

## **Chapter 1**

### **INTRODUCTION**

#### **1.1 Chapter Overview**

This chapter provides a general introduction to the dissertation and provides a foundation for the following chapters. A brief background of the research area is outlined, followed by the rationale and the contribution that this study purports to make to the relevant literature. Finally, the structure and layout of the dissertation is outlined.

#### **1.2 Background to the study**

A variety of expressions are used to define the broad area of mergers and acquisitions (M&As). According to Coyle (2000) mergers and acquisitions are defined as a process whereby two or more firms join together all or part of their operations. However differences exist between these two terms, for instance the size of the firms in the arrangement, majority ownership and management control. A merger exists when two organizations pool their resources into a unified organization and an acquisition or takeover exists when one firm acquires another firm (Coyle, 2000). Wabben (2007) developed a conceptual framework to deal with the wide variety of M&A definitions that are used interchangeably. This framework is documented in Appendix 2.

In the finance world it is well known that M&As have a tendency to occur in waves. In other words there are fluctuations between high and low M&A activity (Barkoulas et al., 2001). To date five completed waves have transpired, those of the 1900s, 1920s, 1960s, 1980s and the 1990s. According to Martynova and Renneboog (2008) M&A activity usually occurs in periods following an economic recession and coincides with a rapid expansion of the credit market. Martynova and Renneboog (2008) provide some explanations for M&A waves in their study. They state that changes in the overall business environment cause companies to reorganize their operations. Gort (1969) developed an economic disturbances model and states that disequilibrium in the economy leads to an increase in the number of takeovers. This view is supported by Steiner (1975)

and Goble and White (1987) who state that changes in the market and the growth of the economy are positively related to an increase in M&A activity between acquiring (purchasing) firms and targets (selling) firms.

There has been pronounced increases in cross-border M&A activity over the last two decades (Martynova and Renneboog, 2008 and Uddin and Boateng, 2009). Therefore it is clear that M&As have become an essential attribute of the global business environment. Francis et al., (2008) also provide evidence of this significant increase in the volume of cross-border M&As during the 1990s and 2000s and articulate that the upsurge was influenced by the growth in international markets.

The development of international financial markets has given many firms the opportunity to pursue investments domestically and internationally (Francis et al., 2008). Cross-border or international M&As continue to be a popular focus as markets become interconnected and M&As become an ideal mode of entry into international markets (Aybar and Ficici, 2009). Cross-border M&As involve an acquirer (buyer) purchasing an existing target (seller) firm in a foreign country as opposed to the domestic or home country of the acquiring firm (Barkema and Vermeulen, 1998). Kogut (1988) state that international M&As amplify the operational flexibility of companies by providing them with opportunities to exploit certain conditions, for instance efficient corporate governance and investor relations systems, huge investments in infrastructure, educated workforce and more favorable tax regulations. Morosini et al (1998) discuss the disparity in nationality between acquiring and target firms and state that cultural distance is significant to cross-border M&As, as such cultural distance symbolizes difference in routines and norms that are specific to a particular country. Although cross-border M&As represent a small percentage of total global M&As, they are fast becoming a larger and growing part of all foreign direct investment (Hopkins, 1999). According to the World Investment Report (2008) global foreign direct investment (FDI) flows reached a record high of \$1.8 trillion dollars in 2007 from just \$400 billion dollars in 1997. Outward FDI flows are dominated by developed economies such as the US, UK, France, Germany and Spain, accounting for \$1,692 billion or 65% of total global outward

FDI in 2007. Two of the major economic groupings are developed and emerging markets (World Investment Report, 2008). A developed market refers to an economy with stable level of economic growth. Some of the most common criteria for evaluating a country's degree of development are gross domestic product (GDP) and per capita income (Hitt et al., 2000). According to (Harvey et al., 1995) emerging markets are in the process of transitioning from a closed to an open market economy. These countries have implemented economic development and reform programs that have resulted in an increase in the economic performance of the country and integration into the global capital markets. Emerging economies FDI inflows grew by 25 percent in 2007 from the previous year, as they attracted more flows than ever before. China and the Russian Federation were the largest recipients of FDI regarding emerging markets (World Investment Report, 2008). In Africa, FDI inflows increased to a new record of \$53 billion in 2007. Also, Asia and South America reported a new record of FDI inflows of \$249 billion and \$72 billion in 2007. The Russian Federation's inward FDI constituted the majority of total FDI inflows to South-East Europe, representing \$52 billion of a total \$86 billion in 2007. Cross-border mergers and acquisitions (M&A) have contributed extensively to the increase in FDI flows. The value of cross-order M&A deals in 2007 was recorded at \$1,637 billion, and it is clear that the global financial crisis did not have a significant diminishing effect on world-wide cross-border M&A activity. Even though the economic downturn initiated a reduction in the level of global FDI flows by 10% in 2008, the resilient economic growth of emerging economies has continued to attract a substantial amount of FDI inflows in the form of M&A deals especially from the US. Thriving commodity markets, improved policy environments and demographic changes are among many of the contributing factors leading to an increase in M&A activity in these regions.

### **1.3 Rationale and Contribution of the study**

During the late 1980s and early 1990s, financial markets in many developing countries were liberalized, thus increasing M&A activity across these reformed regions (Francis et al., 2008). More details are outlined in Appendix 3. It is widely believed that the most recent financial crisis has been a turning point in history with regards to the shift in FDI

inflows and the global economic balance of power from developed economies to emerging ones. For example, 34 percent of total global deals for the first quarter of 2010 involved the execution of M&A deals in emerging economies, representing an increase of 15 percent from 2007. This elevating trend is a representation of the large opportunities available to bidders who acquire targets from emerging markets. The Chinese economy in particular is perceived to provide superior opportunities for acquiring firms given its phenomenal growth rates, with an average gross domestic product (GDP) of 8% per annum over the last twenty years. The liberalization of the Chinese economy in the 1980s opened up the market for foreign acquirers. The economy has grown ten fold since these reforms were implemented through inward and outward FDI (Athreye and Kapur, 2009), with GDP reaching \$US3.42 trillion dollars in 2007 (**Economist.com, 2010**). China is a large and populous emerging country and its increasing growth over recent years has captured the attention of many researchers. Furthermore, China's transition to an emerging economy represents a change in the history of their economy as they expand and integrate into international capital markets (Athreye and Kapur, 2009). Along with China; Brazil, Russia and India are the key emerging markets, commonly known as the BRIC countries. They are the fastest growing economies in the world and account for almost half of the world's population (Athreye and Kapur, 2009). During the 2000-2008 period, these economies contributed to over a third of global GDP and since the beginning of the global recession in 2007 they have accounted for almost 45% of global growth (Goldman Sachs, 2010). According to various analysts China is projected to become the largest economy in the world, with Russia, India and Brazil following suit and *"relegating the US to fifth place"* (Economy Watch, 2010). Therefore, it is evident that these countries have experienced strong economic growth rates over the past eight years that have contributed to an increase in their size, resources and capabilities. The outcome of this has been a large increase in the number of merger and acquisition deals into these countries. Further information is illustrated in Appendix 4.

The majority of cross-border M&A research focuses mainly on the wealth effects of the bidding and target firms who engage in M&A deals in developed economies, for example the US, UK and Western Europe. However, empirical evidence is more limited with

regards to cross-border M&A deals completed in emerging regions of the world. Prominent exceptions are Chari et al. (2004), Graham et al. (2008), Francis et al. (2008) and more recently Aybar and Ficici (2009). Given the escalation in the number of more recent M&A deals across developing economies, the primary motivation of this study is to measure the short-term wealth effects for acquiring firms following the announcement of acquisition of target firms across a number of emerging markets during the time period 2000-2009. Additionally, this study explores the wealth effects of a single developed country (US) and the key determinants that drive these wealth changes. This study is unique as it provides more recent evidence and captures different economic conditions across the seventeen emerging countries observed. The 200-2009 time frame was chosen because it allows for an investigation into the frequency and consistency of deals carried out by US acquires into various emerging markets between the first and second half of the decade. Four emerging regions are analyzed in this study; Asia, Africa, South America and Eastern Europe to enable the researcher to assess the acquirer's wealth effects across the four emerging regions and to gain an insight into the possible variations that may occur. The US was chosen as the acquiring country because it plays a prominent role in the worlds capital markets. It is also the largest contributor of foreign direct investment (FDI) and is a key player in cross-border M&A activity. FIGURES

#### **1.4 Conclusion**

This chapter outlined the background to the study before discussing the rationale for the study and its contribution. The final section outlines the various limitations of the study. The structure of the paper is as follows: chapter 2 reviews the literature in relation to the wealth effects of US acquiring firms. Chapter 3 explains the data and methodology used in this study to compute and investigate the gains to US acquirers and the various factors determining these returns. Chapter 4 illustrates the research findings and chapter 5 provides a discussion of the findings. Finally, chapter six concludes the study and outlines the limitations of the study before outlining recommendations for future research.

## **Chapter 2**

### **LITERATURE REVIEW**

#### **2.1 Chapter Overview**

This chapter provides an insight into the theoretical motives for mergers and acquisitions, followed by empirical evidence which examines and the wealth effects of acquiring firms. This is followed by a detailed analysis of acquiring company shareholder returns across the US, UK and emerging markets. The specific risks and uncertainties associated with international M&As are then discussed. Finally, the key determinants and control variables influencing acquiring firm shareholders returns are then discussed before the conclusion to the literature review is documented.

## 2.2 Theoretical Motives for Mergers and Acquisitions

Berkovitch and Narayanan (1993) outlined three key motives for M&A activity: those of synergy, agency and hubris which are presented in Table 2.1 below. The table suggests that synergy is the key motive for M&A activity when the gains for both the target and acquiring shareholders are positive. Agency is the main motive when net gains are negative, whilst the hubris motive suggests that there are zero gains or losses.

**Table 2.1 Motives for mergers and acquisitions**

Motives	Total Gains	Gains to target	Gains to acquirer
<b>Synergy</b>	+	+	+
<b>Agency</b>	-	+	-
<b>Hubris</b>	0	+	-

### 2.2.1 Synergy motive

The synergy motive relates to the ability of an acquisition to be more successful than the companies were prior to the merger or acquisition (Huyghebaert and Luypaert, 2009). Synergistic acquisitions are motivated by the prospect of benefits and opportunities of uniting the operations of two firms. According to Seth et al. (2000) the synergy motive suggests that M&A deals are completed when the value of the newly formed or combined company is of greater value than the value of the individual firms. The assumption relates to the fact that the firms will only proceed with the M&A if gains are expected by both parties to the deal. According to Letho and Lehtoranta (2004) there is an opportunity to realise synergies if the acquiring company possess exclusive technology or attains excellent knowledgeable skills in the target. Other sources include portfolio diversification (Lessard, 1973), economies of scale (Baumann, 1975), increasing market power and capitalizing on a firms core competencies (Hopkins, 1999). Seth et al (2000)

examined the motives behind foreign acquisitions by US firms and established evidence that the synergy motive was the core reason for their sample of cross-border acquisitions by US firms.

### **2.2.2 Agency motive**

Agency theory asserts conflicting interests between managers and shareholders as the managers are interested in increasing their power and security, while the shareholders are interested in increasing stock prices and profits (Hopkins, 1999). M&As are said to be largely motivated by the personal aims of managers (Schleifer and Vishny, 1991). Managers may have an incentive to expand their company domestically and internationally in order to increase their power and compensation packages at the risk of the shareholders of the acquiring firm (Jensen, 1986). Conflict between managers and shareholders is exuberated even further when the acquiring company has accrued vast amounts of free cash flow (FCF). The hypothesis developed by Jensen states that managers are more inclined to invest money in unprofitable acquisitions when the firm has large amounts of free cash flow. Self-interested managers use this extra wealth to 'empire build' instead of returning it to their shareholders (Martynova and Renneboog, 2008). Consistent with this view is the findings of Harford (1999), who state that acquisitions conducted by cash rich companies are value diminishing. This is supported by Lang et al., (1991) and Firth (1991) who conclude that the management of acquiring firms benefit from acquisitions regardless of whether their shareholders gain or lose from the deal. .

### **2.2.3 Hubris Motive**

The hubris motive asserts that the managers of acquiring firms make poor decisions whilst evaluating the target company (Seth et al., 2000). Aktas et al. (2009) define the concept of hubris as "exaggerated pride or self-confidence". Hubris is associated with the overbidding by acquiring firms which has a tendency to lead to considerable negative abnormal returns (Aktas et al., 2009). Roll (1986) states that managerial hubris is the main reason for unsuccessful M&As and subsequently negative shareholder returns of the acquiring firm. The acquiring firm's management team may overestimate their abilities



to manage an acquisition successfully and can lead to negative abnormal returns for the shareholders of the company (Rau and Vermaelen, 1988; Martynova and Renneboog, 2008). Malmendier and Tate (2005) provide evidence of managerial hubris.

### **2.3 Rationale for Cross-border Mergers and Acquisitions**

In relation to Europe, the commencing of the European monetary union (EMU) and the introduction of the euro as a single currency in 1999 influences international trade and investment in financial, product and services markets (Sudarsanam, 2010). The explosion of technology based on substantial investments in R&D, marketing and distribution have largely encouraged international M&A activity as firms have to sell to a wide range of markets in order to redeem the costs of these investments. There is also a larger availability of capital to firms and this provides them with the opportunity to expand internationally (Weston and Weaver, 2001). Also, Economic reforms and the liberalization of various emerging markets such as the BRIC countries (Brazil, Russia, India and China), who accentuate competition and welcome inward FDI have become attractive locations for acquiring firms (Sudarsanam, 2010).

Dunning (2000) developed an eclectic paradigm of the foreign acquisition decision, which is outlined in Appendix 5. The model involves three stages and it illustrates the various decisions that influence firms to acquire internationally. If firms possess certain competitive advantages they must consider whether these can be exploited to create value through the foreign acquisition. (Ownership decision) They must also decide if the international location is superior to the location in the domestic country. (Location Decision). The final consideration involves whether or not foreign production based on the firm's ownership advantages should be carried out under the ownership and organizational control of the firm or through alternative modes, for example licensing or strategic alliances. (Internationalization decision). If the location decision favours foreign production then the firm may decide to acquire an existing business in the host country.

