error normality. As a result, we decide to not correct the variables for the non-normality. Furthermore, according to Brooks (2008) it is quite common that few extreme error terms cause a rejection of the normality assumption, which is the case in our results as well, as evidenced by the histograms of normality tests shown in Appendix 4.

#### *Test of Multi-collinearity*

The implicit assumption of using OLS estimates is that explanatory variables are not correlated with each other (Brooks, 2008). If they are not correlated, adding or removing a variable from the regression equation would not cause a change in the coefficient values on other variables. If explanatory variables are highly correlated, the problem of multi-collinearity occurs, which causes high  $R^2$  and individual coefficients to have high standard errors. And regression becomes sensitive to small changes in specification, so removing or adding an independent variable causes large change in coefficients or significance of other variables (Brooks, 2008)

In Appendix 5, we include the correlation matrix of the independent variables. From the results, we see that none of the correlation coefficients are higher (lower) than 0.8 (-0.8), a rule of thumb for measuring multi-collinearity. As a result we can conclude that multi-collinearity problem does not exist in our model.

## 5. CONCLUSION AND RECOMMENDATIONS FOR FURTHER RESEARCH

---

*This chapter presents concluding remarks and offers possibilities for further research*

---

### 5.1 Conclusion

This study is the outcome of the identification of a research gap on the analysis of value addition to Dutch acquirers from cross border acquisition. The primary objective of this study was to assess whether cross-border acquisitions create value for acquiring companies based in the Netherlands. For this assessment, we used event study methodology on a sample of 227 acquisition deals by publicly listed Dutch firms from 20 countries during the years 1984 to 2014. As a proxy for shareholder value creation, we looked at average cumulative abnormal return (CAR) for different short-term event windows and found significantly positive CAR across selected event windows. The results suggest that cross-border acquisitions generally create value for the Dutch acquirers. In the process, evidence was found of the validity of efficient market hypothesis (EMH) in the cross border announcement case of Dutch market. Looking at the source of value-creation from a country level perspective, we found evidence that value is mainly created from acquiring targets based in Germany, United States, and United Kingdom. We also looked at acquisitions from a regional perspective and found positive value creation from acquisitions of companies based in North America and Western Europe. Our results are in line with an existing, but outdated study on Dutch cross-border acquisitions which also found evidence of value creation in acquisitions of target firms from North America and Western Europe. For the other countries or regions in our sample, either no significant CARs were found, or were interpreted with caution because of their small sample size despite significant CARs.

The other objective of this study was to find out what factor(s) affect the value creation in cross border acquisition scenario. In our attempt to identify variables that affect value creation, we chose several country-specific and deal-specific variables and formed hypothesis about the impact of each variable on CAR based on previous empirical results and theories. The multiple linear regression was applied using the independent variables on CAR of different event windows. The results from the regression analysis for the independent

variables were mixed in our study. In the original regression and Heteroscedasticity-consistent regression analyses, we found evidence that larger deals relative to the size of acquirers positively affect the shareholder value of Dutch firms in cross-border acquisitions, which is in line with the results of some existing empirical studies. It also suggests that the Dutch market assumes that the acquirers can generate more synergies from relatively bigger cross border deals. Furthermore, we found evidence that the legal status of the target firms also has significant impact on the acquirer value. In that, we assessed that market attributes less value addition to the acquisitions of public foreign firms than acquisition of non-public foreign firms. Apart from these two variables, the regressions showed some variables (unrelated, cash dummy variable, tax difference, corporate control) to have significant impact on CAR across one or few event windows, but not across all event windows. As such, we prefer to be cautious in the interpretation of these variables. And we did not find the rest of the variables such as - cultural difference, GDP growth difference, and stock dummy variable, to have significant impact on the CAR.

In conclusion, we believe that this study will provide the audience, especially the practitioners of publicly-traded Dutch companies, a useful insight into the impact of cross border acquisition on shareholder value of Dutch acquirers.

## **5.2 Recommendations for Further Research**

A large number of studies exist on value creation through M&A, with studies focusing on cross-border M&A increasing over the last couple of years. A majority of these studies also search for determinants which can be used to explain stronger or weaker value-creation. Through this study we have tried to contribute to this large amount of existing literature. However, there are still many interesting questions left to be answered.

First of all, our study focused on Dutch cross-border M&A with the aim of finding those countries in which Dutch M&A creates an above average return for its bidder's shareholders. It would be interesting to focus on those countries, US, Germany, and United Kingdom, and compare them to the other countries in our sample to try and explain for differences which can account for different levels of value-creation.



Secondly our study focused on value-creation for acquirer's shareholders in Dutch outgoing cross-border M&A. We didn't look at value creation for target's shareholders in incoming Dutch-cross border M&A. it would be interesting to see if the same good fit (US and Germany) exists for incoming as well as outgoing M&A

Thirdly, based on previous research, we only focused on eight possible determinants of value-creation expecting those to be most relevant and leaving a lot of determinants unused. Further research should be used to examine other possible determinants of value-creation with a focus on macroeconomic factors such as relative cost-of-labour per country, investor protection, political climate, language, degree of openness to foreign investment, relative inflation and more.

Fourthly, our study focuses on the Dutch cross-border M&A market, but comparable studies could be done for other country-specific markets to find optimal target-countries. Most of the existing research still focuses on the US, UK, Japan and China although cross-border M&A is increasing in magnitude and relevance, and as such more research should be performed.

Lastly, these suggestions are non-exhaustive and the possibilities, scope and range for future research are extensive.

## REFERENCE LIST

### Journal Articles

- Andrade, G., Mitchell, M., Stafford, E., (2001). 'New evidence and perspectives on mergers'. *Journal of Economic Perspectives* 15, 103–120.
- Aktas, N., de Bodt, E. and Declerck, F., (2001), 'Is there information leakage around business combinations on the French market?', Working Paper (Catholic University of Louvain).
- Amihud, Y. and B. Lev, (1989) 'Risk Reduction as a Managerial Motive for Conglomerate Mergers', *Bell Journal of Economics*, Vol. 12, pp. 605-617.
- Anand, J., Capron, L. and Mitchell, W., (2005) 'Using acquisitions to access multinational diversity: Thinking beyond the domestic versus cross-border M&A comparison', *Industrial and Corporate Change*, Volume 14, No. 2, pp. 1991-224.
- Antoniou, A., Petmezas, D., and Zhao, H., (2007) 'Bidder gains and losses of firms involved in many acquisitions', *Journal of Business Finance & Accounting*, Vol. 34, pp. 1221–1244.
- Aw, M., Chatterjee, R. (2004), 'The performance of UK firms acquiring large cross border and domestic takeover targets', *Applied Financial Economics*, Vol. 14 pp.337-349.
- Barkema, H.G., Bell, J.H.J. and Pennings, J.M., (1996), 'Foreign entry, cultural barriers and learning', *Strategic Management Journal*, Vol. 17, pp. 151-166.
- Baserman, M., and Samuelson, W., (1983), 'I Won the Auction but I Don't Win the Prize', *Journal of Conflict Resolution*, Vol. 27, pp. 618–634.
- Bauer, F. and Matzler, K. (2014), 'Antecedents of M&A success: The role of strategic complementarity, cultural fit, and degree and speed of integration'. *Strategic Management Journal*, 35: 269–291
- Beitel, P., Schiereck, B. and Wahrenburg, M., (2002), 'Explaining the M&A-success in European bank mergers and acquisitions', Working Paper (University of Witten/Herdecke, Institute for Mergers and Acquisitions).
- Bild, M., (1998), 'Valuation of Takeovers', Stockholm School of Economics, *EFI, The Economic Research Institute*.
- Birkinshaw, J., (1997), 'Entrepreneurship in multinational corporations: The characteristics of subsidiary initiatives', *Strategic Management Journal*, Vol. 18, 3, pp. 207-229.
- Black, E.L., Carnes, T.A., Jandik, T. and Henderson, B.C., (2007), 'The Relevance of Target Accounting Quality to the Long-Term Success of Cross-Border Mergers', *Journal of Business Finance & Accounting*, Vol. 34, No. 1&2, pp. 139–68.
- Bradley, M. and Sundaram, A., (2004), 'Do acquisitions drive performance or does performance drive acquisitions?', *SSRN Working Paper*.

