The impact of corporate governance systems, economic conditions, and target value ambiguity on bidders' gains

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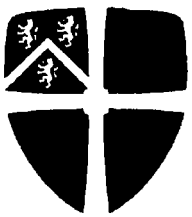

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PhD THESIS

The Impact of Corporate Governance Systems, Economic Conditions, and Target Value Ambiguity on Bidders' Gains

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In Memory of my Grandparents, *Georgia* and *Panayiotis*

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Abstract

The primary objective of this thesis is to investigate the effects of takeover bid announcements on the value of bidders that engage in domestic and cross-border acquisitions. The empirical chapters focus on three major issues. They are: (a) the implications of international variations in corporate governance systems, (b) the roles of market valuations, economic conditions and exchange rate changes, and (c) the effects of ambiguity in the valuation of unlisted targets, on the wealth of shareholders of bidding firms. Evidence from all chapters, while revealing that bidders' gains vary significantly with several firm and transaction specific characteristics, strongly confirm the deterministic power of the key issues examined. Specifically, the findings discussed in chapter 3, not only confirm that bidders tend to enjoy higher short-run gains from acquisitions of (a) listed and subsidiary targets that based in civil-law countries and (b) stock financed acquisitions of targets that based in common-law countries, but they also suggest that bidders perform relatively better in the long-run when the targets are based in common-law countries. The results reported and discussed in chapter 4 show that bidders' shareholders enjoy higher announcement gains from domestic than from foreign takeovers only when the bid is announced during periods of low market valuation, high levels of economic growth, and weak effective exchange rate. On the contrary, acquisitions made during periods of high market valuation and strong effective exchange rate yield higher abnormal returns to shareholders of acquirers of foreign than domestic target firms. The results also confirm that whereas market valuations and the effective exchange rate have similar effects on bidders' post-merger performance, the effects of economic growth tend to reverse after three and five years following the bid announcement. Evidence discussed in the final empirical chapter (chapter 5) suggests that the gains of bidders engaged in acquisitions of unlisted targets are shaped by the degree of difficulty surrounding the valuation of these targets. Bidders' shareholders enjoy higher announcement gains when they acquire less value-ambiguous unlisted targets. Acquisitions of (a) mature and (b) large unlisted targets generate higher (lower) short-run (long-run) returns to shareholders of bidders. In addition, bidders of unlisted targets laden with intangible assets generate low short-run returns but perform better in the long-run. Overall, the findings of this thesis show that the gains of bidders based in the UK are not only affected by transaction and firm specific factors but also by the corporate governance system of the country in which the targets are based, the stock market conditions, economic situations and exchange rate movements at the time of bid announcement, as well as the difficulty involved in valuing the targets.

The material contained in this thesis has not previously submitted for a degree in this or any other university.

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Chapter 1: Introduction

Takeovers have been widely used by corporations as a method of restructuring and expanding their operations in an attempt to increase efficiency and/or market share. As summarised by Shen and Reuer (2004), takeovers represent "a leading cause of industrial change and the rationalization of business organizations in the modern industrial era".[1] Corporate takeovers also entail significant implications, depending on their success, not only for firms directly involved in the transaction, but also for a number of other internal and external stakeholders of merger partners. In spite of extensive research on the effects of takeover deals, a number of issues remain unresolved and/or unaddressed by previous studies. This thesis aims to fill some of those gaps in finance literature.[2] In particular, the thesis aims to address three main issues: (a) the impact of the legal system of the target firm's country of residence on the announcement and post-merger stock price behaviour of UK bidders acquired both domestic and foreign target firms, (b) the roles of market valuations and economic conditions in the source country, as well as the role of the source country's currency Effective Exchange Rate movements, on the announcement and post-merger wealth effects of UK bidders acquired both domestic and foreign target firms, and (c) the effect of value ambiguity (or the difficulty to value) of UK unlisted target firms on the announcement and post-merger gains of UK bidders' shareholders.[3] Research outcomes on these issues should fill a number of voids in finance literature and enhance our understanding of the corporate takeovers process and their implications to various stakeholders of merger partners.

Evidence from earlier research, while revealing that domestic mergers and acquisitions (hereafter M&A) continue to overpopulate the market for corporate

[1] In Pablo, A. L., and Javidan, M. 2004, 'Mergers and Acquisitions: Creating Integrative Knowledge', Blackwell. (p. 82).

[2] The remaining of the discussion in this introduction chapter illustrates clearly the importance and the need of the issues examined in this thesis, the gaps in the literature, the significant endowments that the main outcomes of this thesis add to the literature, as well as the implications to all constituents involved in the M&A transactions.

[3] In this thesis I employ UK sample to test for the above research objectives. Basically, the UK market is very similar to the US one in terms of corporate governance characteristics, legal protection issues and most importantly it has the strongest legal system as compared to continental Europe (issues related to the first empirical chapter, chapter 3) and also it is overpopulated by acquisitions of unlisted targets (almost 90% of the UK sample involves unlisted targe firms, as reported in the third empirical chapter, chapter 5).

control, strongly suggests that over the last three decades the number of M&A that involve firms from two different countries (i.e. cross–border mergers and acquisitions – hereafter CBA)[4] has increased substantially.[5] Observations have also suggested that although there are some common driving forces between domestic and cross-border deals, a number of other strategic considerations separate them. Some of major forces that motivate firms to engage in M&A include, among others, growth, technological advancements, product differentiation, consolidation, government policy, movements in exchange rates, desire to diversify, and political and economic stabilities. However, CBA tend to be much more complex, when compared to domestic acquisitions, since the transactions across two different countries are likely to give rise to differences in political and economic conditions (for example, the liberalization of trade, regional integration, deregulation and privatization), organizational structures, corporate governance mechanisms, cultures, traditions, tax rules, laws, investor protection regimes, as well as accounting standards. Furthermore, several obstacles affect all relevant parties involved in the M&A process within a single country (i.e. domestic M&A). These factors are significant and they are the likely reasons of why at least 50 percent of domestic M&A fail long after the bid announcement.[6] It is also known that more complexities are faced by firms involved in CBA and this is likely to increase their failure rate to well over 50 percent, compared to domestic M&A.[7]

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[4] Corporations have the following alternative ways to expand internationally: a) exporting from to home to foreign market, b) licensing a foreign company to produce the goods and services, c) Greenfield investment in production facilities in the foreign market, *d) merger with, or acquisition of, a firm already operating in the foreign market,* and e) joint venture or other strategic alliance with a firm operating in the foreign market. *The last three ways are in general considered as Foreign Direct Investments (FDI).*

[5] Healy and Palepu (1993) suggested that around the late 1980s the UK was the leading country in CBA activities covering almost 30% of the entire international corporate investments. Given that the UK CBA activities fluctuate over time, the UK still remains one of the major participants in the global CBA activity. UNCTAD (2000) has also suggested that "The value of completed cross-boarder M&A (defined as the acquisition of more than 10 per cent equity share) rose from less then $100 billion in 1987, to $720 billion in 1999." (p. 10).

[6] Porter (1987), as discussed in Hussey (1999), suggested that over a long period after the M&A announcements, at least 50% of them were divested, in other words they were failures.

[7] The failures could be reflected in destruction of market value, financial instability, damaged strategic position, organization weakness, damaged reputation, and violation of ethical norms and laws.

The increased CBA activities in terms of both number of deals and value of transactions (see footnote 3), along with the difficulties and complexities discussed above, have raised a set of important questions, some of which remain to be investigated while others call for further examination. Typical questions that deserve investigation include, how do CBA affect the short and the long-run wealth effects of shareholders of firms that are involved in the deals? What drives CBA activities over time? What are the roles of corporate governance mechanisms and legal system features on the direction and performance of firms that engage in CBA? How does the level of market valuations and economic conditions in the source country, as well as the source country's currency Effective Exchange Rate (EER) movements, affect the level and performance of bidders engaged in CBA? And finally, are there any differences between the performances of bidders involved in domestic acquisitions with the ones involved in CBA? In response to these questions, a voluminous literature has emerged which concentrates on whether CBA create superior value for shareholders of the acquiring firm (Doukas and Travlos, 1988; Kang, 1993; Markides and Ittner, 1994; Doukas, 1995; Gregory and McCorriston, 2005) while another group of studies in the same field of research compares the gains obtained from CBA with those obtained from domestic acquisitions (see for instance Moeller and Schlingemann, 2005 and Conn et al. 2005).

Amongst the earlier studies that have attempted to resolve the puzzle on bidders' gains from domestic versus CBA, Moeller and Schlingemann (2005) attributed the higher gains from CBA to business diversification whilst Gregory and McCorriston (2005) showed that the gains from CBA are dependent on target's geographical region. However, evidence in this field of research is less than convincing with respect to the exact implications on the wealth effects resulting from domestic and CBA announcements. As a result, this thesis examines whether additional factors which have been originally proposed to constitute a fundamental role in the literature of corporate finance, investments, and asset pricing, are sufficient to determine the short and long-run gains of acquiring firms, and also consider the implications they may have to all stakeholders of merger partners. Accordingly, the main question that motivates chapters 3 and 4 of this thesis focuses on whether

domestic and/or CBA create value to shareholders of acquiring firms by investigating the impact of (a) the legal system of the target firm's country of residence, and (b) market and economic conditions at the time of bid announcement, on domestic and cross-border deal activities as well as on the short and long-run gains of bidders that involved in these transactions.

Previous research has also focused on whether target and/or acquiring firms' shareholders benefit from exclusively domestic corporate takeovers within a short window surrounding the takeover's announcement day. In short, the balance of current evidence on value creation from M&A has recorded that although target firms' shareholders enjoy positive and significant abnormal returns after M&A announcements (Bradley et al. 1983; Eckbo and Thorburn, 2000; Billett et al. 2003), the question on whether acquiring firms' shareholders benefit from M&A is still under investigation (Jensen and Ruback, 1983; Asquith et al. 1983; Fuller et al. 2002; Draper and Paudyal, 2006).[8] In particular, the announcement period gains of bidding firms appear more puzzling with several deals to either generate positive or negative abnormal returns or to breakeven in the short-run.[9] Evidence has also admitted that the acquiring firm's performance in the short-run is a function of specific bidder, target, as well as transaction specific characteristics. Indeed, a rich array of studies has concluded that the target firm's status, the method of payment, the growth opportunities of the bidder at the time of the acquisition announcement (measured by the MTBV), the size of the bidder at the time of the bid announcement (measured by the market capitalization of the bidder), and the relative size of the deal are, among others, very important announcement returns determinants.[10] More recently, another strand of studies have examined the sensitivity of bidders' gains on

[8] This thesis focus only on the short and the long-run gains of acquiring firms' shareholders whereas the gains to target firms' shareholders are ignored, given that the value creation to target firms' shareholders is, to some extent, certain.

[9] Many studies in the literature have reached the conclusion that the stock market reaction to the information contained in an acquisition announcement reveals the market's view for this transaction. Specifically, Hietala, Kaplan and Robinson (2003) proposed that the announcement of an acquisition reveals information about the bidder's overpayment, the stand-alone values of the firms involved in the merger (bidding and the target) and finally the potential synergies arising from this combination.

[10] For studies investigate these factors, see for example Asquith et al. 1983, Myers and Majluf (1984), Travlos (1987), Chang (1998), Rau and Vermaelen (1998), Fuller et al. (2002), Moeller et al. (2004), and Draper and Paudyal (2006).

merger activity and it has highlighted the deterministic power of merger waves on the short-run gains of bidders' shareholders (Rhodes-Kropf and Viswanathan 2004; Bouwman et al. 2009).

Along similar lines, recent extensive research on the wealth effects generated to shareholders of bidders when acquiring unlisted target firms, has left some important questions unresolved. For example, does the level of information availability about the target, or the level of difficulty in estimating the value of the target, affects the short and the long-run gains of bidders? How does the valuation ambiguity of the unlisted targets that creates difficulty for the bidding firms in correctly estimating the value of the deal, affects the announcement period and post-merger wealth of bidders' shareholders? And finally, what is the role of the method of payment in acquisitions that involve unlisted, and value uncertain targets firms, on the announcement and post-merger gains of bidders' shareholders? Accordingly, this thesis explores both the challenges and opportunities that occur in favour of the performance of exclusively domestic acquisitions that involve unlisted targets. In short, the fifth chapter of this thesis is mainly concerned with the impact of different levels of information availability or quality of information (i.e. different levels of value ambiguity) concerning the valuation of unlisted target firms, on the announcement and post-merger gains of domestic bidders' shareholders.

Numerous studies have also examined the post-merger (i.e. long-run) performance of acquiring firms and they have admitted that, on average, bidders tend to suffer a loss in a period up to five years following the month of the M&A announcement (Agrawal et al. 1992; Loughran and Vijh, 1997; and Agrawal and Jaffe, 2000). Similarly, several recent studies have recorded that the well documented underperformance of bidding firms in the long-run is not dependent only on firm specific characteristics such as the size and the growth opportunities of firms involved in the transaction, but also on transaction specific characteristics such as the method of payment and the relative size of the deal (Rau and Vermaelen, 1998; Moeller et al. 2004). More recently, other studies have investigated the effects of merger waves on the post-merger bidders' stock price behaviour and they have

strongly confirmed their deterministic power (Bouwman et al. 2009). However, in spite of current research evidence on bidders' post-merger returns, several important questions remain to be investigated. Indeed, whether the post-merger gains of bidders' shareholders should be captured by using a better methodology or whether the post-merger underperformance puzzle is related to other firm, transaction, market or economic specific-factors, are empirical questions that deserve further investigation. As a result, the chapter 3 aims to investigate the impact of the legal system of the target firm's country of residence on the post-merger share price behaviour of bidders engaged in acquisitions of domestic and foreign targets. The legal traditions of the target firm's nation may affect the costs of the target firm's integration into the bidder's existing business environment which is therefore expected to be reflected into the bidder's long-run returns. In addition, while there is some evidence of the effects of market valuations on the post-merger gains of domestic bidders, chapter 4 seeks to uncover the long-run wealth of bidders engaged in domestic and foreign acquisitions at different economic and market conditions, as well as at different effective exchange rate levels. Market valuations and economic conditions at the time of the bid announcement are likely to affect the level of (a) competition, and (b) the investor sentiment in all countries in question, thereby affect bidder's post-merger returns. Lastly, chapter 5 explores the effects of value ambiguities related to unlisted target firms on bidder's post-merger performance. Whether the difficulty in estimating the value of unlisted targets creates different valuation effects to bidders' short and long-run share price is still an open question in finance literature that deserves further investigation. The majority of evidence derived from this thesis fills several voids in the literature related to bidders' post-merger share price behaviour.

Within the overall structure of this thesis, chapter 2 provides a detailed review of the existing literature that is related to gains of domestic and foreign bidders' shareholders (as separate divisions) along with their performance determinants, both in the short and long-run. It also offers a discussion on their main implications and challenges to different stakeholders of the firms involved. The discussion here also reviews the literature on the gains of bidders within the framework of domestic

versus CBA, which is the focus of the chapter 3 and 4 of this thesis and examines the question of whether domestic and/or foreign acquisitions create superior value to UK bidding firms' shareholders. Lastly, the literature related to specific issues examined in each of the empirical chapters (chapters 3 to 5 in the thesis) will be discussed separately within the framework of each of these chapters.

Chapter 3 investigates whether the characteristics of the legal system of the target firm's country of residence from all over the world are significant factors in shaping the short and long-run gains of acquirers of domestic versus foreign target firms. Academic interest on that particular nexus has concluded that the governance procedures and the legal environment of the country affect firm's value (see for example, Jensen, 1993; La Porta, Lopez-de-Silanes, Schleifer, and Vishny, 1997; 1998; 2000, 2000b and 2002; and La Porta et al. 1999 and 2006). The significant impact of the legal provisions pertinent to corporate governance, investor protection, and openness of an economy is that it can affect (a) the acquisition premium/discount offered by bidders, and (b) the process of integration between acquirer and target, which in turn, should be reflected in the announcement and the long-term performance of the bidding firm. However, in spite of the apparent importance of governance systems, no prior study has directly examined the possible implications of the various legal systems and corporate governance mechanisms, on the gains to UK bidders that engage in domestic versus CBA.[11] Therefore, the major task of chapter 3 is to fill this void by empirically examining the possible implications of legal traditions of the target firm's country of residence on the gains to bidders engaged in domestic and foreign acquisitions. The main conclusions derived from this chapter suggest that, after controlling for several firm and transaction specific characteristics, CBA generate higher returns than domestic deals. In the announcement period, bidding firms acquiring listed and subsidiary targets that based in civil-law countries (with lower investor protection) outperform the acquirers of listed and subsidiary targets that based in both the domestic market and

[11] Gregory and McCorriston (2005) grouped UK acquirers' targets by geographical region of countries in which they operate and suggested that the corporate governance system among the regions differ significantly. Similarly, Bris and Cabolis (2008) applied a similar context in their research.

in common-law countries (with higher investor protection). In addition, bidders acquiring targets that based in common-law countries and pay with shares generate higher abnormal returns than the ones acquiring targets that based in the domestic market and in civil-law countries with the same method of payment. Further, in the long-run, bidders of targets that based in common-law countries (both in the UK and in the foreign common-law countries) outperforming the ones of targets that based in civil-law countries.

The overall task of chapter 4 is to explore whether, at aggregate level, the domestic and CBA activities spike with the abnormal deviations of market valuations and various macroeconomic variables; namely the effective exchange rate (EER), Gross Domestic Product (GDP), Gross National Product (GNP), the Growth Index and the Coincidence Index (i.e. business cycle indicator). Along with the domestic and CBA activities, this chapter seeks to investigate the short and long-run stock price behaviour of bidders that engage in these deals. The work presented in this chapter is informed by recent evidence related to the sensitivity of the gains of bidding firms' shareholders on merger activity (i.e. the work by Rosen (2006) on investor sentiment, merger waves, and gains of bidders). Accordingly, the main conclusions derived from this chapter confirm that both domestic and foreign acquisition activities spike with market valuations (both at aggregate and industry level) and economic conditions in the source country, further supporting the main conclusions of other studies such as Bouwman et al. (2009), and Baker et al. (2009). Within the same context, the gains of bidders' shareholders acquiring domestic and foreign targets across periods of high or low M&A activity are found to vary significantly. Specifically, bidders of domestic targets outperform bidders of foreign targets in the short-run, only when the bid is made during times of low market valuations, weak EER, and high levels of economic growth. On the contrary, acquisitions made during periods of high market valuation and strong effective exchange rate generate higher gains to shareholders of acquirers of foreign than domestic target firms. The findings also show that market valuations and the EER have similar effects on the post-merger bidders' gains, whereas the effect of economic growth reverses after three and five years following the M&A announcement.

Chapter 5 develops and empirically examines the proposition that gains of acquirers of unlisted targets depends upon the level of value ambiguity (or difficult to value) of targets. The principle motivation underpinning this empirical chapter is evidence of recent literature which admits that (a) the majority of bidders engage in M&A with unlisted target firms,[12] and (b) the sources of the positive gains to bidders of private or unlisted target firms, in contrast to either negative or zero gains to bidders of listed targets, remain largely unexplored. This chapter is also motivated by recent asset pricing literature which strongly suggests that if the information quality in relation to an asset is not reliable, then ambiguity-averse investors react more strongly to bad news than to good news and in general, they tend to avoid these assets (Epstein and Schneider, 2008). Accordingly, while estimates derived in this chapter are based on a selection of target firms' characteristics that cause difficulty in valuation, such as age, size, intangibility of assets, and investments, they strongly confirm that the bidding firms' gains, both during the announcement and the post-merger period, vary significantly with the level of value-ambiguity concerning the unlisted target firm. In general, acquirers of large (mature) unlisted targets outperform the acquirers of small (young) ones in share deals during the announcement period. On the contrary, acquirers of small (young) unlisted targets perform better in the post-merger period than acquirers of large (mature) unlisted targets. Similarly, while share deals of unlisted targets with balance sheets laden with intangible assets generate low positive or negative announcement returns to bidders' shareholders, they perform better in the long-run. The overall findings show also that the methods of payment interact with the value ambiguity of unlisted targets in shaping the gains of acquirers.

The remainder of this thesis is organized as follows: chapter 2 reviews and discusses the literature that is closely related to (bidders') common abnormal return determinants that applied across the chapters 3 to 5 and form the core of this thesis.

[12] Faccio and Masulis (2005) showed that approximately 90% of UK (and Irish) acquisitions involve unlisted target firms; Draper and Paudyal (2006) reported approximately 87% of the UK acquisitions involved privately held targets. However, Moeller et al. (2007) showed that approximately 53% of US acquisitions involve unlisted targets.

Chapters 3 to 5 present the discussion of the main issues examined in this thesis, my empirical methodology and the data used, whilst they discuss the main findings of the econometric results. Finally, chapter 6 concludes by providing a summary of the main empirical results while it discusses the main implications stemming from the empirical investigations as reflected in the relevant constituents on the domestic and foreign investors.

Chapter 2: Literature Review

2.1 Introduction

A rich array of studies in finance literature has reported that the stock market reaction to the information contained in an acquisition's announcement reveals the market's view of this transaction.[1] In short, these studies have widely recognized that the announcement and post-merger acquiring firm's performance is a function of specific bidder and/or target characteristics, transaction characteristics, as well as other external characteristics. Specifically, several authors have individually concluded that (a) the target firm's status (i.e. private, public, subsidiary), (b) the method of payment (i.e. cash, stock, mixed/other), (c) the growth opportunities of the bidder at the time of the acquisition announcement as measured by the market-to-book value (MTBV) of the bidding firm one month prior to the acquisition's announcement day, (d) the size of the bidder as measured by the market capitalization (MV) of the bidding firm one month prior to the takeover's announcement day, and (e) the relative size of the deal, constitute, among others,[2] very important announcement and post-merger determinants of bidding firms' stock performance.

Along these lines, in this chapter I review and discuss, in great detail, only the literature that is closely related to common abnormal returns determinants on the short and long-run gains of shareholders of bidders acquiring both domestic and foreign targets. In the same framework, I also review the literature that attempts to compare the gains from domestic and cross-boarder acquisitions (CBA) whilst discussing specific factors that lead to any observed differential in performance. Findings of studies that are closely related to issues I investigate within each of the empirical chapters will be reviewed and discussed within the framework of each of the empirical chapters separately (chapters 3 to 5). I follow this structure in order to

[1] Hietala, Kaplan and Robinson (2003) proposed that the announcement of an acquisition reveals information about the bidder's overpayment, the stand-alone values of the firms involved in the merger (bidding and the target) and finally the potential synergies arising from this combination.

[2] Other determinants may include the age of the merger partners, the analyst coverage of the firms involved in the transaction, previous experience in engaging in M&A, previous performance of bidder, etc.

avoid any overlapping amongst the sections reviewing the literature on factors affecting the bidding firms' performance (across all empirical chapters and the present one).[3] This structure will also help the reader to further understand the importance of the issues examined in the thesis and it will clearly reflect its contributions in finance literature.

The remainder of this chapter is organized as follows: in section 2.2 (2.3) I review and discuss the literature related to the announcement stock market reaction around takeovers of domestic (foreign) target firms. Moreover, in section 2.4 I review and discuss the studies that investigate the wealth effects of bidders' shareholders within the framework of domestic versus foreign acquisitions (the ones that examine, simultaneously bidders' gains around takeovers of domestic and foreign firms, as well as factors that lead to any differential in performance) whereas in the final section, section 2.5, I focus on studies that investigate the post-merger stock performance of both domestic and foreign acquirers. Finally, section 2.6 concludes and summarizes this chapter.

2.2 Gains from Domestic Acquisitions

Within this section I review and discuss the literature on the impact of target firm's status and numerous other determinants on the bidding firm's announcement returns. Other determinants include the method of payment used to finance the deal, size of the bidding firm, relative size of the deal, bidding firm's market-to-book value (MTBV) ratio, bidding firm's price-to-earning (P/E) ratio, and age of the bidding and target firm. I focus only on the impact of pre-stated factors on the announcement returns of bidding firms' shareholders that engage in mergers and acquisitions (M&A) with target firms operating in the domestic market.

[3] Given the inter-disciplinary nature of this thesis, which mainly focuses on newly investigated determinants to bidding firms abnormal returns, the incorporation of already existing factors developed by earlier studies for robustness reasons appears essential, thereby the likelihood of repeating these studies in several points increases.

2.2.1 Target Firm Status

The examination of the shareholders' wealth effects of the target firm (when the target firm is a listed one) and the bidding firm within a short window surrounding the M&A announcement day, has been one of the most widely and concurrently controversial researched areas in finance literature. The majority of studies for both the UK and the US markets, as well as for other markets across the world, have documented that while the shareholders of target firms enjoy positive and significant abnormal returns during the announcement period,[4] the gains to shareholders of the bidding companies are to a large degree ambiguous. In fact, it has been extensively recorded that the short-run returns to acquiring firms are largely depended on the target firm's status (i.e. public, private, and subsidiary). Specifically, several studies have reported that acquirers bidding for listed targets either lose significantly (i.e. experience negative abnormal returns) or breakeven in the short-run (i.e. generate zero or small positive returns).[5] On the other hand, the vast majority of studies have recorded positive and statistically significant abnormal returns to bidders acquiring private[6] and subsidiary[7] target firms.[8] In the following

[4] For studies that have documented positive gains to target firms' shareholders, see for example: for the US market, Dodd and Ruback (1977), Langetieg (1978), Bradley (1980), Dennis and McConnell (1986), Bradley, Desai and Kim (1988), Jarrell and Poulsen (1989), Lang, Stulz and Walking (1989), Frank, Harris and Titman (1991), Servaes (1991), Bannerjee and Owers (1992), Conrad and Niden (1992), Healy, Palepu and Ruback (1992), Kaplan and Weisback (1992), Berkovitch and Narayanan (1993), Smith and Kim (1994), Schwert (1996), Laughran and Vijh (1997), Maquieira, Megginson and Nail (1998), Leeth and Borg (2000), Mulherin and Boone (2000), Mulherin (2000), DeLong (2001), Houtson et al. (2001), and Billet, King and Mauer (2003), for Hong Kong, Cheung and Shum (1993), for the UK market, Draper and Paudyal (1999), for Canada, Eckbo and Thorburn (2000) and for European countries, Beitel et al. (2002), and Goergen and Ronneboog (2004).