## **2.4 Risks and uncertainties associated with international M&A activity**

Acquirers involved in international deals can obtain various benefits however they are also exposed to a variety of uncertainties and country risks, consequently elevating the cost of the acquisition deal (Markidas and Ittner, 1994). They may have difficulty in estimating the true value of the foreign deal and may suffer 'the liability of foreignness' (Reuer et al., 2004). These risks relate to the disparity in culture, business and operational practices and customer preferences. Furthermore, lack of experience regarding international business may also reduce the benefits of cross-border M&As (Aybar and Ficici, 2009).

Kiymaz (2009) categorizes country risks as economic, political and financial risks. Economic risk is associated with environmental changes that impact certain industries or all firms within an economy. Political risk analysis is the analysis of certain political events that may have detrimental effects to firms involved in international business. Finally, financial risk is related to the economic condition of a country, for instance the soundness of monetary policy, gross domestic product and inflation rate (Kiymaz, 2009). Findings by Kiymaz (2009) suggest that country risk rating variables have a significant influence in explaining the wealth effects to US bidders as a positive relationship is found between the wealth gains to bidders and financial and political risk ratings, suggesting that established financial and political markets in target countries have a positive effect on the wealth gains to bidding US firms. However, an inverse relationship is also established between acquirer wealth gains and the economic risk ratings, indicating that countries with a lower level of economic risk lead to an increase in the bidding company's wealth gains. Mudambi and Navarra (2003) also claim that country risk is a consequence of political, economic, financial and social dynamics. Conklin (2002) condition that country risk analysis is an essential procedure when selecting a location for international business. Similarly, Oetzel et al (2001) condition the effectiveness of country risk evaluation.

Erb et al. (1996) assert that country risk measures are positively associated with future returns. Diamonte et al. (1996) conducted a study on relation to the impact of political

risk in emerging and developed markets. They state that the returns in decreasing political risk markets, such as emerging markets are higher than those in increasing political risk markets. Also, Habib and Zurawicki (2002) document that the differences in corruption levels of domestic and international countries play a considerable role in influencing foreign direct investment. In contrast to the previous claim Weitzel and Berns (2006) state that corruption levels and takeover premiums are inversely related in their merger and acquisition study.

In summary, the theoretical framework underpinning mergers and acquisitions suggest three competing motives for such activity. The factors influencing cross-border mergers and acquisitions and the risks associated with such activity are of considerable importance to this paper. The next section documents empirical evidence of US and UK acquiring company shareholder returns in relation to international M&A activity

## **2.5 Evidence of acquiring company shareholder returns in international M&A's**

A large volume of research has been conducted on estimating the wealth effects for acquiring shareholders engaged in domestic acquisitions and positive acquiring wealth effects is the general consensus (Bradley et al., 1988; Cybo-Ottone and Murgia, 2000; Datta et al., 2006). However, fewer studies examine the effects of cross-border mergers and acquisitions and the wealth effects of acquiring shareholders (Gregory and McCorriston, 2005). Of the research conducted within this area the evidence is mixed as losses are derived in some cases and small positive abnormal returns obtained in other scenarios (Martynova and Renneboog, 2008). Bruner (2002) illustrate that twenty out of forty-four studies report negative returns for the acquiring shareholders and twenty four report positive returns. Roll (1986) conclude that the performance of acquiring firms decreases after the announcement of the M&A deal. However, in contrast La Porta et al. (2000), Doukas (1995), Walker (2000) and Kiymaz (2004) all find positive returns for the

shareholders of acquiring firms. However, Denis et al. (2002) contradict these findings and state that international acquisitions are more likely to decrease acquirer's returns. Aw and Chatterjee (2004) and Conn et al. (2005) reinforce this and assert that the disadvantages associated with international acquisitions overshadow the advantages in terms of acquirers returns when compared to domestic acquisitions.

The following three sections document empirical evidence of shareholder returns in relation to international acquisitions by US and UK acquirers and also acquirers from other countries. **Appendix 6 Contains a table summarizing many of the important studies relating to this section of the thesis.**

### **2.5.1 Evidence from US acquirers**

Doukas and Travlos (1988) establish that there is no substantial impact on the wealth effects of US acquirers subsequent to cross-border M&A deals through the period 1976 to 1986. These results are consistent with the findings of Datta and Puia (1995) who find non-significant abnormal returns for their sample of US acquiring firms. In contrast, Kiymaz (2009) analyze the impact of country risk ratings on the wealth effects of US acquirers who complete international acquisitions and find empirical evidence of significant positive returns following the acquisition announcements through the sample period 1989-2003. Earlier, Markides and Ittner (1994) find positive returns of 0.54 percent for US bidders who acquire international targets using a five day event window during the period of 1975-1988. Also, Cakici et al. (1996) investigate the wealth effects of US firms that acquired 195 international targets during 1983 to 1992 and discover significant wealth gains to US acquirers around the bid announcement. They report positive returns of 2 percent over a twenty-one day window. Also, Kiymaz and Mukherjee (2000) and Kiymaz (2004) find empirical evidence of significant positive returns to US bidders during the deal announcement. For a sample of 4430 M&As throughout the period 1985-1995 Moeller and Schliemann (2005) provide empirical evidence that US firms who acquire foreign targets as opposed to domestic targets experience lower but positive wealth effects of 1% over a three day window during the period 1985-1995. Furthermore, Freund et al. (2007) analyzed the wealth effects of 194

US firms who acquire international targets during the time frame of 1985-1998 and find significantly positive returns of 1.4 percent for US acquirers over a three-day event window. In contrast, Conn and Connell (1990) who report that US acquirers involved in international acquisitions experience negative returns of -2.5 percent over an event window of six months.

Friederick et al. (2004) investigate the gains to US acquiring shareholders after the announcement of cross-border acquisitions. They assess the returns over the three day window event using market model benchmark returns with the CRSP equally-weighted index returns. Their findings reveal that smaller bidding firms gain more than larger bidding firms when acquisitions are announced. Large companies are more inclined to offer higher premiums to targets than smaller companies and this regularly results in negative returns for the bidding company shareholders. In relation to this, Francis et al. (2008) conduct a study through the period 1990-2003 to re-visit the wealth effects of acquirers in cross-border M&As. They find evidence of a positive cross-border effect in the form of positive returns for US firms conducting M&As during this time frame. Their results also consisted of large variations between the abnormal returns of large acquirers which were found to be 1.49 percent and the returns of small acquires which were reported to be significantly larger at 3.63 percent. Moeller et al. (2004) investigate a sample of 12,023 acquisitions by US firms from 1980 to 2001 and suggest that the wealth effects associated with small companies are 2.24 percent larger than the returns associated with large companies. The difference in returns implies the existence of a size effect in M&A returns. Additionally, Martynova and Renneboog (2008), examined the past five completed M&A waves and state that the acquirers cash flow, leverage and firm size have a negative impact on their own returns. They also find lower returns for acquirers in hostile takeovers and in acquisitions involving equity payments. However, positive were discovered when the acquired and acquiring companies were in close proximity to one another, in relation to their geographic location.

### **2.5.2 Evidence from UK acquirers**

Cross-border M&A activity in the UK has increased rapidly over the past ten years and it

represented thirty percent of the total value of global cross-border M&A 's in 2004 (Uddin and Boateng, 2009). Eun et al. (1996) analyze the synergy theory during the sample period 1979 to 1990 and provide empirical evidence that UK acquiring firms experience significantly negative wealth effects over an eleven day event window when they acquire international targets. Similarly, Aw and Chatterjee (2004) report statistically significant negative abnormal returns for UK acquirers. Antoniou et al. (2007) investigate UK shareholders wealth effects over the time frame of 1987-2004 and find statistically significant positive returns of 1 percent over a five day event window. More recently, Uddin and Boating (2009) conduct a study through the period 1994-2003 to explore the wealth effects of UK companies acquiring target firms in emerging markets and find negative short-run returns for UK acquirers. They illustrate that the performance of UK acquirers is affected by the geographic origin of their target firms, the method of payment used, acquisition strategy and the status form of the target.

In contrast however, Goergen and Renneboog (2004) report significant positive returns of 9 percent in the long-run for UK acquirers over a six month event window. Also, Cosh et al. (2006) report negative returns of 1 percent for UK acquirers during the 1987-2004 period. Several academics put forward the reasoning for positive acquiring returns, some of which are international diversification (Markidas and Ittner, 1994); exchange rate opportunities (Markidas and Ittner, 1994) and a more favourable tax system, for example lower corporation tax in the host country in comparison the domestic country (Manzon et al., 1994).

### **2.5.3 Evidence of acquirers returns from other countries**

Schiereck et al. (2009) investigate 285 European M&As during the period 1997-2002 and their results indicate that bidding firms experience negative returns of 1.5 percent. In contrast Kang (1993) find positive returns of 0.59 percent over a short event window of two days for Japanese firms acquiring targets in the US. For Dutch firms, Corhay and Rad (2000) find weak evidence that international acquisitions create value. According to Cakici et al. (1996) Canadian bidding firms report small positive abnormal returns, while Japanese, Australian and UK firms experience considerable positive abnormal returns

around the acquisition date. More recent research by Eije and Wiegernick (2010) find positive short-term returns for Chinese acquiring firms.

In summary, the majority of the studies observed report positive returns for US acquirers and conclude that these returns are greater for smaller firms. However, the evidence is relatively mixed for UK acquirers, illustrating positive and negative wealth effects over short and long time frames. The following section outlines empirical evidence of bidder returns for acquisitions into emerging markets.

## **2.6 Evidence of M&As in emerging markets**

Francis et al. (2008) find empirical evidence of positive wealth gains for US bidders who acquire targets across developing markets during the period 1996-2006. According to Eije and Wiegernick (2010), the Chinese market provides favorable opportunities for acquirers as the Chinese economy has recently been opened to foreign acquirers, they have shown stable and precipitous growth and China is now one of the largest economies in the world. These results are consistent with the findings of Chari et al. (2004) who examined the stock markets reaction to the announcement of M&As in developing markets through the period 1988-2002. Their evidence shows positive acquirer returns of up to 3 percent. Chari et al. (2004) also state that the acquiring firms bargaining power may increase as there are presumably less acquiring firms in emerging markets and also if the target firm is in financial distress. According to Mody and Negishi (2002) subsequent to the Asian crisis, international acquisitions occurred in the most distressed economies. For the period 1992-2003, Graham et al. (2008) discover that value creation from acquiring firms in emerging markets is the consequence of synergies achieved through the transfer of technology and skills from the acquirer to the target firm operating in a developing country. The acquisition of foreign firms increases the rapid exploitation of growth opportunities in foreign markets (Seth et al., 2000).

Exchange rate instability is deemed an essential element of economic risk that may influence the value of firms in cross-border M&As. Therefore exchange rate risk is significant to firms who are conducting M&As in emerging markets (Graham et al.,

2008). Aybar and Ficici (2009) examine the wealth effects of US acquiring shareholder following the announcement of 433 M&As across emerging markets throughout the sample period 1991-2004. In contrast to the majority of the findings outlined, Aybar and Ficici (2009) report negative wealth effects for US bidding shareholders subsequent to the announcement of a deal in emerging markets. They further illustrate that the high tech nature of the bidding firms and the search of targets in similar industries negatively affect acquiring firms abnormal returns.

It can be concluded from the literature above that acquisitions into emerging markets result in positive wealth gains to the acquirers with the exception of Ayabar and Ficici (2009). It is also noted that the exchange rate is an important element to consider when deciding to acquire targets in emerging countries.

## **2.7 Key determinants of US shareholder returns**

According to Walker (2000) cross-border mergers and acquisitions are more beneficial than domestic mergers and acquisitions because of synergy gains arising from economies of scale, efficient technology and access to surplus knowledge, efficient technology and an enhanced corporate governance structure. Furthermore, cross-border mergers and acquisitions may facilitate firms to earn abnormal profits from differences in tax structures and imperfect capital markets may also allow firms to exploit exchange rate movements (Froot and Stein, 1991). Conversely, Denis et al. (2002) believe that cross-border mergers and acquisitions amplify agency problems. If the bidding firm lacks sufficient information with regards to the foreign target and its country, it may fall victim to the theory of the 'winners curse' and pay an unwarranted premium for the foreign firm (Eckbo, 1992). Fatemi (1984) state that international acquisitions provide benefits of international diversification to foreign acquirers. Furthermore, acquiring firm wealth



effects have been found to depend on their own characteristics (Palepu, 1986). If markets are efficient, valuation metrics such as market-to-book (MTB), price earnings, return on investment (ROI) and market capitalization ratios should be reflective of the firm's investment opportunity and managerial skill (Williams and Liao, 2008) Superior performing firms carry out effective acquisitions (Morck et al. 1990).

There are numerous explanations for cross-border mergers and acquisitions (M&A) and consequently many sources of value creation. Outlined below are some of the key factors motivating M&As that transpire frequently in M&A literature.

### **2.7.1 Economies of scale and growth prospects**

According to Seth et al., (2004) cross-border acquisitions are value generating and reinforce the competitive position of the acquirer and enhance the development of growth prospects in overseas markets. Other factors include establishing economies of scale to reduce costs and as a means of entering new foreign markets (Hopkins, 1999). This allows firms to grow a market position in a foreign country without establishing themselves from foundation and adding additional capacity (Hopkins, 1999). This is further supported by Cassiman et al. (2003). Similarly, Walter and Barney (1990) refer to economies of scale and scope and the expansion of markets and product lines as motives for M&As.

### **2.7.2 Deregulation**

Deregulation is also a powerful motive for M&As as restraints are removed and this encourages firms to enter different markets (Huyghebaert and Luypaert, 2009). Martynova and Renneboog (2008) state that the increase in clustering of M&A activity by industry during the fourth and fifth M&A waves due to the deregulation of specific industries. Similarly, Schoenberg and Reeves (1999) document that industry exposure to deregulation is a significant factor influencing the level of M&A activity. Furthermore, Andrade and Stafford (2004) provide empirical evidence of a positive relationship between industry changes and M&A activity during the 1990s.