- Brown, S.J. and J.B. Warner, (1980), 'Measuring security price performance', *Journal of Financial Economics* 8, 205-258.
- Brown, S.J. and J.B. Warner, (1985), 'Using daily stock returns: The case of event studies', *Journal of Financial Economics* 14, 3-31.
- Bruner, R.B. (2001), 'Does M&A Pay? A Survey of Evidence for the Decision-Maker', Darden Graduate School of Business, *University of Virginia*
- Cakici, N., Hessel, C. and Tandon, K., (1996), 'Foreign acquisitions in the United States: Effect on Shareholder wealth of foreign acquiring firms', *Journal of Banking and Finance*, Vol. 20, No. 2, pp. 307–329.
- Campa, J.M., Hernando, I., (2004), 'Shareholder Value Creation in European M&As', *European Financial Management*, Vol. 10, No. 1, pp. 47-81
- Chakrabarti, R., Gupta-Mukherjee, S. and Jayaraman, N., (2009), 'Mars–Venus marriages: Culture and cross-border M&A', *Journal of International Business Studies*, Vol. 40, pp. 216–236.
- Chari, A., Outimet, P. and Tesar, L.L., (2004), 'Cross Border Mergers and Acquisitions in Emerging Markets: The Stock Market valuation of Corporate Control', *University of Michigan*, Working Paper.
- Coourdacier, N., DeSantis, R.A., and Aviat, A., (2009), 'Cross-border mergers and acquisitions and European integration', *Economic Policy January*, pp. 55-106.
- Conn, R.L., Cosh, A., Guest, P.M., and Hughes, A., (2005), 'The impact on UK acquirers of domestic, cross-border, public and private acquisitions'. *Journal of Business Finance & Accounting*, Vol. 32, pp. 815–871.
- Corhay A., Tourani Rad, A., (2000), 'International acquisitions and shareholder wealth Evidence from the Netherlands'. *International Review of Financial Analysis*, vol. 9, iss. 2, pp. 163-174
- Cosh, A., Hughes, A. and Singh, A. (1980), 'The Causes and Effects of Takeovers in the United Kingdom: An Empirical Investigation for the Late 1960s at the Microeconomic Level', in Mueller, D.C. (ed) *The Determinants and Effects of Mergers: An International Comparison*. Cambridge: Oelgeschlager, Gunn & Hain.
- Craninckx K. and Huyghebaert N., (2011), 'Can stock markets predict M&A failure? A study of European transactions in the fifth takeover wave', *European Financial Management*, Vol. 17(1), pp. 9–45.
- Danbolt, J. and Maciver, G., (2012), 'Cross-border versus domestic acquisition and the impact on shareholder wealth', *Journal of Business Finance & Accounting*, Vol. 39, No. 7&8, pp. 1028-1067.

- Datta, D. and Puia, G., (1995), 'Cross-border acquisitions: an examination of the influence of relatedness and cultural fit on shareholder value creation in U.S. acquiring firms', *Management International Review*, Vol. 35, pp. 337–359.
- De Jong, A., DeJong, D., Mertens, G. and Roosenboom, P. (2007). 'Investor relations, reputational bonding, and corporate governance: The case of Royal Ahold', *Journal of Accounting and Public Policy*, Vol. 26, pp. 328 – 375.
- Denis, D.J., Denis, D.K. and Yost, K., (2002), 'Global diversification, industrial diversification, and firm value', *Journal of Finance*, Vol. 57, pp. 1951–1980.
- Devenow, A., & Welch, I., (1996), 'Rational herding in financial economics', *European Economic Review*, 40, 603-615
- Di Giovanni, J. (2005), 'What drives capital flows? The case of cross-border M&A activity and financial deepening', *Journal of International Economics*, 65, 127–149
- Dos Santos, M. B., Errunza, V. R. and Miller, D. P. (2008), 'Does Corporate International Diversification Destroy Value? Evidence from Cross-Border Mergers and Acquisitions', *Journal of Banking & Finance*, 32, 2716-2724.
- Doukas, J. and Travlos, N.G., (1988), 'The effect of corporate multi-nationalism on shareholders wealth: Evidence from international acquisitions', *Journal of Finance*, Vol. 43, pp. 1161–1175.
- Doukas, J., Holmen, M. and Travlos, N., (2002), 'Diversification, ownership, and control of Swedish corporations', *European Financial Management*, Vol. 8, No.3, pp. 281–314.
- Dutta, S., Saadi, S. and PengCheng, Z., (2013) 'Does payment method matter in cross-border acquisitions?', *International Review of Economics and Finance*, Vol. 25, pp. 91-107.
- Eckbo, B.E., Giammarino, R.M. and Heinkel, R.L., (1990), 'Asymmetric Information and the Medium of Exchange in Takeovers', *Review of Financial Studies*, Vol. 3, pp. 651-676.
- Eckbo, B.E. and Thorburn, K.S., (2000), 'Gains to Bidder Firms Revisited: Domestic and Foreign Acquisitions in Canada', *Journal of Financial and Quantitative Analysis*, Vol. 35, No. 1, pp. 1–25.
- Eden, L. and Miller, S.R., (2004), 'Distance matters: Liability of foreignness, institutional distance and ownership', *Advances in International Management*, Vol. 16, pp. 187–221.
- Erel, I., Lia, R.C. and Weisbach, M.S., (2012), 'Determinants of cross-border mergers and acquisitions', *The Journal of Finance*, Vol. 67, No.3, pp 1045-1082.
- Faccio, M., McConnell, J. and Stolin, D., (2006), 'Returns to acquirers of listed and unlisted targets', *Journal of Financial and Quantitative Analysis*, Vol. 41, No. 1, pp. 197–220.
- Fama, E., (1970). 'Efficient Capital Markets: A review of theory and empirical work'. *The Journal of Finance*, (25), 382-417

- Fama, E. and Jensen, M., (1983), 'Separation of Ownership and Control', *Journal of Law and Economics*, Vol. 26, pp. 301–325.
- Feito-Ruiz, I. and Menéndez-Requejo, S., (2011), 'Cross-border mergers and acquisitions in different legal environments', *International Review of Law and Economics*, Vol. 31, pp. 169-187.
- Fishman M. J. (1989), 'Preemptive bidding and the role of the medium of exchange in acquisitions'. *The Journal of Finance*, Vol. 44, No. 1, pp. 41-57
- Francis, B.B., Hasan, I. and Sun, X., (2008), 'Financial Market Integration and the Value of Global Diversification: Evidence for US Acquirers in Cross-Border Mergers and Acquisitions', *Journal of Banking & Finance*, Vol. 32, pp. 1522–1540.
- Franks, J. and Mayer, C., (1996), 'Hostile takeovers and the correction of managerial failure', *Journal of Financial Economics*, Vol. 40, pp. 163-181.
- Frost, T., (2001), 'The geographic sources of foreign subsidiaries' innovations', *Strategic Management Journal*, Vol. 22, pp. 101-123.
- Goergen, M., Renneboog, L., (2004), 'Shareholder Wealth Effects of European Domestic and Cross-border Takeover bids', *European Financial Management*, Vol. 10, No. 1, pp. 9-45.
- Halpern, P., (1983), 'Corporate Acquisitions: A Theory of Special Cases? A Review of Event Studies Applied to Acquisitions', *The Journal of Finance*, Vol. 38, No.2, pp. 297-317.
- Hansen, R., (1987), 'A theory for the choice of exchange medium in mergers and acquisitions', *Journal of Business*, Vol. 60, pp. 75–95.
- Healy, P.M., Palepu, K.G. and Ruback, R.S., (1992), 'Does corporate performance improve after mergers?', *Journal of Financial Economics*, Vol 31, No.2, pp.135-175.
- Hijzen, A., H. Görg and M. Manchin (2008), 'Cross-border mergers & acquisitions and the role of trade costs', *European Economic Review*, 52(5), 849-866
- Hitt, M., J. Harrison, D. Ireland and A. Best (1998). 'Attributes of Successful and Unsuccessful Acquisitions of US Firms', *British Journal of Management*, 9, pp. 91-114.
- Hofstede, G., (1980), 'Culture's consequences: International differences in work-related Values'. *Beverly Hills: Sage Publications*.
- Houston, J., James, C. and M. Ryngaert, (2001), 'Where do merger gains come from? Bank mergers from the perspective of insiders and outsiders', *Journal of Financial Economics*, Vol. 60, pp. 285–331.
- Ikeda, K. and Doi, N., (1983), 'The Performance of Merging Firms in Japanese Manufacturing Industry: 1964-75', *The Journal of Industrial Economics*, Vol. 31, No.3, pp. 257-266.

- Jemison, David B. and Sitkin, S.B., (1986), 'Corporate Acquisitions: A process Perspective', *Academy of Management Review*, Vol. 11, No. 1, pp. 145-163.
- Jensen, M. and Ruback, R., (1983), 'The Market for Corporate Control: The Scientific Evidence', *Journal of Financial Economics*, Vol. 11, pp. 5–50.
- Jensen, M., (1986), 'Agency costs of free cash flow, corporate finance, and takeovers', *American Economic Review*, Vol. 76, No. 2, pp. 323–29.
- Kogut, B. and Singh, H., (1988), 'The effect of national culture on the choice of entry Mode', *Journal of International Business Studies*, Vol. 19, No. 3, pp. 411-432.
- Kogut, B., and Zander, U., (1995), 'Knowledge, market failure, and the multinational enterprise: A reply', *Journal of International Business Studies*, Vol. 26, pp. 417-426.
- Kohli, R. and Mann, B.J.S., (2011), 'Analyzing determinants of value creation in domestic and cross border acquisitions in India', *International Business Review*, Vol. 21, pp. 998-1016.
- Kostova, T. and Zaheer, S., (1999), 'Organizational legitimacy under conditions of complexity: The case of the multinational enterprise, *Academy of Management Review*, 24, pp. 64-81.
- Kuipers, D., Miller, D. and Patel, A., (2002), 'Shareholder wealth effects in the cross-border market for corporate control', *Indiana University*, Working Paper
- La Porta, R., López-de-Silanes, F., Shleifer, A. and Vishny, R., (1998), 'Law and Finance', *Journal of Political Economy*, Vol. 106, No. 6, pp. 1113-1155.
- La Porta, R., López-de-Silanes, F., Shleifer, A. and Vishny, R., (2000), 'Investor protection and corporate governance.' *Journal of Financial Economics*, Vol. 58, pp. 3–27.
- Langetieg, T.C. (1978), 'An application of a three-factor performance index to measure stockholder gains from merger', *Journal of Financial Economics*, Vol. 6, No.4, pp. 365-383.
- Linn, Scott. & Rozeff, Michael S. (1984), 'The Corporate Sell-off'. *Midland Corporate Finance Journal*, 2(2): 17-26
- MacKinlay, A. C., (1997), 'Event studies in economics and finance'. *Journal of Economic Literature*, Vol. 35, No. 1, pp. 13-39.
- Mandelker, G. (1974), 'Risk and return: the case of merging firms', *Journal of Financial Economics*, Vol. 1, No.4, pp. 303-335.
- Manzon, G.B., Sharp, D.J., and Travlos, N.G. (1994) 'An Empirical Study of the Consequences of U.S. Tax Rules for International Acquisitions by U.S. Firms'. *The Journal of Finance*, Vol. XLIX, No. 5.
- Manson, S., Stark, A.W. and Thomas, H.M. (1994), 'A Cash Flow Analysis of the Operational Gains from Takeovers', *The Chartered Association of Certified Accountants*, Research Report No. 35