[5] For US evidence see for example: Jensen and Ruback (1983), Ascquith (1983), Jarrell and Poulsen (1987a), Bradley, Desai, and Kim (1988), Jarrell, Brickley and Netter (1988), Jarrell and Poulsen (1989), Acquith, Bruner, and Mullins (1983), Servaes (1991), Kaplan and Weisbach (1992), Hansen and Lott (1996), Chang (1998), Mulherin and Boone (2000), Schwert (2000), Ang and Kohers (2001), and Fuller, Netter, and Stegemoller (2002). For UK evidence see for example: Firth (1980), Barnes (1984), Dodds and Quek (1985), Franks and Harris (1989), Limmack (1991), Sudarsanam, Holl and Salami (1996), Gregory (1997), Holl and Kyriazis (1997), Higson and Elliott (1998), Sudarsanam and Mahate (2003), Draper and Paudyal (1999 and 2006), Conn, Cosh, Guest, and Hughes (2005), Doukas and Petmezas (2007), and Antoniou, Petmezas and Zhao (2007). For evidence from other countries (Australia, Canadian, Japanese, German) see for example: Eckbo (1986), Pettway and Yamaha (1986), Eckbo, Giammarino, and Heinkel (1990a), Gregory and Westheider (1992) and Da Silva Rosa, Limmack, Supriadi, and Woodliff (2001).

[6] For UK evidence see for example: Hansen and Lott (1996), Draper and Paudyal (2006), Conn, Cosh, Guest, and Hughes (2005) and Alexandridis, Antoniou, and Zhao (2008). For US evidence see for

discussion I review evidence from studies that constitute a significant contribution in finance literature in terms of how the target firm's status in M&A can, to some degree, shape the variation of the bibbing firms' abnormal returns in the short-run.

2.2.1.1 Gains from Acquisitions of Public Target Firms

In this sub-section only studies that investigate the impact of acquisitions of listed target firms on bidders' gains are reviewed and discussed. The literature in this field of research is divided into three parts: (a) studies that focus on the US market, (b) studies that focus on the UK market and (c) studies that focus on other markets across the world (the Rest-of-the-World – RoW group of countries).

US Evidence

Almost three and half decades of evidence on M&A, following the seminal work of Jensen and Ruback (1983) document that acquiring firms buying public targets either experience significant losses or breakeven in the short-run. More specifically, the balance of current evidence on the bidding firm's stock market reaction around corporate takeovers appears puzzling, with the bidding firms breaking even (i.e. delivering the required rate of return to their shareholders) around successful mergers, while realizing small positive, and statistically significant, gains around bids of successful tender offers. Jensen and Ruback (1983) argued that the gains from takeover announcements appear to stem from other sources than market power, whereas the authors claimed that it is difficult to identify managerial actions that destroy shareholders wealth. Nevertheless, other studies within the same field of research have highlighted that the variation of the gains to bidding firms'

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example: Chang (1998), Ang and Kohers (2001), Fuller, Netter, and Stegemoller (2002). For evidence from other countries (Australia) see for example: Da Silva Rosa, Limmack, Supriadi, and Woodliff (2001).

[7] For evidence see for example: Fuller et al. (2002), Faccio and Masulis (2005), Antoniou et al. (2007).

[8] However, these gains are strongly associated with the method of payment utilized to finance the M&A transaction (a more detailed analysis on the impact of method of payment will follow in section 2.2.2.1).

shareholders around M&A announcements are closely associated with the method of payment utilized in the transaction (see for example Carleton et al. 1983).[9] On the contrary, the review of evidence in the market for corporate control by Jensen and Ruback (1983) suggests that, on average, M&A create value for target firms' shareholders who realize large positive and significant abnormal returns around successful takeover announcements.

Consistent with Jensen and Ruback (1983), Jarrell and Poulsen (1987a), as documented in Jarrell, Brickley, and Netter (1988), investigated the returns to shareholders of acquiring companies that announced tender offers for a series of decades (between 1960s and 1980s). Jarrell and Poulsen (1987a) examined two event windows [-10 to +5 (16 days) and -10 to +20 (31 days)] across all three decades. For all periods (1960s to 1980s) the authors reported positive gains to bidders for tender offers of about 1.14% and 2.04% - although the gains to bidders remain positive and significant for the 1960s and 1970s, they reverse for 1980s where the authors found negative and insignificant gains for the bidding firms (-1.10% for the 16 days event window and -0.04% for the 31 days event window). Along similar lines, Bradley, Desai and Kim (1988) based on the market model, reported similar results for tender offers.[10] In particular, the authors found that acquiring firms gain on average 0.97% for the entire period (1963 to 1984) whereas they found that the results vary significantly across the three sub-periods. Specifically, for 1960s bidders enjoy positive and significant gains, for 1970s enjoy positive although insignificant while bidders experience significant losses during 1980s.

Similar results have been reported by a number of other US studies. For example, Servaes (1991) examined the relationship between corporate takeovers' gains and q ratios for both targets and bidders for 704 mergers and tender offers that

[9] Carleton et al. (1983) suggested that cash takeovers may be sufficiently different from non-cash ones and failure to distinguish between the two may lead to inappropriate conclusions. The same authors have also linked the cash and stock payments with a number of taxation considerations (a more detailed discussion on these considerations will be allowed in the section 2.2.2.1.3).

[10] Consistent with Jensen and Ruback (1983), Bradley, Desai and Kim (1988) reported similar results for both the target firm (large positive gains) and the bidding firm (either small positive or zero gains).

announced over the period between 1972 and 1987. Evidence from this study confirms the findings of the previous studies. Specifically, the author found that for all takeovers, bidders suffer a loss of -1.07% whereas targets enjoy a gain of 23.64% weighted average returns. Further classification of the deals as friendly and hostile conveys that although targets enjoy the highest gains from hostile transactions (31.77% versus 21.89%, both highly statistically significant), bidders suffer the most from hostile deals (-4.71% versus -0.16%). Along similar respects, Healy, Palepu, and Ruback (1992) examined the 50 largest US mergers in the period 1979 to 1984 and found that the bidding firm stock returns are positive and significant within a small window surrounding the M&A announcement. In addition, the authors recorded through regression analysis a positive and significant relationship between the cash-flow improvements following the M&A and the announcement returns. The latter finding clearly indicates that, along with the efficient market hypothesis, the available information from the short-run analysis can predict the post-takeover performance. Another study that applied similar research efforts investigated by Kaplan and Weisbach (1992) who studied the announcement market reaction (t-5, t+5, where t represents the announcement day) for a sample of large acquisitions (MV$\geq$\$100 million) that completed between 1971 and 1982. The authors recorded that, on average, bidders' shareholders experience significant losses whereas target firms' shareholders enjoy significant gains within the same event window. In addition, Mulherin and Boone (2000) studied the acquisition and divestiture activity of a sample of 1,305 firms from 59 industries during the period of 1990 and 1999. The authors found that both acquisitions and divestitures create value during the bid-announcement period. In fact, target shareholders enjoy on average 20.2% in a 3-day event window (t-1, t+1, where t is the announcement day) around the bid announcement whereas bidders gain small negative and insignificant returns (-0.37%).

Several studies have also investigated the gains to US bidders' shareholders when engaged in M&A with all types of target firms (i.e. public, private, and subsidiary ones). In that respect, Hansen and Lott (1996) studied the wealth effects to bidders that acquired 101 privately held targets and 151 publicly traded ones for the period

between 1985 and 1990. The authors found that bidders experience significant losses of 0.98% when listed targets were acquired. Similarly, Chang (1998) examined the announcement gains to bidders that acquired 255 public target firms and 281 private target firms between 1981 and 1992. He found that on average, bidders suffer a loss from acquisitions of listed targets firms whilst the bidders' gains vary significantly with the method of payment utilized. In the same context, Ang and Kohers (2001) examined the market reaction around takeovers of privately held targets (7,070 deals) and listed target ones (5,302 deals) that announced over the period between 1984 and 1996. The authors reported evidence consistent with the findings in other studies in finance literature in terms of the market reaction to acquirers bidding for listed target firms. Lastly, Fuller et al. (2002) examined the announcement period gains of US acquirers' shareholders that engaged in acquisitions with private, public and subsidiary target firms between 1990 and 2000. The authors reported results which on average confirm the findings of previous literature. In fact, the entire sample of public acquisitions (i.e. before control for the method of payment) generates a loss of about -1.00% to acquiring firms' shareholders.

UK Evidence

Whereas the studies reviewed above have focused exclusively on the US market, a strand of other studies in finance literature investigates similar research questions for other countries across the world. The first UK study on takeovers investigated by Firth (1980) where the author employed the market model with parameters estimated based on pre-event data and examined bidders' gains for 434 successful bids and 129 unsuccessful bids over the period from 1969 to 1975. The main conclusions derived from this study convey that although M&A generate significant benefits to target firms' shareholders and to acquiring firms' managers, acquiring firms' shareholders experience significant losses. In fact, bidding firms suffer a loss of about -6.30% on the announcement month for successful bids and -6.00% for unsuccessful ones, whereas the target firms' shareholders enjoy positive and significant returns of 28.10% and 31.20% respectively. Similarly, Barnes (1984)

studied the market reaction for 39 mergers that announced over the period between 1974 and 1976. The authors found that bidders experience significant losses within a small period around the merger announcement. Moreover, Dodds and Quek (1985) studied the market reaction for a sample of 70 publicly quoted and actively traded companies in the Industrial Sector on the London Stock Exchange for the period between 1974 and 1976 and further confirmed the main conclusions recorded by other studies in the same field of literature. In fact, the authors recorded on average more negative returns for the bid-announcement month in the case of merger-active firms than for non-merger-active firms. Similar research proposals applied by Franks and Harris (1989) who investigated the wealth effects of 1,898 UK target firms and 1,058 bidders for the period between 1955 and 1985. The authors concluded that during the bid-month target shareholders earn significantly positive total abnormal returns of about 23%, whereas the bidding firms' shareholders earn small positive abnormal returns of about 1%. Limmack (1991) investigated the distribution of returns of UK firms' shareholders of 448 successful and 81 unsuccessful bids that announced during the period between 1977 and 1986. The author employed three methodologies to examine the distribution of the returns, (a) the market model based on the estimation of parameters with OLS regressions, (b) a model based on adjusted betas, and (c) an index relative model. The main conclusions derived from his study suggest that shareholders of bidding firms suffer significant losses while the target firm's shareholders enjoy positive and significant gains in both successful and unsuccessful bids.

More recently, Sudarsanam, Holl and Salami (1996) examined the impact of the synergy between 429 bidders and targets whilst they investigated the ownership structures of the bidding and target firms on the returns to shareholders. Their results confirm that that synergies do create value to shareholders of both the target and the bidding firms. At the announcement day, bidders experience significant losses of -1.26% while target firms' shareholders enjoy positive and significant gains of 13.96%.[11] In addition, the cumulative abnormal returns for the window [+1 to

[11] The figures obtained by using the market model with Dimson Thin Trading Adjustment.

+40] are -3.56% and 5.58% for the bidder and target, while for the window [-20 to +40] are -4.04% and 29.18% for the bidder and target respectively. In similar respects, Gregory (1997) recognized the difficulty faced by researchers when examining M&A announcement returns with the available "event-study" methodologies. Basically, the author focused on the issue related to the level of the precision of the appropriate asset pricing model as to efficiently capture the M&A effect in the announcement period. In fact, following the major conclusions of a number of scholars in the finance literature, the choice of the appropriate asset pricing model can have important effects on the scale of abnormal returns in the short-run.[12] For that reason, Gregory (1997) employed six methodologies in order to examine the above mentioned issues; these are the following: (1) the basic Capital Asset Pricing Model (CAPM), (2) the Dimson-Marsh (1986) risk and size adjusted model (DM), (3) the simple size control portfolio (SS), (4) the multi-index model using equally-weighted smaller decile minus large decile returns (SML), (5) the value weighted multi-index model using the Hoare-Covett Index as the measure of smaller company performance, and (6) the Fama-French (1996) value-weighted three factor model. Employing a comprehensive list of 420 successful M&A (420 out of the full sample of 452 deals) for the UK market over the period between 1984 and 1992, the author concluded that in general, all methodologies are consistent, with none of them showing significant abnormal returns for the announcement month. Specifically, across most of the models, announcement returns are small negative and insignificant (varying from –0.30% to –0.71%), and significant only for the multi-index SML model. Similar research efforts applied by Holl and Kyriazis (1997) who studied the determinants of, and the relationship between, the wealth effects and bid resistance for a sample of 178 successful takeovers in the UK that are announced within the period between 1979 and 1989. They found that while bidders experience significant losses during the announcement month (-1.70%), target firms' shareholders enjoy positive and significant gains (21.61%).

[12] For relevant studies see for example, Dimson and Marsh (1986), Agrawal et al. (1992), Gregory, Matatko, Tonks, and Purkis (1994), and Kennedy and Limmack (1996).

Similar results recorded by Higson and Elliott (1998) who examined the announcement returns of 830 UK bidding and targets firms over the period of 1975 and 1990, before and after controlling for size. Consistent with all the other studies discussed above, bidding firms' shareholders experience on average zero abnormal returns while target firms' shareholders enjoy positive and significant abnormal returns in the short run, irrespective of the size control. However, when the period is extended to run from the beginning of the announcement month to the end of the completion month, and separately for each of the bid months and the subsequent three months, the results vary significantly with both the acquirers and targets to experience small negative reruns. In the latter case, different wealth effects are observed between portfolios generated pre- and after-controlling for size. Within the same framework, Draper and Paudyal (1999) studied the wealth effects of 581 UK target firms and 349 UK bidding firms over the period between 1996 and 1996. The authors examined both the total returns and the excess returns during the event period. Excess returns are estimated by using three different methodologies: (a) the mean adjusted excess return, (b) the market adjusted excess return, and (c) the market model excess return. Evidently, the main findings of this study confirm the main conclusion of the rest of the literature by reporting significant losses (gains) for bidders (target) firms. Cumulative abnormal returns for the same groups show similar results. Sudarsanam and Mahate (2003) employed a sample of 519 acquirers over the period 1983 and 1995 in order to examine the announcement and post-acquisition gains to bidding firms. The authors computed the buy and hold abnormal returns (BHAR) and by using four different methodologies (the mean-adjusted model, the market-adjusted model, the size-adjusted model, and the market-to-book value adjusted model) they concluded that in the bid announcement period [-1 to +1] the whole sample of acquirers experience statistically significant negative abnormal returns of about -1.40%. Lastly, Doukas and Petmezas (2007) investigated whether serial acquisitions announced by UK overconfident managers generate superior abnormal returns and whether managerial overconfidence stems from self attribution. As elsewhere in the relevant literature, the authors found that bidders experience significant losses within a small window surrounding M&A announcements of public targets. In particular, for the entire sample, bidders lose -

0.90% within a 5-day event window, whereas when equity is used to finance public acquisitions, bidders lose the most of about -2.23% (both figures are statistically significant at 1% level).

Evidence from the Rest-of-the-World (RoW)

Studies that examine the wealth effects of bidding firms that announce takeovers of listed target firms in the rest-of-the-world countries record similar results with the ones in the US and the UK. In fact, Da Silva Rosa et al. (2004) studied 155 takeover bid announcements by ASX listed firms for the period between January 1990 and December 1998. After examining the market excess returns to acquiring companies' shareholders, the author found that bidders generate a gain (loss) of about 1.11% (-0.16%) within a 5-day (21-day) window. Moreover, Eckbo (1986) examined the wealth effects to bidders' and targets' shareholders of a large-sample (7,559 deals) of Canadian mergers over the period between 1964 and 1983. The author reported significant gains to shareholders of both bidder (2.79% within 4-day window [-3, 0]) and target (9.45% within 4-day window [-3, 0]) firms. Evidence of positive gains to acquirers that bid for listed targets appears particularly interesting in light of extant evidence on the performance of both US and UK bidding firms – the finance literature reports that both US and UK bidders either experience significant losses or breakeven around takeovers of listed target firms. Thus, this finding indicates that the Canadian market for corporate control represents a very important role in promoting an optimal resource allocation.

Moreover, Pettway and Yamada (1986) examined the gains to bidders' and targets' shareholders in Japan over the period between 1977 and 1984. The authors investigated the wealth effects to 157 bidders' shareholders that acquired 215 target firms (20 of which are listed firms and 195 unlisted ones) by examining the market reaction around both the announcement day (AD) and the effective day (ED) of the M&A. Their main conclusions derived from this study lie on the basis that Japanese bidders' and targets' share price reacts in a similar way as in the US market. In fact, bidding firms' shareholder wealth increases, although they exhibit statistically

insignificant gains. They also found that their gains vary significantly with the relative size of the deal, even if they display the reverse effect. On the other hand, target firms' shareholders enjoy positive and statistically significant announcement gains. Lastly, Eckbo, Giammarino and Heinkel (1990) examined 182 Canadian takeovers over the period between 1964 and 1982. The authors found that bidders experience significant positive abnormal returns during the announcement period although these gains are highly sensitive to the method of payment employed. In fact, the authors recorded 0.87% announcement period gains when cash is employed, 3.86% when stock is used, and 2.10% for mixed payments.

Overall, a general view of the studies discussed above suggests that acquisitions of public targets generate, on average, negative or zero announcement returns to bidders' shareholders, irrespective of the country's origin. However, regardless of the large number of studies that have investigated, and others that continue to investigate, numerous factors affecting the performance of bidders around takeovers of public targets, several gaps remain unfilled. This thesis aims to fill those gaps by providing additional evidence and explanations for the wealth effects generated to bidders' shareholders around takeovers of other listed target firms. As a result, the chapter 3 and 4 of this thesis investigate various factors that affect the wealth of bidders' shareholders when acquire other listed targets in both the domestic and the foreign market for corporate control. Research outcomes from this thesis are expected to expand the current literature on the gains from public acquisitions, whilst to enrich our understanding of the corporate takeovers process and their implications to various stakeholders involved in the deal. Several considerations in terms of bidders' gains, and implications to all stakeholders involved, are discussed in great detail within the framework of the empirical chapters (chapters 3 and 4).

2.2.1.2 Gains from Acquisitions of Private Target Firms

The unique feature of the UK and US markets for corporate control during the last decade is the predominance of takeovers of privately held target firms, which represent the largest proportion of M&A activity within both markets.[13] As a result, a block of voluminous literature has emerged that concentrates on whether takeovers of privately held target firms create value to shareholders of the acquiring firm. The majority of these studies have directly compared the gains of M&A involving privately held targets with the gains generated from acquisitions of listed target firms. On average, these studies have recorded that (a) acquirers of privately held target firms enjoy positive and significant announcement returns, (b) acquirers of listed targets[14] have been found to either experience significant losses or breakeven within a small window around the M&A announcement's day, and (c) the gains generated to private bidders' shareholders are to a great extent affected by the methods of payment used to finance the deal. Along all these respects and as it has been clearly stated in chapter 1, the main purpose of the fifth chapter is to empirically explore, and further identify, whether the level of information availability or the level of value ambiguity concerning unlisted target firms (i.e. stand alone firms and subsidiaries of other unlisted firms) constitute an extra factor in explaining the gains to bidders that acquire unlisted target firms. Accordingly, the rest of this section reviews and discusses, in great detail, evidence on bidders' gains from acquisition of privately held target firms.

Along the same lines, Hansen and Lott (1996) investigated one of the most important studies that closely examine, both theoretically and empirically, the stock returns of bidders around takeovers of privately held targets firms. The authors employed an

[13] For the US market, for instance, Moeller et al. (2007) found that approximately 47% of US acquisitions in their sample involved listed targets and 53% private. Similarly, for the UK market for corporate control, Draper and Paudyal (2006) found that approximately 87% of the UK acquisitions involved privately held targets while the rest 13% involved publicly traded ones. In addition, Faccio and Masulis (2005) reported that approximately 90% of UK (and Irish) acquisitions involved unlisted and subsidiary targets.

[14] The majority of the findings for acquisitions with listed target firms have been extensively reported in the previous section.

auction theory and observations from corporate takeovers to test whether the gains from acquisitions of publicly traded firms differ significantly from the gains from acquisitions of privately held target firms. Based on earlier research which indicates that bidders of listed target firms experience significant losses, the authors argued that in general '...the negative returns to bidders are of limited relevance to diversified acquiring firm shareholders, for those shareholders will also benefit from their holdings in the target'.[15] Indeed, diversified shareholders will be indifferent of how any wealth effect generated from the acquisition of listed target firm is to be divided. This happens only in the case where the acquiring firm shareholders hold shares of the target firm. Unlike the case of acquisitions of listed target firms, in the case of acquisitions of privately held target firms, this condition is unlikely to be met. Furthermore, the authors used 252 takeover deals of public (151 deals) and private (101 deals) firms over the period 1985 and 1990 and estimated the performance of the bidding firm within an event-window of 2-days [0 to +1] after the announcement. In fact, the authors found that bidders experience, on average, about two percent higher abnormal returns when they acquire privately (1.15%) held firms rather than publicly (-0.98%) traded ones. Based on these findings, the authors supported their main predictions; when a publicly traded firm acquires a listed target firm, diversified shareholders will be indifferent as to the direction of the allocation of the gains from the acquisition, since they may hold shares in both the target and the bidding firm (a condition which is unlikely to be met for private firms, which have more concentrated ownership and thus hold less diversified portfolios).[16] However, a successful portfolio value maximization policy will lead to a decline in corporate profits mainly due to high costs (i.e. managerial costs of assessing and internalizing externalities, greater agency costs associated with more managerial discretion). In the case of acquisitions of private targets, the bidder's shareholders will capture part of the gains of the acquisition, assuming the bid is value-increasing.

[15] Hansen, G. R., and J. R. Lott (1996), 'Externalities and Corporate Objectives in World with Diversified Shareholders/Consumers', Journal of Financial and Quantitative Analysis, Vol. 31, page 59.

[16] The authors argued that fully diversified investors would prefer the manager of the firm to internalize the externalities that the firm have on other firms. Similarly, as long as non-diversified shareholders would prefer the manager of the firm to maximize its value, diversified shareholders would prefer the opposite.

Furthermore, one of the pioneering studies in the literature of M&A that examines the gains to bidders that acquire privately held target firms is Chang (1998). The author assessed the two-day event window returns (-1 to 0) of bidding firms acquiring 281 privately held target companies over the period between 1991 and 1998. At the same time, the author compared the gains from private acquisitions with the gains to bidders that are engaged in acquisitions of 255 public target firms in the period between 1981 and 1988. Following the major conclusions of this study, no significant abnormal returns are generated to bidding firms when both the target status and method of payment restrictions are relaxed. However, when the target status and method of payment controls are applied, the returns to bidding firms vary significantly. In short, bidders that engage in private acquisitions and pay with equity, enjoy significantly positive abnormal returns (about 2.64% on average),[17] consistent with the studies of Asquith et al. (1983), Wruck (1989), Servaes (1991), and Hertzel and Smith (1993). On the contrary, when the target firm is a publicly traded one and the method of payment utilized is equity, bidders experienced significant losses (-2.46% on average). The author provided three explanations for the above mentioned market reaction: (a) the information hypothesis based on Myers and Majluf (1984) and Travlos (1987), (b) the limited competition hypothesis, and (c) the monitoring hypothesis. In the event of acquisitions with privately held target firms, the owners of the private firm have more incentives to examine the bidding firm's value closely thereby estimating its true value accurately and at the same time identifying whether the bidding firm's stock is overvalued (in the event that the deal is finance with stock).[18] Therefore, successful acquisitions of privately held target firms and stock financing, while conveying favourable information to market participants with regards the current and future performance of the bidding firm, they also reflect that the biddings firm's stock is, at least, not overvalued (as it has been examined carefully by the target firm's managers). In addition, the positive

[17] In the case of a stock offer, the financing of takeovers is similar to the private placements of equity because target firms are owned by one or a small number of shareholders.

[18] The same is also true when the target firm is listed. Listed firms have more widely spread shareholders than privately held firms. Therefore, in the event of acquisitions of listed target firms, there are more shareholders who require the benefits from the acquisition compared to the case of acquisitions of privately held targets.

performance of bidders when they bid for privately held target firms is also supported by the limited competition hypothesis. In a competitive market, acquisitions of listed target firms will be zero NPV projects (no abnormal returns for bidders with cash).[19] On the other hand, the competition in the market for privately held target firms is characterized as limited, [20] which therefore increases the likelihood of underpayment and the likelihood of higher announcement abnormal returns (NPV>0). Finally, Chang (1998) suggested that the source of the positive gains to bidding firms that acquire private targets with stock are due to the monitoring hypothesis. Indeed, private firms are often controlled by a family or small group of partners. By using stock as a means of payment, acquirers tend to create outside blockholders, who therefore effectively monitor the managerial performance of the bidding firm closely. This may lead to positive NPV projects which therefore generates positive abnormal returns around the acquisition announcement day.[21] The same author found also that on average, bidders' shareholders enjoy 4.96% (1.77%) announcement period cumulative abnormal returns if a new blockholder is created (not created).