### **2.7.3 Investor protection, ownership and governance**

Research has shown that wider economic and corporate governance policies may influence the decision to acquire firms in foreign markets (Graham et al., 2008). This is supported by Rossi and Volpin (2004) who affirm that M&A activity is considerably greater in countries with superior accounting standards and investor protection. Hagendorff et al. (2008) conduct a study regarding the impact of various investor protection regimes on acquiring shareholders returns. They provide evidence of an inverse relationship between acquirers' returns and the level of investor protection. They further state that a higher premium is commanded by targets if the target nation has extreme levels of investor protection, for instance the UK. Ferreira and Matos (2008) find that institutional investors control a greater level of shares in firms with superior disclosure standards. Also, the intensity of institutional ownership signifies the intensity of governance standards of a particular firm. In contrast, target firms with reasonably poor governance or a low level of institutional ownership could gain from an acquisition by a company with superior governance and a higher level of institutional ownership. According to Aybar and Ficici (2009) efficient corporate governance on the bidders part leads to positive acquiring shareholder returns. In relation to emerging markets, acquiring shareholders may approach emerging market M&As with suspicion due to the poor corporate governance associated with the majority of emerging markets.

### **2.7.4 Acquisition of technological and human resources**

According to Hopkins (1999) strategic motives drive M&A activity in order to enhance the intensity of the core strategy of the business by increasing market power, attaining key resources or to benefit from a company's key competences. Kish and Vasconcellos (1998) also contend that expansion into new markets through M&As provides firms with an opportunity to gain a competitive edge from the ownership of specialized resources. Technological change is also associated with an increase in M&A activity (Martynova and Renneboog, 2009). Jovanovic and Rousseau (2002) illustrate that M&A waves during the 1980s and 1990s were influenced by the development of information technology.

### **2.7.5 Macroeconomic conditions**

Preceding studies in the area of M&As have illustrated that macroeconomic conditions influence companies decisions to acquire firms in foreign markets (Kish and Vaconcellos, 1993). In their study, Rossi and Volpin (2004) find that variations in regulation and law impact the volume and trends of M&As. They confirm that the intensity of M&A activity is higher in markets with more efficient corporate governance and accounting standards. Favourable economic conditions in the acquiring firm's nation are likely to influence international acquisitions with the objective of increasing demand and diversification levels (McDonagh Bengtsson, 1990). However the authors also endeavor that adverse cyclical conditions, for example recessions may influence acquiring firms to focus on their domestic M&A business. This notion is related to the economic disturbances model developed by Gort (1969) where an increase in M&A activity is predicted during periods of economic changes. Golbe and White (1987) conclude that changes in economic growth and capital market conditions are positively related to the volume of M&A activity.

### **2.7.6 Exchange rates and Gross Domestic Product (GDP)**

Froot and Stein (1991) assert that there is a correlation between M&A activity and exchange rate movements, however they reinforce that there is no evidence that a change in the exchange rate increases the wealth effects of acquirers. Also, Vascellos and Kish (1993) show an inverse relationship between exchange rates and acquirers returns. Goldberg (1993) reports dissimilar findings. The author asserts that an appreciation of the dollar leads to an increase in foreign acquisitions of US firms and a decreasing trend in US acquisitions of international firms. Similarly, Conn et al. (2005) state that acquiring firms gain the stronger their currency is in relation to the currency of their target, leading to a reduction in the cost of the acquisition. In contrast, Cakici (1991) state that acquirers with a strong currency experience negative wealth effects as the value of future repatriated profits will be lower. In relation to emerging markets, Muller and Veschoor (2007) claim that the exchange rate instability experienced during the 1997

Asian crisis increased awareness of exchange rate risk and the potential vulnerability of firms who engage in international business. Therefore, exchange rate risk is of significant importance to companies completing M&As in emerging markets.

Gross domestic product (GDP) is an indicator of the economic health of the target country (Graham et al., 2008). GDP growth sends positive signals to the market of future economic opportunities available in the target nation (Kiymaz, 2009). Kiymaz (2004) illustrates that the economic conditions in the target country has a significant effect on the returns of acquiring shareholders.

In summary all of the factors above have important implications in determining the returns to acquirers. Therefore all of these factors should be considered by bidding firms prior to the completion of merger and acquisition deals. The following section outlines additional variables influencing acquiring company shareholder returns.

## **2.8 Additional variables influencing acquiring company shareholder returns**

Many studies have suggested that the performance of acquiring firms has a tendency to vary and depend upon certain firm and event characteristics. For instance; geographic origin of the target firm, company status, industry relatedness of bidder and target, the experience of the acquirer, payment method and deal size. The following section outlines the literature behind these six key variables and their influence on acquirers returns.

### **2.8.1 Geographical origin of target firm**

It has been acknowledged in the M&A literature that international diversification is the main benefit arising from cross-border mergers and acquisitions. This enables the acquiring firm to exercise its tactical advantages in foreign markets with the objective increasing market power and profits (Kiymaz and Mukherjee, 2000). Gleason et al. (2002) find empirical evidence of positive returns for bidding firms when they purchase

targets in countries with a lower taxation system and less retraining government regulations. Doukas and Lang (2003) state that geographically diversified firms improve the risk-return trade-off. Berger et al. (2000) also assert that international acquisitions provide opportunities to improve the return-risk trade off of bidding firms. Hisey and Caves (1985) state that the location of the target firm is an essential detriment of the advantages of a cross-border acquisition. According to Doukas and Travlos (1988) and Chari et al. (2004) acquiring firm performance will increase if the target firm is from a developing country. Kiymaz (2004) find evidence to support this claim and report that US banks that acquire firms in Latin American countries encounter larger returns. However, Conn et al. (2005) find contradictory results and state that acquiring firms experience greater returns when they acquire targets from developed countries. Kiymaz (2003) and Moeller and Schlingemann (2005) also establish that the geographic location of target firms affects the performance of acquiring firms.

### **2.8.2 Private versus public target firms**

The status of the target firm is considered to influence the wealth effects of acquiring firms (Uddin and Boateng, 2009). This is based on the idea that acquirers experience negative wealth effects when acquiring public targets and positive wealth effects when buying private targets (Fuller et al., 2002). Cited by Uddin and Boateng (2009), Conn et al (2005) find that private companies make up the majority of companies acquired through cross-border merger and acquisitions and find that the acquisition of private firm's in comparison to public firm's create positive wealth effects for acquiring firm shareholders. Similarly, Chang (1998) state that the acquisition of private firm's earn significantly positive abnormal returns in comparison to the acquisition of publicly listed firms. Eije and Wiegerinck (2010) state that shareholders are less likely to have shares in private firms and therefore they base their evaluation of acquisitions of private firms only on the results for the acquirer. For that reason acquisitions of private firms are not as likely to generate negative returns to the bidders' shareholders and therefore one may find on average positive returns for the acquiring shareholders. Fuller et al (2002) concur with the above authors and conclude that private firms are less liquid and are more difficult to sell, hence they consequently trade at a discount price in contrast to publicly

listed firms.

### **2.8.3 Target and acquirer's relatedness**

The relatedness of the target and acquiring firms is found to influence the performance of acquiring firms (Uddin and Boateng, 2009). Relatedness refers to acquisitions between companies where there is a common link in their market, SIC industry codes, product or technology (Hopkins, 1999). Doukas and Travlos (1988) acknowledge the benefits that are gained from entering into new industry sectors. Yet more recently, Moeller and Schlingemann (2005) disagree as they find evidence that acquiring company shareholder returns are smaller if the bidding firm acquires a target in a diverse industry.

Markides and Ittner (1994) and Eun et al. (1996) report positive abnormal returns for related acquisitions. Martynova and Renneboog (2006) report positive returns of 0.98% for the acquirers of related acquisitions and negative returns of 0.45% for the acquirers of unrelated deals during the European M&A wave of the 1990s. Yet, Datta and Puia (1995) state that the impact of the industry relatedness on the performance of the bidding firms remains varied.

Various studies have observed the functioning of related acquisitions that are connected through the market environment, specific products or technology (Hopkins, 1999). Porter (1987) reveals a higher divestiture rate for unrelated acquisitions in comparison to related acquisitions. Shelton (1988) and Healy et al (1997) state that a high degree of relatedness between the bidding and target firms improves the functioning of the acquiring firm after the event. Singh and Montgomery (1987) discover that related acquisitions perform better based on total dollar gains. However, in contrast, Chatterjee and Lubatkin (1990) condition that relatedness of firms is not a benefit. In addition, Hopkins (1987) observed unrelated acquisitions and also market- and technology-related mergers and acquisitions and he found that while market relatedness was a prime performer, it did not perform superior than the non-acquisitive firms.

#### **2.8.4 Experience of the acquiring firm**

According to Aybar and Ficici (2008) the level of experience with regards to cross-border M&A deals is an important benefit for acquiring firms and is associated with positive acquiring shareholder wealth effects. Doukas and Travlos (1988) illustrate that the M&A announcement of bidders with an established presence in the foreign country earn positive returns. Post acquisition costs are also reduced due to the familiarity with international M&A deals, consequently increasing the gains to acquirers (Aybar and Ficici, 2008).

#### **2.8.5 Payment method**

Various papers have advocated that the payment method involved in M&As has an influence on the performance of the acquiring firm (Uddin and Boateng, 2009). According to Arnold (2005) cash is found to be the most popular method of payment, followed by equity and preference shares.

According to Asquith et al. (1983) the size of the target firm in comparison to the bidding firm positively affects the bidding firm's returns. Small companies generally pay for the deal with cash and this usually sends positive signals with regards to the acquiring shareholders. The author also concluded that cash acquisitions perform superior to stock acquisitions.

According to Travlos (1987) acquisitions of public firms paid for with equity experience smaller returns than those acquisitions paid by cash. Also Myers and Mailuf (1984) state that firms that pay with equity sends out signals that the market overvalues their assets. However, Fuller et al. (2002) state that privately acquired firms paid for with equity do not experience smaller returns than private acquisitions paid for with cash.

Fuller and Glatzer (2003) and Dan bolt (2004) conclude that cash payments of acquisitions result in higher returns for acquirers in comparison to stock transactions. However, Conn et al (2005) find that cash deals do not result in favorable performance relative to non-cash deals.

### **2.8.6 Deal Size**

It is evident from the previous section that there is interconnectedness between the size of the deal in terms of value and the payment form of the acquisition. According to Uddin and Boating (2009) the size of an acquisition deal can have an influence on the performance of bidding firms involved in international acquisitions for various reasons. The issue of hubris is likely to be raised if the size of the deal is substantial (Seth et al., 2000). However, Myers and Majluf (1984) affirm that large acquisitions provide opportunities for economies of scale and scope and benefits associated with financial synergy. Correspondingly, Asquith et al. (1983) and Danbolt (1995) claim that acquiring firms experience greater gains the larger their target firm. The proclamation is that large combinations assist the exploitation of the target firm's resources and result in increased revenues and cost savings due to greater economies of scale.

### **2.9 Conclusion**

This chapter reviewed the relevant literature related to cross-border mergers and acquisitions. The theoretical motives for domestic and international M&As were discussed, followed by the risks associated with cross-border deals. Empirical evidence was then documented, consisting of evidence of acquirers returns in the US, UK, additional markets and finally emerging markets. The last two sections of this chapter outlined the key determinants of US acquiring shareholder returns and additional variables that influence these returns.



## **Chapter 3**

### **DATA AND METHODOLOGY**

#### **3.1 Chapter Overview**

The purpose of this chapter is to outline the research methodology utilized in the study. The chapter will begin with a review of both qualitative and quantitative research methods. Details of the research questions and hypothesis addressed in the empirical sections of this study will then be discussed. This is followed with an overview of the data sample and the data collection process and the research methodology employed to answer the research questions. Finally, the last section of this chapter outlines the limitations of the methodology employed.

### **3.2 Quantitative versus Qualitative research**

Research is usually classified into the following groups, namely quantitative and qualitative research. Qualitative research involves using words and observations to express an idea, whereas quantitative research involves the use of numbers, data and facts to express ideas and opinions (Bryman and Bell, 2007).

Qualitative analysis is carried out using focus groups and interviews, whereas quantitative analysis involves the collection and analysis of data using statistical programs such as Excel, SPSS or RATS.

This study utilizes a quantitative approach as opposed to a qualitative approach. According to Bryman and Bell (2007) one of the main difficulties with qualitative research is that it quickly produces an immense database because of its dependence on text in the form of notes and interview transcripts. Therefore it is important for the researcher to protect themselves from being enthralled by the richness of the data collected, so that there is a failure to carry out a true analysis. Therefore qualitative research may be more suitable for generating new ideas and theories, whereas quantitative is more appropriate for testing new concepts and theories. Quantitative data has reached a superior level in that an explicit set of rules about how to handle data have been established. In general the researcher will choose one form of analysis; however it is not unusual for both forms to be employed. This study involves the collecting, quantifying and analyzing financial data; therefore quantitative research is more suitable and thus utilized.

### **3.3 Research Objectives**

The objective of this study is to measure the wealth effects for US acquiring firms following the announcement of acquisitions of target firms across a number of emerging markets during the time period 2000-2009 and to analyze the key determinants driving these wealth changes.

This analysis is significant for various reasons, as firstly international acquisitions are an important source of investment opportunities for US firms (Francis et al., 2008). Secondly, Li (2007) has recently illustrated that subsequent to the Sarbanes Oxley Act, the cross-listing of foreign companies in the US, especially those from emerging markets has decreased substantially. Hence, foreign firms who desire to gain access to the US market are more inclined to agree to be acquired by a US firm. Consequently, M&A activity has become a significant method for foreign firms especially those from emerging economies to achieve a foothold to US capital markets. The liberalization of various emerging markets has facilitated for a number of new studies to be conducted and report new findings in relation to the M&A literature. Emerging economies continue to attract global investors as they have been growing at a rate three times faster than developed economies (Bruner et al., 2002). The BRIC (Brazil, Russia, India, China) countries in particular have experienced rapid economic growth in recent years, with a large amount of attention focused on the superior expansion of the Chinese economy. Therefore these economies have become attractive locations for acquiring firms (Economist, 2010). Finally, US cross-border acquisitions increase our understanding of global integration far beyond which is achievable by analyzing solely domestic M&A activity.