Maquiera, C., Megginson, W. and Nail, L., (1998), 'Wealth creation versus wealth redistributions in pure stock-for-stock mergers', *Journal of Financial Economics*, Vol. 48, No.1, pp. 3–33.

Markides, C. C. and Ittner, C. D. (1994), 'Shareholder Benefits from Corporate International Diversification: Evidence from U.S. International Acquisitions', *Journal of International Business Studies*, Vol. 25, No. 2, pp. 343-366

Marks, M. L. and Mirvis, P. H. (2011), 'A framework for the human resources role in managing culture in mergers and acquisitions'. *Human Resource Management*, vol 50: 859–877.

Martin, J. D. and Sayrak, A., (2003), 'Corporate Diversification and Shareholder Value: A Survey of Recent Literature', *Journal of Corporate Finance*, Vol. 9, pp. 37-57.

Martynova, M. and Renneboog, L., (2008), 'Spillover of corporate governance standard in cross-border mergers and acquisitions.' *Journal of Corporate Finance*, Vol. 14, pp. 200–223.

Martynova, M. and Renneboog, L., (2008), 'A century of corporate takeovers: What have we learned and where do we stand?' *Journal of Banking and Finance*, Vol. 32, pp. 2148–2177.

Martynova, M. and Renneboog, L., (2011), 'The performance of the European Market for Corporate Control: Evidence from the Fifth Takeover Wave', *European Financial Management*, Vol. 17, No. 2, 208-259.

Moeller, S.B. and Schlingemann, F.P., (2005), 'Global Diversification and Bidder Gains: A Comparison between Cross-Border and Domestic Acquisitions', *Journal of Banking & Finance*, Vol. 29, No. 3, pp. 533–64.

Moeller, S., Schlingemann, F. and Stulz, R., (2004), 'Firm size and the gains from acquisitions', *Journal of Financial Economics*, Vol. 73, pp. 201–28.

Morck, R. and Yeung, B., (1991), 'Why investors value multi-nationality', *Journal of Business*, Vol. 64, 2, pp. 165-187.

Moschieri, C., & Campa, J. M. (2013). 'New trends in mergers and acquisitions: Idiosyncrasies of the European market'. *Journal of Business Research*

Mueller, D.C. (1980), 'The United States, 1962-1972', in Mueller, D.C. (ed) *The Determinants and Effects of Mergers: An International Comparison*. Cambridge: Oelgeschlager, Gunn & Hain.

Mueller, D.C. (1987), 'The Corporation: Growth, Diversification and Mergers', *Fundamentals of Pure and Applied Economics*, Vol. 16. Chur: Homewood Academic Publishers.

Mulherin, J. H. and Boone, A. L., (2000), 'Comparing acquisitions and divestitures', *Journal of Corporate Finance*, Vol. 6, pp. 117–39.

Mulherin, H., (2000), 'Incomplete acquisitions and organizational efficiency', *Penn State*, Working Paper.

Myers, S. and Majluf, N., (1984), 'Corporate financing and investment decisions when firms have information that investors do not have', *Journal of Financial Economics*, Vol. 13, pp. 187–221.

Roll, R., (1986), 'The hubris hypothesis of corporate takeovers', *Journal of Business*, Vol. 59, pp. 197–216.

Rossi, S. and Volpin, P., (2004), 'Cross-Country Determinants of Mergers and Acquisitions', *Journal of Financial Economics*, Vol. 74, No. 2, pp. 277-304.

Schmidt, D. and Fowler, K., (1990), 'Post-Acquisition Financial Performance and Executive Compensation', *Strategic Management Journal*, Vol. 11, No.7, pp. 559-569.

Schoenberg, R., (2006), 'Measuring the performance of corporate acquisitions: An empirical comparison of alternative metrics', *British Journal of Management*, Vol. 17, No. 4, pp. 361–370.

Scholes, M., and M. Wolfson, (1992), 'Taxes and Business Strategy: A Planning Approach'. Englewood Cliffs, N.J.: Prentice-Hall.

Shimizu, K., Hitt, M.A., Vaidyanath, D. and Pisano, V., (2004), 'Theoretical foundations of cross-border mergers and acquisitions: A review of current research and recommendations for the future', *Journal of International Management*, Vol. 10, pp. 307-353.

Starks, L. and Wei, K.D., (2004), 'Cross-Border Mergers and Differences in Corporate Governance', Paper presented at Financial Management Association Conference.

Tuch, C. and O'Sullivan, N., ( 2007) The Impact of Acquisitions on Firm Performance: A Review of the Evidence *International Journal of Management Reviews*, Vol. 9, No. 2, pp. 141-170, June 2007

Walker, M. (2000), 'Corporate Takeovers, Strategic Objectives, and Acquiring-Firm Shareholder Wealth', *Financial Management*, Vol. 29, No. 1, pp. 53-66

Zaheer, S., (1995), 'Overcoming the liability of foreignness', *Academy of Management Journal*, Vol. 38, No.2, pp. 341–363.

Zaheer, S., (2002), 'The liability of foreignness, redux: a commentary', *Journal of International Management*, Vol.8, pp. 351-358.

## **Books**

Brooks, Chris, (2008), 'Introductory Econometrics for Finance', 2<sup>nd</sup> Ed., Cambridge University Press, Cambridge.



Bryman, A. & Bell, E. (2011). 'Business Research Methods'. Third Edition. New York: Oxford University Press Inc

Campbell, J., Lo, A., & MacKinlay, C. (1997). 'The Econometrics of Financial Markets'. New Jersey: Princeton University Press

Fama, E. F. (1976), 'Foundation of Finance', New York: Basic Books.

Gaughan, P.A. (2007), 'Mergers, acquisitions, and corporate restructurings', 4th ed., Hoboken, New Jersey, John Wiley & Sons

Madura, J. (2012), 'International Financial Management', 11<sup>th</sup> Ed., Cengage Learning

Ramanathan, R. (1995), 'Introductory Econometrics with Applications', 4<sup>th</sup> Ed., Harcourt Brace College Publishers, The Dryden Press.

## Websites

CIA Factbook, Central Intelligence Agency (2013), 'Legal System' [Online], Available at: <<https://www.cia.gov/library/publications/the-world-factbook/fields/2100.html>> [Accessed 23 May 2014].

Dagblad Trouw, Economic Press, (1999), 'E-Plus geeft KPN groeisput' [Online], Available at: <<http://www.trouw.nl/tr/nl/5009/Archief/archief/article/detail/2717938/1999/12/11/E-Plus-geeft-KPN-groeisput.dhtml>> [Accessed 22 April 2014]

Deloitte Research & Market Intelligence, (2013), 'The Dutch Deloitte CFO Survey: Ready for Growth', *Deloitte*, [Online], Available at: <<http://actueel.deloitte.nl/media/362664/cfosurvey2013.pdf>> [Accessed 22 April 2014]

de Rooij, A. (2013), 'KPN-aandeel geen kop koffie meer waard', *Reformatisch Dagblad* [Online] Available at: <[http://www.refdag.nl/nieuws/economie/kpn\\_aandeel\\_geen\\_kop\\_koffie\\_meer\\_waard\\_1\\_773046](http://www.refdag.nl/nieuws/economie/kpn_aandeel_geen_kop_koffie_meer_waard_1_773046)> [Accessed 22 April 2014].