Similar results are also obtained by Ang and Kohers (2001) who studied the wealth effects to US bidders that announced 7,070 takeovers involving privately held target firms and 5,302 takeovers involving listed target firms over the period between 1988 and 1996. The authors documented that bidders enjoy significant positive announcement gains around bids of private target firms, regardless of the method of payment, contrary to the wealth effects to M&A announcements of listed targets. Ang and Kohers also showed that the premiums paid to private targets are relatively higher than those paid to public targets. The authors claimed that the higher premiums paid to private target firms can be attributed to their strong bargaining power and their timing options to wait and sell (supporting the bargaining power

[19] The market for acquisitions of publicly owned firms is characterized as highly competition (bidding contest) and the likelihood of overpayment is higher, which in turn will result into zero abnormal returns to bidding firms.

[20] Due to high information search cost (mainly because of the scarcity of public information on privately held targets) there is limited competition in the event of private acquisitions.

[21] On the other hand, an increase in managerial ownership can decrease a firm's value if it allows managerial entrenchment or makes takeovers more costly (Fama and Jensen, 1983, Stulz, 1988 and Morck, Shleifer and Vishny, 1988).

hypothesis).[22] To an extent, the authors proposed two main explanations or interpretations for this variation in the premiums paid. Certainly, private firms have more concentrated ownership which removes or lowers any agency problems/conflict they might face (opposite of listed companies which have in general more scatter ownership). Similarly, acquiring firms' managers avoid any public pressure from outside investors, which therefore help them to cancel out any hubris-motivated takeover. Based on those two explanations, bidders of privately held target firms have the opportunity to cancel out any M&A deal with a private firm, when it is required for strategic reasons, without involving high 'prestige' costs.

In addition, Fuller et al. (2002) studied the announcement period stock returns of 3,135 US M&A deals of public, private and/or subsidiary target firms that announced over the period between 1990 and 2000. This study focuses mainly on serial acquisitions (i.e. bidders that announce five or more M&A deals within three years time). The authors found that on average, bidders experience significant losses when bidding for listed target firms (-1.00%), whereas they enjoy positive and significant abnormal returns when buying private (2.08%) and subsidiary (2.75%) targets. However, the distribution of bidders' gains varies significantly with the method of payment utilized. In fact, in public acquisitions, bidders realize insignificant positive or negative returns in cash (0.34%) or mixed of both cash and stock offers (-1.10%) whereas bidders suffer significant losses for shares exchanges (-1.86%).[23] On the other hand, in private and subsidiary acquisitions, bidders enjoy significant and positive abnormal returns, irrespective of the method of payment. In similar respects, Antoniou, Petmezas and Zhao (2007) investigated the wealth effects of UK frequent bidders engaged in acquisitions of private, public, and subsidiary targets over the period between 1987 and 2004. In the process of their investigation of the short-run gains generated to serial acquirers, the authors controlled for several firm and transaction specific characteristics including the relative size of the deal, book-

[22] Private firms have more concentrated ownership structure – a group of people or a family (opposite to listed firms which have less concentrated ownership structure). Therefore, private firms have the option to wait to sell without any pressure from outside owners.

[23] This is consistent with Mayers and Majluf (1984), Travlos (1987), Chang (1998), and other studies in the finance literature.

to-market ratio of the bidder, industry classification and target origin. Accordingly, the major conclusions derived from this study convey that in the short-run, bidders acquiring listed targets deliver the required rate of return to their shareholders whereas they generate positive and significant gains to their shareholders when they acquire private and subsidiary target firms. In addition, Doukas and Petmezas (2007) found that the gains to serial acquirers are highly sensitive to managerial overconfidence stemming from self-attribution. Regarding private acquisitions, bidders enjoy 1.18% from the entire sample whereas the highest gains detected when equity is used to finance the deal (3.47%). A more recent study on the examination of the gains to serial acquirers is conducted by Draper and Paudyal (2008). The authors investigated the case of serial acquisitions in the UK market in order to examine whether the information asymmetry for the bidding firm mitigated after several deal announcements. In short, the authors suggested that when high information asymmetry between overvalued companies and investors exists, companies announce takeover bids in order to attract the attention of investors and analysts, thereby increasing the share price through revaluation. They also concluded that in the presence of high pre-bid information asymmetry, bidding firms gain the most from early bids while the gains declined with the number of takeover bids announced within three years, supporting their original propositions in terms of bidders' gains involving many M&A deals.

Similar research questions on the wealth effects of bidders' shareholders when acquire private target firms are investigated for other than the US market. For example, Da Silva Rosa et al. (2004) examined the announcement period wealth effects of 155 takeover deals of private and listed target firms over the period 1990 and 1998. The authors documented that acquisitions of privately held target firms generate positive and significant abnormal returns to bidders' shareholders whereas the opposite happens for acquisitions of listed target firms. The method of payment found to play a significant role for the variation of bidders' gains within the same context. In fact, within a 5-day window, cash-bids generate a significantly positive abnormal return (3.26%) while share-bids yield an insignificant positive average return (1.65%). Da Silva Rosa et al. (2004) claimed that the higher gains to bidders

from private takeovers are due to the limited competition for private targets. Furthermore, Conn, Cosh, Guest, and Hughes (2005) examined the announcement share returns of UK firms that announce takeovers of 576 public firms and 2,628 private firms over the period 1984 and 1998. The authors reported results consistent with the rest of finance literature in the same context. In fact, bidders experience significant losses in the short-run (-0.99%) from public acquisitions although they enjod significant gains from private acquisitions (1.05%).

Moreover, Draper and Paudyal (2006) studied the announcement wealth effects to UK bidders that engage into acquisitions with public (1,098 deals) and privately held targets (7,499 deals) over the period between 1981 and 2001. Using three methodologies in their approach,[24] the authors reported that in general, bidders enjoy positive and significant abnormal returns around acquisitions of privately held targets. On the other hand, when bidders acquire listed target firms they experience significant losses in the short-run. The authors also concluded that gains to acquiring firms within a 3-day (t-1, t+1) window around the M&A announcement day are highly sensitive to the target status, the method of payment, and the relative size of the deal. They proposed three main explanations/interpretations in their attempt to explain the differentials in performance between private and public acquisitions: (a) the managerial motive hypothesis, (b) the liquidity hypothesis, and (c) the bargaining power hypothesis. Accordingly, the *managerial motive hypothesis* suggests that the higher returns to acquirers engaging in acquisitions with privately held companies, rather than with public targets, is due to lower (higher) premiums paid in the event of acquisitions of privately (publicly) held target firms.[25] The *liquidity hypothesis* suggests that, since information is more (less) available for publicly traded (privately

[24] The models used are the Market Model, the CAPM, and the Fama and French (1993) three factor model.

[25] The *managerial motive hypothesis* suggests that bidders would prefer to pay higher premiums for listed targets given that they are in general larger and better known firms. Similarly, acquisitions with listed targets will enhance the private benefits to the managers of the bidding firms which, among others, are associated with the size and the prestige of the firms they manage. On the contrary, private firms are smaller in size and thus bidders' managers prefer to pay lower premiums to acquire them, given that they will not be able to benefit from the previous mentioned personal benefits. However, private firms are smaller in size thereby they may be integrated more easily into the bidders' business environment than large listed targets.

held) target firms, competition is higher (lower) for public (private) firms, leading in turn, to lower (higher) abnormal returns for acquiring firms. Finally, the *bargaining power hypothesis* suggests that, since private firms are managed by a family or a small group of partners, any agency problem that may arise is reduced and in most cases disappears. This enables private firms' managers to choose both when they prefer to sell and also permits the buyer to decide to whom they prefer to be sold. In fact, in the case when private firms' managers are prepared to accept shares as the method of payment, the option to choose when to sell, and to whom, leaves them with a significant bargaining power. Therefore, the strong bargaining power of private firms' managers allows its owners to receive a higher price for the deal with a premium paid by the bidders to exceed the potential benefits from the merger, which in turn leads to a negative NPV project for the bidding firm.[26]

Faccio, McConnell, and Stolin (2006) investigated the announcement period abnormal returns to acquirers of listed and unlisted targets in 17 Western European countries over the interval 1996 and 2001. On average, the authors documented that bidders enjoy significant abnormal returns when unlisted firms are acquired (1.48%) whereas bidders experience significant losses when listed targets are acquired (-0.38%), consistent with the findings documented by several other studies for both the UK and US. This pattern holds across time and across all countries. The authors suggested that this market reaction to acquisitions involving listed and unlisted target firms is attributed to the listing effect, which remains the same through time and across countries. Moreover, the same pattern persist after controlling in the cross-section for the method of payment, the acquirer's size and Tobin's Q, pre-announcement leakage of information about the transaction, whether the acquisition created a blockholder in the acquirer's ownership structure, whether the acquisition was a cross-border deal, and other variables. Lastly, Alexandridis, Antoniou, and Zhao (2008) presented a very recent study which investigates the gains of UK bidders that acquired privately held target firms in the domestic market. In this study the authors examined whether the Miller's (1977) divergence of opinion

[26] Value creation in corporate takeovers is on average achieved once the present value of synergies is greater than the premium paid (i.e. positive NPV projects) for successful acquisition announcements.

'premium hypothesis' can explain gains to acquiring firms. The main conclusions that derived from this study suggest that there is a significant positive relationship between the belief asymmetry and the announcement returns to acquiring firms bidding for unlisted targets after accounting for various firm and deal specific characteristics.

The main conclusions derived of the above studies clearly convey that when private target firms are acquired, bidders' shareholders benefit from the M&A during the announcement period. However, these gains to acquirers' shareholders are highly sensitive to the method of payment utilized to finance the transaction. Indeed, bidders' shareholders breakeven for cash-deals whereas they enjoy significant positive returns when common equity is used to finance the deal. Regardless of the number of scholars who continue to study potential factors on the explanation of bidders' gains around private acquisitions, this thesis aims to provide a different approach by investigating several factors, from the target firm's edge, that have not been examined by previous research. Specifically, in chapters 3 to 5 of this thesis I investigate the wealth effects to shareholders of bidders that acquire private firms both in the domestic and in the foreign market for corporate control. Chapters 3 and 4 investigate whether the gains of bidders that acquire privately held targets, both in the domestic and in the foreign market, vary significantly with different economic conditions and market valuations in the home market, as well as different levels of effective exchange rate of the home currency. Within the same context, different corporate governance mechanisms, institutional laws, and regulations from all over the world are investigated. In addition, chapter 5 of this thesis focuses on the impact of value ambiguity (or the difficulty to value) of unlisted target firms on the announcement and post-merger wealth effects of bidders' shareholders acquiring unlisted targets. The relatively small number of studies in finance literature that investigate the wealth effects of bidders' shareholders around private acquisitions, compared to studies that investigate bidders' gains around public acquisitions, constitute this research particularly important.

2.2.1.3 Gains from Acquisitions of Subsidiary Target Firms

A limited number of studies in the literature investigate the wealth effects of bidders announcing M&A deals of subsidiary target firms. Fuller et al. (2002) utilized a sample of 539 US bidders engaging in 3,135 M&A deals involving public, private, and subsidiary target firms over the period between 1990 and 2000. The authors recorded that when acquirers engage in M&A with subsidiary target firms they enjoy significant positive abnormal returns, irrespective of the method of payment employed. In fact, for all acquisitions with subsidiary targets, bidders enjoy 2.75% whereas in stock (combo) payments they enjoy 3.23% (3.33%) on average. Fuller et al. (2002) claimed that the main reason of the positive gains to acquisitions of subsidiary targets is the preference for cash of host sellers, who want to realize their financial and asset restructuring goals. Moeller et al. (2004) reported similar results. In fact, the authors documented positive abnormal announcement returns for 3,798 acquisitions of subsidiary target firms (2.00%), consistent with the findings by Fuller et al. (2002). More specifically, Moeller et al. (2004) documented similar wealth effects for acquirers' shareholders that bid for subsidiary target firms, after controlling for the method of payment and the bidding firm's size.

In addition, Faccio and Masulis (2005) studied the determinants of the M&A payment methods available to a large sample of European takeovers over the period between 1997 and 2000. The authors reported that on average, when subsidiary targets are involved in European M&A, cash is preferred as the method of payment. The authors suggested that subsidiary targets are more likely to prefer cash instead of stock payments, given the illiquid and more concentrated nature of their portfolio holdings. In addition, cash considerations may arise given that corporations are more likely to sell subsidiary firms when they face financial distress, which in turns leads to the preference of cash payments, or when they desire to restructure their core business, when again cash payments should be preferred.[27] Overall, in both cases,

[27] The latter point is in line with the findings of Amihud, Lev, and Travlos (1990) where the authors noted that as bidders prefer to maintain the control of the firm, cash is preferred in corporate takeovers deals.

the use of cash may be motivated by the bidders' desire, through the divestiture of subsidiaries, to finance new acquisitions or reduce their debt burden.

Another recent study that examined bidders' gains when subsidiary targets are involved is by Conn, Cosh, Guest, and Hughes (2005). The authors examined the announcement period returns of UK takeovers involving public, private, and subsidiary target firms over the period 1984 and 1998. They reported that on average bidders enjoy positive abnormal returns when subsidiary firms of other private and public firms are acquired (both in the domestic and in the foreign market). The higher gains from subsidiary acquisitions in this study are derived when the subsidiary firm operates in the foreign market for corporate control. Faccio, McConnell, and Stolin (2006) investigated the announcement period abnormal returns to acquirers of listed (735 deals) and unlisted (3,694 deals) targets, including subsidiaries of unlisted firms, in 17 Western European countries over the period between 1996 and 2001. The authors reported that bidders of listed targets generate to their shareholders an insignificant negative abnormal return of about -0.38%, whereas bids of unlisted targets generate positive and significant abnormal returns of about 1.48%. More specifically, acquisitions of unlisted targets firms from all 17 European countries generate a positive and significant gain to bidders' shareholders of about 1.44%, consistent with all the other studies in finance literature. Lastly, a more recent study on the gains generated from subsidiary acquisitions investigated by Antoniou, Petmezas and Zhao (2007). The authors investigated the wealth effects of UK frequent bidders engaged in acquisitions of private, public, and subsidiary targets over the period between 1987 and 2004. Among their major conclusions, the authors found that bids of subsidiary targets generate significant wealth effects to bidders' shareholders on about 1.31%, after controlling for several firm and transaction specific characteristics including the relative size of the deal, book-to-market ratio of the bidder, industry classification and target origin.

In conclusion, the above studies clearly suggest that bidders' shareholders enjoy positive and significant gains around takeovers involving subsidiary target firms.

However, the literature on the gains of bidders when subsidiary targets are acquired appears largely incomplete, especially in the case when the subsidiary target firm is operating in a foreign country (i.e. foreign target). Several conclusions have been also recorded in terms of the acquisitions of subsidiary targets and the method of payment utilized. In all these respects, the overall purpose of this thesis across chapters 3 and 4 is to uncover the wealth effects of bidders that acquire domestic and foreign subsidiary target firms, along with other factors investigated, as well as to examine whether the differentials between domestic and foreign bids of subsidiary targets appear statistically significant. Along similar lines, chapter 5 of this thesis examines whether the short and long-run gains to bidders that acquire subsidiary targets of other unlisted firms, are shaped by the various levels of value-ambiguity that characterize unlisted firms.

2.2.2 Other Determinants of Abnormal Returns

Several transaction and firm-specific characteristics have been recognized by finance literature as major determinants of the announcement gains generated to bidders' shareholders. Such factors may include the method of payment utilized to finance the transaction, the relative size of the deal, the size of the bidder, the market-to-book-value (MTBV) ratio and the price-to-earning ratio of the bidder, as well as the age of the acquiring and the target firm, at the time of the M&A announcement. Accordingly, this section reviews and discusses, in great detail, the literature/studies associated with the above factors that have a significant impact on the bidding firm's performance in the short-run.

2.2.2.1 Method of Payment

Several studies have been individually concluded that the method of payment utilized in M&A is closely related with the presence of information asymmetry in financial markets, as well as with the ownership structure and tax considerations

related to the final entity after the completion of the M&A. In general, the methods of payment available to finance a takeover are cash, stock, a combination of both (cash and stock), and 'other' methods of payments. Earlier studies have clearly depicted the impact of the method of payment on the wealth effects of bidders' shareholders. In this respect, Asquith et al. (1983) studied the wealth effects of 343 completed mergers over the period between 1975 and 1983. The authors found that bidding firm's returns are positive for cash bids (0.20%), but negative and significantly smaller for equity financed bids (-2.40%). Similar results are obtained by Eckbo, Giammarino, and Heinkel (1990) who examined 182 Canadian takeovers over the period between 1964 and 1982. The authors documented 0.87% announcement period's gains when cash is employed, 3.86% when stock is used, and 2.10% for mixed payments. An overall view of the above studies, although it suggests that bidders' shareholders experience significant losses when they finance takeover bids with common equity, they breakeven (or deliver the required rate of return to their shareholders) when they use cash to finance the takeover bid.

Previous research has also confirmed the impact of the methods of payment along with the status of the target firm on the determinations of the gains of bidders in the domestic market (relevant evidence have reported and discussed in the previous section, 2.2.1).[28] Similarly, others have found that the method of payment and the target status are relevant when abnormal return differentials between domestic and cross-border acquisitions (CBA) are investigated. In this respect, Conn et al. (2005) found that when UK bidders acquire domestic (foreign) listed targets with cash, they generate insignificant positive (insignificant negative) abnormal returns to their shareholders. On the contrary, acquisitions of domestic (foreign) listed targets with non-cash[29] instruments yield statistically significant negative (insignificant positive) gains to bidders' shareholders. Furthermore, bidders acquiring domestic private

[28] For a sample of studies that examine the impact of the method of payment along with the target firm status, see for example: Desai and Kim (1982); Limmack (1991); Servaes (1991); Hansen and Lott (1996); Sudarsanam, Holl and Salami (1996); Gregory (1997); Chang (1998); Draper and Paudyal (1999 and 2006); Mulherin and Boone (2000); Da Silva Rosa, Limmack, Supriadi, and Woodliff (2001); Fuller, Netter, and Stegemoller (2002); Sudarsanam and Mahate (2003); Conn, Cosh, Guest, and Hughes (2005).

[29] Non-cash offers include stock offers, stock and cash offers, and other offers.

targets yield significantly larger abnormal returns than acquiring foreign private targets irrespective of the method of payment used. In general, cash transactions generate higher returns for domestic acquisitions rather than for CBA. The overall conclusion derived from this study confirms that the method of payment and the status of the target firm are both important determinants of the bidders' gains when they engage in domestic versus foreign acquisitions.

Lastly, the choice of the means of payment that utilized to finance M&A deals is found to be highly sensitive to different corporate governance systems, ownership structures, market and institutional settings, and legal and regulatory traditions across several European countries. In short, Faccio and Masulis (2005) examined the method of payment used to finance M&A deals of European bidders of private and public target firms over the period between 1997 and 2000. The main conclusion derived from this study is that both corporate governance mechanisms and debt financing constrains are the main determinants of the choice of the bidders' payment method. The same authors concluded also, consistent with previous literature, that the choice of the method of payment is mainly shaped by several firm and deal-specific characteristics. For example, in the event of subsidiary acquisitions, cash is preferred as the method of payment.

Overall, the analysis in this section clearly reflects that the target status, the target origin, the corporate governance under which both the bidder and the target operate, institutional settings, laws, and regulations, are all highly relevant in the determination of the method of payment used to finance M&A deals, thereby in the determination of abnormal returns to shareholders of the bidding firms.

2.2.2.1.1 Information Asymmetry – Signalling Hypothesis

Several scholars have recorded that the method of payment utilized in M&A is also closely related with the presence of information asymmetry in financial markets. In fact, it has been widely accepted that several informational asymmetries exist

between the management of listed firms and market participants. Hansen (1987), Stulz (1988), and Fishman (1989) developed models which claim that bidders engage in acquisitions and pay with cash (stock) instruments when there is high information asymmetry about their own value (target's value).[30] This would suggest that the greater the information asymmetry in the case of cash payments the higher the returns (Moeller, Schlingemann, and Stulz, 2007). Accordingly, Fishman (1989), Berkovitch and Narayanan (1990) and Brown and Ryngaert (1991) concluded that in general cash-bids generate higher announcement gains to bidders' shareholders than stock-bids.

Along similar respects, Myers and Majluf (1984) noted that in several occasions information asymmetries arise due to the fact that managers hold superior information about the firms they control thereby they consider their overvalued shares as the optimal mean of payment for takeover bids. Outside investors, recognizing the *adverse selection problem*, consequently revise their estimates of the offer's value downwards. This is a plausible explanation for the negative performance of stock deals. Along these lines, stock payments when listed targets are involved are expected to lead to negative abnormal returns in the short-run, as they signal to investors that the equity is overvalued.[31] The negative value generated to bidding firms' shareholders in stock offers is further enforced by the high incentives of target firms' shareholders to request higher premiums in order to compensate for the 'lemons' problem which is associated with common stock based bids. In this respect, Travlos (1987) examined the impact of the methods of payment on the short-run share price behaviour of bidders that announce M&A over the period between 1972 and 1981. The authors recorded significant differentials between portfolios of bidders that finance acquisitions with common stock versus cash payments. In particular, bidders experience significant losses on the announcement day of about -2.09% when common stock is used, whereas the

[30] However, only in Fishman's model, bidders have the option to pay using cash and a risky debt security, rather than using stock.

[31] See for example: Travlos (1987), Wansley, Lane and Yang (1987), Amihud, Lev and Travlos (1990), Servaes (1991), Brown and Ryngaert (1991), Martin (1996), Ghosh and Ruland (1998), Draped and Paudyal (1999, 2006), and Fuller, Netter, Stegemoller (2002), Conn et al. (2005).

opposite happens for cash payment with the bidding firms' shareholders to enjoy small positive abnormal returns (about 0.31%).

2.2.2.1.2 The Proposition of Managerial Ownership

Numerous studies in the literature have confirmed that the choice of the method of payment in corporate takeovers is closely related with the managerial ownership of both merger parties that involved in the transaction. Accordingly, several scholars have individually concluded that the greater the management's share of the acquiring or the target firms, the more likely it is that cash financing is used as the optimal method of payment (see for example Stulz, 1988; Amihud et al. 1990; and Faccio and Masulis, 2005). One explanation of this strategy in M&A deals is that the managers of both parties offer (or accept) cash as the medium of exchange in order not to dilute their existing control after the acquisition. Stulz (1988) examined the relationship between the choice of payment methods and the managerial ownership of acquiring firms. His study showed that the larger the fraction of the ownership held by the acquiring firm, the less likely it is that an acquisition is financed by using shares. Under such circumstances, the management of the bidder is reluctant to offer shares in order to avoid diluting their original control after the acquisition.

Amihud, Lev and Travlos (1990) used a sample of 209 US acquisitions that announced over the period 1981 and 1983 and documented negative returns for bidders that use stock financing as the method of payment as long as they have low managerial ownership. They found also that in cash financing deals the top five officers and directors of the firm hold on average about 11 percent of the company's shares, while in share financed deals they hold less than 7 percent. This result indicates that managers with relatively higher shareholdings in their firms prefer financing acquisitions with cash, because, as Amihud et al. (1990) noted, they do not want to increase the risk of losing control after the completion of the acquisition.[32]

[32] The same view is analyzed by Martin (1996).

However, given the above argument, the use of stock may signal to investors that the acquisition is not value decreasing.

Finally, Faccio and Masulis (2005) argued that cash is the method of payment that should be preferred when preserving control. This is particularly important for bidders, especially under circumstances where continued corporate control is threatened.[33] The corporate control's incentives for choosing cash are likely to be the strongest when a target's share ownership is concentrated.[34] On the contrary, stock financing would be preferred if a shareholder had supermajority voting rights, because in this case the shareholder's controlled would not be threatened.

2.2.2.1.3 Taxation Implication Proposition

Several studies have investigated the impact of tax considerations upon the announcement's returns to bidders' shareholders. The majority of these studies, however, have linked the impact of tax considerations with the method of payment utilized to finance the M&A. For example, Carleton et al. (1983) suggested that cash deals may be sufficiently different from non-cash deals and modelling the events as being the same may be inappropriate. For that reason, a number of important considerations have been proposed in an attempt to explain the extensively high use of cash payments in M&A. In the 1960s, many deals were financed with convertible bonds since such payments were tax deductible. After 1969, however, M&A financing using convertible bonds have not been allowed as tax deductible expenses. As Carleton et al. (1983) suggested "the increased use of cash may be further understood by looking at current differences in the tax and accounting consequences of cash takeovers and security exchanges". The same study also added that due to the existence of different tax treatments between cash and stock payments, the acquirer must pay a higher premium in cash bids in order to offset the tax burden of the target shareholders. In the event of common equity bids, many

[33] For example, see Shleifer and Vishny's (2003) model of control benefits.
[34] This is a common feature of private companies. Financing with stock can create a new blockholder in the bidding firms, a fact that is always seriously considered by managers.

stock exchanges will be treated as tax-free transactions and therefore the premium paid to target shareholders will be lower. Along similar lines, Wansley, Lane and Yang (1983) concluded that targets' returns are higher in cash acquisitions (33.54% for cash deals versus 17.47% for stock deals) confirming the important role of tax differences between cash and stock payments. On the contrary, Harris, Franks and Mayer (1988) failed to support the previous evidence indicating that tax considerations are not shaping capital gains in cash acquisitions. They showed that over the period between 1965 and 1969 cash financing yields on average an 18.60% gain, whereas between 1960 and 1964 the gain is 29.20%. However, this drift reversed in the period between 1975 and 1979 with the proportion of cash financing of 33.60%.