The time frame of 2000-2009 was chosen because it provides an insight into the frequency and consistency of deals carried out by US acquirers into various emerging markets between the first and second half of the decade. The time range also allows for the examination into the variation of US acquirer returns throughout the decade. The current global recession has had a detrimental impact on the volume of the more recent deals, especially in the more developed economies (World Investment Report, 2008). However, there is little evidence regarding the effect of the global recession on the volume of M&A deals carried out in emerging markets. Therefore the timeframe investigated in this study allows for the exploration of the possible impact the economic downturn has had on the level of M&A activity and the volume of returns regarding US bidders acquiring targets in emerging markets.

The research objective is addressed through a series of research questions which are as follows:

1. What are the wealth effects for US acquiring firm shareholders engaged in international M&As into emerging markets?
2. Do the wealth effects for US acquiring firms engaged in M&A activity into emerging markets differ with regards to the geographic location of the target firms?
3. Do the wealth effects for US acquiring firm shareholders differ over the time period 2000-2005 in comparison to the 2006-2009 period?
4. Do the wealth effects for US acquiring firm shareholders into emerging markets differ in respect of the status of the target (public or private)?
5. Do the wealth effects for US acquiring firm shareholders into emerging markets differ in respect of the deal between parties being in similar or dissimilar industry sectors?
6. Do the wealth effects for US acquiring firm shareholders into emerging markets differ with respect to the payment method used in the deal?
7. Do the wealth effects for US acquiring firm shareholders into emerging markets differ with the relative size of the value of the deal?
8. Do the wealth effects of US acquiring firm shareholders involved in M&As activity into emerging markets differ between multiple and single acquirers?
9. What is the impact of the foreign exchange rate, GDP target levels, firm and event specific variables on the wealth effects of US acquiring shareholders?

### 3.4 Sample of Data

The sample consists of international M&As by US firms into emerging markets. The target firms are located in the following regions of the world; Africa, Asia, Europe and South America. The study concentrates on the acquiring shareholder returns across all industries. To avoid any insignificant impact on the performance of acquiring firm acquisition events only completed deals that involve the acquisition of more than 50 percent of the target firm shares are included in the sample, similar to Uddin and Boateng (2009). The sample frame extends over the period 2000-2009. This timeframe allows for the investigation of a sufficient sample and some of the more recent M&A deals into emerging markets. It also facilitates an analysis regarding the consistency of deals throughout the decade and the difference in the volume and value of deals and shareholder returns in the first and second half of the decade.

The preliminary sample was collected from *Thomson One Banker* and access to this database was provided by Waterford Institute of Technology. The deal tear sheets provided information regarding the announcement date, the name of both acquiring and target firms, the nationality of the acquirer and target firms, public status, industry codes, industry of acquiring and target firms, summary of the transaction, the value of each deal and the consideration offered by the acquiring firms.

During the sample period, 79 successful emerging market acquisitions were identified with an average transaction value of US\$67.14 million. Table 3.1 outlines the geographic location of each target firm. The total number of acquisitions in the sample occurred in 17 different emerging countries. In relation to the geographic region of the targets, South American targets encompass 58% of the sample. The BRIC economies represent 44% of the total sample. Out of the total 17 emerging markets observed, the majority of targets are from China, which comprising 20% of the sample of targets. This reflects the attractiveness of the Chinese economy as a suitable location for cross-border M&As; with its liberalized economy, rapid growth rates, deregulation and high levels of domestic saving (Athreye and Kapur, 2009). Mexico was the second most popular target country making up just over 16.5% of the sample, followed by India (10%) and Brazil (8.9%).

**Table 3.1 Sample outlined by target country**

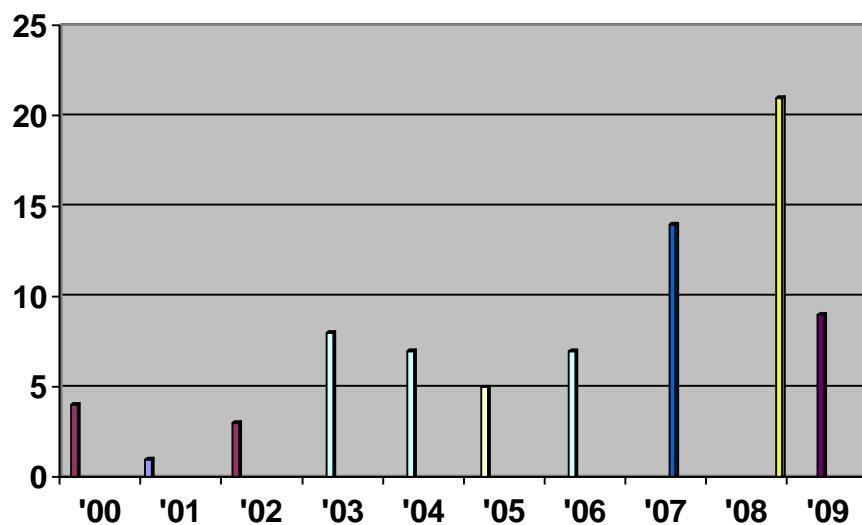
<b>Emerging markets</b>	<b>No. of deals</b>	<b>Percent of total deals</b>
<i><b>Africa</b></i>		
Egypt	1	1.26
South Africa	2	2.53
<b>Total</b>	3	3.79
<i><b>Asia</b></i>		
China	16	20.25
India	8	10.12
Philippines	2	2.53
<b>Total</b>	26	32.9
<i><b>Europe</b></i>		
Russia	4	5.1
<b>Total</b>	4	5.1
<i><b>South America</b></i>		
Argentina	5	6.3
Brazil	7	8.9
Chile	4	5.1
Columbia	6	7.6
Costa Rica	1	1.3
Guatemala	1	1.3
Mexico	13	16.5
Peru	5	6.3
Puerto Rico	2	2.5
Venezuela	1	1.3
Bolivia	1	1.3
<b>Total</b>	<b>46</b>	<b>58.4</b>

Figure 3.1 provides the annual distribution of the volume of acquisitions across emerging markets. The year 2008 appears the most popular year for M&A deals in emerging markets, accounting for over 26% of the total. The year 2007 was the peak year for Chinese acquisitions by US firms. During this period issued new and improved M&A regulations which facilitate the M&A process. The number of deals in emerging markets appears not to be evenly distributed across the time frame. Transactions increased gradually from 2005 and peaked in 2008 and this was followed by a large decline in 2009.

The information illustrated in Figure 3.1 corresponds with Martynova and Renneboog (2008) in that since mid-2003, M&A activity has been increasing again since its sharp

decline in 2001 and this showed signs of a new takeover wave emerging. However, the sharp decline in from the year 2008-2009 demonstrates the adverse effects of the US credit crisis. This decline also concurs with Martynova and Renneboog who claim that M&A activity is often disturbed by a large decrease in the world's stock markets and subsequent economic recessions.

**Figure 3.1 Sample of cross-border M&As in emerging markets across time (2000-2009)**



### 3.5 Event Studies

This study employs an event study in order to examine the wealth effects US bidding firms involved in international M&As across emerging markets throughout the sample period. The event date for this analysis is the announcement date of the merger or acquisition deal as derived from *Thomson One Banker* database.

Event study analysis in empirical finance has become a universal standard in estimating stock price response to a particular event such as the announcement of a merger or acquisition (McWilliams and Siegel, 1997) and it has been extensively utilized to examine both domestic and international mergers and acquisitions. Therefore event study methodology allows academics and researchers to measure the wealth effect of acquisitions announcements on both the acquiring and target firm (Ayber and Ficici, 2009).

McWilliams and Siegel (1997) have expressed that the dimension of the event window employed in an event study is the most important concern in research design. Uddin and Boateng (2009) state that the event window ought to be *"short enough to increase the power of the test and at the same time long enough to capture the full effect of the event in question"*. Subsequent this concern and bearing in mind the tendencies in previous literature in the area of international mergers and acquisitions and their performance concerning the length of the event window, this analysis adapted the event windows similar to Uddin and Boating (2009) who applied a short event window varying from one day before the date of announcement to one day subsequent to the announcement date and a reasonably extended event window varying from ten days previous to the announcement date to ten days subsequent to the announcement date. Therefore the windows used are: (-1, +1), (-2, +2), (-3, +3), (-4, +4), (-5, +5), (-6, +6), (-7, +7), (-8, +8), (-9, +9) and (-10, +10). Doukas (1995) and Gleason et al. (2002) also utilize similar event windows to Uddin and Boating (2009), which will allow for various comparisons these studies and the findings of this study. The majority of the announcement effect is expected to be detected in the short three-day day event window (-1, +1) as the issue of announcements are quickly compounded by financial markets. The estimation time frame utilized in this analysis began 316 days prior to the announcement of the acquisition date and finished on the 61<sup>st</sup> day before the date of announcement, similar to Kiymaz (2009). This allows 255 days to estimate model parameters and 60 days for the event window to analyze the wealth effects. The three day window (-1, 1) and the twenty-one day window (-10, +10) reported the most significant abnormal returns for this study. Therefore, the twenty-one day (-10, 10) event window was used as the dependent variable for the regression analysis as this window is short enough to assume market efficiency but also long enough to allow the market to evaluate the value implications of the acquisition.



### 3.6 Methodology

To calculate the abnormal returns (AR) for the sample of US firms involved emerging market acquisitions, the market model proposed is employed (Fama, 1976). The market model assumes that capital markets are efficient, which consequently suggests that the value of any stock encompasses all obtainable information and adapts to the release of new information immediately. Bowman (1983) and Armitage (1995) state that the market model is superior to other statistical models such as the CAPM model. The model forecasts a company's returns in relation to the market return and the company's chronological correlation to the market. The study utilized the following market model equation to compute the returns of the sample of US acquiring firms' shares:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \epsilon_{it}$$

**Where:**

$t$  = day measured relative to event

$R_{it}$  = return on security  $i$  on day  $t$

$R_{mt}$  = S&P 500 Index

$\alpha_i$  = estimated period intercept of firm  $i$

$\beta_i$  = OLS estimates of firm  $i$ 's market model parameters

$\varepsilon_{it}$  = the error term of security  $i$  on the sample event day  $t$

The abnormal returns (AR) for each sample event  $i$  on day  $t$  are obtained as follows:

$$AR_{it} = R_{it} - ( \alpha_i + \beta_i R_{mt} )$$

**Where:**

$t$  = day measured relative to event

$AR_{it}$  = excess return to security  $i$  for day  $t$

$R_{it}$  = return on security  $i$  on day  $t$

$R_{mt}$  = S&P 500 Index

$\alpha_i$  = estimated period intercept of firm  $i$

$\beta_i$  = OLS estimates of firm  $i$ 's market model parameters

The returns are calculated for each sample event in the study over the event window on a daily basis. For a sample of  $N$  deals, the average abnormal returns for each day  $t$  are calculated as:

$$AR_t = \frac{1}{N} \sum_{i=1}^N AR_{it}$$

The cumulative abnormal return (CARs) for each company  $i$ ,  $CAR_i$ , are determined by adding the returns over the event time frame as follows:

$$CAR_i, K, L = \sum_{t=K}^L AR_{it}$$

Where the  $CAR_i, K, L$  is for the phase from  $t = \text{day } K$  to  $t = \text{day } L$ . The cumulative average abnormal returns (CARs) over the event time frame from day  $K$  to day  $L$  are determined:

$$CAR_{K,L} = \frac{1}{N} \sum_{i=1}^N CAR_i, K, L$$

When CARs differ from zero, parametric tests can be performed to see whether this deviation is statistically significant. The abnormal returns and cumulative abnormal returns are used to calculate the statistical significance of the of the various control variables.

The average CAR act as a measure of the total wealth effects of an acquisition for each acquiring firm. Regression tests are then run using these bidder CAR as the dependent variable to analyze the determinants of the acquiring shareholders wealth effects.

### **Determinants of acquiring shareholder returns**

The following section of this chapter outlines the independent variables and their prospective consequence on acquiring shareholder returns. Macroeconomic variables, firm specific, event specific and control variables are the explanatory variables used in the model.

#### **Macroeconomic Variables**

Similar to Rossi and Volpin (2004) and Graham et al. (2008), two variables foreign exchange (FOREX) and gross domestic product (GDP) are included to capture the macroeconomic environment of the target country. Foreign exchange (FOREX) is an important element to consider especially when entering unstable developing markets (Graham et al., 2008). This study follows the FOREX calculation employed by Harris and Ravenscraft (1991) and Kiymaz (2004): (the exchange rate of the target country (in US\$ terms) in the announcement year is subtracted from the mean exchange rate of the target country's currency during the sample period; divided by the mean exchange rate). This measures the strength of the targets currency in relation to the acquirer's currency. A positive value implies that the target currency is stronger than the US dollar and a negative value signifies that the target currency is weaker than the US dollar.

GDP growth is utilized as a proxy for economic stability in the target nation and it reveals potential future growth prospects in the target nations (Graham et al., 2008). For this study, GDP growth is measured as the yearly change in GDP in the two years previous to the M&A. A negative GDP figure indicates a possible slowdown of growth, whereas a positive GDP figure indicates a possible increase in the GDP growth rate.

#### **Firm Specific Variables**

The market-to-book ratio (MBT) is employed as a proxy for growth and investment

prospects obtainable by the acquiring firms (Palepu, 1986). The ratio is defined as the company's market capitalization divided by ordinary capital, measured in the year previous to the M&A.

The price-earnings (PE) ratio is measures as the ratio of the acquiring firms current share price compared to the earnings per share in the year previous to the acquisition deal.

The return on investment (ROI) is employed as an indicator of past returns to acquiring firm shareholders. The ROI is derived for each of the acquiring firms at year end one year previous to the acquisition event.

Market capitalization (MKT.CAP) is a useful indicator of the size of the acquiring firm and reveals the stock market valuation of the acquiring firm (Williams and Liao, 2008). This figure is measured at year end for each acquiring firm in the year prior to the event.