Eigenraam, A. (2014), 'Sterkste groei Nederlandse economie in drie jaar tijd', *NRC.nl*, [Online], Available at: <<http://www.nrc.nl/nieuws/2014/02/14/nederlandse-economie-groeit-met-07-procent-herstel-zet-door/>> [Accessed 22 April 2014]

Grant Thornton, Hughes, M., *Grant Thornton International Business Report*, (2013), 'The Rise of the Cross-Border Transaction', [Online], Available at: <[https://www.gti.org/files/ibr\\_m\\_a\\_the%20rise%20of%20the%20cross-border%20transaction%202013.pdf](https://www.gti.org/files/ibr_m_a_the%20rise%20of%20the%20cross-border%20transaction%202013.pdf)> [Accessed 23 April 2014]

International Monetary Fund (2014), 'World Economic Outlook April 2014 Edition', [Online], Available at:

<<http://www.imf.org/external/pubs/ft/weo/2014/01/weodata/index.aspx>> [Accessed 12 May, 2014]

KPMG International, Kelly, J., Cook, C., Spitzer, D., *Mergers & Acquisitions: A Global Research Report*, (1999), 'Unlocking shareholder value: The keys to success', [Online], Available at: <<http://people.stern.nyu.edu/adamodar/pdfiles/eqnotes/KPMGM&A.pdf>> [Accessed 23 April 2014]

KPMG International, Nachman, S., (2013), '2014 M&A Outlook Survey Report', [Online], Available at: <<http://www.kpmgsurvey-ma.com/pdf/2014%20MA%20Outlook%20Survey.pdf>> [Accessed 23 April 2014]

Meinema, A., (2013), 'Waarom verkoopt KPN E-Plus?' NOS, [Online], Available at: <<http://nos.nl/artikel/532593-waarom-verkoopt-kpn-eplus.html>> [Accessed 22 April 2014]

Reuters, (2014), 'World Bank sees stronger growth as rich economies expand', [Online], Available at: <<http://www.reuters.com/article/2014/01/15/worldbank-economy-idUSW1N0IP02J20140115>> [Accessed 22 April 2014]

The Hofstede Centre (2014), 'Country Comparison', Available at: <<http://geert-hofstede.com/countries.html>> [Accessed 21 April, 2014]

UNCTAD (2013), 'Global Value Chains: Investment and Trade for Development', New York and Geneva: United Nations, Available at: <[http://unctad.org/en/publicationslibrary/diae2013d1\\_en.pdf](http://unctad.org/en/publicationslibrary/diae2013d1_en.pdf)> [Accessed 24 April 2014]

World Bank Group, (2013), 'Doing Business 2014', [Online], Available at: <<http://www.doingbusiness.org/reports/global-reports/doing-business-2014>> [Accessed 24 April 2014]

## APPENDICES

### Appendix 1: Cultural Difference Data

Country	Cultural Dimensions				Cultural Difference With Netherlands
	PDI	IDV	MAS	UAI	
Australia	36	90	61	51	1.83
Belgium	65	75	54	94	2.62
Brazil	69	38	49	76	2.76
Canada	39	80	52	48	1.17
China (PRC)	80	20	66	30	5.38
Denmark	18	74	16	23	0.74
France	68	71	43	86	1.82
Germany	35	67	66	65	2.34
Italy	50	76	70	75	2.87
Luxembourg	40	60	50	70	1.41
Netherlands	38	80	14	53	0.00
Norway	31	69	8	50	0.13
Poland	68	60	64	93	3.60
Russia	93	39	36	95	3.98
South Korea	60	18	39	85	3.36
Spain	57	51	42	86	1.87
Sweden	31	71	5	29	0.45
Switzerland	34	68	70	58	2.61
Turkey	66	37	45	85	2.75
United Kingdom	35	89	66	35	2.39
United States	40	91	62	46	1.94
Variance of Each Dimension (considering all countries in the index)	433	409	351	408	

## Appendix 2: Heteroscedasticity Test

### Regression 1: CAR (-1,+1)

#### Heteroskedasticity Test: White

F-statistic	6.955071	Prob. F(9,217)	0.0000
Obs*R-squared	50.82057	Prob. Chi-Square(9)	0.0000
Scaled explained SS	241.8670	Prob. Chi-Square(9)	0.0000

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 05/25/14 Time: 18:18

Sample: 1 227

Included observations: 227

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	116.1524	74.09920	1.567526	0.1184
CULTURALDIF^2	-4.266068	3.568593	-1.195448	0.2332
GDPGROWTH^2	7.542270	4.420246	1.706301	0.0894
TAXDIF^2	0.245888	0.154357	1.592982	0.1126
CORPORATECONTROL^2	-0.004664	0.003687	-1.265040	0.2072
RDEALSIZE^2	0.000121	0.000106	1.133642	0.2582
CASH^2	-39.39930	38.91877	-1.012347	0.3125
STOCK^2	-27.35262	47.32375	-0.577989	0.5639
UNRELATED^2	71.44837	54.85803	1.302423	0.1942
PUBLIC^2	-38.99494	26.61106	-1.465366	0.1443

Regression 2: CAR (-3,+3)

**Heteroskedasticity Test: White**

F-statistic	2.683512	Prob. F(9,217)	0.0056
Obs*R-squared	22.73431	Prob. Chi-Square(9)	0.0068
Scaled explained SS	87.05313	Prob. Chi-Square(9)	0.0000

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 05/25/14 Time: 18:21

Sample: 1 227

Included observations: 227

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	253.0256	113.2865	2.233503	0.0265
CULTURALDIF^2	-8.174181	4.326098	-1.889504	0.0602
GDPGROWTH^2	3.603559	2.167271	1.662717	0.0978
TAXDIF^2	0.053234	0.102301	0.520365	0.6033
CORPORATECONTROL^2	-0.009250	0.005547	-1.667616	0.0968
RDEALSIZE^2	1.86E-05	5.45E-05	0.341717	0.7329
CASH^2	-87.22783	57.65166	-1.513015	0.1317
STOCK^2	-70.20252	71.52483	-0.981513	0.3274
UNRELATED^2	29.46644	61.01172	0.482964	0.6296
PUBLIC^2	-84.90894	40.42432	-2.100442	0.0368

### Regression 3: CAR (-5,+5)

#### Heteroskedasticity Test: White

F-statistic	2.883304	Prob. F(9,217)	0.0031
Obs*R-squared	24.24612	Prob. Chi-Square(9)	0.0039
Scaled explained SS	95.46002	Prob. Chi-Square(9)	0.0000

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 05/25/14 Time: 18:23

Sample: 1 227

Included observations: 227

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	386.0730	160.8522	2.400172	0.0172
CULTURALDIF^2	-15.71885	6.214358	-2.529440	0.0121
GDPGROWTH^2	5.000167	2.460460	2.032208	0.0434
TAXDIF^2	0.040574	0.139989	0.289836	0.7722
CORPORATECONTROL^2	-0.012996	0.007773	-1.671804	0.0960
RDEALSIZE^2	-1.74E-05	4.96E-05	-0.351340	0.7257
CASH^2	-132.2060	81.73977	-1.617401	0.1072
STOCK^2	-127.9211	95.95435	-1.333145	0.1839
UNRELATED^2	40.25369	83.03782	0.484763	0.6283
PUBLIC^2	-126.8042	57.51237	-2.204816	0.0285

### Regression 4: CAR (-10,+10)

#### Heteroskedasticity Test: White

F-statistic	26.01419	Prob. F(9,217)	0.0000
Obs*R-squared	117.8092	Prob. Chi-Square(9)	0.0000
Scaled explained SS	1348.023	Prob. Chi-Square(9)	0.0000

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 05/25/14 Time: 18:24

Sample: 1 227

Included observations: 227

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-135.7097	290.8632	-0.466576	0.6413
CULTURALDIF^2	6.456263	20.42302	0.316127	0.7522
GDPGROWTH^2	63.57419	37.73460	1.684772	0.0935
TAXDIF^2	2.258712	1.269274	1.779530	0.0766
CORPORATECONTROL^2	-0.006665	0.010477	-0.636195	0.5253
RDEALSIZE^2	-8.90E-06	0.000111	-0.080197	0.9362
CASH^2	50.60877	124.4378	0.406699	0.6846
STOCK^2	57.95397	170.2071	0.340491	0.7338
UNRELATED^2	416.4306	244.8842	1.700521	0.0905
PUBLIC^2	-20.89714	86.21823	-0.242375	0.8087

## Regression 5: CAR (-20,+20)

### Heteroskedasticity Test: White

F-statistic	22.48858	Prob. F(9,217)	0.0000
Obs*R-squared	109.5481	Prob. Chi-Square(9)	0.0000
Scaled explained SS	769.0681	Prob. Chi-Square(9)	0.0000

Test Equation:

Dependent Variable: RESID^2

Method: Least Squares

Date: 05/25/14 Time: 18:25

Sample: 1 227

Included observations: 227

White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-92.81419	321.0877	-0.289062	0.7728
CULTURALDIF^2	0.599642	21.89612	0.027386	0.9782
GDPGROWTH^2	69.49323	42.94866	1.618053	0.1071
TAXDIF^2	2.445047	1.451546	1.684443	0.0935
CORPORATECONTROL^2	-0.000902	0.011150	-0.080851	0.9356
RDEALSIZE^2	-1.32E-05	0.000142	-0.093294	0.9258
CASH^2	29.85171	139.5210	0.213958	0.8308
STOCK^2	143.3279	225.0191	0.636959	0.5248
UNRELATED^2	489.1638	280.1759	1.745916	0.0822
PUBLIC^2	-13.74405	92.54702	-0.148509	0.8821