2.2.2.2 Size Effect

The market capitalisation (MV) of the acquiring firm has been identified as a major determinant of the announcement's gains to acquiring firms' shareholders. Moeller et al. (2004), used a sample of 12,023 successful US takeovers that announced over the period between 1980 and 2001 and provided evidence supporting that small acquirers outperform large ones by a statistically significant margin of about 2 percent. In fact, the authors found that while small acquirers' shareholders enjoy a statistically significant positive abnormal return of about 2.32%, returns to large acquirers are on average not statistically significantly different from zero (0.07%), generating a statistically significant differential of 2.24%. Deals involved private and subsidiary target firms generate on average positive and significant abnormal returns to bidders' shareholders, whereas small acquirers are found to outperform large ones by 1.44% and 2.18% respectively. In the event of acquisitions involved listed target firms, small bidders enjoy a significant positive abnormal return of about 0.92%, whereas large bidders experience significant losses of about -1.70% (2.62% statistically significant differential). Across all four portfolios (entire sample and the three groups based on the target status), the method of payment is found to play an insignificant role, after controlling for the target status and the size effect. In fact,

irrespective of the method of payment, large bidders of listed targets experience significant losses (-2.45% in the event of common stock financing), whereas small acquirers generate significant and positive gains to bidders' shareholders, irrespective of the mean of financing, as in Chang (1998) and Fuller et al. (2002). This reflects that public acquisitions are not necessarily negative NPV projects, and clearly small acquirers of listed targets generate higher gains to bidders' shareholders. Overall, these results suggest that the magnitude of target status and payment method in determining the gains to acquiring firms is to a major extent shaped by the size of the acquirer.

Moeller et al. (2004) offered several explanations/interpretations for the prevalent role of size as a main determinant of gains to acquisitions. Firstly, managerial overconfidence, as discussed in Malmendier and Tate (2005), is expected to be more of a problem with large acquirers. Managerial decisions in large firms are more likely to be hubris motivated since managers in such firms (a) are covered more by media, (b) are in general relatively more successful, and (c) have wide availability of resources when making investment decisions. In addition, Billett and Qian (2007) showed that large firms are more likely to conduct many acquisitions that reflect bad managerial decisions, which are value destroying. Secondly, the size effect can be explained by the ownership structure proposition. Small acquirers are likely to have less dispersed ownership and better aligned managerial incentives (Demsetz and Lehn (1985)). Third, it is more likely that large firms acquire large and listed firms. Given that it is more profitable for acquirers to acquire private, as opposed to public targets, then this can be a reason why small acquirers gain more. Further, large acquirers are more likely to be overvalued and have exhausted their growth opportunities thus, conveying negative signals about the acquirer's price. It is also less likely that arbitrageurs will take positions in small acquirers even if they believe they are overvalued and hence allowing potential overpricing to develop at the announcement and persist in the short-run. Lastly, the original structure of small acquirers is expected to change the most, especially when larger firms are acquired, thereby creating superior wealth effects to bidding firms' shareholders (due to relative size effect).

2.2.2.3 Relative Size of the Deal

It has been widely agreed that the size of the target firm, relative to the size of the bidding firm, is a major factor affecting announcement's returns of the bidding firm (Asquith, Bruner, and Mullins, 1983; Jensen and Ruback, 1983; Jarrell and Poulsen, 1989; Kang, 1993; and Fuller et al. 2002). The abnormal returns generated are expected to be more severe the larger the target firm's size relative to the bidder's size, and thus the more the original structure of the acquiring firm changes as a result of the acquisition. Along these lines, Jensen and Ruback (1983) noted that the bidders' returns depend on the relative size of the deal. Their main finding is that abnormal returns increase as the target's size increases relative to the acquirer's size (Asquith et al. 1983; Jarrell and Poulsen, 1989; and Kang, 1993). The same authors concluded that when acquisitions are wealth increasing for the bidding firms, bidder shareholders enjoy higher abnormal returns if the target is larger than the acquirer. On the contrary, Loderer and Martin (1990) claimed that large firms seem to overpay for their targets and large bids seem to be overpriced on average, deteriorating share price performance. This may be linked to the fact that the larger the size of the target firms the more likely it is that the acquirer uses share financing in M&A (Myers and Majluf, 1984; and DeAngelo et al. 1984). This in turn leads to low returns. Further, Ang and Kohers (2001) supported the view that abnormal returns to acquiring firms when bidding for public targets are significantly smaller than for bidders buying private targets.

Importantly, Cakici, Hessel, and Tandon (1996) examined, among other factors, the role of relative size in determining CBA performance using cross sectional regressions for a sample of US acquisitions. The authors found that bidders' abnormal returns when buying foreign listed targets are inversely related to relative size, but this relation is not statistically significant. When the authors formed portfolios according to different levels of relative size, they found an insignificant relationship between bidder's abnormal returns and the relative size of the deal.

Similar conclusions have reached also by Pettway and Yamada (1986) who examined the wealth effects of Japanese fins that engage in domestic M&A in relation to the relative size of the deal. However, Brooks et al. (2000) examined the gains to US acquirers engaging in domestic and foreign acquisitions, and found that the gains of bidding firms' shareholders are positively related to the relative size of the deal. In addition, the cross sectional regression analysis within this study records no evidence of a statistically significant difference in abnormal returns to acquiring firms in domestic and international acquisitions, after controlling for the relative size of the target.

Furthermore, Fuller et al. (2002) investigated also the role of relative size of the deal within the context of private versus public acquisitions. The authors reported evidence that as the relative size of the deal increases for public bids, the abnormal returns to bidding firms' shareholders increase for cash offers, decrease for equity offers, while they do not change much for combination of cash and equity offers. On the contrary, for bids of private and/or subsidiary target firms, the authors found that there is a positive relationship between the deal's relative size and the bidders' gains. In fact, the greater the deal's relative size for private bids, the higher the bidders' gains in common stock-bids, in contrary to cash-bids. The explanation given by the authors is that bidders receive a better price when they buy a non-public target firm. This could be the outcome of the liquidity effect, as private and subsidiary firms cannot be bought and sold as easily as a publicly traded firm can. Thus, the valuation of privately held assets reflects a liquidity discount, which in turn leads to higher returns for bidder's shareholders. Finally, with respect to the stock financing for privately held targets, the authors state that the larger returns obtained by bidders are due to tax considerations and monitoring.

2.2.2.4 Market-to-Book Value and Price-to-Earnings Ratio

Several scholars have independently confirmed that the market-to-book value (MTBV) of the acquiring firm is a major determinant of bidders' announcement

returns, as it conveys important information about the current and future bidders' stock returns. Accordingly, glamour bidding firms are high growth, while value acquirers are low growth firms, since their high market valuation may reflect the anticipated high growth or investment opportunities. Rau and Vermaelen (1998), and Sudarsanam and Mahate (2003) have reached the conclusion that value acquirers (with low MTBV) outperform glamour ones following the announcement of an acquisition, after controlling for the mode of payment. Glamour firms receive premium ratings in the form of high MTBV based on their past stock performance. On the contrary, undervalued acquirers (with low MTBV) may have the potential for subsequent wealth creation. Lastly, Conn et al. (2005) found that in domestic acquisitions public and private growth acquirers do worse. However, for cross-border acquisitions value acquirers experience the worst performance in general. This suggests that the role of MTBV deserves further investigation when controlling for target origin.

2.2.2.5 Age of the Bidding and Target Firm

Empirical evidence suggests that the age of a firm plays a very important role in shaping the announcement gains to firms that engage in M&A. In general, it is likely for newly established firms to exhibit higher uncertainty than older firms due to several reasons. In general, it has been widely documented in the literature that markets tend to hold more information for firms with a long history (Barry and Brown, 1985). Mature companies tend to be commonly known by more customers, more suppliers, and also they tend to operate within more mature industries. Hannan and Freeman (1989) argued that young firms are likely to lack reliability and accountability in their organizational routines and performance. In terms of institutional constrains, young firms lack legitimacy, due to the lack of support from relevant organizations (Baum, 1989) and due to segmentation within the market for inter-organizational relationships (Carter and Manaster, 1990; Podolny, 1993). In similar respects, Zhang (2006) used the age of a set of US firms to proxy for informational uncertainties related to the same firms. In short, the author found a

negative relationship between information uncertainties and the cross-section of expected returns, further suggesting that the information quality following firms (as measured with the age of the firm) destroy of enhance shareholder wealth.

Overall, the above discussion of the literature on other factors that shape short-run bidders' gains shows that several transaction and firm-specific characteristics are important determinants. In short, the method of payment, the size and growth opportunities of the acquiring firm, the relative size of the deal and the age of the bidder and target at the announcement time constitute, among others, very important determinants of short-run bidders' gains. However, in spite of extensive research on the effects of these factors on bidders' gains, several voids remain unfilled. The major aim of this thesis is to investigate the impact of the above-mentioned factors, along with other performance determinants, on the domestic and foreign bidding firm's short-run gains. In particular, chapter 3, 4, and 5 of this thesis investigate factors affecting bidders' performance by including in all univariate and cross-section approaches the above-mentioned controls. Notably, given the contradicting evidence in finance literature regarding the effect of relative size on the gains of foreign bidders (see for example Cakici et al. 1996), chapters 3 and 4 investigate this relationship in both univariate and cross-section approaches. Furthermore, chapter 5 of this thesis examines closely the gains of bidders' shareholders by investigating, in great detail, the impact of method of payment and size of the firms involved, as well as the relative size of the deal, on bidders' gains when buy exclusively domestic unlisted targets.

2.3 Gains from Cross-Border Acquisitions

This section reviews and discusses, in great detail, only studies that investigate short-run bidders' gains from CBA. The literature in this field of research has focused on either the main factors that motivate firms to expose themselves internationally, or examine the acquiring firms' short and long-run gains. In short, previous studies on bidders' gains from foreign acquisitions have attributed these gains to transaction

and firm-specific characteristics, similarly to studies for domestic acquisitions (see section 2.2). As the number of UK firms involved in cross-border acquisitions (CBA)[35] continues to rise over time,[36] the need for clear explanations regarding the trade-off between costs and benefits of international business environment to foreign bidders is increasing. Thus, the review of the literature related to the short-run gains of foreign bidders in this section, along with its association with key issues examined in chapters 3 and 4, will further allow the contribution of this thesis to become much more transparent.

Previous research has focused on the investigation of the announcement gains of shareholders of US bidders that acquire foreign targets. These studies have attempted to explain the behaviour of bidder gains on various firm and transaction-specific characteristics, as well as on factors related to economic indicators and governance/institutional settings. In the same way, scholars have also attempted to investigate the gains of shareholders of target firms that involved in CBA. Among others, one of the most important studies that examine the returns to bidders engaged in CBA is investigated by Doukas and Travlos (1988). The authors studied the impact of corporate multinational presence on the wealth effects of 301 US cross-border deals. In general, they recorded that bids do not generate any statistically significant abnormal returns for their shareholders on the announcement day (0.08%). However, the major conclusion derived from this study is that the multinational network of the bidding firms plays a very important role during the announcement period. In short, cross-border bidders' shareholders enjoy statistically significant positive abnormal returns on the announcement day (0.31%) only if the bidder is not already operating in the target firm's country. On the other hand, when bidders are already operating in the target firm's country, their shareholders

[35] CBA are the single most important mode of Foreign Direct Investments (FDI). FDI means the acquisition of controlling interest in foreign firms and businesses. Despite CBA being financed mainly via FDI, they account for a major portion in global FDI and more specifically in industrial economies.

[36] UNCTAD (2006) suggested that "Global foreign direct investment (FDI) flows grew substantially in 2005 over those in 2004. As in the late 1990s, that growth was spurred by cross-border mergers and acquisitions (M&As)." (p. 3). In addition, Healy and Palepu (1993) have also pointed out that around the late 1980s the UK was the leading country in CBA, accounting for almost 30 percent of all global corporate investments. Although the share of the UK on outward FDI has been volatile over the years, the UK remains one of the major participants in the cross-border M&A activities in the world.

experience insignificant losses (-0.08%). The authors also noted that shareholders of US firms expanding internationally for first time display insignificant positive abnormal returns (0.74%) on the announcement day. Particularly, when Multinational Corporations (MNC) diversifies across new industries and geographical markets, and especially when this occurs in less developed markets than the US, abnormal return tends to be larger. Shareholders gain the most if the expansion is in less developed countries and if it simultaneously diversifies across geographical and industrial regions/sectors. Similar research efforts have been applied by Markides and Ittner (1994) who used a sample of 276 US foreign acquisitions announced over the period between 1975 and 1988 and found that on average international acquisitions increase value to bidders' shareholders. More specifically, within a window of 2-days (-1, 0), 5-days (-1, +3), and 6-days (-2, +3) acquiring firms' shareholders enjoy positive and statistically significant abnormal returns of about 0.32%, 0.54%, and 0.49% respectively. The authors proposed that factors affecting performance, among others, are the industry classification, and bidders' prior international experience given its present profitability, and finally key macroeconomic variables, such as tax regulations and US dollar relative strengths, further confirming the findings generated by Doukas and Travlos (1988).

Along similar respects, Kiymaz and Mukherjee (2000) examined the gains of US targets (141) and bidders (112) involved in CBA over the period between 1982 and 1991.[37] The authors documented positive and highly significant CAR for US targets' shareholders across all windows examined (varying from 2.03% to 6.55%), whereas US bidders are found to generate statistically insignificant wealth effects. The bidders' and targets' abnormal returns vary significantly with the country of origin of the bidder and the target firms. In fact, within a 2-day window (-1, 0) US targets enjoy the highest gains when the bidders operate in Australia (6.71%), Canada (5.71%), Japan (6.16%) and France (12.79%), whereas US bidders experience the lowest gains when they bid for target firms in Canada (-1.30%) and the highest for bids against German firms (1.45%). The authors found numerous explanatory

[37] Countries in the sample include Australia, Canada, France, Germany, Italy, Japan, Netherlands, Switzerland, and the UK.

variables that describe the variation of the gains of US targets' shareholders in the short-run, such as the correlations between the quarterly GNP growth rates of the two participating countries over a five year period, the correlations between the month stock market returns of the two participating countries over a five year period, the target firm's MTBV, the dollar value of acquisitions in the US target's country divided by the total dollar value of all acquisitions in a given year, dummy variables that take the value of 1 (a) if the targets and the bidding firm are operating in the same industry, (b) if the payment is by cash, (c) if the whole firm is acquired, (d) if the bidders has previous involvement in the target's host country, (e) if the acquisition announcement after 1986, and (f) the acquisition takes place in an English-Speaking country, and 0 otherwise. In addition, Black, Carnes, and Jandik (2001 and 2002) studied the gains of shareholders of 361 US bidders that engage in CBA with targets operating in 17 foreign countries over the period between 1985 and 1995.[38] The main conclusion of this study is that on average bidders enjoy positive and significant abnormal returns in the short-run. In fact, within 7-day (-5, +1) and 11-day (-5, +5) event window around the day of the announcement, bids generate 0.90% and 1.50% wealth effects to bidders' shareholders.

Earlier research has also investigated the impact of the cultural distances and industry relatedness among countries, such as Datta and Puia (1995). The authors examined (a) the shareholders wealth of 112 large US bids announced between 1978 and 1990, and (b) the impact of industry affiliation and cultural distances, on the explanation of the wealth effects of the above US bidders acquiring foreign targets. Their main results suggest that bidders generate on average statistically significant negative abnormal returns to their shareholders of about -0.42% and -0.72% within a 2-day (-1, 0) and a 11-day (-5, +5) windows respectively. When the authors controlled for the impact of industry relatedness and cultural gaps, results convey the significant impact of both variables in shaping the gains to bidders' shareholders. In fact, in related bids, deals do not generate statistically significant abnormal

[38] The foreign countries include Australia, Belgium, Canada, Denmark, France, Germany, Hong Kong, Ireland, Italy, Japan, Netherlands, Norway, Singapore, South Africa, Sweden, Switzerland, and the United Kingdom.

returns to bidders' shareholders across all windows, whereas in unrelated bids generate significant losses to acquirers' shareholders of about -4.50%, -7.27%, and -9.10% for the windows (-15, +15), (-20, +20), and (-30, +30) respectively. Similarly, when firms involved in CBA operate in countries culturally distant, bidders' shareholders suffer relatively large losses (between -2.58% and -5.85%), compared to cases when there is low cultural distance between the firms involved in the CBA. In the latter case, results appear not statistically significant different from zero. Datta and Puia claimed that the poor performance of CBA could be due to the difficulties of managing the post-merger performance when cultural differences make integration and accumulation a difficult, time consuming, and expensive process. Thus, the bigger the cultural gap, the greater the risks that may be faced.

Along the same lines, other scholars have also investigated the relationship between the Tobin's q and bidders' gains in the framework of CBA. For example, Doukas (1995) used a sample of 463 US foreign acquisitions over the period between 1975 and 1989 and found that bidders with $q>1$ yield significant positive (0.41%) announcement returns within a 2-day event window (-1, 0). On the other hand, bidders with $q<1$ generate insignificant negative announcement returns to their shareholders (-0.18%) for the same period/window. Further, the cross-section regressions of a 2-day CAR on cash flows for high and low q bidders conveys the significant impact of cash flows on the shape of bidders' CAR only for bidders with $q<1$. In fact, for negative q bidders, the coefficient of the cash flow variable appears negative (-0.95) and significant at the 5% significance level. The author found also that foreign target bidders' short-run gains are very sensitive to the degree of international exposure of the bidding firm, the degree of economic development of the target firm's country, the degree of industrial relatedness between the bidding and the target firm, the exchange rate regime, the method of payment, and the free cash flows.

Prior research has also focused on the examination of the emergence of synergies for merger partners that are based in different countries. In that respect, Eun, Kolodny, and Scheraga (1996) studied several propositions for a sample which

consist of 225 foreign acquisitions of US firms (117 foreign bidding firms), 213 US targets (of foreign bidders) and 103 paired acquirers and targets that announced over the period between 1979 and 1990. The authors concluded that only Japanese (3.62%) and Canadian (3.18%) acquirers realize positive abnormal returns within 11-day event windows (-5, +5), yet is statistically significant only for Japanese bids. On the other hand, UK and all the other foreign bidders experience significant losses within the same window. Moreover, the 213 US targets (of foreign bidders) yield high positive abnormal returns within the 11-day window. In fact, the highest gains realized to US target firms involved in CBA are when Japanese bidders are involved (48.55%), whereas on average all 213 US targets enjoy 37.02% announcement returns. The authors found also that foreign bidders' and targets' gains vary significantly with research and development variables, market value of the target's equity divided by the market value of the acquirer's equity, exchange rate variables, and dummy variables taking the value of 1 (a) if the bidder and targets are operating in the same line of business, (b) if there are multiple bidders, (c) if the target shares are tendered, and (d) if the acquirer has a US presence prior to the acquisition, and 0 otherwise.

Other markets, than the US one, have attracted significant research efforts by many scholars due to their high involvement in CBA, such as the UK market, Japanese and the Dutch ones. Specifically, Conn and Connell (1990) is the first study that examined the wealth effects to shareholders of 35 US and 38 UK acquired firms involved in CBA over the period between 1971 and 1980. This study used two models to measure the wealth effects to US and UK targets' shareholders: (a) the domestic market model (DMM) and (b) the international market model (IMM). The main conclusion derived from this study suggests that that shareholders of US target firms acquired by UK foreign bidders enjoy positive abnormal returns during the announcement month, significant for both DMM (0.40%) and IMM (0.43%). Similarly, shareholders of UK target firms acquired by US foreign bidders enjoy positive abnormal returns during the announcement month in both models (0.18% for the DMM and 0.20% for the IMM). Evidently, UK acquired firms (by US foreign bidders) enjoy almost half of the gains generated to US acquired firms (by UK foreign bidders) during the

announcement month. Conn and Connell claimed that the relatively lower CAR to UK targets is due to the fact that the UK market for corporate control is less competitive, given the greater agency costs and fewer regulatory/disclosure requirements in the UK. A more recent study that focuses on both the short-run and the post-merger wealth effects of UK foreign acquirers is investigated by Gregory and McCorriston (2005). The authors used a sample of 343 deals which consists of 206 deals with US target firms, 98 with European targets, and 39 deals with firms in the Rest-of–the-World, announced over the period between 1984 and 1994.[39] In order to ensure that only economically significant deals were involved, the authors restricted their sample to only deals with target firms' sales to be equal to, or greater than, 5% of acquirer's sales in the financial year pre-acquisition. The announcement gains to UK foreign bidding firms is estimated within a 5-day window (-3, +1). Accordingly, for the entire sample, CAR appear negative (-0.02%) and statistically insignificant. In addition, although bids with US targets (0.24%) and with targets that operate in the Rest of the World (0.20%) group appear positive, they are again statistically insignificant. The greatest losses realized to UK foreign bidders' shareholders are from acquisitions with targets operating in Europe (-0.72%), which is again statistically insignificant. The cross-section analysis suggests that although takeovers in Europe destroy value, acquisitions in the US breakeven. Further, the coefficient of the dummy variable which takes the value of 1 if the takeover was of a US company and occurred prior to the introduction of the 1986 Tax Reform Act, appears across all models negative and statistically significant, suggesting an improvement of the wealth effects with the introduction of the 1986 Tax Reform Act. Finally, the coefficient of the exchange rate variable and the sales in the target region by acquiring firm in the year prior to acquisition, appear both negative and statistically significant across all models, consistent with the FDI literature. Overall, although the main conclusions derived from this study suggests that geographic diversification plays a very important role in shaping the announcement gains of the foreign bidding firms' shareholders, the result obtained from the long-run analysis

[39] 238 (105) of these foreign deals are announced with targets that operate in the same (different) business line of the bidder.

appear much more intense with regards the impact of the geographical diversification on the share price behaviour after the CBA announcements.

Similar research proposals have been applied by Kang (1993) who assessed the valuations effects to 119 Japanese bidders (98 non-financial ones) and 102 US targets involved in CBA over the period between 1975 and 1988. The main conclusions derived from this study lie on the basis that Japanese bidders enjoy significant positive abnormal returns within 2-day (-1, 0) and 3-day (-1, +1) event window when buying foreign targets in the US, whereas US targets breakeven. More specifically, Japanese bidders enjoy 0.59% and 0.51% announcement gains, whereas US targets gain on average -0.29% and -0.10% abnormal returns respectively for the two windows. The differentials generated between the gains to Japanese bidders and US targets appear both economically and statistically significant (0.88% and 0.61% respectively). These findings are consistent with the rest of the findings in the FDI literature, with the exchange-rate movements and the bidder's characteristics being significant explanatory variables in shaping the variation of the Japanese bidders' abnormal returns. Lastly, Corhay and Rad (2000) examined the wealth effects generated to Dutch bidders' shareholders engaged in CBA with 84 Western European firms, 17 US firms, and 10 Eastern European firms, over the period between 1990 and 1996. Various windows were used to measure the bidders' gains across all portfolios. In general, the authors documented weak evidence suggesting that CBA are value increasing projects for the bidding firms' shareholders. In fact, the announcement period gains created to bidders' shareholders vary across the three portfolios based on the target firm's country of origin: (a) bids in the Western European countries generate 1.44% announcement gains within a window (-5, +5) with no abnormal returns generations in longer windows, (b) bids in US generate a CAR of 4.50% in a 81-day window (-40, +40) with no favourable immediate effects around the M&A announcement, and (c) bids with Eastern European countries generate highly negative and statistically significant abnormal returns. The cross-section analysis of Dutch acquiring firms' CAR for windows of (-1, +1) and (-10, +10) on (a) the FOREIGN dummy variable (1 if the ratio of foreign sales to total sales of the acquiring company is equal to, or higher than, 40%, and 0 otherwise), (b) the

INDUSTRY dummy variable (1 if the bidder and targets are operating in the same business line, and 0 otherwise), and (c) the SIZE dummy variable (1 if the ratio of the target firm's sales to the bidding firm's sales is equal to, or greater than, 10%, and 0 otherwise) reflects that bidders' gains are negatively correlated to the FOREIGN and INDUSTRY dummies, and positively, although statistically insignificantly, correlated to the SIZE dummy, for both windows.

Overall, the review and discussion of the literature in foreign acquisitions suggests that, while gains to foreign acquirers are very controversial, gains to foreign targets' shareholders appear always positive and highly statistically significant, irrespective of the bidder's and target's country of origin. Given these findings, the importance of the examination of the wealth effects to foreign bidders, as well as the identification of further determinants of the announcement abnormal returns, led to the emergence of several research questions. Respecting all these observations, this thesis aims to identify further abnormal return determinants for the gains of bidders' shareholders that acquire foreign target firms. More specifically, chapters 3 and 4 of this thesis attempt to identify more factors, other than the ones recorded in the literature so-far, that explain (a) the stock price behaviour around foreign acquisition announcements, and (b) any differential in performance detected between domestic and foreign acquisition deals. More specifically, chapters 3 and 4 investigate the impact of (a) the legal system of the target firm's country of residence and (b) the market valuations and economic conditions in the source country as well as the power of the source country's currency, on the gains of foreign bidding firms. Given the continuously increasing number of firms that are involved in foreign acquisitions, the research outcomes from this thesis should add significant value to our current knowledge and fill several voids in finance literature.