### **Event Specific Variables**

Following the method of Kiymaz (2009), dummy variables are created to examine the effect of geographical location (REGION) on the wealth effects of US acquirers. The sample size of this study is relatively small but diverse, hence the use of a dummy variable. China is a dummy variable equal to 0 because the majority of the firms that were acquired by US firms across emerging markets are located in China. Over 20% of the sample is made up of Chinese M&A deals.

The sample period was split and classified as (YEAR) 2000-2005 and 2006-2009 to capture the frequency of acquisition deals in the first and second half of the decade. 2000-2005 is a dummy variable equal to 0 and the period 2006-2009 is a dummy variable equal to 1.

To determine the impact of the status (STATUS) of the target firms on acquiring shareholder returns a dummy variable taking the value of 1 if the target is privately owned and 0 if the target is publicly listed.

To establish the effect of industry relatedness (RELATE) on the wealth effects of US bidders, a dummy variable is constructed taking the value of 1 if the target and acquirer are related and 0 if they are not related. This variable is measured using SIC industry codes.

### **Control Variables**

To determine the impact of the method of payment (PAYMENT) on the wealth gains or losses of US acquirers, a dummy variable was constructed taking the value of 1 if the consideration offered was purely cash and 0 if the deal was financed through a means of other payment such as stock.

The size (SIZE) of the M&A deal in terms of value is also used to measure the wealth effects of US acquiring shareholders. The average size of the value of all deals is \$67.14 million. If a deal is greater than the average the deal it is considered to be large and if the deal is less than the average the deal it is considered to be a medium sized deal. A dummy variable was constructed taking the value of 1 if the deal was considered medium sized and 0 if the deal was considered large. This illustrates the variation in the value of the deals across the sample of 79 acquisitions.

The following regression model is used, where CAR (-10, +10) refers to the aggregate abnormal returns (AR) over the 21 day window:

$$\text{CAR} (-10, +10) = \alpha + \beta_1 \text{FOREX} + \beta_2 \text{GDP} + \beta_3 \text{MTB} + \beta_4 \text{PE} + \beta_5 \text{ROI} + \beta_6 \text{MKT.CAP} + \beta_7 \text{REGION} + \beta_8 \text{YEAR} + \beta_9 \text{STATUS} + \beta_{10} \text{RELATE} + \beta_{11} \text{PAYMENT} + \beta_{12} \text{SIZE} + \varepsilon$$

### **3.7 Limitations of Methodology**

Despite a number of steps undertaken to gather a suitable data base and utilize a similar method employed in the M&A literature, there are a number of limitations. A quantitative approach has been employed to address the research questions, however quantitative methods are limited in capturing the beliefs, views and judgments of key

stakeholders.

Bidding firms wealth effects may rely on the choice of event window and estimation period adopted. The purpose of the market model approach is to examine changes in share prices over the bidding period. These variations in share price reflect market expectations, however if the M&A is already publicly known then the deal announcement will have no consequence (Roll, 1986). Also, regardless of the event window and estimation period chosen, there will be a sacrifice between the possible disclosure of information into the public domain and confining events independent to the M&A announcement.

According to Jensen and Ruback (1983) estimating returns for acquiring companies is complicated when firms are considerably larger in size to their targets. Eckbo and Thornburn (2000) claim that this size difference is a key reason why event studies report weak returns for acquiring company shareholders.

The use of financial ratios such as MTB and PE are used in this study as measures of company growth. In general, financial ratios are used to investigate specific qualities of a firm. Therefore, healthier performing firms are more inclined report superior wealth gains in comparison to inferior performing firms.

Numerous variables could have been tested in this study; however this form of analysis would have been beyond the scope of this study. Therefore, only a small number of variables were analyzed.

### **3.8 Conclusion**

This chapter identifies the research objective of this study and outlines the various research questions used to address the research question. The data collection process was identified along with an illustration of the sample of data. The research methodology was discussed and the procedure and variables employed in this study have been described. The following chapter presents the research findings of this study.





## **Chapter 4**

### **RESEARCH FINDINGS**

#### **4.1 Chapter Overview**

The objective of this chapter is to present the research findings. Firstly the descriptive statistics of the analysis are presented, followed by the findings of the univariate analysis. Finally, the cross-sectional regression results for US acquirers are illustrated.

#### **4.2 Descriptive Statistics**

Table 4.1 outlines the country and regional distribution of the value and volume of each M&A deal. The total number of acquisitions in the sample occurred across 17 different emerging markets. There were 44 deals (58.8% of the sample) in South America and 26 deals (32.9%) in Asia; however Africa only had 3 transactions (3.79%). It is evident from Table 4.1 that the majority of targets were Chinese firms, making up approximately one fifth or 20.25% of the total sample. The recent increase in growth in China may have an influence on the high incidence of M&As within the Chinese economy. Yet, although China accounted for the highest number of transactions it did not account for the largest value of deals. Mexico being the second most popular country for M&A activity throughout this study; yet it is the largest in value terms, accounting for 41% of the total value of deals surpassing the 16.43% accounted for by China. Bolivia represents the minority of the sample with a recorded deal value of only US\$250,000 for the one M&A that occurred in this country. Furthermore, it can be seen from the table that the percent of total deals and total deal value for the South American region are relatively similar (58.4% and 60.27%) while the percent of total deals for the Asian region is larger than the percent of the total deal value (32.9% and 21.74%).

**Table 4.1 Country and regional distribution of the sample**

<b>Emerging markets</b>	<b>No.of deals</b>	<b>Percent of total deals</b>	<b>Value of deals (\$M)</b>	<b>Percent of total deal value</b>
<b><i>Africa</i></b>				
Egypt	1	1.26	80	1.5
South Africa	2	2.53	7.5	0.14
<b>Total</b>	3	3.79	87.5	1.64
<b><i>Asia</i></b>				
China	16	20.25	871.52	16.43
India	8	10.12	254.39	4.79
Philippines	2	2.53	27.82	0.52
<b>Total</b>	26	32.9	1153.73	21.74
<b><i>Europe</i></b>				
Russia	4	5.1	709.3	13.37
<b>Total</b>	4	5.1	709.3	13.37
<b><i>South America</i></b>				
Argentina	5	6.3	70.99	1.33
Brazil	7	8.9	155.54	2.93
Chile	4	5.1	27.38	0.51
Columbia	6	7.6	55.2	1.04
Costa Rica	1	1.3	403	7.59
Guatemala	1	1.3	135	2.54
Mexico	13	16.5	2163.31	40.7
Peru	5	6.3	75.35	1.42
Puerto Rico	2	2.5	108.08	2.03
Venezuela	1	1.3	10	0.18
Bolivia	1	1.3	0.25	0.004
<b>Total</b>	46	58.4	3204.1	60.27
<b><i>Total emerging markets</i></b>	<b>79</b>	<b>100</b>	<b>5304.38</b>	<b>100</b>

Table 4.2 illustrates the annual distribution of the volume and value of US M&As into emerging markets. The year 2008 was the most popular year for M&A deals across emerging markets, consisting of over one quarter or 26.58% of the sample, followed by 17.7% of the sample in the previous year. However, the year 2006 reported the largest transaction values of US\$1301.66 million out of a total US\$5304.38 million for all of the 79 deals within the sample. It is evident from the table that the number of deals in

emerging markets is not evenly distributed across the years and does not display a particular trend. Transactions increased gradually from just five deals in 2005 and peaked in 2008 with twenty-one deals. This was followed by a large decline to nine acquisitions in the year 2009. The mean value of deals for US acquisitions into emerging markets peaked in 2002 accounting for a value of US\$326.04. The mean transaction values also show no particular trend. However, when the sampling time frame was split according to the years 2000-2005 and 2006-2009 the value of the deals are more evenly dispersed. The time frame 2000-2005 also demonstrates the end of the fifth merger wave. Table 4.2 also exemplifies the minimum and maximum values of the deals in each year and it is clear that there is a wide fluctuation in the value of deals each year. For instance, in 2006 the minimum and maximum values range from \$0.64 million to \$776 million.

**Table 4.2 Annual Distribution of the sample**

<b>Year</b>	<b>No. of deals</b>	<b>Value of deal</b>	<b>Mean Value (\$M)</b>	<b>Min Value (\$M)</b>	<b>Max Value (\$M)</b>
2000	4	207.96	51.99	19.99	108
2001	1	225	225	225	225
2002	3	978.12	326.04	6.12	962
2003	8	153.36	19.17	0.25	80
2004	7	274.82	39.26	0.08	170
2005	5	515	103	0.35	501
<b>Total</b>	<b>28</b>	<b>2354.26</b>	<b>764.46</b>		
2006	7	1301.66	185.88	0.64	776
2007	14	346.22	24.73	1.85	100
2008	21	926.31	44.11	0.03	403
2009	9	375.93	41.77	0.64	150
<b>Total</b>	<b>51</b>	<b>2950.12</b>	<b>296.49</b>		

Table 4.3.1 demonstrates the distribution of the value of the 79 deals within the sample. It is clear from the table that almost half of the deals (46.8%) of the deals were ranked at a value less than 10 million and the remaining 53.2% were ranked between the values of \$10 million and \$100 million.

**Table 4.3.1 Frequency Distribution of the value of the deals**

Purchase Price	Number of deals	% total value
Less than \$1m	15	19
\$1m-\$10m	22	27.8
\$10m-\$20m	8	10.2
\$20m-\$50m	14	17.7
\$50m-\$100m	8	10.1
\$100m-\$1000m	12	15.2

Table 4.3.2 shows the statistics of all of the deal values. The mean value is reported as \$67.14 million and a skewness value of 4.12 which determines that the sample is slightly positively skewed. The kurtosis value is 18.85, therefore the observations under consideration cluster around a central point. The somewhat large standard deviation and the considerable difference between the maximum and minimum components imply a widely distributed range of bids. Therefore outliers do exist within the sample and these are dealt with further on in this chapter

**Table 4.3.2 Descriptive Statistics of the value of the deals**

Sample	Mean (\$)	Std. Dev.	Variance	Skewness	Kurtosis	Min.	Max.
All bids	67.14	156.20	24401	4.12	18.85	.03	962

Table 4.4 outlines the distribution of the target and acquirers macroeconomic industry. This breakdown offers a functional insight into the more active M&A industries. According to Song and Walking (1993) only a minority of studies carry out this form of analysis. The M&A deals in this study have been classified according to industry SIC codes and includes twelve different sectors. Deals that consist of similar SIC codes for both the acquirer and target are considered to be related deals and deals of dissimilar codes are unrelated acquisitions. The most prominent industries for both the target and acquiring firms are Consumer Staples (19%) for both the acquirer and target firms,

Materials accounting for 16.5% for both parties also and High Technology constituting 15.2% of the sample for the acquirers and 12.7% for the targets.

**Table 4.4 Acquirer and target macroeconomic industry distribution**

Acquirers Industry	Acquirers Total (%)	Targets Total (%)
Consumer Products and services	6.3	7.6
Consumer Staples	19	19
Energy and Power	7.6	7.6
Financials	3.8	3.8
Healthcare	8.9	11.4
High Technology	15.2	12.7
Industrials	7.6	7.6
Materials	16.5	16.5
Media and Entertainment	2.5	3.8
Real Estate	2.5	2.5
Retail	2.5	0
Telecommunications	7.6	7.6
<b>Total</b>	<b>100</b>	<b>100</b>

Table 4.5 presents the key characteristics of the sample of M&A deals. Out of the total sample of 79 M&As, 61 (77,2%) bids were classified as medium deals and 18 (22.8%) classified as large deals. In order to split the deals into the two categories the average transaction value of US\$67.14 million was calculated and any deal that ranked below this mean was reported as a medium deal and anything above was reported as a large deal. The sample of bids is dominated by cash transactions (70.9%) in comparison to non-cash transactions (29.1%). The table also illustrates that 57 of the target firms out of the total of 79 were private firms and only 22 were publicly listed. Also, 76.1% of the deals were related as the acquirer and targets of these deals shared the same SIC industry code.

**Table 4.5 Sample characteristics of acquisition events**

<b>Description</b>	<b>Sample characteristics</b>	<b>No. of Deals</b>	<b>% of total sample</b>
<b>Deal Size/value</b>	Medium deals	61	77.2
	Large deals	18	22.8
<b>Total</b>		<b>79</b>	<b>100</b>
<b>Payment Method</b>	Cash	56	70.9
	Non-cash	23	29.1
<b>Total</b>		<b>79</b>	<b>100</b>
<b>Target Status</b>	Public firms	22	29.1
	Private firms	57	70.9
		<b>79</b>	<b>100</b>
<b>Relatedness of target and acquirer industry</b>	Related	60	76.1
	Unrelated	19	23.9
<b>Total</b>		<b>79</b>	<b>100</b>

## Summary

### 4.3 What are the wealth effects for US acquiring firm shareholders engaged in international M&As into emerging markets? (*RQ.1*)

Table 4.6 illustrates the abnormal returns (AR) over a twenty-one day period for the 79 US bidding firms that engaged in M&As across emerging markets during the study period under observation. The returns around the announcement date are negative for days -10 to -7; however it is clear from the table that the returns are positive for day -6 to day +10. The returns are 27.25% on the day of the M&A announcement and increase to 39.38% the day after the announcement of the deal. The average returns (AR) for the 21-day period are found to be positive and different to zero but not statistically significant at the 5% level as all of the p-values are greater than the required limit of 0.10.

**Table 4.6 US acquirer's abnormal (AR) returns over the 21 day window**

Event Days	AR (%)	Mean	Std. Dev.	t-value	p-value
-10	-4.40	-0.55	5.78	-0.08	0.93
-9	-14.63	-0.18	5.52	-0.29	0.76
-8	-13.25	-0.16	5.23	-0.28	0.77
-7	-19.85	-0.25	5.19	-0.43	0.66
-6	7.64	0.09	5.24	0.16	0.87
-5	17.51	0.22	5.03	0.39	0.69
-4	27.66	0.35	5.32	0.58	0.56
-3	15.47	0.19	5.11	0.34	0.73
-2	35.98	0.45	5.46	0.74	0.45
-1	32.63	0.41	5.17	0.70	0.48
0	27.26	0.34	5.08	0.60	0.54
1	39.39	0.49	4.88	0.90	0.36
2	34.10	0.43	5.10	0.75	0.45
3	31.51	0.39	4.64	0.76	0.44
4	21.07	0.26	4.75	0.49	0.62
5	16.21	0.20	4.46	0.40	0.68
6	28.55	0.36	4.26	0.75	0.45
7	39.28	0.49	4.62	0.95	0.34
8	36.16	0.45	4.79	0.84	0.39
9	34.48	0.43	4.55	0.85	0.39
10	39.77	0.50	5.56	0.81	0.42

The overall trend of the returns for the sample of bidding firms over the twenty-one day window is displayed in Figure 4.1. The figure reiterates Table 4.6 and demonstrates the negative returns from day -10 to day -6. These results illustrate positive wealth effects for US bidders acquiring targets in emerging markets from six days before the announcement of the deal until ten days after the announcement.