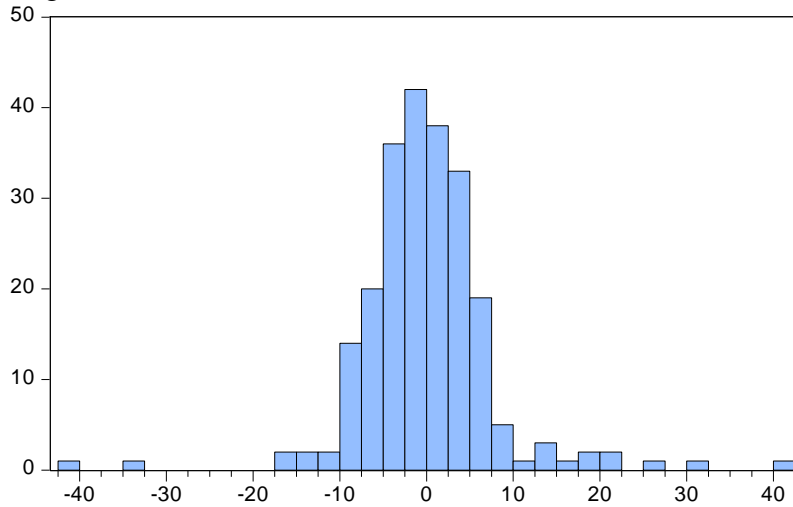


### Appendix 3: Correlation Coefficients of Regression Residuals and Explanatory Variables

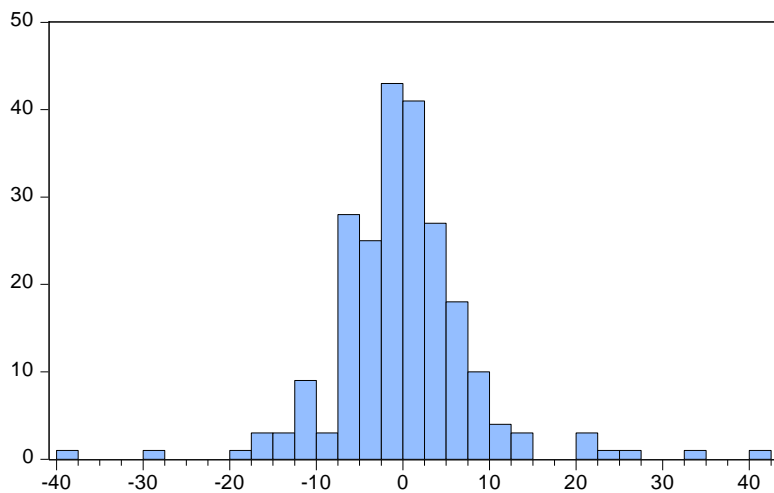
Correlation Probability	Regression 1 RESID01	Regression 2 RESID02	Regression 3 RESID03	Regression 4 RESID04	Regression 5 RESID05
CULTURALDIF	-7.52E-16 1.0000	-8.10E-16 1.0000	-3.26E-16 1.0000	-5.29E-16 1.0000	-1.74E-16 1.0000
GDPGROWTH	9.73E-18 1.0000	8.61E-17 1.0000	5.92E-17 1.0000	-2.14E-17 1.0000	1.58E-16 1.0000
TAXDIF	3.33E-17 1.0000	6.82E-17 1.0000	1.41E-16 1.0000	-1.05E-17 1.0000	5.73E-17 1.0000
CORPORATECONTROL	-4.71E-17 1.0000	3.86E-17 1.0000	2.11E-16 1.0000	1.11E-17 1.0000	-3.74E-17 1.0000
RDEALSIZE	5.33E-17 1.0000	-6.37E-17 1.0000	2.80E-16 1.0000	1.54E-16 1.0000	4.94E-17 1.0000
CASH	1.05E-16 1.0000	1.67E-17 1.0000	1.01E-16 1.0000	-3.77E-33 1.0000	4.87E-17 1.0000
STOCK	1.07E-17 1.0000	-2.24E-17 1.0000	1.93E-17 1.0000	1.29E-17 1.0000	7.23E-18 1.0000
UNRELATED	1.30E-17 1.0000	4.34E-17 1.0000	8.03E-18 1.0000	-2.86E-17 1.0000	2.41E-17 1.0000
PUBLIC	1.49E-17 1.0000	3.27E-17 1.0000	-1.41E-17 1.0000	5.88E-17 1.0000	1.58E-17 1.0000

## Appendix 4: Normality test

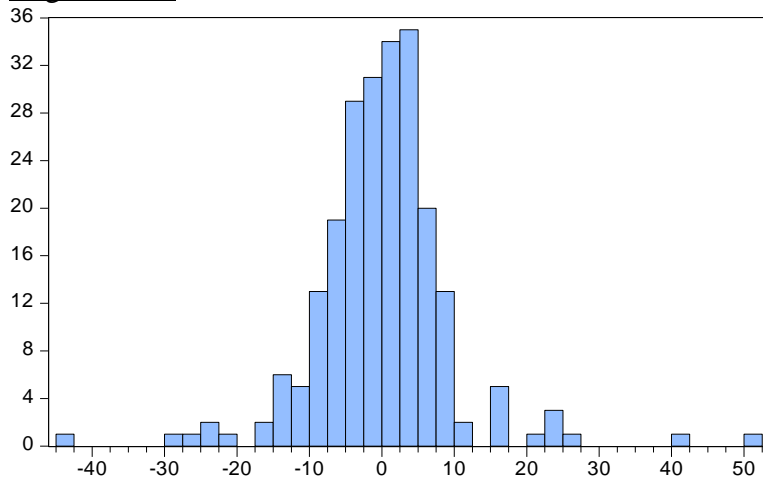
### Regression 1:



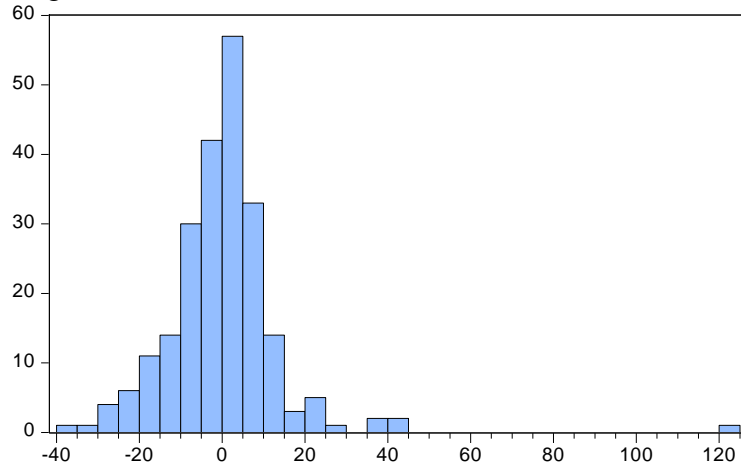
### Regression 2



### Regression 3

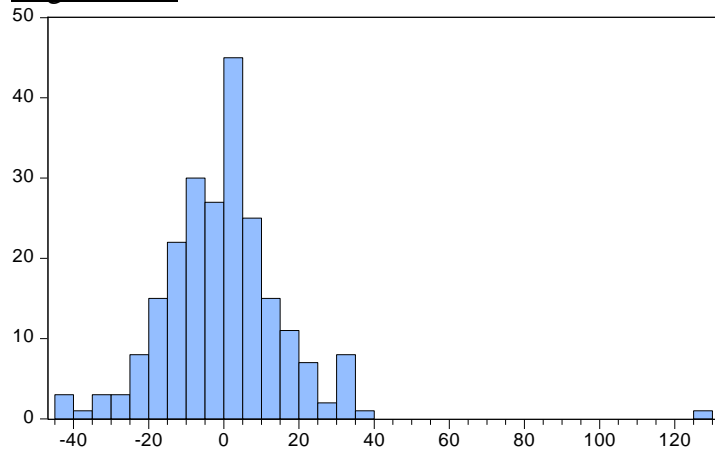


### Regression 4



Series: Residuals	
Sample 1 227	
Observations 227	
Mean	-3.17e-16
Median	0.413272
Maximum	122.0284
Minimum	-37.33024
Std. Dev.	14.27849
Skewness	2.855604
Kurtosis	26.04265
Jarque-Bera	5330.541
Probability	0.000000

### Regression 5



Series: Residuals	
Sample 1 227	
Observations 227	
Mean	7.08e-16
Median	0.129184
Maximum	127.9358
Minimum	-44.08641
Std. Dev.	16.96220
Skewness	1.813801
Kurtosis	16.36464
Jarque-Bera	1813.853
Probability	0.000000