2.4 Gains from Domestic versus Cross-Border Acquisitions

In this section I only review and discuss studies that investigate the main factors documented in the literature which have a significant impact upon the differentials

detected in performance of domestic versus CBA. In the same framework, I further discuss the main features that lead to such differentials and their implications to all merger partners.

A limited number of studies have directly compared the wealth effects from domestic versus foreign acquisitions, whilst discussing possible reasons for any differential in abnormal returns detected. Along these lines, Eckbo and Thorburn (2000) compared directly the domestic and cross-border performance of US and Canadian bidders both acquiring Canadian targets between 1964 and 1983. The 1,261 domestic bidders listed in the Canadian market (TSE) experience significantly positive abnormal returns during the announcement month. On the contrary, the 390 foreign bidders listed in NYSE yield insignificantly abnormal returns. The latter finding is somehow surprising given that US (bidders) and Canadian (targets) operate under the North America Foreign Trade Association (NAFTA) area. Along similar lines, Brooks et al. (2000) compared the gains generated between 137 bids of domestic listed target firms and 149 foreign ones over the period between 1981 and 1989. The authors suggested that bidders' shareholders experience losses in both domestic and foreign acquisitions. However, these losses are statistically significant only for domestic bids.

Further, Moeller and Schlingemann (2005) identified the market integration as a crucial parameter when they examine domestic versus cross-border announcement performance. The authors found that US bidders experience lower abnormal returns when buying foreign targets, rather than when buying domestic ones, after controlling for several factors.[40] In addition, Goergen and Ronneboog (2004) used a sample of 187 mergers and acquisitions announcements for large European firms (valued at least USD100 million). By looking solely on the main findings of this study we may identify that bidders from any country buying domestic targets yield

[40] The authors controlled first for general transaction and bidder characteristics, which include method of payment, relative transaction size, and industry specification, tender offer versus merger, friendly versus hostile takeover, market-to-book value, and free cash flow. Second, they controlled for specific cross-border transaction and bidder characteristics, in simple worlds for the global and industrial diversification. Finally, they controlled for target country characteristics, which are trade policy, capital restrictions and government intervention.

negative, yet insignificant, abnormal returns, while acquirers buying foreign targets experience positive and highly significant excess returns. UK and Irish bidders acquiring domestic targets realise negative but insignificant abnormal returns, whereas bidders engaging in CBA gain positive and highly significant abnormal returns.

Lastly, Conn et al. (2005) examined the interrelation between target status (private, public, and subsidiary) and country of origin (domestic versus cross-border) of 4,320 takeover deals announced over the period between 1984 and 1998. In general, the authors found that UK bidders engaging in domestic acquisitions generate higher announcement gains to their shareholders than the ones engaging in foreign deals, after controlling for target status and the method of payment. More specifically, acquirers bidding for domestic (foreign) listed target firms experience significant losses (yield zero abnormal returns) during the announcement period. Further controls according for the method of payment used suggests that cash payments in bids of domestic (foreign) listed targets generate positive (negative) abnormal returns – insignificant in statistical terms though. Moreover, bidders buying domestic (foreign) listed targets with non-cash[41] instruments, obtain a statistically significant negative (insignificant positive) abnormal return. This result could be driven by the investor protection hypothesis, i.e. the higher the investor protection in a particular market, the higher the abnormal returns to the bidding firm acquiring a listed target using stock as the mean of payment.

On the contrary, both domestic and foreign acquisitions of privately held target firms result in positive announcement abnormal returns. Further analysis based on the method of payment utilized suggests that the gains to bidders in the domestic versus CBA framework vary significantly. In fact, bidders buying domestic private targets using cash experience significantly larger abnormal returns than when buying foreign private targets with cash. This could be a result of high competition in the foreign market of corporate control for privately held targets when cash is used as the mean

[41] Non-cash offers include stock offers, stock and cash offers, and other offers.

of payment, according to the limited competition hypothesis. In several cases, domestic private bids yield higher abnormal returns than cross-border ones when non-cash instruments are used to finance the deals. Overall, the main conclusion from this study is that cash transactions generate higher announcement returns for domestic than for CBA. On the contrary, acquirers engaging in CBA with public target firms using non-cash means of payment do not lose, whereas non-cash private bids in the domestic market generate higher abnormal returns than cross-border deals.

The overall conclusion derived from this section suggests that in the framework of domestic versus foreign acquisitions, the country of origin, target firm's status, and the method of payment in M&A are all highly relevant determinants in shaping the gains of bidders' shareholders. In spite of extensive research in this field and the several conclusions recorded by a number of other studies, numerous important questions remain to be investigated. As a result, the major task of chapter 3 and 4 of this thesis is to investigate research questions related to factors affecting bidders' gains in the framework of domestic versus foreign acquisitions, both in the short and in the long-run. For example, questions that deserve investigation include, what is the impact of the target firm's nation legal system or investor protection, on the short and long-run gains of shareholders of bidders acquiring domestic versus foreign target firms? How does the level of the source country's market valuations and economic conditions, and the level of Effective Exchange Rate of the source country's currency, affect domestic and CBA activities as well as the announcement and post-merger stock price behaviour of bidders that engage in domestic versus foreign acquisitions? Critical evaluations of factors that measure the effects in the pre-stated questions, along with their association with other determinants that have been recognised by earlier studies, will fill several voids in finance literature whilst enrich our current knowledge on the short and long-run gains of bidders acquiring domestic versus foreign target firms.

2.5 Long-Run Performance of Domestic and Cross-Border Acquisitions

This section reviews and discusses only the literature that is associated with the post-merger gains of shareholders of bidders acquiring domestic and foreign target firms. In the same framework, specific factors that contribute to the interpretation of the gains generated to bidders' shareholders are discussed and analyzed. Accordingly, the balance of current evidence on the post-acquisition stock performance of domestic and foreign bidding firms has documented significant losses up to five years following M&A announcements.[42] In this respect, several scholars have admitted that the negative gains to bidders' shareholders in the long-run cancel out the positive gains generated during the announcement period (Andrade et al. 2001). However, despite the rich array of studies that attempt to resolve the puzzle on the post-merger underperformance, the question on whether bidding firms experience significant gains or losses is still under investigation. Several arguments related to this puzzle have been closely examined by a large volume of studies, varying through methodological issues, firm and transaction-specific characteristics.

In general, the post-merger underperformance of bidders is a global phenomenon that it is mainly associated with the gains of bidders engaged in deals with listed target firms. However, a small number of studies that examine the post-merger gains to bidders of private targets fail to support the underperformance hypothesis, which is a clear indication of the major role played by the target status on the bidders' gains in the post-merger period. In that respect, Moeller, Schlingemann and Stulz

[42] For US empirical evidence, see for example: Mandelker (1974), Dodd and Ruback (1977), Lengetieg (1978), Asquith (1983), Bradley, Desai, and Kim (1983), Malatesta (1983), Jensen and Ruback (1983), Magenheim and Mueller (1988), Agrawal, Jaffe, and Mandelker (1992), Loderer and Martin (1992), Anderson and Mandelker (1993), Loughran and Vijh (1997), Rau and Vermaelen (1998), Agrawal and Jaffe (2000), Pettit (2000), Ferris and Park (2001), Kohers and Kohers (2001), and Moeller, Schlingemann, and Stulz (2004). For UK evidence, see for example: Firth (1980), Franks and Harris (1989), Limmack (1991), Kennedy and Limmack (1996), Gregory (1997), Alexandridis, Antoniou, and Zhao (2006) and Alexandridis, Antoniou, and Petmezas (2007). For CBA evidence, see for example: Conn and Connell (1990), Goergen and Renneboog (2004), Gregory and McCorriston (2005), Francoeur (2005), Conn et al. (2005). There are, however, other studies [e.g., Bradley and Jarrell (1988), and Franks, Harris and Titman (1991)] that do not find significant long run underperformance.

(2004) examined the gains generated to unlisted target bidders' shareholders in the post-merger period and reported that, on average, bidders earn zero abnormal returns in three years following the announcement month. However, this is not the case in CBA for which Conn et al. (2005) reported negative gains to foreign target bidders' shareholders that acquire private firms.

2.5.1 Long Long-Run Performance of Domestic Acquirers

Malatesta (1983), Asquith (1983), and Magenheim and Muller (1988) reported losses (statistically significant only in Malatesta, 1983) for the bidding firm in the year following acquisition announcements. In fact, Malatesta (1983) observed that the post-merger underperformance occurred after 1970 whereas this drift was mainly associated for bidders with smaller equity value. Along similar lines, Agrawal, Jaffe and Mandelker (1992) used US acquisitions sample and report significant negative abnormal returns for the next 5-years after adjusting for firm size and shifts in beta over time. The authors hypothesized that stock prices adjust to corporate signals slowly although subsequently they concluded that such hypothesis is not supported in their study. Likewise, Andre et al. (2004) investigated the post-merger performance of 267 Canadian takeovers over the period between 1980 and 2000 and found that Canadian acquirers experience significant underperformance over a three-year period. Their results are robust to the inclusion or not of overlapping cases whist they also found that both the extrapolation and the method of payment hypotheses can explain their results. In fact, glamour acquirers and equity-financed deals shape the documented underperformance, supporting the findings of several other studies in finance literature.

However, a number of US studies have failed to find any evidence supporting the underperformance hypothesis. In fact, Langetieg (1978) and Franks et al. (1991) used multifactor benchmarks and reported insignificant negative performance over a three-year period after acquisitions. The same authors argued that when previous studies reported poor performance after acquisitions, it is because of benchmark

portfolio errors rather than mispricing at the time of the takeover. Similar conclusions have been reached by Agrawal et al. (1992) who admitted that their results are period specific and, hence, cannot be generalised. Consistent with Franks et al. (1991), Loughran and Vijh (1997) reported that the five-year abnormal return for their entire sample is insignificantly different from zero. Lastly, Loderer and Martin (1992) also reported that the five-year post-merger performance is positive but insignificantly different from zero.

Previous research has also examined similar research proposals for UK based firms. For example, Firth (1980) examined the post-merger performance of a sample of acquisitions over the period between 1969 and 1975 and reported that bidding firms experience negative abnormal returns. Similarly, Barnes (1984) examined all mergers undertaken by companies listed in the London Stock Exchange (LSE) from 1974 to 1976 and reported significant losses for acquirers in the long-run. In the same respect, Franks and Harris (1989) used a comprehensive sample for a thirty-year period (between 1955 and 1985) and found that bidders experience losses in the post-merger period of about 13% two years after the merger. Furthermore, Limmack (1991) reported that on average, over the 24 months after the takeover's announcement bidders' shareholders experience significantly negative abnormal returns.

Along similar lines, Gregory (1997) examined domestic takeovers over the period between 1984 and 1992 and found that, irrespective of the benchmark model used, the two-year post-acquisition returns are on average significantly negative. Hence, the author suggested that "the contribution of this paper has been to show that the post-takeover performance of UK companies is unambiguously negative in the longer term" (page 998). Gregory (1997) noted that the underperformance for acquiring companies in the UK seems to be more pronounced than for the US market. In addition, Limmack (1997, page 1,006) points out that "his conclusion is perhaps a little premature' since there remain at least three possible explanations for the results obtained in this and other studies, which are (i) the market is inefficient and takeovers are not, on average, in bidding shareholders' interest (ii)

results are time and sample specific and (iii) the models or methods selected for control may not be appropriate for the purpose and that there are other as yet unspecified but more appropriate control models or methods". Contrary to studies that document significantly negative abnormal returns, but consistent with Franks et al. (1977), Dodds and Quek (1985) examined post-acquisition performance of acquirers over the period between 1974 and 1976 and found that they enjoy positive abnormal returns. However, they observed that the positive abnormal returns that earned only lasted until the 25th month with acquirers experiencing negative abnormal returns thereafter.

More recently, Alexandridis, Antoniou, and Zhao (2006) investigated the relationship between the degree of short sale constraints for acquiring firms' equity and post takeover stock performance of bidders. The authors found that as the persistence of institutional block-holder ownership increase, bidders' post-merger returns appear less negative, after controlling for size, methods of payment and growth opportunities of the bidder. In addition, Alexandridis, Antoniou, and Petmezas (2007) investigated the relationship between divergence of opinion about the value of the acquiring firm in the pre-acquisition announcement period, and post-acquisition stock returns. The main findings of this study suggest that acquirers subject to high divergence of opinion yield lower post-merger returns than acquirers subject to low divergence of opinion. It appears also that negative post-merger returns are only experienced by acquirers subject to high divergence of opinion about their value.

It is clear from the evidence discussed above that the long-run underperformance of acquiring firms is by no means a universal phenomenon and cannot be generalized. Several authors have suggested that the negative performance detected is driven by several acquirer and transaction specific characteristics. Accordingly, method of payment, book-to-market effects and slow adjustment of prices to information associated with takeovers has been the most prevailing explanations for this

puzzle.[43] Agrawal and Jaffe (2000), in assessing the literature, identified the method of payment, mode of acquisition and performance extrapolation as potential explanations of such underperformance.

In addition, a number of other scholars examined the question of whether post-takeover operating performance increases after M&A announcements. Evidence suggests (Healy, Palepu, and Ruback, 1992; Andrade, Mitchell, and Stafford, 2001) that operating performance following M&A announcements increases in the long-run, relative to industry benchmarks. Specifically, Healy, Palepu, and Ruback (1992) examined the post-acquisition performance of the 50 largest US M&A for the period 1979 to 1984 and found that operating cash-flows for the merged firms increase relative to the industry cash-flows. The same authors also measured the announcement returns to bidders and by employing regression analysis concluded that the short-run performance of the combined firms is positively and significantly related to cash-flow improvements in the long-run, supporting the efficient market hypothesis that announcement returns can predict the post-takeover performance.[44]

Further, Andrade, Mitchell, and Stafford, (2001) examined the effect of M&A on the post-takeover operating performance of a comprehensive sample of M&A for the period 1973 to 1998. The authors reported an improvement in operating performance by the merging firms relative to industry benchmark. Similar to Healy et al. (1992), Andrade, Mitchell, and Stafford, (2001) have concluded that the improvement in post-takeover cash-flow performance is related to the positive stock returns at the M&A announcement. Therefore, the need for further identification of what exactly influences this significant and persistent underperformance to bidding firms' stock returns in the long-run, while others report improved performance for the same window, is an empirical issue that calls for further examination.

[43] For extensive discussions on such explanations, see for example, Travlos (1987), Huang and Walking (1987), Amihud, Lev, and Travlos (1990), Agrawal, Jaffe, and Mandelker (1992), Loughran and Vijh (1997), Rau and Vermaelen (1998) and Dong, Hirshleifer, Richardson, and Hong (2005).

[44] This finding is opposite to the vast majority of the literature on the post-takeover performance which documents a negative and persistent negative performance in the long-run.

2.5.2 Long-Run Performance of Foreign Target Acquirers

Earlier research has examined the post-merger gains to bidders' shareholders up-to five years following CBA announcements. Conn and Connell (1990) examined the post-merger gains to 73 foreign acquisitions that announced over the period 1971 and 1980 between US (35) and UK (38) companies. The main conclusions of this study suggest that CAR for both US and UK acquiring firms are highly sensitive to the period used to estimate the parameters of the econometric model. In fact, using data from the pre-merger period, bidders experience significantly lower CAR than when data from the post-merger period are used. Another study that examined the post-merger wealth effects of UK targets being acquired by overseas companies has developed by Danbolt (1995). The author used five methodologies to estimate the abnormal returns, namely, (a) the index model (IM), (b) the market model (MM), (c) the CAPM, (d) the Hoare Govett small companies index model (HGSC), and (e) the size deciles index model (SD). The main conclusion derived from this study suggests that UK targets of foreign bidders enjoy positive returns for the first two months following the CBA announcement (significant only in the first month), whereas they experience significant losses thereafter until the fifth month. Along similar lines, Goergen and Renneboog (2004) used a near-exhaustive sample (187 deals) of European bidders and targets involved in domestic and foreign acquisitions. In particular, 118 deals are conducted with domestic target firms, while the rest (69) are conducted with foreign target firms. Overall, the authors found that target firms' shareholders earn significant and positive abnormal returns (21.66%) within a window of 121 days (-60, +60) whereas bidders breakeven (-0.26%) in the same window. When cross-border bids only are examined, bidders' gains in the window (-60, +60) vary significantly across European countries. Specifically, when all foreign acquisitions are considered, from all European countries, foreign target bidders deliver the expected rate of returns to their shareholders. However, foreign target bidders experience significant losses, in economic terms only, when the bidder is a German (-5.99%), or a Scandinavian (-11.31%), or a Benelux company (17.20%). On

the contrary, foreign French (12.68) and Southern European (5.22%) bidders' shareholders enjoy positive and significant gains in the same window. Lastly, UK and Irish foreign target bidders generate zero abnormal returns to their shareholders.

Another study on the long-run gains from foreign acquisitions is developed by Gregory and McCorriston (2005). The authors used a near-exhaustive sample of UK companies that acquire targets firms in the US, Europe and in the rest-of-the-world. This is the first study of FDI decisions that employs the Lyon et al. (1999) "bootstrapping" method in testing for long-run abnormal returns. Accordingly, Gregory and McCorriston reported that while on average long-run returns are not significantly different from zero they show extensive variation by region. Specifically, firms experience significant losses following acquisition in the US, show insignificant returns following acquisitions in the EU, whereas bidders in the RoW groups of countries enjoy significant positive returns in the long-run. The authors suggested that the different exchange rate regimes, the US tax reforms, the industry research and development, the industry advertising expenditure and the industry classification of the acquirer and the target firm form, among others, very important determinants for the variation of the long-run gains to UK foreign target bidders.

Similar research questions have also examined by Conn et al. (2005) who reported similar results for the long-run performance (36 months following the CBA announcement) of UK firms by using two methodologies, Buy-and-Hold and Calendar Time approaches. On average, they concluded that UK foreign target bidders experience significant losses in the long-run, although the losses vary with the target firm's status. With the Buy-and-Hold (Calendar Time) methodology, for the entire sample, foreign target bidders suffer a loss of -13.37% (-0.27%), whereas when the target firm is private bidders experience insignificant losses of -10.91% (-0.19%). In addition, bidders of foreign targets suffer the greatest losses when the target firm is listed. In fact, they lose -32.33% significant abnormal returns using the Buy-and-Hold and -0.71% using the Calendar Time Approach. Lastly, Francoeur (2005) used a sample of 847 CBA conducted by 279 Canadian acquiring firms and completed during the period from January 1990 to December 2000. After estimating returns using the

Calendar Time Approach for 12, 24, 36, 48, and 60 months, the author found that Canadian bidders experience negative abnormal returns in the long-run. In most of the cases the results appear statistically insignificant, suggesting the bidder delivers the required rate of return to their shareholders. However, for 24-months and 36-months following the CBA, the results appear negative and significant at 10% level.

In summary, and in view of the results discussed so far in this section, it appears that bidders of both domestic and foreign targets experience significant losses in the long-run or they deliver the required rate of return to their shareholders. However, there are only a few cases where the gains from the post-merger analysis appear positive. Overall, whether the gains to domestic and/or foreign bidders' shareholders should be captured by using a more accurate methodology or whether the puzzle related to the bidding firm's underperformance in the long-run can be explained by other factors, are empirical questions that deserve further investigation. Accordingly, this thesis aims to identify other factors that explain the long-run stock price behaviour of bidders that engage in acquisitions of domestic and foreign target firms. More specifically, chapter 3 and 4 attempt to identify whether the long-run gains to bidders' shareholders vary with various institutional laws and corporate governance systems from all over the world as well as with the economic conditions and market valuations in the source country. Lastly, chapter 5 aims to investigate whether the post-merger bidder gains vary with the unlisted target firm's level of valuation ambiguities or with the quality of available information for the unlisted target firm.

2.6 Conclusion

Overall, the literature discussed above suggests that both short and long-run bidders' gains vary with several firm and transaction-specific characteristics. In short, the listing status of target firm, the method of payment, the size and growth opportunities of the bidding firm, as well as the relative size of the deal and the age of the merger partners, constitute important determinants of short and long-run

abnormal returns of bidders. However, in spite of the rich array of studies that have recorded these conclusions, several important considerations remain to be investigated whilst leaving several voids unfilled in finance literature. This thesis seeks to investigate the impact of several factors on the gains of bidders that acquire both domestic and foreign target firms while it aims to fill a number of gaps in three important fields in the finance literature. In this attempt, chapter 3 investigates whether the legal system of the target firm's country of residence is an important factor in explaining the differences in the performance of domestic and foreign target bidders. Chapter 4 investigates the impact of market valuations, economic conditions and the effective exchange rate on the gains of bidders engaged in domestic and foreign acquisitions. Finally, the chapter 5 of the thesis addresses the question on whether the gains of unlisted target acquirers are shaped by the difficulty and uncertainty in valuing the targets.

Chapter 3: Host Country Legal System and Acquirers' Gains

3.1 Introduction

Recent years have witnessed increases in foreign direct investments (hereafter FDI), especially in the form of cross-border mergers and acquisitions (hereafter CBA).[1] Existing research evidence suggests that foreign acquirers benefit from expanding internationally due to growth, technological advancements, internalization, business diversification[2], and imperfections in factor, government policy, exchange rates, product, and capital markets.[3] Other reasons that encourage firms to engage in CBA include strategic, behavioural, and economic considerations.[4] However, apart from achieving potential benefits, firms engaging in CBA face additional risks such as foreign exchange, political and economic risks. To an extent, firms willing to engage in CBA face a trade-off between costs and benefits of international business expansion. Along similar lines, the increased CBA activities along with the risks faced by firms when expanding internationally have culminated into the emergence of a block of voluminous literature that concentrates into whether CBA create superior value for shareholders of acquiring firms. These studies have admitted that the gains from CBA are dependent on target's geographical region (see Gregory and McCorriston, 2005) while Doukas and Travlos (1988) showed that acquiring target firms into new markets (or countries) enhance shareholders' wealth. Nevertheless, in spite of extensive research on value creation from CBA, numerous important questions remain unresolved.

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[1] UNCTAD (2006) highlighted that "Global foreign direct investment (FDI) flows grew substantially in 2005 over those in 2004. As in the late 1990s, that growth was spurred by cross-border mergers and acquisitions (M&A)" (p. 3). In addition, Healy and Palepu (1993) have also pointed out that around the late 1980s the UK was the leading country in CBA, accounting for almost 30 percent of all global corporate investments. Although the share of the UK on outward FDI has been volatile over the years, it still remains one of the major participants in the cross-border M&A activities in the world.

[2] Seminal studies on the gains from multinationalisation suggest that investors value the benefit of expanding internationally (see Hughes, Logue and Sweeney, 1975 and Agmon and Lessard, 1977). This is particularly relevant when there are more cross-border trade barriers for investors than for firms.

[3] See Caves (1971), Hymer (1976), and Errunza and Senbet (1981), to name only a few.

[4] Strategic considerations include, for example, seeking new product markets, finding new sources for raw materials, lowering costs associated with the goods produced and services rendered as well as with skilled human capital, and attempting to overcome trade barriers.

Whereas the majority of earlier studies have mainly concentrated on the investigation of various factors related to firm, transaction, economic and regional characteristics, others scholars have recorded that the governance procedures and the legal environment of a country affect firm's value (see for example, La Porta et al. 2000 and Bris and Cabolis, 2008). As a result, one of the major factors responsible in shaping net gains from CBA is the corporate governance and the legal system in host nations (i.e. civil-law and common-law systems).[5] Indeed, legal provisions pertinent to corporate governance, entry and exit, investors' protection, and openness of economy can affect acquisition premium/discount offered by bidders and ease of integration between acquirer and targets which, in turn, should affect the short and long-term performance of acquirers.[6] Despite the apparent importance of governance systems, no prior study, to my knowledge, has directly examined the implications of the various legal and governance systems on the gains earned by UK bidders engaging in CBA.[7] Therefore, the central aim of this chapter is to fill this void by investigating the possible implications of legal traditions of the target firm's country of origin on the gains of bidders engaged in CBA.[8]

Another strand of literature in the same field of research has focused on whether any significant disparity exists between the gains obtained from domestic versus foreign acquisitions. These studies have mainly concentrated on various firm and transaction-

[5] The two most important corporate governance mechanisms that have been identified within the literature are cited as being the internal mechanisms, which influence the structure of the board of directors and ownership rules, and the external mechanisms, which are concerned with the organization's legal framework.

[6] Acquiring firms consider seriously the corporate governance mechanisms of the target firm, as well as the rules and regulations of the target firm's country, to assess whether the target is a worthwhile investment and whether it can be integrated into the acquirer's existing business environment.

[7] Gregory and McCorriston (2005) grouped UK acquirers' targets by geographical region of countries in which they operate suggesting that the corporate governance system among the regions differs significantly.

[8] As Bris and Cabolis (2008) stated, "An area for future research is the study of the specific characteristics of cross-border mergers that affect firm value. In our paper, we control for the frequency of domestic and cross-border acquisitions affecting a particular country and show that these ratios are significantly related to the market's reaction to the announcement of a cross-border merger. Exploring the factors behind these costs and benefits, and documenting the differences between domestic and cross-border mergers, deserves future work." (p. 642-647)

specific characteristics that have been proposed to account for these differentials in performance between bidder gains from domestic and foreign acquisitions. In short, among the earlier studies that have attempted to explain the reasons behind the differences in the gains of acquirers of domestic and foreign targets, Moeller and Schlingemann (2005) attributed the higher gains from CBA to business diversification. However, the impact of the domestic versus CBA on the bidding firms' abnormal returns appears, to a large degree, hard to substantiate through the existing literature. Indeed, the validity of this issue stands of major importance in this field of research and merits additional consideration. Several factors are likely (and known) to influence the announcement period gains of acquirers (such as the premiums paid, the degree of investor protection, the corporate governance system, deal and firm-specific characteristics) while the same factors may affect the post-acquisition performance of bidders differently.