**Figure 4.1 US acquirer's abnormal returns (AR) over the 21 day window**

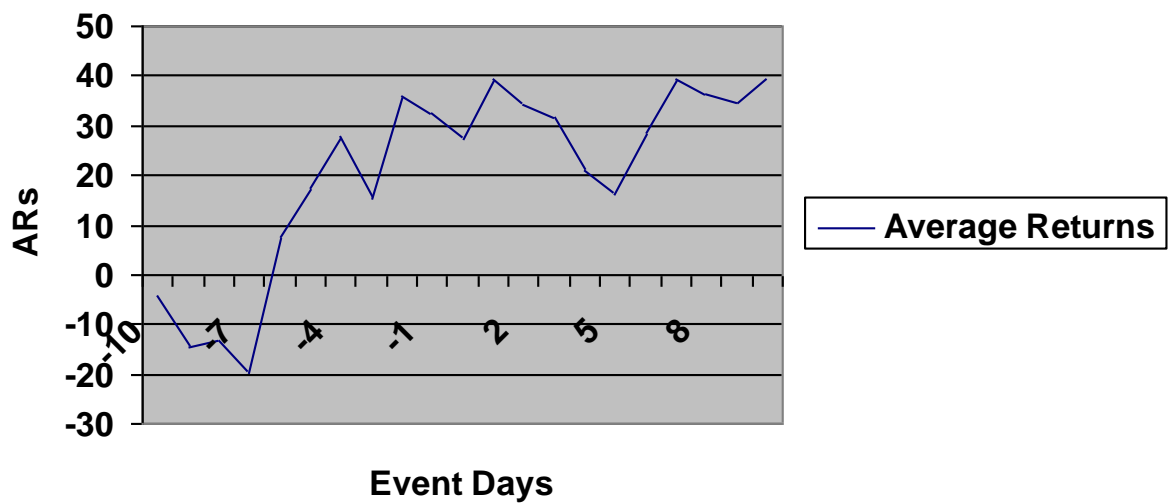




Table 4.7 outlines eight different cumulative abnormal returns (CAR) windows. The CARs over all of the event windows are found to be positive. The largest CAR are reported in the three day (-1, 1), two-day (-1, 0) and five day (-2, 2) windows. Therefore, emerging market acquisitions has a positive effect on the wealth effects of US acquirers over a twenty-one day period.

**Table 4.7 US acquirer's cumulative abnormal returns (CAR) for various windows**

Event Window	CAR (%)	Mean	Std. Dev.	t-value	p-value
(-1, 1)	72.01	0.91	9.92	0.81	0.41
(-2, 2)	70.08	0.88	10.37	0.76	0.45
(-5, 5)	33.71	0.42	8.93	0.42	0.67
(-10, 10)	35.35	0.44	9.25	0.43	0.66
(1, 0)	66.64	0.84	9.91	0.75	0.45
(-1, 0)	69.88	0.75	10.17	0.66	0.51
(-5, 0)	44.76	0.56	9.49	0.53	0.59
(-10, 0)	22.85	0.28	9.74	0.26	0.79

**4.4 Do the wealth effects for US acquiring firms engaged in M&A activity into emerging markets differ with regards to the geographic location of the target firms? (RQ. 2)**

Table 4.8 shows the cumulative abnormal returns (CAR) for the US acquiring firms in relation to the location of the target corporations. 79 deals were completed in 17 countries and the majority of these deals were executed in China (20.25%). It is evident from the table that the returns to the US bidders are positive for both Chinese and all other targets located in emerging markets under the three (-1, 1), (-5, 5), (-10, 10) event windows and the results are significant at the 5% level for the event window (-5, 5). However it is also clear from Table 4.8 that Chinese targets are more profitable for US acquirers in comparison to the remaining targets located in across emerging countries. Therefore, this finding concludes that the geographic location of target firms has an impact on the wealth effects of US acquirers and firms that acquire targets in China earn higher returns than those that acquire firms in other emerging markets. Further evidence is contained in Appendix 6.

**Table 4.8 Geographic origin of target firms and acquirer returns**

Event Window	Geographic region	CAR (%)	N	Mean	Std. Dev	t-stat	p-value
CAR (-10, 10)	China	1.77	16	-1.86	7.32	1.12	.26
	All other emerging markets	0.83	63	1.03	9.65		
CAR (-5, 5)	China	1.84	16	-2.61	7.73	1.51	.13**
	All other emerging markets	0.96	63	1.12	9.05		
CAR (-1, 1)	China	1.76	16	-1.40	7.78	1.11	.27
	All other emerging markets	1.19	63	1.63	10.20		

Notes: \* Significant at the 10 percent level

\*\* Significant at the 5 per cent level

#### 4.5 Do the wealth effects for US acquiring firm shareholders differ over the time period 2000-2005 in comparison to the 2006-2009 period? (RQ.3)

Table 4.9 illustrates the wealth effects of US acquiring firms engaged in international acquisitions in emerging markets in respect of the year of the acquisition. It can be seen from the table that 36.7% of the deals were completed in the period 2000-2005, however a larger volume of 63.3% were completed through the period 2006-2009. Table 4.9 provides evidence that acquisitions undertaken through the 2006-2009 time frame gain positive returns in all of the windows under observation. The gains are larger in the short-run three day window of (-1, 1) reporting a significant CAR of 75.38. However the returns are negative for the 2000-2005 period under the twenty-one and eleven day event windows of (-10, 10) and (-5, 5) and only reporting a small positive CAR of 5.11 for the three day event window (-1, 1) for this time frame. Therefore, this finding concludes that the year of acquisition across the decade influences the wealth effects of US acquirer's and acquisitions completed in the second half of the decade are more successful than those completed in the first half of the decade. Further evidence is illustrated in Appendix 7.

**Table 4.9 Year of acquisition and acquirer returns**

Event Window	Years	CAR (%)	N	Mean	Std. Dev	t-stat	p-value
CAR (-10, 10)	2000-2005	-16.69	29	-0.586	10.87	0.75	0.45
	2006-2009	51.81	50	1.04	8.24		
CAR (-5, 5)	2000-2005	-3.37	29	-0.10	11.38	0.35	0.72
	2006-2009	32.48	50	0.64	7.17		
CAR (-1, 1)	2000-2005	5.11	29	0.195	10.40	0.56	0.57
	2006-2009	75.38	50	1.49	9.49		

Notes: \* Significant at the 10 percent level

\*\* Significant at the 5 per cent level

#### 4.6 Do the wealth effects for US acquiring firm shareholders into emerging markets differ in respect of the status of the target (public or private)? (RQ. 4)

It is evident from Table 4.10 below that the majority of firms located in emerging markets acquired by US firms are private companies. Only, only 8.8% of the firms acquired were publicly listed in comparison to 91.2% private targets. The findings in Table 4.10 illustrate that US firms that acquired private firms located in developing countries outperform those that acquired public firms throughout the study. Positive gains are stated for the twenty-one (-10, 10), eleven (-5, 5) and three (-1, 1) day periods for the privately acquired targets. However, the returns for the same windows are negative for US firms that acquired public firms in emerging markets. Consequently, this finding concludes that the wealth effects do differ for US acquiring firms in respect of the status of the target and it is clear that acquirers of private firm's experience considerable wealth gains in comparison to the negative gains associated with the acquisition of public targets. Appendix 8 provides further evidence

**Table 4.10 Status of target firm and acquirer returns**

Event Window	Status	CAR (%)	N	Mean	Std. Dev	t-stat	p-value
CAR (-10, 10)	Public	0.03	7	0.42	2.36	0.00	0.99
	Private	3.04	72	0.44	9.68		
CAR (-5, 5)	Public	-0.03	7	-0.42	2.65	0.25	0.80
	Private	2.89	72	0.44	9.27		
CAR (-1, 1)	Public	-0.06	7	-0.63	2.38	0.46	0.64
	Private	3.00	72	1.18	10.22		

**Notes:** \* Significant at the 10 percent level

\*\* Significant at the 5 per cent level

**4.7 Do the wealth effects for US acquiring firm shareholders into emerging markets differ in respect of the deal between parties being in similar or dissimilar industry sectors? (RQ.5)**

It is evident from Table 4.11 that the sample is unevenly split between related and unrelated acquisitions and that the majority of deals are carried out in related industries as opposed to unrelated industries. However, it is clear that unrelated deals gain for the event windows (-10, 10), (-5, 5) and (-1, 1). US bidders involved in related acquisitions in emerging markets also earn positive returns, however these CAR are slightly lower in comparison to unrelated acquisitions. In summary, this finding illustrates the variation in US acquirer returns for related and unrelated deals and it is obvious that unrelated acquisitions perform superior to related acquisitions. Further evidence is contained in Appendix 9.

**Table 4.11 Strategy of the deal and acquirer returns**

Event Window	Relatedness	CAR	N	Mean	Std. Dev	t-stat	p-value
CAR (-10, 10)	Unrelated	1.99	19	-0.71	9.28	0.62	0.53
CAR (-5, 5)	Related	0.88	60	0.81	9.29	0.91	0.36
	Unrelated	2.08	19	-1.25	8.24		
CAR (-1, 1)	Related	0.84	60	0.88	9.08	0.73	0.46
	Unrelated	1.96	19	-0.41	8.19		
	Related	1.10	60	1.47	10.27		

**Notes:** \* Significant at the 10 percent level

\*\* Significant at the 5 per cent level

**4.8 Do the wealth effects for US acquiring firm shareholders into emerging markets differ with respect to the payment method used in the deal? (RQ. 6)**

Table 4.12 shows the returns for the US acquirers who completed the deals using cash and mixed payments methods. Only 29% of the acquisitions involved mixed payment methods compared to 71% cash payments. The abnormal returns for the twenty-one, eleven and three day windows demonstrate that the wealth effects of acquirers do vary with respect to payment method and it is illustrated that cash deals are more inclined to perform superior to mixed payment deals. Appendix 10 provides further evidence.

**Table 4.12 Method of payment and acquirer returns**

Event Window	Payment method	CAR (%)	N	Mean	Std. Dev.	t-stat	p-value
CAR (-10, 10)	Mixed payment	0.20	23	0.21	3.11	0.20	0.83
CAR (-5, 5)	Cash only	2.40	56	0.53	10.84	0.10	0.91
	Mixed payment	0.26	23	0.25	3.35		
	Cash only	1.54	56	0.41	10.36		
CAR (-1, 1)	Mixed payment	0.11	23	-0.11	4.08	0.92	0.36
	Cash only	2.84	56	1.48	11.34		

**Notes:** \* Significant at the 10 percent level

\*\* Significant at the 5 per cent level

**4.9 Do the wealth effects for US acquiring firm shareholders into emerging markets differ with the relative size of the value of the deal? (RQ. 7)**

Table 4.13 illustrates the returns for the US bidding firms on the basis of the value of the deal. As stated previously the average deal size in terms of value was calculated as \$67.14 million and any deal above this value represents large deals and any below the average represents small deals. 23% of the deals are considered to be large acquisitions as they out exceed the mean deal value for this study and 72% considered medium sized deals. Table 4.13 clearly demonstrates that US bidders involved in substantial sized deals across emerging markets do not yield statistically significant profits in the event windows (-10, 10) and (-5, 5) and only modest positive returns in event window (-1, 1). However, all three windows report positive wealth effects for US acquirers who engage in medium sized deals across emerging markets with the highest returns reported in the event window (-5, 5). As mentioned previously various outliers were identified with regards to extremely large sized deals. Appendix 11 contains additional evidence. For example 22% of the sample accounted for deals between \$100 million and \$962 million. Therefore the 12 deals that were valued above \$100 million were excluded from the sample to determine if there was any change in the results when these outliers were removed. Table 4.13.1 outlines the new findings and it clearly illustrates that these large sized deals in terms of value had a major effect on the findings.

**Table 4.13 Size of the deal and acquirer returns**

Event Window	Deal Size	CAR (%)	N	Mean	Std. Dev.	t-stat	p-value
CAR (-10, 10)	Large	-0.20	18	-0.90	11.64	0.70	0.48
CAR (-5, 5)	Medium	2.81	61	0.84	8.50	1.06	0.29
	Large	-0.35	18	-1.58	10.93		
CAR (-1, 1)	Medium	3.16	61	0.94	8.20	0.05	0.96
	Large	0.10	18	0.91	13.51		
	Medium	2.85	61	1.05	8.54		

**Notes:** \* Significant at the 10 percent level

\*\* Significant at the 5 per cent level

It is evident from Table 4.13.1 that US acquirers who complete medium volume deals obtain statistically significant positive returns when these outliers are removed. Also the exclusion of such deals had a significant effect on the returns for the three windows as it can be seen by comparing the two tables below the CARs for large sized acquisitions were reported to be statistically negative in Table 4.13. Also, it is apparent from the table that the largest positive and negative returns for medium and large sized deals occur in the event window (-5, 5). Supplementary evidence is illustrated in Appendix 12.