### Appendix 5: Correlation Matrix of Explanatory Variables

Correlation Probability	CULTURALDIF	GDPGROWTH	TAXDIF	CORPORATE CONTROL	RDEALSIZE	CASH	STOCK	UNRELATED	PUBLIC
CULTURALDIF	1 -----								
GDPGROWTH	0.3059 0.0000	1 -----							
TAXDIF	0.1428 0.0315	0.0431 0.5181	1 -----						
CORPORATE CONTROL	-0.0665 0.3188	-0.1691 0.0107	-0.1416 0.0330	1 -----					
RDEALSIZE	-0.1479 0.0259	-0.0205 0.7590	0.1246 0.0608	0.0176 0.7921	1 -----				
CASH	0.1058 0.1119	-0.0265 0.6908	-0.0698 0.2951	-0.0436 0.5132	-0.1295 0.0513	1 -----			
STOCK	-0.1000 0.1329	-0.0247 0.7118	-0.0502 0.4519	-0.0901 0.1764	-0.0070 0.9168	-0.4255 0.0000	1 -----		
UNRELATED	0.0352 0.5983	0.0785 0.2388	-0.0573 0.3901	0.0010 0.9882	-0.0345 0.6050	0.0340 0.6099	-0.0947 0.1551	1 -----	
PUBLIC	-0.0413 0.5361	0.0029 0.9655	-0.1165 0.0799	-0.1627 0.0141	-0.0344 0.6062	-0.2989 0.0000	0.0315 0.6370	0.0086 0.8969	1 -----

## Appendix 6: Acquisition Frequency Distribution by Year

Announcement Year	No. of Acquisitions Announced	Percentage of Total
1984	1	0.4%
1986	2	0.9%
1987	2	0.9%
1988	1	0.4%
1989	7	3.1%
1990	9	4.0%
1991	8	3.5%
1992	5	2.2%
1993	4	1.8%
1994	8	3.5%
1995	5	2.2%
1996	9	4.0%
1997	7	3.1%
1998	11	4.8%
1999	28	12.3%
2000	29	12.8%
2001	3	1.3%
2002	6	2.6%
2003	6	2.6%
2004	7	3.1%
2005	11	4.8%
2006	9	4.0%
2007	14	6.2%
2008	6	2.6%
2009	4	1.8%
2010	8	3.5%
2011	6	2.6%
2012	8	3.5%
2013	2	0.9%
2014	1	0.4%
<b>Total</b>	<b>227</b>	<b>100.0%</b>

## Appendix 7: The Final Sample of Cross Border Deals

#	Acquirer Name	Target Name	Target Nation	Announcement Date	Deal Size (Eur mn)
1	Hagemeyer NV	Pacific Dunlop Ltd-Electrical Distribution Business	Australia	1/Aug/00	213.9
2	Hagemeyer NV	Techpac Holdings Ltd	Australia	13/Jun/03	27.1
3	Trader Classified Media NV	Trading Post Group Pty Ltd	Australia	1/Oct/02	58.9
4	ABN-AMRO Holding NV	Generale de Banque SA	Belgium	26/May/98	11086.1
5	CSM NV	Continental Sweets(Gilde Buy- Out Fund,AXA Private Equity Fund)	Belgium	12/Sep/00	110.4
6	Equant NV	Global One Co-Corporate Data Services Businesses	Belgium	20/Nov/00	3071.0
7	Gamma Holding NV	De Witte Lietaer	Belgium	23/Feb/90	47.6
8	ING Groep NV	Banque Bruxelles Lambert SA	Belgium	11/Nov/97	3916.0
9	Internationale Nederlanden Groep NV	Banque Bruxelles Lambert SA	Belgium	10/Sep/92	1297.8
10	Koninklijke KPN NV	KPN Orange Belgium NV (Koninklijke KPN NV)	Belgium	14/Dec/00	957.9
11	Koninklijke Vendex KBB NV	Brico Belgium SA(GIB Group SA)	Belgium	27/Mar/02	505.3
12	Koninklijke Vendex KBB NV	Leroy Merlin-DIY Business, Belgium	Belgium	17/Apr/03	65.1
13	Krasnapolsky Hotels & Restaurants NV	European Hotel Ventures Belgium SC-Hotels, Belgium and Netherlands (6)	Belgium	25/May/99	22.6
14	Krasnapolsky Hotels & Restaurants NV	Alfa Hotels Management NV, Alfa International Hotels NV	Belgium	13/Sep/99	18.3
15	Macintosh Retail Group NV	Brantano NV	Belgium	29/Oct/07	159.7
16	Petroplus International NV	Nynas Petroleum-Antwerp Bitumen Refinery	Belgium	19/Nov/02	21.7
17	Sensata Technologies Holding NV	Sensor-Nite NV	Belgium	15/Jun/11	223.2
18	Smit Internationale NV	URS Belgie NV	Belgium	31/Dec/07	181.9
19	United Services Group NV	Solvus NV	Belgium	15/Jun/05	688.7
20	Vilenzo International NV	Tricotop BV	Belgium	14/Aug/01	15.6
21	ABN-AMRO Holding NV	Banco Real SA	Brazil	8/Jul/98	1948.8
22	Koninklijke DSM NV	Tortuga Cia Zootechnica Agraria	Brazil	8/Aug/12	490.4
23	Mittal Steel Co NV	Arcelor Brasil SA	Brazil	2/Aug/06	4392.5
24	AMG Advanced Metallurgical Group NV	Timminco Ltd	Canada	27/Jan/09	15.2
25	Delft Instruments NV	Oncology Software Solutions	Canada	11/Feb/03	21.5
26	Exact Holding NV	Longview Solutions Inc	Canada	17/Sep/07	36.1
27	Koninklijke DSM NV	Ocean Nutrition Canada Ltd	Canada	18/May/12	415.0
28	Nutreco Holding NV	Maple Leaf Foods Inc- Maple Leaf Animal Nutrition	Canada	21/May/07	342.6
29	Elephant Talk Communications Inc	Beijing Chinawind Communications Information Technology Co	China (PRC)	4/Jan/06	4.1
30	Trader Classified Media NV	SouFun Holdings Ltd	China (PRC)	13/Jul/05	140.6
31	Axa Stenman Industries NV	Basta Group A/S	Denmark	20/Jan/00	12.9
32	Grontmij NV	Carl Bro Gruppen A/S	Denmark	12/Jul/06	168.7
33	Koninklijke Ten Cate NV	Roshield A/S	Denmark	7/Dec/06	34.6
34	Madge Networks NV	Olicom A/S-Token Ring Business	Denmark	31/Aug/99	14.2
35	Corporate Express NV	Lyreco SAS	France	21/May/08	1718.7
36	Delft Instruments NV	Auxitrol Systems & Sensors (Auxitrol Technologies SA)	France	8/Nov/02	6.9
37	Endemol Holding NV	Endemol France SAS	France	9/Jan/07	450.7
38	Gucci Group NV	Sanofi Beaute(Artemis SA)	France	28/May/99	923.8
39	ING Groep NV	Credit Commercial de France {CCF}	France	10/Dec/99	8374.7
40	McGregor Fashion Group NV	Gaastra Europe SARL	France	16/Oct/00	3.5
41	Nedgraphics Holding BV	Info Design	France	11/Jan/99	4.3
42	Pakhoed Holding NV	Lambert Riviere SA	France	5/Dec/94	35.8
43	Royal Wessanen NV	Distriborg Groupe	France	7/Jul/00	95.9