Although the majority of studies have primarily focused on the announcement gains of foreign acquirers, the investigation of the post-merger gains of these acquirers remains largely under-theorized. In short, the announcement period gains of bidders engaged in CBA are likely to be filtered out in the post-acquisition period, as the firm's value moves towards its equilibrium level. While recent studies (see for example Gregory and McCorriton, 2005) have attempted to fill this void between the short and the long-run performance of foreign acquirers, others have suggested that the short-run abnormal returns earned by bidding firms may not fully reflect the wealth effect of that particular event (see for example Loughran and Vijh, 1997). To an extent, the superiority of CBA over domestic deals (or *vice versa*) should be more obvious when both short and long-run performances are analysed. Therefore, this chapter focuses on the performance differentials (announcement period as well as long-term ones) on gains of bidders acquired domestic *versus* foreign targets, with special reference to the legal tradition of the host country in which the target operates.

This chapter shows that the degree to which the legal system of the target firm's country of residence protects the minority shareholders contains an important explanatory power for the abnormal returns differentials to bidding firms engaging into domestic acquisitions versus CBA. The chapter focuses on the incentive mechanisms created by the legal environment and corporate governance practices in the host country to explain the sources of value creation (or destruction) within the domestic acquisitions versus CBA framework. Specifically, the following research questions are addressed: (a) what are the implications of the target firm's origin (i.e. domestic versus CBA) on bidder's wealth? (b) What is the role of the target firm nation's legal system (i.e. civil-law versus common-law) on bidding firm's short and long-run abnormal returns? (c) What are the likely effects of firm and transaction-specific characteristics on bidders' gains in the context of domestic versus CBA? In the overall context of this chapter, I firstly estimate the differentials in bidders' short and long-run abnormal returns within the framework of domestic versus CBA. Subsequently, to identify any incremental effect of the legal origin, I further examine the gains of bidders by the host country's legal system.

The major conclusions derived from this chapter reflect that both the target-origin and the target nation's legal-system, in which the target firms operate, constitute very important roles in shaping the gains of acquirers in the short and in the long-run. More specifically, once the implications of various determinants of acquirers' gains are controlled for, CBA generate higher returns than domestic acquisition. Bidders generate higher announcement returns to their shareholders when they acquire foreign listed and subsidiary targets that based in civil-law countries with lower investor protection (than bids of listed and subsidiary targets that based in common-law (including UK) countries with higher investor protection). Further, bidders enjoy higher announcement returns when they use shares to finance foreign acquisitions of targets that based in common-law countries (than bids in the domestic market and bids in civil-law countries with the same method of payment). Finally, bidders perform relatively better in the

long-run when they engage in acquisitions of targets that based in common-law (including UK) countries than in civil-law countries.

This chapter makes several important contributions in finance literature. Firstly, this is the first study that examines the impact of the corporate governance and legal systems of the host countries on the returns of UK bidding firms' shareholders that engage into domestic versus CBA.[9] Secondly, this chapter examines the impact of acquirer, target, and transaction specific characteristics which have received little attention in the literature on the gains of bidders acquired domestic versus foreign target firms. Third, the use of near-exhaustive sample of 6,634 acquisition deals (both domestic and CBA) made by UK bidders makes this chapter one of the most comprehensive studies on M&A activities of the UK firms. Finally, the examination of the effects of CBA deals involving 74 different countries that operate within 5 different legal systems offers comprehensive and robust evidence on the gains from foreign target acquisitions.

The remainder of this chapter is organized as follows: Section 2 refers to the effect of legal systems on the firm value, section 3 reviews the literature related to the main issues to be examined, section 4 establishes the hypotheses and how they are derived, section 5 describes the data and methodologies I follow and, lastly, sections 6 and 7 provide discussions of the empirical findings and concluding remarks, respectively.

[9] As reported in one of the surveys by Mckinsey and Co. (www.mckinsey.com) for about 200 institutional investors, 75 percent of them found that board mechanisms were at least as important to them as financial performance when evaluating potential investments. In fact, 80 percent of those surveyed would pay a premium for shares in corporations exhibiting good governance practices. This is in line with the main findings of Rossi and Volpin (2004) where the authors noted that UK bidders pay higher premiums for targets operating in countries with better corporate governance systems.

3.2 Legal Systems and Firm Value

The corporate governance mechanisms, the legal systems, and to an extent the degree to which the corporate laws protect the minority shareholders' rights vary significantly across countries or across groups of countries. In a series of studies, La Porta, Lopez-de-Silanes, Schleifer, and Vishny (here after LLSV) (1997, 1998, 2000, 2000b, and 2002) and La Porta, Lopez-de-Silanes and Schleifer (1999 and 2006) showed that country's corporate laws and investors' rights depend on the nation's legal origin and the quality of law enforcements.[10] They also showed that countries belonging to the Scandinavian civil-law system have the strongest law enforcement mechanisms followed by countries belonging to the German civil-law and the common-law systems respectively. On the other hand, countries following the French civil-law system have the weakest law enforcement system. Investors receive stronger protection in the common-law countries (such as the UK and the US) than in countries that have the civil-law system (such as France and Germany). In this respect, Wurgler (2000) showed that the differences in investor protection against expropriation by insiders can affect the nature and effectiveness of capital markets and hence the value of the firm. In addition, La Porta, Lopez-de-Silanes and Schleifer (2006) have provided strong evidence in favour of stock market benefits when laws mandating disclosure and facilitating private enforcement through liability rules, contrary to weak evidence in favour of stock market benefits through public enforcements.

Earlier research has also revealed that the legal environment and corporate governance mechanism affect the severity of agency costs (LLSV, 2000), the type of ownership structure (La Porta et al. 1999), the relevance of reported earnings to firm's performance (Ball et al. 2000), the association between investor protection and takeover premiums (Rossi and Volpin, 2004), the stock market benefits (La Porta et al.

[10] The authors found that that the differences in investor protection regimes, the legal environments, and corporate governance mechanisms across the world, affect the nature and effectiveness of capital markets, the size and the development of a country's capita market.

2006), and the level of the overall economic growth (Demirguc-Kunt and Maskimovic, 1998; Rajan and Ziglanes, 1998; Wurgler, 2000; Himmelberg, Hubbard, and Love, 2002; Gianetti, 2003; Fauver, Houston and Naranjo, 2003). Other scholars have also confirmed the implications of the legal environment and corporate governance mechanism at the industry and firm specific level. In short, whereas Lins (2003) and LLSV (2002) investigated the impact of the legal system and corporate governance mechanism on the total value of the firm, Wurgler (2000) investigated both of them on the investment strategy followed by the firm's management. Similarly, Bris and Cabolis (2008) documented a strong and positive relationship between the shareholder protection and accounting standards in the acquiring firm's country, with respect the merger premium paid in CBA relative to matching domestic acquisitions.

The legal origin of a particular country and the way in which its laws are enforced may also affects the firms' financial decisions and the firm's access to capital markets. As shown by LLSV (1997), countries with weak investor protection have the smallest capital markets, compared to countries with strong investor protection that have the biggest capital markets worldwide. Investors' willingness to pay premium prices for risky assets (i.e. to accept lower expected return) depends on the level of protection they receive (Rossi and Volpin, 2004). This premium stems from the fact that investors recognize the decreased probability of the expropriation of cash flows originally directed to shareholders by insiders, as enforced by the better legal/investor protection provisions. Therefore, an announcement of CBA of a target operating in a country with superior investor protection should generate a favourable stock market reaction. However, in spite of the importance of corporate governance traditions and legal provisions, their possible implications on acquirers' gains remain largely unexamined. On the basis of the extensively reported importance of corporate governance systems on firm value and the theoretical reasons articulated in next section, this chapter investigates the possible implications of differences in the legal environment under which bidders and targets operate, on the gains of acquirers.

3.3 Literature Review

This section compliments the main literature review chapter (Chapter 2) whilst concentrates on the literature that is closely related to the main issue examined in the present empirical chapter. To recap, the main purpose of this chapter is to empirically analyse the announcement period and long-run abnormal returns of bidding firms and their determinants when the acquirers are engaged in domestic versus foreign target acquisitions. Specifically, I investigate whether the host country's legal system has significant implications upon the short and long-run gains to bidding firms abnormal returns. Therefore, the rest of this section is designed to review the literature which is closely related to the effect of legal system on (a) the firm value, (b) industry development, (c) financial system development, and (d) economic development (where appropriate, I also refer to the other characteristics of the corporate governance mechanism). More precisely, I focus on the literature on international corporate governance mechanisms whilst I briefly provide some discussion of the literature on the effects of corporate governance system within a single country.[11]

Following the comprehensive survey of studies by Denis and McConnell (2003), the research on the international corporate governance mechanisms worldwide can be divided into two broad fields (see figures 3:1 and 3:2). The first field of research focuses on the international corporate governance research which is basically formed after the US one.[12] Specifically, it focuses on corporate governance mechanisms of individual countries with regards to their board composition and equity ownership. The second

[11] As a significant proportion of the total M&A activity has an international dimension during the last three decades, the corporate world has become more global and the internalization of various corporate governance systems a compulsory requirement.

[12] In terms of the research on corporate governance for the US market, it is divided into two broad groups, the internal governance mechanisms (i.e. the board of directors and the ownership structure) and the external ones (i.e. the takeover market and the legal system).

field of research focuses on the impact of different legal systems, which basically compares the various legal systems across the world. Accordingly, I firstly review the literature on the second field of research into the international corporate governance mechanisms, which is closely related to the host country's legal system thereby the key input of this analysis. Subsequently, I review the literature on the first field of research into the international corporate governance systems, as well as on the corporate governance research in a single country.

Insert figures 3:1 and 3:2 about here

3.3.1 The Structure of International Corporate Governance System

This section, while focuses on the evolution and the various legal systems worldwide, based on evidence from previous research it also discusses, in great detail, the effects of the various legal systems on the firm's value. In short, it reviews and discusses studies that examine the relationship between the legal system of a country/group of countries with (a) the protection of the minority shareholders rights, and (b) the economic growth.

3.3.1.1 The Legal System

Recently, it has been widely documented in finance literature that the structure of a country's legal system has important implications on (1) the investor protection of the minority of shareholder interests, (2) the ownership concentration of listed corporations, (3) the size and effectiveness of capital markets, (4) the stock markets benefits, (5) the access of firms to external finance, (6) dividend policies, (7) agency problems, (8) the economic development of a particular country, and (9) the valuation effects and performance of individual corporations. Within the same framework, recent

studies have examined the relationship between the level of the country's investor protection and the takeover premiums paid in CBA, as well as the overall CBA activity. The major conclusions derived from these studies suggest that the degree to which the legal system protects the minority of shareholders' interests affects the premiums paid, the method of payment used to finance the transaction, and the overall takeover activity (see for example Rossi and Volpin, 2004; Bris and Cabolis, 2008). Based on the key findings from these studies, in this chapter I investigate the implications of the legal system in the target firm's country of residence on the gains of UK bidders engaging in domestic versus CBA. Whereas the legal system constitutes one of the most important international corporate governance mechanisms (external one – see figures 3:1 and 3:2), in this chapter I examine whether its influential impact is filtered in the announcement and post-merger gains of bidding firms that engage in domestic versus foreign target acquisitions.

3.3.1.1.1 Legal Systems and Protection of Minority Shareholders Interest

The various legal systems across the world have developed throughout a number of ways, falling in the following two major categories: common-law and civil-law. The common-law has originated in England and it has been spread across most of the former English colonies, as well as a number of other countries worldwide. The common-law depends on decisions made by judges, which are subsequently incorporated into written law by the legislature. On the other hand, the civil-law tradition began with the Roman-law and relies on statutes and comprehensive legal codes. The civil-law has been developed in three separated, but related ways, which are in general referred to as French, German, and Scandinavian civil-law. Therefore, most of the countries across the world fall in one of the four abovementioned categories, namely, the English common-law, the French civil-law, the German civil-law and finally the Scandinavian civil-law (LLSV, 1997).

An important difference between the two legal systems is the role of the judge and the concept of fiduciary duty (see Coffee, 1999b). Under civil-law, judges are required to mechanically apply comprehensive codes to the cases before them. For example, if a new case that is not specifically covered in an existing code comes before the court, the judge has *little discretionary power* to deal with it, regardless of the judge's opinions on that matter. In contrast, common-law courts rely on the concept of fiduciary duty, which gives judges much *greater discretion* in issues involving shareholder rights. Recent evidence has suggested that common-law judges tend to apply this discretion in favour of minority shareholders rights, especially when the existing statutes do not directly address an issue that the judge is considering. Others have also suggested that legal tradition affects both, the explicit laws protecting minority shareholder rights, and the net effect of these laws on a corporation's ability to receive financing (LLSV, 1997, 1998, 2000). In particular, these studies documented that those countries with an English common-law heritage protect minority shareholders' rights better than those with civil-law traditions. Within the civil-law countries, French civil-law provides significantly less protection for shareholders, while the German and Scandinavian civil-law traditions provide an intermediate level of protection. Lastly, better legal protections are associated with easier access to capital and a higher volume of external financing.

The focus of the discussion turns now on the effects of the legal system on the value of the firm. In recent years, much attention has been directed towards the implications of the various legal systems on corporate valuations. The first indication of the impact of the legal system on corporate valuations within the market for corporate control is documented by Jensen (1993). He acknowledged the legal system as a corporate governance mechanism. However, he characterized it as being too blunt an instrument to deal effectively with the agency problems between managers and shareholders. Studies that included in their sample of interest observations from a single country have provided weak evidence from studying the effects of legal systems, as all observations in such a sample are subject to the same national legal system. In this chapter, I investigate

the valuation effects of bidding firms engaging in CBA with targets from all over the world. Given the different features of various legal systems worldwide, I aim to uncover whether any gains or losses generated to shareholders of bidders of foreign targets are shaped by the characteristics of these legal systems.

Along similar lines, a rich array of studies have examined the implications of the various legal systems and investor protection regimes across the world on (a) the level of development, and effectiveness of capital markets, (b) the degree to which the minority of shareholder rights are protected, and (c) the firm's value, which to an extent stand as cornerstones in this field of research. These studies investigated by La Porta, Lopez-de-Silanes, Schleifer, and Vishny – LLSV – (1997, 1998, 2000, 2000b, and 2002) and La Porta, Lopez-de-Silanes and Schleifer – LLS – (1999 and 2006). Specifically, LLSV (1997) examined the impact of the legal system and investor protection on the level and size of the capital markets' development. Their main conclusions suggest that the extent to which a country's laws protect the minority of investors' rights and the extent to which those laws are enforced, are very important determinants for the development of the capital market, corporate governance, and corporate finance within a particular country. Regarding the association between the legal system and the size of capital markets, LLSV (1997) found also that countries with weak investor protections have the smaller and narrower capital markets, in contrast with countries under the common-law legal system with the biggest capital markets. A more recent study by LLS (2006) reached similar conclusions in the same context. Particularly, the authors investigated the implications of security laws on the stock market development across 49 countries. Their results indicate that security laws matter for the stock market development but market forces alone are not able enough to enforce development across the financial market.

Extensive research has also been applied in terms of the differences in ownership concentration of listed corporations around the world (LLS, 1999), differences in capital

markets (LLSV, 1997), dividend policies and agencies problems (LLSV, 2000), and the availability of external finance to firms (LLSV, 1997). In the same context, LLSV (2000b) investigated the relationship between inventor protection and corporate governance. Specifically, LLSV (2000b) examined whether the legal system is a fundamentally important corporate governance mechanism and they admitted that the differences described above are closely related with the degree to which corporate shareholders are protected by law. The authors found also that the extent to which a country's laws protect the minority of investor rights (both shareholders and creditors), and the extent to which those laws are enforced, are the most fundamental determinants of the ways in which the corporate governance develop/expand in a particular country. Further, they suggested that the best way to fully understand the corporate governance mechanism of a particular country is through its legal system, and not through the usual distinction between bank-oriented and market-oriented corporate governance system.

Another study by LLSV (2000) assessed the agency problems and dividend policies subject to different levels of protection of shareholder interests worldwide. The authors employed 4,000 large companies across 33 countries worldwide in order to test their two agency models of dividends – the common model and the substitute model. The authors reported that the distribution of dividends "are an outcome of effective legal protection" of minority of shareholders rights, thereby investors have the power to request from corporate insiders to "disgorge cash", supporting their first proposition. On the other hand, the distribution of dividends are a "substitute for effective legal protection" of the minority of shareholder rights, thereby give firms of "unprotective" systems the power "to establish reputations for good treatment of investors through dividend policies", consistent with their second propositions. LLSV (2000) found also that corporations based in countries with stronger investor protections to minority of shareholders rights pay higher dividends whereas investors based in countries with weak investor protection accept any amount of dividends that the corporations are prepared to pay, irrespective of the corporations' investment opportunities. In addition,

fast growth firms in strong investor protection countries pay lower dividends than slow growth firms, supporting the view that when the minority of shareholder interest are protected the most, investors are prepared to wait and request their dividends in the future along with fast growth opportunities.

Along similar respects, LLSV (2002) employed a sample of 539 large corporations from 27 wealthy economies worldwide in order to investigate the relationship between the level of investor protection on minority shareholders and the cash-flow ownership by a controlling shareholder, with respect to firm's valuation. The authors concluded that there is positive relationship between the firm's valuation and the level of investor protection of minority shareholder rights. Indeed, firms in countries with stronger investor protection, and higher cash-flow ownership by controlling shareholders, are valued higher. Similarly, they concluded that weak investor protection is associated with lower firms' valuations while higher cash-flow ownership by controlling shareholders improves valuation.

Numerous recent studies have reported similar results. For instance, Wrugler (2000) examined the allocation of capital within financial markets and found that if the legal protections accorded minority investors are inadequate, corporate insiders are free to invest in projects that do not necessarily increase value. Indeed, better protection leads to more valuable firms (see also LLSV, 2002) and more profitable investment programs initiated by firm's management. More importantly, LLSV (2002) stated that value creation in the cross-border investment decision-making should be directly related to the degree of shareholders' rights, creditors' rights, and the legal environment of the participating firms. In this respect, Rossi and Volpin (2004) investigated the determinants of M&A for 49 countries across the world and found that the volume of M&A is significantly larger in countries with better accounting standards and stronger shareholder rights. They also found that in CBA, targets are typically from countries with lower investor protection than their acquirers' countries. Those patterns seem to

suggest that CBA play a key role in corporate governance in terms of improving the degree of investor protection within the target firms' countries (see also Starks and Wei, 2004). Better investor protection is associated with the greater use of stock as the method of payment, as well as higher takeover premiums. In all these respects, this finding indicates that UK bidders are paying higher premiums to countries with stronger investors' protection (i.e. US targets) and lower ones for targets in countries with weaker investors' protection (i.e. countries belonging to the French civil-law).

Several important considerations related to the announcement and post-merger gains of foreign bidders may emerge from the above discussion. Depending on the host country's legal system, CBA activity is likely to increase (decrease), bidders are likely to face higher (lower) levels of competition when approach target firms operating in common-law (civil-law) countries, which therefore is likely to increase (decrease) the premium required and thus decrease (increase) the likelihood of value creation from the takeover.[13] The use of stock to finance foreign bids in countries that protect the minority of shareholders rights the most (i.e. common-law countries) is also likely to increase, which is therefore expected to allow for more profitable investments in this group of countries during the announcement period. Indeed the use of shares to finance private bids in the Anglo-Saxon legal group is expected to create outside blockholders which is likely to deliver higher gains in the short and in the long-run due to better, and similar with the UK, corporate governance practices. Among others, these considerations help in setting the hypotheses for this chapter.

3.3.1.1.2 Legal System and Economic Growth

Several considerations regarding the impact of the legal system on the level of a country's economic growth have been investigated in a similar way by several scholars

[13] Value creation through mergers and acquisition is mainly delivered once the PV of the synergy exceeds the premiums paid.

in finance literature. In short, the main argument in this respect lies under the effect of legal system on (a) the growth levels in the economy, and (b) the growth levels of individual companies, and deals mainly with the availability of external finance. LLSV (1997) examined whether better legal protection enforce investors to use more external finance. The main conclusions derived from this study suggest that the external finance is the highest in common-law countries (with the strongest investor protection) whilst the lowest one is found for the French civil-law countries (with the weaker investor protection). In the same respect, Rajan and Zingales (1998) found that industrial sectors that need more external finance develop much faster in countries with the strongest investor protection and the more developed financial markets. On this very issue, Wurgler (2000) noted that firms in countries with developed financial sectors (common-law countries) increase investments more in growing industries whilst decrease them in declining industries. Demirguc-Kunt and Maskimovic (2002) stated also that the development of a country's legal system predicts firms' access to external finance, after they incorporate into their sample of interest 40 countries. Lastly, Johnson, Boone, Breach, and Friedman (2000) claimed that the degree of a country's investor protection affects the way in which that economy's capital market responds to adversity. They particularly found a negative relationship between the magnitude of decline in the stock market, as well as the degree of depreciation on the exchange rate, and the degree of investor protection in that country.

Prior research has also investigated the impact of legal system on creditor rights. In particular, Giannetti (2003) examined the effect of creditor rights on the availability and the use of debt within firms across 8 European countries. The author documented a positive relationship between the ability of firms to obtain loans for investment in intangible assets and the level of protection of creditor rights. Finally, Giannetti (2003) also found that this positive relationship holds true when (a) the degree to which these rights enforcements is higher, and (b) firms operating in sectors with highly volatile fundamentals access long-term debt.

Overall, this discussion suggests that a country's legal system is an important determinant of its economic development, and the size of its financial system. In fact, countries with strong (weak) investor protection rights experience high (low) rates of economic growth and have the largest (smallest) capital markets. This may have important implications to UK bidders that acquire foreign targets in common-law (civil-law) countries due to the level of competition they face in the bidding contest. In this respect, common-law countries are expected to experience higher competition levels among the winning bidders (relative to civil-law countries), which in turn should be expected to decrease the likelihood of value creation during the announcement period. However, in the long-run, acquisitions of foreign targets in common-law countries may generate higher returns as high levels of economic development usually spike with technological advancements and innovations, features that are likely to increase the likelihood of the post-merger success (as the potential synergies increase, the PV of the synergy is expected to be higher than the premiums required to finance the deal).

3.3.2 Other International Corporate Governance Mechanisms

In this section I very briefly refer to the rest of the internal and external corporate governance mechanisms whilst I review the literature associated with the key issues examined in this chapter. The internal mechanism consists of the board of directors and the ownership structure and control. In fact the board of directors consist the board composition, the board size, the CEO turnover, the Poison Pills, and the executive compensation (see figure 3:2). Similarly, the ownership structure and control divided into the ownership concentration into the US and the ownership concentration across the world (see figure 3:2). On the other hand, the external mechanisms consist the takeover market and the legal system (see figure 3:2 and the discussion in section 3.3.1.1). From both the internal and the external mechanisms, I review only the

literature on the ownership structure and control, as several aspects from this field of research are utilized for the development of the theoretical framework in this chapter.[14] In short, the ownership structure and control may have significant implications on the competition that bidders face within the international market for corporate control, as well as on the likelihood of outside blockholder creation in the event of foreign private acquisitions financed with shares.

3.3.2.1 Ownership Structure and Control

For any corporate governance system, the ownership and control provide, among others, two of its most fundamental mechanisms. Research on this field goes back to work of Jensen and Meckling (1976). Whereas the authors tested the agency theory on the modern corporation, they have specifically modelled the agency costs of outside equity. Among their major conclusions, the authors have suggested that when the ownership and control in corporations are not fully aligned, it is very likely for conflicts of interest between owners and controllers, to emerge.[15] In other words, shareholder wealth maximization in a world where ownership and control are distributed to different groups of people is, to some degree, unrealistic.

In general, the ownership and control are very rarely completely separated for any corporation. There are several cases where the controllers hold a large proportion of the firm's equity and, other cases where the owners effectively apply control over the company they own (due to the size of the firm's equity they hold). Evidence show that for a large number of firms, the CEO, the directors, and other senior managers own shares of the company, and they are responsible to increase its value. Accordingly, since a large proportion of their income is delivered through the firm's potential gains which

[14] Recent evidence documented the significant impact of legal system on the ownership structure across the world. See for example La Porta et al. (1999).

[15] However, the traditional model of the firm assumes that the main objective of a firm is to maximize its profits, its market value and thus its shareholder wealth.

in fact emerge from the return of the firm's equity, they have strong incentives to maximizing shareholder wealth. Therefore, the main objective of the owners of the company's shares will be the maximization of shareholder wealth, as they will benefit simultaneously. In that respect, Cosh and Hughes (1987) found that in the US, 33 percent of executive directors and 21 percent of all directors are controlling assets in their own companies that worth more than one million dollars. As a result, even though in some cases there is a gap between the ownership and control, there is a very important group of individuals who are both shareholders and senior managers that bridge the gap between ownership and control.