**Table 4.13.1 Deal Size and acquirer returns (excluding deals above the value of US\$100 million)**

Event Window	Deal Size	CAR (%)	N	Mean	Std. Dev.	t-stat	p-value
CAR (-10, 10)	Large	-45.36	5	-9.07	9.01	2.49	0.01**
	Medium	2.81	61	0.84	8.50		
CAR (-5, 5)	Large	-45.73	5	-9.14	10.93	2.66	0.01**
	Medium	3.16	61	0.94	8.20		
CAR (-1, 1)	Large	-36.35	5	-7.26	13.51	2.12	0.03**
	Medium	2.85	61	1.05	8.54		

**Notes:** \* Significant at the 10 percent level

\*\* Significant at the 5 per cent level



#### 4.10 Do the wealth effects of US acquiring firm shareholders involved in M&As activity into emerging markets differ between multiple and single acquirers? (RQ.8)

Table 4.14 reports the CARs for the sample of US acquiring firms on the basis of multiple versus single acquirers. Again the sample was unevenly distributed between the two groups with 15% multiple and 85% single acquirers. The results clearly illustrate that the wealth effects differ for multiple acquirers in comparison to single US acquirers when carrying out M&As in emerging markets. The multiple acquirers in this study are Coca-cola, Monsanto Corporation, Azteca Gold Corporation and Universal Travel Group. More details in Appendix 13. The results suggest that multiple acquirers out perform single acquirers as they report positive returns in the three event windows under observation and it is evident from table 4.14 that the CARs in the event windows (-10, 10) and (-1, 1) are statistically significant. Yet, the three day (-1, 1) and twenty-one day (-10, 10) event windows report negative returns for the single acquirers and these are statistically significant at the 5 per cent level. The largest returns for the multiple acquirers occur during the three day event window (-1, 1) and the largest negative returns for single acquirers occur during the eleven day event window of (-5, 5). Therefore this finding concludes the variation in the wealth effects for multiple and single acquirers and illustrates the superior performance of the multiple acquirers in comparison to the single acquirers. Further details are shown in Appendix 14.

**Table 4.14 Multiple versus single acquirers and impact on returns**

Event Window	Multiple versus single acquirers	CAR (%)	N	Mean	Std. Dev.	t-stat	p-value
CAR (-10, 10)	Multiple	53.46	12	4.45	9.95	1.67	0.10**
	Single	-4.32	67	-0.27	9.02		
CAR (-5, 5)	Multiple	42.24	12	3.52	8.83	1.34	0.18
	Single	-15.96	67	-0.19	8.84		
CAR (-1, 1)	Multiple	69.96	12	5.82	14.27	1.87	0.06**
	Single	-2.17	67	0.158	8.62		

**Notes:** \* Significant at the 10 percent level

\*\* Significant at the 5 per cent level

#### **4.11 What is the impact of the foreign exchange rate, GDP target levels, firm and event specific variables on the wealth effects of US acquiring shareholders? (RQ. 9)**

##### **4.11.1 Determinants of acquiring shareholder returns**

Cross-sectional regression analysis was applied to examine the relationship between Cumulative abnormal returns (CAR) during the twenty one day event window (-10, 10) and the independent variables. In order to ensure that all of the variables contribute evenly to the analysis, the dependent variables (CARs) were standardized. That is, the mean predicted value is subtracted from the predicted value and the difference is divided by the standard deviation of 1. Table 4.14 contains the regression results for six separate equations. Each equation adds a new group of explanatory variables into the examination. The first equation uses the macroeconomic variables to explain the wealth effects of US bidders who complete M&As across emerging markets. The second equation includes macroeconomic variables along with more firm specific variables. The third equation contains macroeconomic, firm-specific and two event specific variables; year and region of targets. Finally, the fourth equation combines all of the variables together with the exception of the market capitalization variable. The market capitalization variable and size variable are measuring relatively the same thing; therefore the fourth equation eliminates the market capitalization to determine if this exclusion improves the robustness of the analysis.

The models explanatory power (adjusted R squared) for the five regressions ranges from -0.020 (equation 4) to 0.50 (equation 2). In relation to equation 2, 50% of the variation in US acquirers returns under the twenty-one day event window (-10, 10) can be explained by macroeconomic and firm specific variables. In other words, 50% of the returns to US acquirers are determined by macroeconomic and firm specific variables. The foreign exchange variable has a significantly negative impact in explaining the wealth gains to US acquirers in the first equation and also in the second equation when the firm specific variables are added to the equation.

### **Macroeconomic Variables**

The negative coefficients of the foreign exchange (FOREX) rate variables suggest that the currencies of the various emerging markets are weaker relative to the dollar. Following the method employed by Kiymaz (2004), the stronger currency in the acquirer country triggers aggressive bidding for the target and consequently increases the cost of the acquisition, thereby reducing the returns to acquirers. Also, the value of repatriated profits will be lower for the acquirers. Therefore, these negative figures in Table 4.14 imply that the foreign exchange rate plays a key role in determining the wealth effects of US acquirers. Using the method employed by Graham et al. (2008) to calculate economic growth, the target country GDP showed no statistical significance in determining the returns of acquiring shareholders. Opposite to expectations, the economic growth of the target country is negatively related to the returns of the acquirers in equation 1.

### **Firm Specific Variables**

Consistent with the value-increasing hypothesis, the higher the market-to-book (MTB) values of the acquirers the greater their returns. The significantly positive coefficients on market-to-book (MTB) imply that the MTB value of US acquiring firms is a determinant of their returns when they compete M&As in emerging markets. The price-earnings (PE) coefficients are negative and statistically significant indicating a statistically negative relationship between the PE of acquiring firms and their returns. The coefficients for return on investment (ROI) are significantly positive for the four equations in Table 4.14, therefore indicating that this ratio influences. Therefore the higher the ROI of the acquiring firms, the larger their returns of US acquiring shareholders. The coefficient on market capitalization (MKT CAP) in equation 1 and 2 proved to be insignificant in determining the wealth effects of US acquirers.

### **Event Specific Variables**

The positive coefficients for the country (REGION) of the targets and the year (YEAR) of the acquisition indicate that the location of the target firm and the year that the target was acquired does have an impact on the wealth gains of the US acquiring firms. The dummy variables used to measure this effect proved to be positive but not significant. This means that US firms who acquire targets in China earn higher but returns than those who acquire firms in other emerging markets. Also firms that acquired targets during the 2006-2009 period experienced larger but not significant wealth effects. It is evident from Table 4.14 that the coefficient on the variable STATUS is negative. Therefore the status of the target firm, meaning whether the firm is public or private has no effect on the wealth effects of US firms who acquire targets in emerging markets. The industry relatedness (RELATE) coefficient is positive, therefore indicating that this variable helps determine US acquirers shareholder returns but are not statistically significant.

### **Control Variables**

The method of acquisition payment (PAYMENT) coefficient is positive and therefore this indicates that this variable helps determine US acquirer's shareholder returns but are not statistically significant. The final variable in the regression model is deal size (SIZE). This coefficient has a negative relationship with deal size.

### **4.12 Conclusion**

This chapter identifies the key findings of the study and it is evident that a variety of factors influence the wealth effects of US firms acquiring targets in emerging markets. The following chapter will discuss these findings in detail.

**Table 4.14 Cross-sectional regression results for US acquirers (Equation 1-4)**

<b>Variables</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Constant</b>	-0.043 (0.760)	0.33 (0.829)	-0.452 (0.501)	-0.412 (-0.492)
<b>Macroeconomic Variables</b>				
FOREX	-0.697 (0.060)**	-0.626 (0.088)**	-0.559 (0.142)	-0.612 (0.139)
GDP	-9.8E-005 (0.973)	0.000 (0.788)	0.000 (0.652)	0.000 (0.630)
<b>Firm Specific Variables</b>				
MTB		0.011 (0.054)**	0.010 (0.094)**	0.009 (0.140)**
PE		-0.003 (0.027)**	-0.002 (0.085)**	-0.002 (0.084)**
ROI		0.003 (0.114)**	0.003 (0.164)	0.002 (0.248)
Mkt. Cap.		-2.0E-006 (0.511)	-2.1E-006 (0.500)	
<b>Event Specific Variables</b>				
Region			0.453 (0.479)	0.422 (0.538)
Year			0.035 (0.896)	0.10 (0.970)
Status				-0.186 (0.665)
Relatedness				0.080 (0.791)
<b>Control Variables</b>				
Payment				0.086 (0.758)
Size				3.71E-006 (0.996)
N	79	79	79	79
Adjusted R Squared	0.21	0.50	0.031	-0.014

**Notes:** \* Significant at the 10 percent level

\*\* Significant at the 5 per cent level

## **Chapter 5**

### **DISCUSSION**

#### **5.1 Chapter Overview**

The purpose of this chapter is to connect the interpretation, analysis and discussion of the findings. Firstly the total wealth effects of US firms are considered, followed by a discussion surrounding the impact of event specific factors and their impact on the wealth gains of US acquirers. Finally, the variables relevant to the regression analysis are discussed.

#### **5.2 Total wealth effects for US acquiring firm shareholders engaged in international M&As into emerging markets.**

Table 4.6 illustrates the wealth changes for the 79 US acquiring firms throughout the 21 day window. These are largely positive on all of the days excluding days -10, -9, -8 and -7. The positive returns from six days prior to the announcement maybe a result of information leakage regarding the acquisition before the actual announcement of the deal. These results are similar to the findings of Francis et al. (2008) who report positive wealth gains of 0.96% for US bidders who acquire targets in developing markets during the years 1996-1997. Also, complimenting this result is the findings of Chari et al. (2004) who find evidence of positive acquirer returns of 3% for the period 1988-2002. In contrast however Uddin and Boateng (2009) report negative returns for UK bidders who acquire firms in emerging markets. Their findings consist of -0.24% and -0.02% for the two days before the announcement and two days subsequent to the deal announcement. UK bidders who acquire targets located in emerging markets over the period 1994-2003.

Table 4.7 outlines the cumulative abnormal returns (CARs) windows. The CARs over all of the event windows are found to be positive. The largest CARs are reported in the (-1, 1) and (-2, 2) windows. Therefore this finding also shows that acquisitions by US firms into emerging markets influence stock prices positively and provides beneficial wealth effects for the shareholders of US bidding corporations. This result is comparable to the

study of Doukas and Travos (1988) who report positive returns for similar event windows. However, these results are in contrast to the findings of Aybar and Ficici (2009) who report negative CARs for all of their event windows. The CAR reported in their three day event window (-1, 1) was their highest negative (-0.09) in comparison our highest positive CAR of 72.013 for the same 3 day window. These results also contradict the findings of Hitt et al. (2001). The higher returns in this study may reflect the fact that this study analyzes acquisitions into four emerging market regions, those of Asia, South America, Eastern Europe and Africa; whereas Aybar and Ficici (2009) limit their emerging market analysis to solely Asia. The differing time frames of the two studies could also have an influence in the inconsistency between the two results. It was illustrated in Table 4.9 that US acquiring shareholders experienced substantial returns during the 2006-2009 period, whereas the study conducted by Aybar and Ficic (2009) only spans across the period of 1991-2004.

### **5.3 Geographic location of target firms and the wealth effects of acquiring firms**

Table 4.8 illustrates the wealth effects of US bidding firms in relation to the geographic location of the target firms. The returns to the US bidders are found to be positive for both Chinese and all other targets located in emerging markets under the three key event windows. This is similar to the findings of Doukas and Travlos (1988) and Chari et al. (2004) who state that the bidding firms performance is certain to increase if the target firm is from a developing country but in contrast to the results reported by Conn et al. (2001) who claim that bidding firms experience greater returns when they purchase targets from developed European countries. Nevertheless it is also clear from Table 4.9 that acquisitions by US firms into Chinese markets result in larger acquiring shareholder returns in comparison to acquisitions into other merging countries. Therefore it is clear that the geographic location of target firms affects the performance of the bidding firms. Kiymaz (2003) and Moeller and Schlingemann (2005) provide empirical evidence to support this claim, however it is contradicted by Yook and McCabe (1996). The finding that US acquirers perform superior when they acquire targets in China as opposed to the other emerging countries in the sample may be clarified by the variations between market

for corporate control in China and all other emerging markets. Since the liberalization of the Chinese economy, growth rates have been increasing rapidly in comparison to other emerging markets. Therefore, the Chinese economy is now less protected and more open, leading to lower agency costs and consequently increasing the US acquirer's gains. This view supports Gleason et al. (2002) who find empirical evidence that the returns for acquiring firms are positive when firms acquire targets with less restraining tax and government regulations. However, Kiymaz (2004) contradicts the claim that Chinese targets provide greater gains than any other emerging markets and put forward evidence that US bidders that acquire firms in Latin-American countries encounter larger returns as opposed Chinese firms.

#### **5.4 Year of the acquisition event and the wealth effects of US acquiring firms**

Table 4.9 demonstrates the wealth effects for the US acquiring firms engaged in international acquisitions in emerging markets in respect of the year of the acquisition. It can be seen from the table that 36.7% of the M&As were completed in the period 2000-2005, however a larger volume of 63.3% were completed through the period 2006-2009. Table 4.9 provides evidence that acquisitions undertaken through the 2006-2009 time frame earn positive abnormal returns in all of the windows under observation. However the returns are negative for the 2000-2005 period under the twenty-one and three day event windows (-10, 10) and (-5, 5). This is probably due to the fact that the restrictions in emerging markets had just been lifted previous to the earlier time frame (2000-2005) and the newly liberalized regimes did not have sufficient time to be absorbed in these economies (Yadong and Rosalie, 2007). Therefore bidders acquiring within these emerging markets are more likely to be faced with higher agency and capital costs until the full effects of liberalization are in progress. The assertion that the wealth effects of US acquiring firms differ for the two time frames under observation clearly lends support to the proposal that the year of the acquisition has an effect on the acquirer's returns. This finding is partially in contrast to Francis et al. who find positive wealth effects for US acquiring firms during the period 1996-2003. Similarly, William and Liao (2008) find evidence of positive wealth gains to US bidders who complete deals in emerging markets throughout the 1998-2005 time frame. However, the result is consistent with Aybar and



Ficici (2009) who demonstrate negative returns during the sample period 1991-2004.