44	TKH Group NV	CAE Groupe	France	20/Jul/07	75.2
45	Unit 4 Agresso NV	Risc Technology	France	22/Jun/04	14.9
46	Vendex International NV	BIS SA	France	6/Jan/97	221.9
47	VIA NET.WORKS Inc	Amen SAS	France	28/Jan/04	5.6
48	Ahrend Groep NV(Buhrmann-Tetterode NV)	Gwinner & Ulrich Fertigungs GmbH	Germany	29/Nov/94	8.9
49	Akzo Nobel NV	Hoechst Roussel Vet(Hoechst AG)	Germany	11/Aug/99	667.0
50	Benckiser NV(Joh A Benckiser GmbH)	Benckiser Marken GmbH & Co (Joh A Benckiser GmbH)	Germany	27/Jul/99	183.5
51	Brack Capital Properties NV	Undisclosed Property Co	Germany	19/Jul/12	29.4
52	Gamma Holding NV	Verseidag AG	Germany	1/Dec/98	228.2
53	Gemalto NV	Cinterion Wireless Modules GmbH	Germany	29/Jun/10	163.4
54	Hagemeyer NV(First Pacific Davies/First Pacific Co Ltd)	J Froeschl & Co	Germany	11/Jun/91	61.3
55	Hollandsche Beton Groep NV	Wayss und Freytag AG(AGIV AG fuer Industrie und Verkehrswesen)	Germany	30/Dec/96	136.5
56	ICTS International NV	ICTS-GmbH(ICTS International NV)	Germany	1/Jul/97	3.5
57	ING Groep NV	Berliner Handels und Frankfurter Bank KGaA	Germany	13/Aug/99	2212.3
58	Koninklijke Ahrend NV	Mauser Waldeck AG	Germany	24/Feb/00	28.1
59	Koninklijke Grolsch NV	Wickueler Group	Germany	31/Jan/91	34.3
60	Koninklijke KNP BT NV	Wilhelm Seiler,Bunzl Italia (Bunzl PLC)	Germany	24/Dec/96	82.5
61	Koninklijke KPN NV	E-Plus Mobilfunk GmbH(Otelo Communications GmbH)	Germany	10/Dec/99	2915.2
62	Mediq NV	Assist GmbH	Germany	9/Nov/11	95.0
63	Oce-van der Grinten NV	Hochleistungsdrucke HLD (Siemens Nixdorf Informationssy)	Germany	15/Feb/96	427.2
64	Rood Testhouse International NV	Microtec GmbH	Germany	4/Jul/08	3.2
65	Samas NV	Schaerf AG	Germany	2/Mar/95	126.8
66	Samas NV	Schaerf AG (Samas-Groep NV)	Germany	18/May/98	14.6
67	Telegraaf Media Groep NV	ProSiebenSat1 Media AG	Germany	1/Jun/07	437.5
68	USG People NV	Allgeier DL GmbH	Germany	21/Feb/08	174.4
69	Versatel Telecom International NV	Versatel Deutschland Holding GmbH	Germany	16/Aug/04	20.3
70	CSM NV	Socalbe(Cie Industriali Riunite SpA)	Italy	11/Apr/01	132.2
71	Koninklijke Numico NV	Mellin SpA	Italy	28/Feb/05	398.5
72	VimpelCom Ltd	Weather Investments Srl	Italy	4/Oct/10	16359.2
73	Vistaprint NV	Pixartprinting Srl	Italy	1/Apr/14	137.0
74	Wolters Kluwer NV	Ipsos SpA(Isvim SpA/Ferruzzi Finanziaria SpA)	Italy	26/Apr/91	141.1
75	Mittal Steel Co NV	Arcelor SA	Luxembourg	27/Jan/06	32516.8
76	Omnium Europe	Financiere de Developpement Regional SA	Luxembourg	10/Jan/91	6.4
77	United Pan-Europe Communications NV	SBS Broadcasting SA	Luxembourg	9/Mar/00	2201.2
78	Aegon NV	Vital Forsikring A/S	Norway	3/May/95	314.6
79	Apothekers Cooperatie OPG UA	Norsk Medisinaldepot AS (Norway)	Norway	15/Mar/99	23.8
80	Buhrmann NV	Andvord Tybring-Gjedde ASA	Norway	29/Aug/06	269.7
81	EVC International NV	Norsk Hydro AS-Petrochemicals Division	Norway	7/Jul/98	107.3
82	Fugro NV	Exploration Resources ASA	Norway	15/Aug/05	241.0
83	Nutreco Holding NV	Hydro Seafoods(Norsk Hydro A/S/Norway)	Norway	13/Mar/00	464.4
84	Apothekers Cooperatie OPG UA	Orfe SA(Orphe Holdings Ltd)	Poland	10/Jun/99	20.0
85	GTC Real Estate BV	Globe Trade Centre SA	Poland	11/Oct/05	76.7
86	New World Resources NV	Lubelski Wegiel "Bogdanka" SA	Poland	5/Oct/10	801.3
87	UNIT4 NV	Teta SA	Poland	9/Jul/10	44.3
88	Heineken NV	Ivan Taranov Breweries	Russia	17/Aug/05	455.1
89	Koninklijke Philips Electronics NV	LG Electronics Co Ltd-Active Matrix Liquid Crystal Display	South Korea	17/May/99	1498.8
90	Heineken Holding NV	Cruz del Campo SA(Guinness PLC)	Spain	10/Jun/99	870.4
91	Heineken NV	Cruz del Campo SA	Spain	9/May/90	945.5
92	Heineken NV	El Aguila SA(Heineken NV)	Spain	10/Aug/94	86.8

93	Koninklijke Ahold NV	Superdiplo SA	Spain	7/Sep/00	1302.0
94	Roto Smeets Group BV	Quebecor World Europe Holding	Spain	7/Nov/07	239.3
95	Akzo NV	Nobel Industrier Sweden AB (Securum/Nordbanken/Sweden)	Sweden	8/Nov/93	2791.9
96	Draka Holding NV	ABB Cables AB,ABB Norsk Kabel (ABB Asea Brown Boveri Ltd)	Sweden	16/Nov/99	203.7
97	Koninklijke Ahold NV	ICA Group	Sweden	10/Dec/99	1797.5
98	Koninklijke Ahold NV	ICA AB	Sweden	19/Jul/04	835.6
99	LBI International NV	LBI International AB	Sweden	25/Feb/10	110.9
100	Royal Imtech NV	NVS Installation AB	Sweden	4/Nov/08	236.0
101	Royal Imtech NV	Narkes Elektriska AB	Sweden	23/Jun/10	102.9
102	Spyker Cars NV	Saab Automobile AB	Sweden	26/Jan/10	685.0
103	Wolters Kluwer NV	Liber AB	Sweden	15/Jan/93	161.8
104	BE Semiconductor Industries NV	Oerlikon Assembly Equipment AG	Switzerland	26/Jan/09	4.6
105	Crucell NV	Berna Biotech AG	Switzerland	1/Dec/05	320.2
106	Cryo-Save Group NV	Salveo Biotechnology SA-Cord Blood Preservation Assets	Switzerland	24/Dec/13	0.7
107	DSM NV	Roche Holding AG-Vitamins & Fine Chemicals Business	Switzerland	3/Sep/02	1921.3
108	Fugro NV	GeoTeam A/S-Core Businesses (Petroleum Geo-Services A/S)	Switzerland	9/Feb/94	26.8
109	Gucci Group NV	Severin Montres	Switzerland	25/Nov/97	94.1
110	Petroplus International NV	Royal Dutch/Shell Group- Cressier Refinery	Switzerland	14/Jul/99	128.3
111	Wavin NV	Pilsa Plastik Sanayi AS	Turkey	22/Nov/07	55.2
112	Aalberts Industries NV	IMI PLC-Copper Fittings Business	United Kingdom	22/Jul/02	102.3
113	Aalberts Industries NV	Senior Heat Treatment Ltd,Traitement Thermique Iberique SAS	United Kingdom	5/May/99	37.5
114	Aalberts Industries NV	Pegler Holdings Ltd	United Kingdom	26/Aug/05	58.4
115	Accell Group NV	Raleigh Cycle Ltd	United Kingdom	26/Apr/12	59.7
116	Aegon NV	AEGON Scottish Equitable PLC	United Kingdom	21/Dec/95	378.7
117	Akzo Nobel NV	Imperial Chemical Industries PLC{ICI}	United Kingdom	18/Jun/07	11726.3
118	Akzo Nobel NV	Courtaulds PLC	United Kingdom	17/Apr/98	3454.1
119	Atag Holding NV	Dawes Cycles Ltd	United Kingdom	23/Apr/90	3.9
120	Draka Holding NV	Delta PLC-Remaining Cables Businesses	United Kingdom	2/Mar/99	32.9
121	Elsevier NV	Pergamon Press PLC(Maxwell Communication Corp PLC)	United Kingdom	28/Mar/91	613.5
122	Eriks Group NV	Wyko Investments Ltd	United Kingdom	17/Oct/06	385.2
123	Fugro NV	Thales GeoSolutions Group Ltd	United Kingdom	17/Jul/03	156.5
124	Gamma Holding NV	Arthur Sanderson & Sons Ltd (West Point- Pepperell Inc)	United Kingdom	10/Apr/90	74.7
125	Hagemeyer NV	WF Electrical PLC	United Kingdom	13/Jun/00	189.4
126	Hagemeyer NV(First Pacific Davies/First Pacific Co Ltd)	Newey & Eyre Group Ltd(ABN AMRO Holdings NV,Hagemeyer NV)	United Kingdom	18/Jan/94	35.6
127	Hollandsche Beton Groep NV	Kyle Stewart Ltd	United Kingdom	2/Aug/89	55.3
128	Hollandsche Beton Groep NV	GA Holdings Ltd	United Kingdom	10/Jul/92	18.8
129	Internationale Nederlanden Groep NV	Barings PLC-Assets	United Kingdom	3/Mar/95	822.7
130	Koninklijke BolsWessanen NV	Telford Foods,H & C Cereales in Faverolles(Harrisons & Crosfield PLC)	United Kingdom	17/Aug/94	101.6
131	Koninklijke Grolsch NV	Ruddles Brewery Ltd(Courage Ltd/Foster's Brewing Group)	United Kingdom	17/Jan/92	59.2
132	Koninklijke Nedlloyd Groep NV	Blue Star Line Ltd-Container Shipping Business	United Kingdom	9/Feb/98	90.8
133	Koninklijke Vopak NV	Ellis & Everard PLC	United Kingdom	10/Nov/00	588.3
134	Madge Networks NV	Gains International (CI) Ltd	United Kingdom	8/Feb/99	40.9
135	Medicopharma NV	Macarthy PLC-Wholesaling Division	United Kingdom	10/Aug/90	25.2
136	Nutreco Holding NV	Marine Harvest McConnell (Booker PLC)	United Kingdom	1/Aug/99	49.5
137	Pakhoed Holding NV	Tees Storage Co, Gebr Broere BV Dordrecht (Tenneco Inc)	United Kingdom	22/Jan/88	96.1
138	Pakhoed Holding NV	Panocean Storage & Transport Ltd(Ocean Group PLC)	United Kingdom	25/Feb/92	60.2