Ownership Structure and the Impact of Blockholders

In several cases, the gap between ownership and control is bridged by the additional pressure or control which is applied by the emergence of inside and outside blockholders. With respect to that, several studies have reached the conclusion that insiders own on average 20% of a randomly selected exchange-listed corporation in the US market (see for example, Mikkelson and Partsh, 1989; Holderness, Kroszner, and Sheehan, 1999; Holderness, 2003). Along similar lines, Morck, Shleifer, and Vishny (1988), and McConnell and Sevaers (1990) documented that, although the firm's value increase when managerial stock ownership increase up to 5%, the firm's value decreases when the managerial stock ownership is between 5% and 25%. Further, for over 25% managerial ownership the firm value tends to increase slightly. Jensen and Murphy (1990) in an examination for only large firms reported on average ownership of only 1%. In addition, Denis, Denis, and Sarin (1999) also found that the average CEO ownership is 7.2% for a random selected sample. On the other hand, Himmelberg, Hubbard, and Palia (1999) claimed that changes in managerial ownership seem to affect neither the value of the firm nor the firm's performance.

Furthermore, in the case where a number of outside shareholders become blockholders of the corporation, they can serve better monitoring to the firm's management and therefore they may be able to control them having their attention on the maximization of the shareholder wealth. Indeed, Mehran (1995) found that 56 percent of the firms in a sample of randomly selected manufacturing firms have outside blockholders. However, a few cases exist where the outside blockholders act in their own benefit by trying to extract very useful information from the firm's management. There are also cases where the government is a significant blockholder of a corporations' equity. In this case, the ownership concentration is characterized as highly significant as the government can apply too much control and therefore influence significantly the valuation of the corporation (as this ownership is funded with money that belongs to the state). However, the impact of the transfer from state to private ownership provides some very useful incentives, which affect significantly the firm's value.

Along similar lines, Holderness (2003) reported that block ownership is motivated by both, share benefits of control and, private benefits of control. More precisely, the blockholders have the incentive and the opportunity to increase the expected cash-flows of the firms that accrue to all shareholders due to share benefits of control. Empirical evidences of the existence of such benefits come from several sources. For instance, Mikkelson and Ruback (1985) indicated that the structure of blocks is closely associated with the rise of abnormal stock prices, whereas Barclay and Holderness (1991 and 1992) found evidence supporting that the trading activity of large blocks is associated with increase of stock performance. In addition, Barclay and Holderness (1989) is the first study that reports evidence with regards the private benefits for a large shareholders portfolio by testing the pricing of trading activity of large proportion of stock. In this particular case, the blockholders have the incentive and the opportunity to consume corporate benefits to the exclusion of smaller shareholders. Additional evidence for the private benefits provided by Mikkelson and Regasha (1991) and Chang

and Myers (1995) confirmed that block trades are in general priced at a premium to an exchange price (9.2% and 13.6% for both studies correspondingly).

Ownership Concentration across the World

Earlier research has also investigated the ownership concentration worldwide. In short, the US market is characterized as the one with the most widely dispersed ownership. Similarly, the equity ownership in the UK has been characterized much like the US one. In the US, individual shareholders own very small proportions of a corporation's shares and therefore they have very little or no incentive (or power) to apply much effort in order to monitor the management or even to influence the management's decisions (as it will cost them significant amounts of resources). In addition, the free-rider problem decreases the incentives of shareholders within these widely share ownership markets. On the other hand, individual shareholders (institutional shareholders) within the same framework, with higher level of ownership, have greater incentives to expend resources in order to monitor and influence corporate insiders' decisions and therefore corporate valuations.

Accordingly, there are cases where the shareholders, other than the management of the firm, can influence the decisions taken by the management. This is more likely to happen in markets where the share ownership is more concentrated, such as the German and the Japanese one. The equity ownership in Germany has been more concentrated than in the US and UK with the banks to play a key role in the corporate governance. Studies that concentrate on the abovementioned corporate governance systems as well as the differences occurred among them, are reviewed and discussed in this section. In fact, Prowse (1992) concluded that in the bank oriented Japanese market the financial institutions are the most common blockholders. One would also expect the same for the German market since it has been grouped in the same category. Nevertheless, Franks and Mayer (2002) have pointed out that in the German market

other companies are the most common blockholders, such as families. However, the majority of evidence in finance literature suggests that financial institutions have significant control over the firms in Germany and Japan.

Further, there is a considerable large amount of studies that focus specifically on the relation between the ownership structure and firm's performance in Germany and Japan. Along the same lines, Kang and Shivdasani (1995) pointed out that the blockholders have superior power in Japanese firms' restructuring. More specifically, the authors noted that, Japanese firms with blockholders restructure more quickly following poor performance, in contrast with Japanese firms without blockholders. However, they stated that this response it is faster in US than in Japan. Regarding the relationship between the firm's performance and the concentrated equity ownership in Germany, Gorton and Schmid (2000) have confirmed that there is a positive relationship between the two. However, Kaplan (1994) documented a negative relationship between ownership structure and management turnover, using a sample of German companies. Moreover, an examination of Czech companies regarding the relationship between (a) firm profitability and (b) labour productivity, with ownership concentration, Claessens and Djankov (1999) documented a positive relationship between them.

Although most studies discussed above focused explicitly in these four big countries (US, UK, Germany and Japan) and their corporate governance systems' characteristics (ownership structure), a large amount of studies in the literature of corporate finance and investment concentrates in other economies. Along these lines, Faccio and Lang (2002) using a sample of western European economies found that most of the listed companies are either, widely held (UK and Ireland), or they are family owed. The latter is more likely in continental European economies. Xu and Wang (1997) found also that in China the ownership concentration is, to some degree, very high. This ownership is, in fact, separated equally between the government, institutions, and domestic individuals. A study that focuses on the Israel economy by Blass, Yafen, and Yosha (1998) found that

the ownership concentration is very high. Within this economy, banks and institutional investors are the most significant outside equity holders of the Israelis companies. Finally, Valadares and Leal (2000) noted that the ownership concentration is very high in Brazil. Indeed, the majority of the blockholders are corporations and individuals.

Ownership Structure and the Legal System

Regarding the relationship between the legal system and the ownership structure and control, LLSV (1998) examined the legal origins of 49 countries across the world and showed that countries with weak investor protection (i.e. the French civil-law countries) have, in general, the highest concentration of equity ownership in the largest public companies. They also have suggested that diversified shareholders are very unlikely to be important in countries that protect the interests of corporate shareholders the least. In terms of the impact of the legal system on the ownership structure, LLS (1999) examined the ownership structure of large corporations within 27 wealthy economics worldwide. The authors showed that, opposite to Berle and Means's ownership structure of the modern firm, a rather small number of firms are widely held. Indeed, their findings supported their prediction for firms mainly based on economies with not "very good shareholder protection". Specifically, LLS (1999) concluded that these firms are controlled by families or the state. Concluding, from both studies (LLSV, 1998 and LLS, 1999), it is clear that there exists a negative relationship between the degree to which a country's legal rules protect the minority of shareholder interests and the level on equity ownership on large corporations. In short, in countries with weaker investor protection, a larger number of corporations are closely followed or held by families and the state (i.e. more concentrated ownership structure). In similar respects, Himmelberg, Hubbard, and Love (2002) examined whether the lack of investor protection strength the company's insiders to hold higher amounts of the equity of the firms they manage. The authors found a negative relationship between the degree of investor protection and the amount of equity held by insiders.

Clearly, depending on the variation of the level of investor protection regimes, which therefore affect the levels of concentration of ownership and control worldwide, several important implications to foreign bidders' gains, may arise. Specifically, a less (more) concentrated ownership structure may decrease (increase) the likelihood of outside blockholder creation in the event of private firm acquisitions. Likewise, the level of concentration of ownership and control may also affect the pressure of outside shareholders in the event of bids with listed firms in the foreign country, which may either enforce (or not) the option to 'wait and sell', a fact that may increase (or decrease) the premiums paid.

3.4 Hypotheses Development

The central theme of this empirical chapter rests on the fact that firms acquiring foreign targets are exposed to different financial, legal and corporate governance environment which may have significant implications on their value. To test for this, this chapter examines the propositions summarized below.

3.4.1 Domestic versus Foreign Acquisitions

Despite extensive research on takeovers the issue of whether CBA are superior to domestic acquisitions remains inconclusive. The acquirers derive benefit from the acquisition of foreign targets. For example, they may gain better access to product markets, obtain relatively stable cash flows owning to reduced exposure to macro-economic risk, have access to local resources and technology that may reduce production cost, and access to foreign capital markets which contribute to lowering the firm's cost of capital. Multinational firms also enjoy more investment opportunities than

domestic firms, as they open up their business to foreign markets while maintaining the opportunities available in their home market. Such benefits suggest that the acquisition of a foreign target should not only increase the value of the bidder but also the gains from CBA should also be higher than the gains from domestic target acquisitions. One should also note that foreign target acquisitions may increase the risk of acquirer and thus the required rate of return because the acquisition of a foreign target exposes the firm to a wider range of transactions and translations risks which may result in higher volatility in cash flows, earnings, and net assets measured in domestic currency. Additionally, it also exposes the acquirer to political risks in the form of nationalization by the host government or changes in host government's economic policy towards foreign investment that may affect bidder's cash-flow adversely, while differences in legal and cultural factors is likely to increase the agency cost of managing a foreign subsidiary relative to that of a domestic subsidiary.[16] These factors are likely to increase the cost of capital which, in turn, reduces the value of the bidder, suggesting therefore that bidders of domestic targets which are not exposed to these risks should perform better than bidders engaged in CBA. Thus whether CBA are superior to domestic acquisitions remains an empirical issue that should be addressed, which leads to the first testable proposition that:

H1: 'CBA are superior to domestic acquisitions'.

[16] See for example, (i) the effect of dollarization in Ecuador, and (ii) the Foreign Investment Protection in Uruguay regarding the Botnia Case. In terms of the effect of dollarization in Ecuador, Rafferty (2003) stated that "Dollarisation was adopted to try to restore monetary stability and confidence in the Ecuadorian economy, thus attracting FDI into the country whilst also stemming capital outflows. It was hoped that inflation would fall to levels compatible with price stability and thus rid Ecuador of the harmful effects of hyperinflation. Lower inflation and a stable currency could furthermore encourage saving and private investment and lead to a lower rate of interest. In short, it was intended that dollarisation would provide a platform for the economy to return to growth." (page 169). Further, the Botnia investment in Uruguay represents the largest FDI ever made in Uruguay and concurrently it represents the largest project ever made by a Finish company outside Finland (with an estimate of US$ 1.200.000.000). Along these lines, Andres Duran Hareau reported that the level of investor protection constitutes the most important role in this FDI decision (www.mondaq.com). In addition, the same author stated that "Uruguay has traditionally been considered as a country with a friendly legal environment for foreign investments. Strong public policies have been implemented in order to attract additional foreign investments into the country, and evidence indicates that FDI's rates have been consistently growing during the last years." (page 1)

3.4.2 Investors' Protection and Foreign Acquisitions

LLSV (1997) showed that investors in common-law countries (also known as the Anglo-Saxon legal system) receive the highest level of protection whereas investors in civil-law countries (also known as French, German, and Scandinavian legal systems) receive the least protection.[17] In spite to this, Rossi and Volpin (2004) noted that investors are prepared to offer higher premium (i.e. accept low returns) in countries with stronger investor protection (i.e. they report a strong positive association between takeover premiums and investor protection) than in nations with weaker protection, which is possible since higher protection reduces the investors' required rate of return thereby causing higher competition among potential acquirers, leaving therefore the winning bidder to pay a higher premium. In the same context, Chari, Ouimet, and Tesar (2006) highlighted the importance of competition in the bidding contest by reporting higher gains to acquirers when they prefer to engage in foreign acquisitions of targets that operate in emerging markets (due to lower competition).[18] Furthermore, countries with higher investor protection are characterized with diffused ownership which, in turn, exacerbates the free-rider problem by forcing the acquirer to pay a higher premium than otherwise (Grossman and Hart, 1980). Thus, given the higher takeover premium, the net gain to bidders will be lower when they acquire targets in common-law countries. On the other hand, when targets are based in countries with weaker investor protection (i.e. civil-law countries), bidders are expected to pay a lower premium which, in turn, should generate higher gains to acquirers.

[17] In Appendix A I categorise the countries into 5 major groups (and an unclassified category) by their legal traditions.

[18] The majority of the emerging markets are under the civil-law group (according to the lists of emerging and developed markets that provided by economist and financial times; www.economist.com and www.ft.com).

Along these lines, LLSV (2002) highlighted that value creation from foreign investments should be closely associated to the degree of shareholder's rights, creditor's rights, and the legal environment in which the participating firms operate. It is also possible that target owners operating in countries with lower investor protection to be prepared to sell their firms at a discount generating positive gains to bidders.[19] In addition, Wurgler (2000) found that when the investor protection in a country is weak, managers engage in projects that do not increase value. Therefore, it is expected that acquisitions in civil-law countries are value-increasing for the UK bidding companies for the following reasons a) the deal could be able to take place with targets undervalued as the managers in this region engage into transactions without the value-increase being their main aim, and b) bidders are also likely to face lower competition to acquire targets in low investor protection nations than in countries with higher investor protection, which in tern leads to the second testable proposition that:

H2: 'Firms bidding for targets in low investor protection countries gain more than the bidders opting for targets in high investor protection nations'.

3.4.3 Legal Systems, Share Deals and Bidders' Gains

Previous research suggests that the biddings firm's performance in the short-run is highly sensitive on the outside blockholding creation in the event of private acquisitions with stock financing (Chang, 1998; Fuller et al. 2002; Draper and Paudyal, 2006; Faccio et al. 2006). This empirical investigation aims to examine for this effect within the

[19] According to the main conclusions of Rossi and Volpin (2004), in cross-border deals, targets are typically from countries with poorer investor protection than their acquirers' countries, suggesting that cross-border transactions play a key role in terms of corporate governance by improving the degree of investor protection within target firms (and their respective countries). Similar results have reached by two more recent studies by Bris and Cabolis (2008) and Bris, Brisley, and Cabolis (2008). This implies that target firms' managers would be prepared to sell the firms they manage to a firm that is operating under strong investor protection regimes and corporate governance practices (i.e. operating in the UK) in an attempt to become ex-ante part of the new entity.

framework of domestic versus foreign acquisitions. Specifically, in the case of CBA, the complexities and information asymmetries tend to be higher than in the case of domestic M&A and thus an accurate proxy to account for this problem is needed. To an extent, acquisitions of private target firms in the foreign market should be subject to higher complexities given their obscure information environment.

In general, the incorporation of an acquired target into the existing business environment of the acquirer is one of the major challenges in corporate takeovers and hence it has important implications on value creation through mergers. In the event of CBA the problem, among others, arises from the existence of any cultural gap between the bidding and target firm's home country (see also Datta and Puia (1995) for similar results), differences in corporate governance traditions of the two merger partners, and differences in the legal environment under which they operate, thereby the incorporation of the acquired target in the acquirers existing business becomes even more severe.[20] In fact, the process of incorporation of the acquired target firm becomes more costly and complex in the case of foreign acquisitions than in the case of domestic acquisitions.

Given that traditions of managers, corporate governance mechanisms, and the legal environment in common-law countries are similar with the ones in the UK, I should expect higher abnormal returns from takeover announcements in common-law countries, than in civil-law ones, due to the mitigation of the aforementioned problems. Specifically, the use of shares to finance private acquisitions in common-law countries

[20] For instance, the acquisitions of Columbia Pictures by Sony Corporation and the Best foods by Unilever highlight the importance of legal and cultural gaps (i.e. both national and industrial) between the bidding and the target firm country. Specifically, while the legal and cultural gaps between the bidding and the target firm's country are narrow for the acquisition of Best foods by Unilever (Unilever has an Anglo-Dutch legacy, which is closer to American one), for the acquisition of Columbia Pictures by Sony Corporation the differences are enormous (legal, cultural, and ethnographical differences from Japan to United States would be rather far). Along these lines, the Unilever acquired a firm in its own industry reflecting that managers have the ability to understand and assess each other's potential and performance with less error. On the other hand, Sony Corporation acquired Columbia Pictures, a company operating in a different industry sector.

should generate higher returns to bidders than the use of shares to finance private acquisitions of targets in civil-law countries, due to the similarities between the bidding (the UK) and the target firm's country legal traditions, corporate governance traditions, and cultural features, thereby signalling better news to market participants.[21] Similarly, the outside blockholder creation with firms under similar corporate governance and legal traditions should be interpreted as good news and investors are expected to take long position for the bidders' stock.[22] Moreover, the use of equity in private acquisitions may lead to (or may be motivated by) the retention of the target firm's board of directors or management.[23] For acquisitions in common-law countries, the retained managers will be people under the same traditions with the ones in the UK, which therefore contributes in mitigating information asymmetries and lowering any complexity exists thereby lowering the cost of incorporation of the target firm into the existing acquiring firm's business environment. Therefore, this leads to another testable proposition (the third one) which states that:

H3: 'UK bidders acquiring private targets that based on common-law traditions with shares should benefit more than the bidders acquiring private targets that based on civil-law countries with shares'.

[21] Accordingly, Rossi and Volpin (2004) found that the volume of M&A activity is significantly larger in countries with better accounting standards and stronger shareholder protection. The probability of an all-cash bid decreases with the level of shareholder protection in the acquirer country. This might implies that bidding firms based in common-law countries engaging into CBA with targets into common-law countries to utilize more stock-swaps due to the similarities that exist between the two systems thereby the cost of integration between the two to be less than otherwise.

[22] See for example Chang (1998). Also, Faccio and Masulis (2005) observed that in general stock offers are less likely to be used for unlisted targets due to bidder aversion to create a new blockholder. Similarly, Amihud, Lev, and Travlos (1990) suggested that in M&A the bidding firms' managers try to avoid stock offers thus minimizing the likelihood of loosing control of the firms they manage. In CBA this is expected to be more obvious in deals of targets in civil-law countries as the likelihood of blockholding creation will be much higher due to higher equity ownership concentration (i.e. La Porta et al. 1999).

[23] The value of the target firm after the M&A announcement may be conditional to the retention of its pre-bid management or 'human capital'. In principle, target firm managers with long experience/knowledge in the firm's operations will be specialized on the success of the business (i.e. in terms of production functions, corporate relationships with customers, suppliers, creditors, and competitors, marketing, and distribution functions). Therefore, the transfer of the target firm's management may provide significant value on the final entity after the M&A completion.

3.4.4 Investors' Protection and Long-Run Performance

Following the background motivation of the previous hypothesis (hypothesis 3), the incorporation of the target firm into the existing business environment of the acquirer plays a very important role for the synergy in M&A. In fact, the long-run performance of the bidding firm is expected to filter out the level and effectiveness of the incorporation of the target firm into the bidding firm's business environment,[24] which is expected to be depended on the host country's legal system. It is therefore likely that the bidder and the target firms are operating under the same or different corporate governance traditions and legal systems, which will further affect the costs of integration and also the timing/process of the incorporation of the target firm into the existing business environment of the bidding firm. Indeed, the host country's legal system will reflect the wealth effects of the combination of the two firms into the final entity. Accordingly, M&A of target firms that based in common-law countries with similar to UK corporate governance systems and legal traditions are expected to take place with lower costs of integration and also the incorporation of the target firms into the existing business environment of the bidder to be much faster. Thus this leads to the next testable proposition (the fourth) that:

H4: 'In the long-run, successful acquisitions involving targets in countries with high investor protection outperform the deals that involve targets in countries with low investor protections'.

[24] Loughran and Vijh (1997) noted that the announcement returns generated to bidders' shareholders may not fully reflect the wealth effect of that event and therefore the examination of the bidders returns in the long-run to represent a necessary task. Similarly, regarding the main task of this chapter, the long-run analysis of the domestic and foreign bidders' gains will better reflect the impact of the legal system in the target firm country on the gains to bidding firms' shareholders.

3.5 Data and Methodology

This section refers to the data used for this empirical investigation whilst it describes the methodologies applied for this research. The sample description and sample features are also analyzed and discussed in the same framework.

3.5.1 Sample Description

The sample comprises of takeover bids announced by UK firms between 01/01/1986 and 31/12/2005 and recorded by the Security Data Corporation (SDC). The choice of sample period is guided by the comprehensiveness of records in SDC and available at the time of data collection. SDC records 51,714 cases of M&A deals involving UK bidders within the sample period. For a deal to remain in the sample it should meet several criteria:

- The acquirer is a UK company traded in the London Stock Exchange (LSE).
- Targets of all status (public, private, and subsidiary[25]) and domicile (domestic and foreign) are included.
- The deal value is at least £1 million (excluding fees and expenses).
- The market value of the acquirer a month prior to the announcement of the deal is at least £1 million.[26]
- The sample is restricted when the acquirer aims to obtain more than 50% of the target firm.

[25] All subsidiary targets are not listed in any stock exchange according to the Target Public Mid Code in SDC.

[26] I follow Fuller, Netter, and Stegemoller (2002), Moeller, Schlingemann, and Stulz (2004), and Moeller and Schlingemann (2005) and employ a one million pounds cut-off to avoid results being driven by very small deals.

- Acquisitions involving financial, utility, government and agencies and healthcare firms as either the bidding or the target company are excluded.
- To avoid the implications of multiple bids multiple deals announced within 5 days (t-2, t+2) surrounding a bid are excluded.
- Deals with no return to index (RI), market capitalization (MV), and market-to-book value (MTBV) data available from Thomson Financial DataStream database and deals with negative MTBV, and negative or MV (as in Lyon et al. 1999) are excluded.

I finally obtain a sample of 6,634 UK acquisitions deals survive the criteria. This sample comprises of 4,262 domestic and 2,372 cross-border bids.

3.5.2 The Sample Features

The annual distribution of sample deals (figure 3:3) shows that two major M&A waves occurred within the sample period, the first in the late 1980s and the second a decade later.[27] This is consistent with the finding of Healy and Palepu (1993) that in the late 1980s the UK became the leading nation in CBA. Goergen and Reneboog (2004) suggested that the technological progress in biomechanics and electronics, as well as the development of new financial innovations and markets, was behind the merger wave between 1983 and 1989. Such financial innovations facilitated the financing of acquisitions and produced an unparalleled high level of hostile bids. It also appears that since the mid 1990s CBA have increased significantly (figure 3:3). This rapid increase can

[27] Both M&A waves are characterized by both domestic and CBA. Specifically for CBA, from the mid-1980s onwards, the wave of privatizations in former state-owned industries such as telecommunication, utilities, chemical, petroleum and gas, and finally the oil industry, has accounted for much of the overall CBA activity which basically attracts multinational companies that intend to expand into new markets and countries and search for opportunities of wealth maximization. This rapid increase is also attributed on several other factors, including the liberalization of trade and investment, globalization, deregulation of services, relaxation of controls and market integration. As UK companies expand internationally, they seek to capture the accruing benefits following such investments. It also appears that since the mid 1990s, global CBA have increased significantly.

be attributed to several factors, such as the liberalization of trade and investment, deregulation of services, privatization of state-owned enterprises, relaxation of controls regarding capital mobility across countries as well as and integration of international financial markets. Goergen and Reneboog (2004) have also pointed out that the period between 1993 and 2000 was fuelled by the sustained economic expansion, the development of new European stock exchanges (such as the European New Markets and EASDAQ), and the growth of the internet and telecommunications industries. In 2001, the collapse of consumer confidence in these industries, as well as the overcapacity in traditional sectors, caused an unexpected reduction in merger activity. This trend was reinforced by the fact that many analysts at that time had anticipated a bleak macroeconomic outlook owing to the previous un-sustained economic euphoria.

Insert figure 3:3 about here

Along these lines, figures 3:4 and 3:5 present the annual distributions of CBA into different legal system groups. Figures 3:4 and 3:5 reflect very important information regarding the main scope of this empirical chapter which is to examine whether the host country legal system appear important in shaping the bidding firms' gains. Overall, the CBA activity appears similar across the common-law and civil-law countries (figure 3:4 and table 3:1). In percentages, common-law countries reflect almost the 53% of the entire CBA activity while almost 47% reflected by civil-law countries. Similarly, within the CBA activity within the civil-law countries group, the larger proportion of acquisitions conducted with targets firms operating in the French legal system, opposite to German and Scandinavian legal systems (figure 3:5). These figures are in line with the findings of Rossi and Volpin (2004) where the authors suggested that the CBA activity in significantly higher into strong protected countries, relative to weak protected countries.

Insert figures 3:4 and 3:5 about here

Table 3:1 shows that more than one in three deals announced by UK bidders involve foreign targets. Among the CBA about half of the targets are based in countries with the Anglo-Saxon legal traditions (table 3:1 and figure 3:5). Deals involving targets from the socialist nations are only a few but increasing (figure 3:5). This is possibly because acquiring targets by western firms in these countries have been feasible only in recent years and started only in the mid-1990s. Table 3:2 shows that the majority of acquisitions involve private targets (54.3%) followed by subsidiaries (34.4%). This pattern holds for domestic as well as CBA deals and for all categories of legal systems. Cash payments are the most preferred medium of payment (58.2%) while stock transactions are the least favoured (5.4%). Among the CBA, only 2.82% of deals are settled in shares. The preferred method of payment in subsidiary acquisitions is cash irrespective of targets' domicile and the nation's legal tradition. This is in line with (a) Gaughan (2002), who highlights that until very recently, foreign takeovers by UK companies almost universally involved cash, as the targets were frequently unwilling to accept foreign equity, and (b) Faccio and Masulis (2005) where the authors stated that when an acquisition takes place with the target being a subsidiary firm, cash is preferred since corporations selling subsidiaries are often motivated by financial distress concerns or a desire to restructure towards their core business.