### **5.5 The status of the target firm and acquiring firm wealth effects**

It is evident from Table 4.10 that the majority of firms located in emerging markets acquired by US firms were private companies. For instance only 8.8% of the firms acquired were publicly listed in comparison to 91.2% of them being private targets. The findings in Table 4.10 illustrate that US firms that acquired private firms located developing countries outperform those that acquired public firms throughout the study. This result is consistent with Fuller et al. (2002), Uddin and Boateng (2009). The results are also in line with Conn et al (2005). They find that private companies make up the majority of companies acquired through cross-border merger and acquisitions and they also state that the acquisition of private firms in comparison to listed firms create positive wealth effects for acquiring shareholders. The reasoning behind this finding maybe due to relatively small size of private firms in comparison to listed firms. Therefore small private firms are more effectively examined and controlled, thus leading to a decrease in agency costs and an increase in acquiring firm shareholder returns. Also, as the majority of the emerging markets are only recently liberalized and stock exchanges are relatively small and less efficient than those of developed markets, therefore the majority of firms within these countries are privately owned.

### **5.6 Macroeconomic industry relatedness of the acquiring and target firms and its impact on the wealth effects of acquiring shareholders**

The findings demonstrated in Table 4.11 show that unrelated acquisitions outperform related acquisitions in terms of larger positive returns to US acquiring shareholders. The sample is unevenly split between related and unrelated acquisitions and it is clear that the majority of deals undertaken by US firms are carried out in related industries as opposed to unrelated industries. These results are consistent with the findings of Doukas and Travlos (1988) who illustrate the benefits that are gained from entering into new sectors and industry diversification. This is in contrast to the findings Martynova and Renneboog (2006) who report positive returns of 0.98% for the acquirers of related acquisitions and negative returns of 0.45% for the acquirers of unrelated deals during the

European M&A wave of the 1990s. Also, challenging this finding are Moeller and Schlingemann (2005), and Uddin and Boateng (2009) who provide evidence that acquiring company shareholder returns are smaller if the acquisition is completed in a diverse industry. The outperformance of unrelated acquisitions in comparison to related acquisitions maybe due to the fact that many firms may want to expand their operations into diverse products and industries so as not to become too dependent and over rely on one particular industry, especially during the current recessionary period.

### **5.7 Payment method of acquisition and US acquiring firm shareholders wealth effects**

Table 4.12 shows the wealth effects for the US acquirers who completed the deals using cash and mixed payments methods. 29% of the acquisitions were finalized using mixed payment methods and 71% were finalized in the form of cash payments. This is not surprising as it is widely known that cash payment methods are the norm in international acquisitions. This finding is consistent with the evidence of Linn and Switzer (2001) and Arnold (2005) who proclaim that is the most popular means of acquisition payment. See Appendix 15. The abnormal returns for all three event windows are positive, yet cash deals are more inclined to outperform mixed payment deals. This finding is parallel to Travlos (1987) who states that acquisitions of firms paid for with equity experience smaller returns than those acquisitions paid by cash. However, Fuller et al. (2002) provide evidence that acquired firms paid for with equity do not experience smaller returns than private acquisitions paid for with cash. Foreign targets may be less inclined to accept overseas shares as the valuation of the deal becomes increasingly complicated, thereby giving reason to the larger number of cash acquisitions in this study.

### **5.7 The size of the acquisition deal and the wealth effects of US acquiring shareholders**

Table 4.13 reports the wealth effects for the US bidding firms on the basis of the value of the deal. 23% of the total deals are considered to be large acquisitions and 72% considered to be medium sized deals. Table 4.13 clearly demonstrates that the US acquirers engaged in large sized deals across emerging markets do not obtain statistically

significant returns in the two out of the three event windows. However, all three windows report positive wealth effects for US acquirers who engage in medium sized deals across emerging markets with the highest returns reported in the eleven day event window (-5, 5). In relation to medium sized deals, this finding is in contrast to the finding of Uddin and Boateng (2009) who report negative wealth effects for both the 21 day and 3 day windows. However, the finding in relation to negative acquiring returns for large sized deals corresponds to Uddin and Boateng (2009). This finding is also similar to the results of Moeller et al. (2004) and Francis et al. (2008). The latter report positive acquiring returns of 3.63% for small sized deals. This finding is surprising as it would be expected that large sized deals would lead to certain opportunities such as economies of scale. Maybe large deals lead to an increase costs brought about by integration complexities and therefore decrease the acquiring firm's wealth effects.

### **5.8 Multiple versus single acquirers and the acquiring firms wealth effects**

Table 4.14 reports the CARs for the sample of US acquiring firms on the basis of multiple versus single acquirers. Again the sample was unevenly distributed between the two groups with 15% multiple and 85% single acquirers. The results clearly illustrate that the wealth effects differ for multiple acquirers in comparison to single US acquirers when carrying out M&As in emerging markets. The results show that multiple acquirers out perform single acquirers as they report positive returns in the three event windows under observation and it is evident from table 4.14 that the returns during the twenty-one (-10, 10) and three day event windows (-1, 1) are statistically significant. All of the event windows report negative returns for the single acquirers and are also statistically significant at the 5 per cent level. The largest returns for the multiple acquirers occur during the three day event window (-1, 1) and the largest negative returns for single acquirers occur during the eleven day event window of (-5, 5). The experience of the multiple acquirers in relation to M&A activity is a competitive advantage as they are less inclined to overpay for deals. Their experience also leads to a reduction in post-acquisition integration costs. Therefore information asymmetries are decreased.

## **5.9 The impact of the foreign exchange rate, GDP target levels, firm and event specific variables on the wealth effects of US acquiring shareholders?**

### **5.9.1 Macroeconomic variables**

The findings revealed that the foreign exchange rate (FOREX) of the target firms has a significant impact on the wealth effects of US acquirers. The negative foreign exchange rate (FOREX) variables in Table 4.15 suggest that the currencies of the various emerging markets are weaker relative to the dollar. Therefore, the stronger currency in the US triggers aggressive bidding for the target and consequently increases the cost of the acquisition, thereby reducing the returns to acquirers. This finding is similar to Cakici (1991) and Vascellos and Kish (1993), however in contrast to the findings of Conn et al. (1995). The negative coefficients for FOREX in this study are in contrast to the positive FOREX figures reported by Graham et al. (2008). However these positive coefficients are insignificantly related to US acquiring shareholders wealth gains. Similarly, Kiymaz et al. report an insignificant relationship between FOREX and the bidder's wealth effects. In contrast, Harris and Ravenscarft (1991) found evidence of a positive relationship between FOREX and acquirer's wealth gains for an earlier timeframe of 1970-1987.

The inverse relationship between gross domestic product (GDP) and bidder returns implies that the target country's GDP level has no statistical significance in determining the wealth effects of US acquirers. Graham et al. (2008) also report negative GDP coefficients in their study, also suggesting possible slowdowns in the growth of the emerging market economies observed in their study. These findings are unrelated to the results of Markides and Ittner (1994) who report positive GDP coefficients, indicating that the targets economic growth is increasing at a higher rate than the acquirers. Nonetheless, it is vital to consider that these results were shown to be statistically insignificant.

### **5.9.2 Firm specific variables**

The significantly positive coefficients on market-to-book (MTB) in Table 4.15 imply that the MTB value of US acquiring firms is a determinant of their returns when they carry out acquisitions in emerging markets. This finding suggests that the returns to US acquirers increase with the MBT value. This finding is similar to Graham et al. (2008) who report a significantly positive MTB coefficient of 0.009. The coefficients for return on investment (ROI) are significantly positive for the four equations in Table 4.15, therefore indicating that this ratio positively affects the returns of US acquiring shareholders. This is similar to the findings of Williams and Liao (2008) who illustrate significantly positive ROI figures of 0.122 for their 21 day window. These figures indicate positive past returns to the acquirers of US firms. The negative coefficient on market capitalization (MKT CAP) in Table 4.15 is insignificant in determining the wealth effects of US acquirers. This is also similar to the finding of Williams and Liao (2008) who report a negative coefficient of -0.396 for the 21 day window.

### **5.9.3 Event Specific Variables**

The positive coefficients for the country (REGION) of the target firms outlined in Table 4.15 indicate that the location of the target firm would appear to have an impact on the wealth gains of the US acquiring firms. This result contradicts the finding of Kiymaz (2009) who report a negative REGION coefficient of -0.046 for the emerging markets observed in his study in comparison to the positive coefficient of 0.453 reported in our third equation in Table 4.15. The reason for this may be due to the fact that their study included a comparison between developed and developing markets, whereas this study focused solely on developing markets.

It is also evident from Table 4.15 that there is an inverse relationship between the status (STATUS) of the target firm and the acquiring firm's wealth effects as the coefficient is reported as -0.170. This finding is comparable to Aybar and Ficici (2009) who also report a negative STATUS coefficient of -0.0141 under a 21 day window for the period 1991-2004. During a slightly different but comparable study, Francis et al. (2008) report a negative coefficient on the public target variable (PUBLIC). Moeller and

Schlingemann (2005) also support this finding. Also, Eije and Wiegerinck (2010) find positive bidder returns for US shareholders following the announcement of acquisitions in China for the 1997-2008 time frame. However, it is important to consider the uneven spilt in the sample between public and private targets. For instance, it is outlined in Table 4.5 that only 29% of the transactions involved publicly owned targets in comparison to 71% of the transactions involving privately owned targets.

The industry relatedness (RELATE) variable is positively associated with the wealth gains of the bidding shareholders. A positive coefficient of 0.103 is reported on the RELATE variable in the fourth equation of Table 4.18. Aybar and Ficici (2009) report slightly higher but similar findings of 0.4076 for the 21 day window in their study carried out over the 1991-2004 time frame. This illustrates the importance of industry relatedness in determining the acquiring firm's returns.

### **Control Variable**

The results for deal size (SIZE) in Table 4.18 are similar to the findings of Kiymaz (2009) who also report a negative coefficient of -0.67 for the period 1989-2003 and Ayber and Ficici (2009) who illustrate a negative coefficient of -0.000036 for the 21 day window. These results imply a negative relationship between the value of the deal in terms of size and bidder wealth effects. However, these results are in contrast to Liebeskind and Opler (1995) and Graham et al. (2008). The latter found empirical evidence of a positive relationship between deal size and positive acquirer gains. They report a significantly large positive SIZE coefficient of 51.974.

## Chapter 6

### CONCLUSION AND RECOMMENDATIONS

#### 6.1 Overview

The purpose of this study is to analyze the wealth effects for US acquiring firms following the announcement of acquisitions of target firms across emerging markets and to investigate the variables that may determine acquiring shareholder wealth effects. An event study methodology is utilized to discover the stock markets response to the announcement of acquisition deals. The market model is employed to calculate the returns obtained by US acquiring shareholder over a 21 day period. Utilizing a univariate analysis, this investigation discovered that US acquirers experience positive wealth effects on the announcement of deals completed in emerging markets. The largest returns of 71% were found using the three day (-1, 1) event window. The twenty-one day (-10, 10) window illustrated positive wealth effects of 35%. This result assists the exploration into what factors determine these wealth effects. The twenty-one day (-10, 10) window is chosen as it will pick up all of the relevant information in relation to the run up to the announcement and subsequent to the announcement. The geographic location of the target is found to significantly influence the wealth effects of US acquirers, especially if the target is located in China. US acquisitions are found to be more profitable for the period 2006-2009 as the emerging economies adapt to the full effects of liberalization. The study also initiates the importance of acquiring private firms in emerging markets in comparison to the negative wealth effects of acquiring public targets. In relation to the industry relatedness of the target and acquiring firms, both related and unrelated acquisitions exemplify positive wealth effects. However, none of these prove to be statistically significant, indicating a weak impact of the relatedness concept on the returns of acquiring shareholders. Cash deals were found to be more profitable than other forms of payment and large sized deals in terms of value were found to have a significantly negative impact on the wealth gains of US bidders. Also, the positive returns of multiple acquirers as opposed to negative single acquisitions have a substantial impact on the gains to US acquirers.

In the context of the multivariate regression, there is an inverse relationship between the wealth gains to US acquirers and foreign exchange and GDP. Regarding the firm specific factors, market-to-book (MTB) and return on investment (ROI) are found to have a positive impact on the returns to acquirers. However, price-earnings (PE) ratio is statistically unrelated to bidder's wealth gains. The status and deal size factors display a negative association with bidder's returns and the industry relatedness and payment method are found to have a positive effect on the determinants of US acquiring shareholder returns

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### **6.2 Limitations of study and recommendations for future research**

The quantitative approach employed in this study focuses only on the short-term announcement effects. The short-term approach assumes market efficiency, however the market may take time to evaluate the implications of the acquisition and therefore the share price may not adapt to deal announcements in the short-run. Therefore, potential future research could involve extending the event windows to a period of six months to assess the long-term wealth effects of US acquirers. This study is limited to measuring exclusively the wealth effects of the acquiring firms. Therefore, potential research could include the analysis of the wealth gains of the target firms located in emerging markets. The focus of this study is solely on the wealth effects of US acquiring shareholders. Consequently the study is limited in the fact that the findings derived cannot be applied to other countries. Future research could include the investigation of the returns to UK and European acquirers. The sample of emerging markets is relatively narrow as only seventeen countries are analyzed. This was due to the lack of available data regarding the additional emerging markets across the globe. However, a comparative study could be explored between emerging and developed economies. Also, the analysis is limited to a concise but incomprehensive set of variables to capture the effect of macroeconomic, firm and event specific factors in explaining the wealth effects of US acquirers. Future research could extend the number of variables to include R&D expenditure, advertising expenditure, foreign sales as a percentage of total sales and previous operations in



emerging markets. The recent case of GOOGLE CHINA- POLITICAL RISK – ASSESS MORE CLOSELY IN LIGHT OF US AND CHINESE GOVT. GOOGLE 2M.

Various potential areas for further research have been identified.

In future research a larger sample size and a longer time frame should be used to obtain more accurate and consistent results. A recommendation for companies who are considering acquiring firms in emerging markets would be to consider all of the factors that positively and negatively impact on the wealth effects of bidders. Further research could include the wealth gains of the target firms located in emerging markets. This would result in a more detailed investigation of M&A wealth effects and the factors that determine these wealth effects. The research could also be to perform a comparative study between a particular industry in an emerging and developed economy to determine what variations occur. This study adds to previous literature in this area paves the way for future researchers discover complimentary and additional factors that determine bidders returns when the execute acquisitions in emerging markets.