139	Petroplus International NV	Phillips-Imperial Petroleum Ltd(ICI,Phillips Petroleum Co Inc)	United Kingdom	13/Dec/00	48.0
140	PolyGram NV(Philips Electronics)	Propaganda Films,Working Title	United Kingdom	24/Sep/91	154.5
141	Rood Testhouse International NV	MTL Microtechnology(Cambridge Electronic Industries)	United Kingdom	31/Jul/89	1.7
142	Royal Dutch Petroleum Co	Shell Transport & Trading Co PLC	United Kingdom	28/Oct/04	69803.6
143	Royal Imtech NV	Meica Group Ltd	United Kingdom	19/Aug/03	26.2
144	Samas NV	VF International Limited (Vickers PLC)	United Kingdom	23/Jul/90	85.5
145	Smit Internationale NV	Land & Marine Engineering Ltd (Costain Group PLC)	United Kingdom	16/Aug/96	13.1
146	Spyker Cars NV	Midland F1 Ltd	United Kingdom	9/Sep/06	84.5
147	Unit 4 Agresso NV	CODA PLC	United Kingdom	14/Jan/08	205.0
148	United Pan-Europe Communications NV	Telewest Communications PLC	United Kingdom	26/Jun/00	3667.7
149	Van der Moolen Holding NV	Curvalue Financial Services Group	United Kingdom	27/May/05	59.0
150	VRG-Groep NV(Koninklijke Nederlandse Papierfabrieken NV)	Systems Reliability Holdings PLC-Corporate Computers	United Kingdom	13/Sep/90	17.2
151	Wienerberger Finance Service B.V.	Baggeridge Brick PLC	United Kingdom	17/Aug/06	146.2
152	Aalberts Industries NV	Amcast Industrial Corp-Certain Flow Control Division Assets	United States	9/Jul/04	43.6
153	ABN-AMRO Holding NV	Standard Federal Bancorp,Troy, Michigan	United States	22/Nov/96	1517.4
154	ABN-AMRO Holding NV	Michigan National Corp (National Australia Bank Ltd)	United States	23/Nov/00	3265.7
155	ABN-AMRO Holding NV	Cragin Financial Corp	United States	6/Jul/93	425.4
156	Aegon NV	Providian Corp-Insurance Operations	United States	27/Dec/96	2081.4
157	Aegon NV	TransAmerica Corp	United States	18/Feb/99	8635.7
158	AerCap Holdings NV	International Lease Finance Corp	United States	16/Dec/13	3949.4
159	Akzo NV	Stauffer Chemicals-Speciality Chemical Business (Imperial Chem Inds PLC)	United States	22/Jun/87	525.1
160	Akzo NV	Reliance Universal Inc(Tyler Corp)	United States	19/Apr/89	232.3
161	Akzo NV	FRP Company-Paper Chemical Activities(Monsanto Co)	United States	3/Nov/86	184.8
162	AMEV NV(Fortis AG)	Western Life Insurance Co, St Paul Advisors Inc(St Paul Cos)	United States	27/Sep/84	174.1
163	AMG Advanced Metallurgical Group NV	KB Alloys LLC	United States	21/Feb/11	17.6
164	Arcadis NV	Malcolm Pirnie Inc	United States	25/Jun/09	158.9
165	ASM International NV	NuTool Inc	United States	2/Mar/04	47.2
166	ASM Lithography Holding NV	Silicon Valley Group Inc	United States	29/Sep/00	1670.2
167	ASML Holding NV	Cymer Inc	United States	17/Oct/12	1785.7
168	BAAN Co NV	Aurum Software Inc	United States	13/May/97	189.9
169	Bateman Litwin BV	Delta-T Corp	United States	17/Jul/07	37.7
170	BE Semiconductor Industries NV	RD Automation	United States	2/Sep/00	24.4
171	Centrale Suiker Maatschappij NV{CSM}	Westco Products Inc	United States	16/Jul/92	103.1
172	Chicago Bridge & Iron Co NV	Howe-Baker International Inc (Wedge Group Inc)	United States	31/Jul/00	155.4
173	Chicago Bridge & Iron Co NV	The Shaw Group Inc	United States	30/Jul/12	2609.0
174	Chicago Bridge & Iron Co NV	ABB Lummus Global Inc	United States	27/Aug/07	696.4
175	CSM NV	CarPro Inc	United States	8/Jan/03	290.7
176	DSM NV	Catalytica Pharmaceuticals Inc (Catalytica Inc)	United States	2/Aug/00	875.4
177	Fuel Tech NV	Nalco Fuel Tech(American Bailey Corp,Fuel Tech NV)	United States	2/Sep/99	9.3
178	Getronics NV	Wang Laboratories Inc	United States	4/May/99	1544.0
179	Hagemeyer NV	Vallen Corp	United States	15/Nov/99	190.2
180	HCS Technology NV	Savin Corp(Colorocs Corp)	United States	28/Jul/89	24.8
181	HCS Technology NV	Colorocs Corp	United States	28/Apr/89	21.3
182	HCS Technology NV	Savin Corp(Colorocs Corp)	United States	28/Jul/89	13.7
183	ING Groep NV	ReliaStar Financial Corp	United States	28/Apr/00	5458.1
184	ING Groep NV	Aetna Inc-Financial Services & International Businesses	United States	20/Jul/00	5335.9



185	ING Groep NV	Equitable of Iowa Cos	United States	8/Jul/97	1991.7
186	Koninklijke Ahold NV	Stop & Shop Cos	United States	28/Mar/96	2340.5
187	Koninklijke Ahold NV	US Foodservice Inc	United States	8/Mar/00	3604.2
188	Koninklijke Ahold NV	Tops Markets LLC	United States	27/Feb/91	316.6
189	Koninklijke Ahold NV	Giant Food Inc	United States	19/May/98	2438.5
190	Koninklijke Ahold NV	Alliant Exchange Inc(Clayton Dubilier & Rice Inc)	United States	4/Sep/01	2469.7
191	Koninklijke Ahold NV	Pathmark Stores Inc	United States	9/Mar/99	1607.3
192	Koninklijke Bijenkorf Beheer (DNU>6/30/99)	FAO Schwarz	United States	31/Jul/90	36.0
193	Koninklijke DSM NV	Fortitech Inc	United States	8/Nov/12	498.2
194	Koninklijke KNP BT NV	BT Office Products International Inc(Buhrmann- Tetterode NV)	United States	22/Jan/98	126.9
195	Koninklijke Luchtvaart Maatschappij NV {KLM}	Hilton International Co (Transworld Corp)	United States	18/Dec/86	880.2
196	Koninklijke Luchtvaart Maatschappij NV {KLM}	Northwest Airlines Corp	United States	14/Sep/94	142.8
197	Koninklijke Numico NV	General Nutrition Cos Inc	United States	5/Jul/99	2488.5
198	Koninklijke Numico NV	Rexall Sundown Inc	United States	1/May/00	1923.2
199	Koninklijke Philips Electronics NV	Respironics Inc	United States	21/Dec/07	3532.7
200	LBI International NV	Mr Youth	United States	14/Nov/11	36.7
201	Oce NV	Imagistics International Inc	United States	15/Sep/05	585.2
202	Oce-van der Grinten NV	AM International Inc-Bruning Division	United States	1/Aug/91	42.3
203	OPG Groep NV	Byram Healthcare Centers Inc	United States	19/Feb/08	89.5
204	Pakhoed Holding NV	Univar Corp	United States	3/Jun/96	410.5
205	Pharming Group NV	ProBio Inc	United States	28/Nov/00	9.4
206	Philips Gloeilampenfabrieken NV	North American Philips Corp (Philips Gloeilampenfabrieken NV)	United States	17/Aug/87	648.9
207	PolyGram NV(Philips Electronics)	Motown Records(Boston Ventures)	United States	3/Aug/93	261.5
208	Qiagen NV	Digene Corp	United States	3/Jun/07	988.9
209	Randstad Holding NV	Strategix Solutions Inc	United States	27/Aug/98	784.9
210	Randstad Holding NV	SFN Group Inc	United States	20/Jul/11	514.2
211	Royal Dutch Shell PLC	East Resources Inc	United States	28/May/10	3811.4
212	Sarakreek Holding NV	Eastern Realty Investment Corp	United States	20/Sep/96	143.9
213	Smartrac NV	Millennium Card's Technology Ltd	United States	5/Nov/09	8.7
214	Tornier NV	OrthoHelix Surgical Designs Inc	United States	24/Aug/12	148.6
215	Unilever NV	Slim-Fast Foods Co	United States	12/Apr/00	2401.1
216	Van der Moolen Holding NV	Lawrence O'Donnell Marcus LLC	United States	25/Jun/98	137.5
217	Vedior NV	ACSYS Inc	United States	17/Apr/00	118.3
218	Vistaprint NV	Webs Inc	United States	19/Dec/11	90.6
219	VNU NV	IMS Health Inc	United States	10/Jul/05	5788.8
220	VNU NV	ITT World Directories Inc (ITT Corp)	United States	18/Dec/97	1897.2
221	VNU NV	Nielsen Media Research Inc	United States	16/Aug/99	2641.7
222	VNU NV	ACNielsen Corp	United States	18/Dec/00	2612.2
223	VNU NV	BPI Communications Inc	United States	14/Jan/94	196.5
224	VNU NV	Miller Freeman Inc	United States	18/Jul/00	697.2
225	VRG-Groep NV(Koninklijke Nederlandse Papierfabrieken NV)	VGC Corp	United States	18/Apr/89	26.9
226	Wolters Kluwer NV	Commerce Clearing House Inc	United States	27/Nov/95	1372.1
227	Wolters Kluwer NV	JB Lippincott	United States	21/May/90	189.0