Insert table 3:1 about here

Further analysis of the sample reveals that acquirers engaged in CBA are more mature (measured by the bidder *age*) than bidders of domestic targets. In addition, mature bidders prefer targets from countries with the Anglo-Saxon and the German legal traditions. Bidders engaged in CBA are much larger (about 4.6 times in *market capitalization*) than bidders engaged in domestic deals. Similarly, the average *deal value* of CBA (£78.40 million) is more than double of domestic deals (£35.21 million). Amongst the CBA, the deals involving targets based in countries with the Anglo-Saxon legal

systems are larger (£87.40 million) than the acquisitions involving targets based elsewhere. This may be a reflection of the fact that firms based in these countries are relatively larger than the firms based elsewhere. In addition, bidders of domestic targets are usually value firms (measured with the *market-to-book value*), while those engaged in CBA tend to be glamour firms. Finally, among CBA deals value bidders acquire more targets domiciled in countries with the socialist legal systems, while growth acquirers tend to engage in acquisitions of targets operating in the Anglo-Saxon and the French legal systems.

Insert table 3:2 about here

3.5.3 Methodologies

The measurements of the announcement post-acquisition period gains are discussed in this section. The statistical tests are also discussed in great detail in the same framework.

3.5.3.1 Event Studies

The event studies are mainly introduced by Fama et al. (1969). Event studies investigate how stock prices respond to information flow at different time periods. After the introduction of event studies by Fama et al. (1969) several scholars have examined the implications of various announcements (i.e. M&A, stock splits, dividend, spin-off) on the stock returns of the firm within a short window surrounding the announcement of the event. There exist a number of event study methodologies which are consistent among each other when they measure the effect of a specific event on the returns of the firm (i.e. Gregory, 1997). Similarly, Andrade, Mitchell and Stafford (2001) referred to short-run analysis around M&A as: "The most statistically reliable evidence on whether

mergers create value for shareholders" (page 109). On the other hand, a number of studies in the corporate and investment finance literature noted that, in the short-run, the choice of benchmark used is not so important (in contrast to long-run studies) for the measurement of abnormal returns (Gregory, 1997).

A major concern in the theory of finance focus on whether the market is efficient and whether prices adjust quickly to information attach the markets. Basically, the short-run analysis of any corporate event provides a direct measure of any value creation or destruction while it provides a forward-looking performance measure. In theory, stock prices are the present value of expected future cash flows. However, this requires significant assumptions[28] about the functioning of stock markets: efficiency, rationality, and absence of restrictions on arbitrage. Research suggests that for most stocks these are not unreasonable assumptions, on average and over time. Similarly, evidence can be assembled supporting the market efficiency argument. If markets were not efficient they would adjust slowly (or not at all) to new information. Results from over 100 studies carefully documented by Elton and Gruber (1987) showed that the market responds rapidly to new information. In fact, the typical result in event studies using daily data is that, on average, stock prices seem to adjust within a day to event announcements. As Jensen (1988) noted, "Although the evidence is not literally 100 percent in support of the efficient market hypothesis, no proposition in any of the sciences is better documented" (page 26). Thus, there is ample evidence for the market efficiency assumption underlying event study methodology.

3.5.3.2 Measurement of Announcement Excess Returns

I analyse bidders' announcement period as well as long-term excess returns to examine whether bidders' gains are dependent on corporate governance and legal traditions

[28] The basic assumption in studies that focus on short return windows is that any lag in the response of prices to an event is short-lived.

under which targets operate. Given that the sample includes multiple bidders, use of asset pricing models that require a long time series of pre-event period returns that is free from the influence of the event under investigation, cannot be applied. However, Brown and Warner (1980) contain that that adjustment of the firm's risk (beta) does not improve the precision of short period abnormal returns calculations. Therefore, I measure the announcement period abnormal return as market adjusted return (equation 1). For the same reason several recent studies used this method (see, for example, Fuller et al. 2002, Faccio et al. 2006).

$$AR_{i,t} = R_{i,t} - R_{m,t} \tag{1}$$

Where $AR_{i,t}$ is the excess return of bidder i on day t; $R_{i,t}$ is the return of bidder i on day t measured as the percentage change in return index (inclusive of dividends) of bidder i; $R_{m,t}$ is the market return defined as the percentage change in FT-All Share index (value weighted) on day t. The announcement period cumulative excess returns (CAR_i) is the sum of the abnormal returns of 5 days (-2 to +2) surrounding the day of the announcement of the bid as defined in equation (2). R_i and R_m are defined in equation (1).

$$CAR_i = \sum_{t=-2}^{t=+2} (R_i - R_m)_t \tag{2}$$

3.5.3.3 Test of Significance of Average Gain

T-statistics are used to test the null hypothesis that the mean CAR is equal to zero for a sample of n firms is as follows:

$$t_{CAR_i} = \frac{\sum_{i=1}^{i=n} \frac{CAR_{i,t}}{n}}{\left(\sigma \left(\sum_{i=1}^{i=n} \frac{CAR_{i,t}}{n} \right) \Big/ \sqrt{n} \right)} \tag{3}$$

Where $CAR_{i,t}$ denotes the sample average, and $\sigma(CAR_{i,t})$ denotes the cross-sectional sample standard deviations of abnormal returns for the sample of n firms.

3.5.3.4 Long Run Performance

To assess the long-run performance of bidders I estimate one, three and five year holding period excess returns after controlling for known risk factors identified in Fama and French (1996). Average monthly post-merger excess returns for 12, 36 and 60-months are estimated under a calendar time portfolio regression (CTPR) framework. The CTPR accounts for the cross-sectional dependence of stock returns caused by the lack of independence among observations. This problem arises from overlapping returns and the non-random timing of acquisitions.[29] In my data set this of particular importance because of frequent acquirers in the sample. For each calendar month in the sample period, from January 1986 to December 2005, excess returns of all bidders that announced domestic bids and/or CBA during the previous 12, 36 and 60 months are calculated. The calendar-time portfolio excess returns are estimated with equation (4):

$$\left(R_{p,t} - R_{f,t}\right) = \alpha_p + \beta_p\left(R_{m,t} - R_{f,t}\right) + s_p SMB_t + h_p HML_t + \varepsilon_t \qquad (4)$$

In equation (4), the intercept (α_p) measures the monthly average risk adjusted excess return of bidders after controlling for the effects of 3 risk factors. The dependent variable $\left(R_{p,t} - R_{f,t}\right)$ is the monthly excess return of the calendar-time portfolio of bidders over risk free rate; $\left(R_{m,t} - R_{f,t}\right)$ is the excess return of market portfolio; SMB (Small minus Big) is the excess return of a portfolio of small firms (value weighted) over a portfolio of large firms; and HML (High minus Low) is the excess return of a portfolio of value firms (value weighted) over glamour firms. SMB and HML estimated using the method outlined in Fama and French (1996). The standard errors are corrected for

[29] A detailed explanation of the CTPR method can be found in Lyon et al. (1999).

possible heteroscedasticity induced by the variation in the number of firms in monthly portfolios.[30]

3.5.4 *Control Factors*

I also control for other potential determinants of bidders' gains such as bidders' age, size (market capitalization), relative size of the deals, market to book value (MTBV) ratio, and diversifying versus focused deals. Barry and Brown (1985) and Zhang (2006) showed that firms with a long history have more information in the market and are likely to belong to mature industries. Therefore, I control for the age of the acquirer in my analysis. Moeller et al. (2004) documented a statistically significant abnormal return of acquirers that bid for small firms. Further, the evidence also shows that the abnormal returns are expected to be larger in larger deals. Hence, my model controls for the size of the acquirer as well as the relative size of the deals (deal size to market value of the bidder ratio). Sudarshanam and Mahate (2003) and Conn et al. (2005) showed that value acquirers (i.e. bidders with low MTBV ratio) outperform the glamour ones (i.e. bidders with high MTBV ratio) both in the short-run and the long-run. Therefore, my analysis controls for the growth opportunities of acquirers. If target and bidder belong to the same industry sector the integration of firms should to be easier and synergy gains higher. Such deals should also benefit from the experience of bidder managers in managing the line of business and hence generate higher returns. On the other hand, firms acquiring targets that operate in an unrelated business may gain from diversification causing a reduction in the volatility of cash flow of the combined firm. Therefore, I also control for this feature, while comparing the gains from bids involving targets from various nations.

[30] To check for the reliability of estimates and control for heteroscedasticity I apply a weighted regression method of estimation. In the model the weights are the reciprocal of the square root of the number of sample deals in each month. Only portfolios with a minimum of five deals are included in the estimation. The results based on weighted least squares regressions are qualitatively similar to those of the main model.

3.5.5 Grouping of Targets' Nations by their Legal Traditions

Follow the series of papers by LLSV (1997, 1998, 2000, 2000b and 2002) and La Porta, Lopez-de-Silanes and Schleifer (1999 and 2006) I sort portfolios according to the target firm's level of investor protection (i.e. the target firm's country legal system). Therefore, initially I form portfolios for my cross-border sample divided either into the common-law or into the civil-law. In addition, the civil-law system is further divided into portfolios subject to the French legal system, the German, and the Scandinavian ones. The remainder of my sample is grouped into the Socialist legal system (see Appendix A).

3.6 Empirical Findings

The main purpose of this chapter is to investigate the implications of the host country's legal system on the short and long-run differentials in abnormal returns between acquirers engaging in domestics versus CBA. Accordingly, the following discussion is designed upon the basis of the aforementioned framework. Initially, I report abnormal returns, and the differentials generated from them, for acquirers engaging into domestic versus CBA after controlling for target status and method of payment. Following to that, the discussion concentrates on the abnormal returns, and their differentials, for acquirers engaging into solely CBA in countries belonging to various legal systems (i.e. common-law, civil-law, French legal system, German legal system, Scandinavian legal system, and the Socialist legal system). Differentials in returns will be reported in each case between (a) portfolios of domestic acquisitions and CBA, (b) portfolios of domestic acquisitions and each of the legal system individually, and (c) bidders engage only into foreign acquisitions with targets operating under different legal systems. Finally, the subsequent examination will follow the abovementioned

structure but the analysis will focus upon the acquisitions conducted with targets operating in both the same and in different industries, relative size of the deal, bidder size, bidder age, and bidder growth opportunities measure by the market-to-book value (MTBV).

3.6.1 Announcement Period Gains

Tables 3:3 to 3:6 present Cumulative Abnormal Returns (hereafter CAR) using 5-day event window (-2 to +2) for acquisitions (all cases, both domestic and cross-border) divided into portfolios according to the target status (private, public or subsidiary), alternative methods of financing (cash, stock, and mixed/other), and the various legal families (common-law, civil-law, French, German, Scandinavian, and Socialist legal systems). Abnormal returns differentials between domestic and CBA and to an extent for all acquisitions engaging in countries belonging to various legal systems (or legal families) are reported in each case.

3.6.1.1 Domestic versus Cross-Border Acquisitions

The estimates in table 3:3 (panel A) show that during 5-days surrounding the announcement of bids acquirers gain a significant positive excess return (1.23%). However, the gain is target status dependent. Acquirers of private and subsidiary targets earn significant positive returns while bidders of public targets breakeven. The estimates further show that acquirers of both domestic and foreign targets earn significant positive returns (1.22% and 1.24% respectively) but difference in their gains is not statistically significant. However, there are significant differences in the gains of foreign and domestic target bidders by their target status. Among bidders of listed targets, acquirers of domestic firms suffer a significant loss (-0.72%) while acquirers of foreign targets breakeven, generating a negative and significant differential of about -

1.12%. On the other hand, acquisitions of domestic private targets generate significantly higher return (1.61%) than CBA of private targets (1.15%) with a positive and significant differential of 0.46%. On the other hand, acquiring a foreign subsidiary is superior to taking-over a domestic subsidiary. Overall, the univariate estimates that are not controlled for other deal features and bidder specific characteristics confirm that there is no significant difference in the average gains to acquirers of domestic and foreign targets, but the gains are target status dependent.[31]

3.6.1.2 Legal Origin of Host Country

Table 3:3 records the gains to acquirers of foreign targets by the legal origin of targets' nation. The estimates show that acquirers of targets based in the socialist systems gain the most (2.77%) followed by the acquisitions of targets based in the German traditions (1.77%). On the other hand, acquiring targets based in the French legal system is least attractive (1.05%). Such high gains from the acquisitions of targets based in countries with the socialist legal system may be a reflection of growth opportunities in targets' nations that are characterised with high economic growth.[32] The attention then is turned into the impact of the host country's legal system (i.e. common-law and civil-law) on the bidding firm abnormal returns.

Overall, the estimates confirm that there are significant differences in the gains to acquirers of domestic and foreign targets by the legal origin of the country in which the target is based. On average, acquirers of targets based in civil-law countries gain more than acquirers of targets based in common-law countries; however it is dependent on the listing status of targets. This looks counter intuitive as in the sample acquirers operate under common-law systems and hence acquiring targets in similar markets

[31] Later findings indicate that announcement returns of foreign targets outperform the ones for domestic targets (multivariate analysis).

[32] For example, China is recognized as one of the fastest growing countries during the last decade (see Bai et al. 2002).

should be more beneficial from the perspective of post-merger integration. However, such a pattern is possible for two reasons: (a) bidders face less competition in civil-law countries to acquiring a target and hence do not have to pay high premium, and (b) due to lower investor protection in civil-law countries owners/investors of targets are prepared to accept relatively low value for their holdings in an anticipation of achieving better protection as the bidder operates in higher investor protection environment (in line with the findings reported in Rossi and Volpin, 2004). Consequently, bidders are left with higher share of synergy gains from such acquisitions. On the other hand, bidders attempting to acquire targets based in economies where disciplining management through corporate restructuring are common and shareholders enjoy extensive rights and protections (the common-law countries) face more competition and require paying higher premium. Hence, the gains from acquiring targets in such markets are limited. In fact, results show that bidders gain on average more around acquisitions of targets operating into civil-law countries versus the ones in the domestic market or the ones into common-law countries. Evidently, bidders enjoy higher gains acquiring listed and subsidiary target firms into civil-law countries while they enjoy higher returns acquiring private targets into the domestic market or into common-law countries.[33,34] These findings clearly support the second and the third hypotheses that bidders enjoy higher returns by acquiring targets in civil-law countries than in common-law countries while others gain more from acquiring targets in countries with similar legal traditions.

Insert table 3:3 about here

Further analysis supports the above conclusions. Table 3:4 indicates that bidders opting for listed target firms into the civil-law countries outperform the ones into common-law countries (with a significant return differential of -1.48%). On the other hand, bidders

[33] The multivariate analysis within that context generates similar results.

[34] The later finding, of higher gains around takeovers of private target firms into the domestic market or into common-law countries support the third hypothesis which is related to the integration of the target firm into the bidding firm's environment.

gain higher returns when acquiring unlisted targets into common-law countries suggesting that the possibility of creating outside blockholders into countries with similar corporate laws and investor protection generates higher gains to bidders.

Insert table 3:4 about here

Further univariate analysis shows that the gains from CBA and domestic acquisitions are also dependent on whether targets and bidders operate in the same industry group (i.e. target and acquirer have the same 2-digit SIC), host country's legal system, target status and method of payment.

Insert tables 3:5 and 3:6 about here

3.6.1.3 Methods of Payment

The method of payment, one of the major determinants of acquirers' gains, has been known to interact with target status. Estimates reported in table 3:3 (panel B) show that although all methods of payment generate significant positive gains to acquirers there exists a substantial variation in announcement period gains. Deals settled in mixed mode generate the highest (1.53%) return to bidders while cash deals generate the lowest (1.06%). Further analysis confirms the findings of Draper and Paudyal (2006) that the method of payment interacts with target status in determining bidders' gains (table 3:4). On average, acquirers of listed target suffer a significant loss (-2.14%) in share deals. This is consistent with the prediction of information asymmetry hypothesis (Myers and Majluf, 1984) applied to takeovers. On the other hand, the share payment in private and subsidiary targets acquisitions generate positive gains (3.46% and 3.27% respectively). As argued by Draper and Paudyal (2006) such positive gains are possible due to anticipated reduction in agency costs through creation of blockholders when unlisted targets are acquired. Further analysis shows that when the proportion of stock

is more than 50% acquirers of foreign targets gain more and the differences between domestic and foreign acquisitions become even larger when the proportion of stock is 75% or higher (table 3:3, panel D). Such differentials are mainly driven by acquisitions into common-law countries, thereby strongly support the third hypothesis (legal system and integration of target). Along the same lines, bids of private targets into common-law countries utilizing stock as the method of payment generate positive abnormal returns (7.81%), opposite to bids with the same target status and mean of financing into the French and German legal system countries (1.49% and 0.11% insignificant abnormal returns respectively), further supporting the third hypothesis.

Bidders acquiring domestic targets in cash gain significantly more (1.11%) than bidders acquiring targets based in common-law nations (0.92%) and countries with the French legal traditions (0.68%). Cash acquisitions of targets based in Scandinavian systems are the most profitable (1.94%). CBA settled in stocks generate much higher return (4.82%) than domestic share deals. This differential is clearly driven by deals with targets based into the common-law countries (5.40%).[35]

Overall, the results suggest that although there is no significant difference in average gains from domestic and foreign acquisitions there are significant differences in acquisition gains by target status, methods of payment, legal origin of target's nation, and the level of investor protection where the targets operate. Bidders' gains are lower when targets are based in countries that have Anglo-Saxon systems with higher investor protection. Shareholders of targets based in such countries demand high takeover premium, consequently acquirer shareholders gain the least. This is consistent with the view of Rossi and Volpin (2004) that higher investor protection leads to higher takeover premium, which in turn, reduces the gains to bidders. On the other hand, acquirers bidding for targets based in countries belonging to non-Anglo-Saxon traditions with lower investor protection gain the most. This is possible because when acquiring targets

[35] Although an estimate in table shows that share acquisition in socialist systems seems to generate the highest return, but it is based on only one deal. Hence, no firm conclusion could be drawn.

based in countries with weaker investor protection bidders are not required to pay high takeover premiums resulting in higher gains to shareholders of acquirers. Thus, the results confirm that gains to acquirers from CBA depend upon the legal origin and the level of investors' protection in targets' country.

3.6.2 Deal Features and Gains from Acquisitions

In addition to target status and methods of payment, other factors that are known to influence acquirers' gains include relative size of the deals, bidders' growth opportunities, bidders' age, and the industry affiliation of bidder and target. I estimate excess returns to bidders after controlling for the effects of these factors in both univariate and multivariate frameworks. Although the results from univariate analysis are revealing, they do not account for simultaneous effects of multiple factors on acquirers' gains. To overcome such limitations I regress announcement period (5-days) excess returns of bidders against a set of explanatory variables that are likely to be responsible in shaping the gains of acquirers from domestic and CBA (equation 5).

$$CAR_i = \alpha + \sum_{i=1}^{N} X_i + \varepsilon_i \qquad (5)$$

In equation 5, the intercept, (α), measures the excess return to bidders after accounting for the effects of all explanatory variables. The vector of explanatory variables, 'X', includes acquirer's age on the day of bid announcement (log), acquirer's market value one month prior to the announcement of deal (log), relative size of the deal measured as the deal value divided by acquirer's market value, bidder's growth opportunity (ratio of market to book value of equity of acquirer one month prior to the acquisition announcement), and deal value (log). Dummy variables, that take the value of one and zero otherwise, are included to represent cross-border deals, diversifying deals (i.e. target and acquirer do not have the same 2-digit SIC), private targets, listed targets, and

cash only and stock only deals. Further, dummies representing the legal origin of targets' nation are also included where appropriate. The model is estimated for the separately for the entire sample, domestic deals, and cross-border deals. The model is estimated with various combinations of explanatory variables and results presented in table 3:8. Although the F-statistics confirm the significance of all models, the results should be viewed with caution as the explanatory power of the models, as indicated by adjusted R-Squared.

To examine the role of the *relative size* (defined as the deal value divided by the market capitalization of bidder a month before the announcement of bid) of the deals I split the sample deals into three categories. The estimates (table 3:7, panel A) show that bidders' gains increase monotonically with the increase in relative size of the deals. Although, all three categories of deals generate significant positive gains to acquirers, high relative size deals generate significantly higher return (1.96%) than low relative size deals (0.58%). This is not surprising as the monetary value of synergy from larger deals is likely to be higher than the value of synergy gains from smaller deals. This evidence is consistent with the findings of Fuller et al. (2002) for the US and Draper and Paudyal (2006) for the UK. This pattern of returns holds for acquirers of both domestic and cross-border targets. Returns generated by CBA involving targets operating in the Anglo-Saxon and the French systems display similar patterns. However, the gains from the acquisitions of targets operating in the German, the Scandinavian, and the Socialist legal systems display a similar pattern, in economic terms, but the differences in gains across the relative size groups are not statistically significant. The positive and highly significant coefficient of the relative size of the deals in models (1-10) (table 3:8, panel A:1) confirms the suggestion of univariate analysis that bidders' gains increase with the deal size. However, its role is relatively weaker in the cases of domestic deals (table 3:8, panel B) than in the cases of CBA (table 3:8, panel B).

The *market capitalisation* of the bidding firms is examined within the same context. To examine the effect of market capitalization on the bidding firm abnormal returns I divide the sample into three portfolios. Results suggest that, bidding firms' abnormal returns decrease monotonically from the portfolio subject to small bidders (2.06%) to the one subject to big bidders (0.65%) with a statistically significant margin in most of the groups (table 3:7, panel B). This pattern holds form almost all groups apart the ones for bids into common-law countries, countries operating under the French legal system, Scandinavian, and the Socialist legal system. This finding is consistent with the findings of Moeller, Schlingemann, and Stulz (2004) where the authors reported higher returns for small bidders. Big bidding firms are normally offer higher premiums than small firms. Similarly, the insignificant differential between small and big bidding firms' abnormal returns may be due to the high premiums paid in general for acquisitions into common-law countries (Rossi and Volpin, 2004). As indicated by the negative coefficient of *market capitalisation* (table 3:8, panel A:2) larger acquirers gain less from acquisitions. This pattern holds for the acquirers of both domestic (table 3:8, panel B) as well as foreign targets (table 3:8, panel B). The estimates further reveal that larger bidders acquiring public targets gain less while the acquisitions of unlisted targets have positive effect on returns to bidders (table 3:8, panel A:2).

Insert tables 3:7 and 3:8 about here

Extant literature suggests that bidders' gain depends upon *acquirers' growth opportunities*. To control for its possibility I divide the sample deals on bidders' growth opportunity measured by their market value to book value ratio. The estimates (table 3:7, panel C) reveal that value bidders (low market to book value ratio bidders) earn higher announcement period gains (1.69%) than glamour bidders (1.09%), as in Sudaranam and Mahate (2003). This pattern holds for bidders of both domestic as well as cross-border targets. Amongst the CBA deals, if targets are based in common-law countries, value bidders earn less than glamour bidders do. The multivariate analysis

(table 3:8, panel A:1 and A:2) suggests that on average acquirers' growth opportunity does not affect their announcement period gains. However, such insignificant effect seems to be driven by the experience of domestic target bidders only (table 3:8, panel B). Acquirers of foreign targets experience a significant positive relation between the announcement period gains and their own pre-bid growth opportunities implying that glamour bidders gain more than value bidders (table 3:8, panel B).

In this analysis I also control for the effect of the *age of the bidder* on the announcement gains generated to bidding firm's shareholders around domestic and foreign acquisitions' announcements. Evidently, the estimates reported in table 3:7, panel D, conveys the deterministic power of the age of the bidder on the announcement gains generated to bidding firm's shareholders. More specifically, my evidence suggests that there is a negative relationship between the age of the bidder and the announcement gains to bidders' shareholders. This pattern is further confirmed by the coefficients of the multivariate analysis in table 3:8, panel A:1 only. The remaining of the panels of the multivariate analysis (table 3:8, panels A:2, B:1, B:2, and panel C) suggest that the gains to bidders increase with the age of the bidder, which is basically consistent with the results reported by the majority of studies in the finance literature.

The estimates (table 3:7, panel E) show that bidders' gains do not depend on *industry affiliation* of bidder and target (see also tables 3:5 and 3:6). Both diversifying as well as focused deals generate similar gains from domestic deals. Among the CBA, although bidders' gains from focused deals are economically higher (1.38%) than the gains from diversifying deals (1.08%) they are not significantly different from each other. It is also noteworthy that this pattern holds irrespective of legal origin of target's nation. A similar conclusion, i.e. no significant effect of industry affiliation, is revealed by multivariate analysis (table 3:8, panels A, B and C). Overall, the evidence shows that bidder's gain is not affected by industry affiliation of bidders and targets.

The evidence from univariate analysis that *methods of payment* interacts with target status in shaping the gains to acquirers is also confirmed by the evidence from multivariate analysis. Once the effects of target status are controlled in the model, the implications of the methods of payment (both cash and shares) on the gains of average acquirer as well as bidders of domestic targets remain inclusive (table 3:8, panels A and B). However, acquirers of foreign targets breakeven in cash deals and earn significant positive gain from shares deals (table 3:8, panel C).

Further, the coefficients of dummies representing acquisitions into foreign nations are positive and statistically significant after controlling for bidders' size and other factors (table 3:8, panel A:2) show a positive and significant role of CBA dummy confirming that when the effects of other deal features are controlled for, acquirers of cross-border targets gain more than bidders of domestic targets. Evidently, these results support the first hypothesis of this empirical investigation which states that bids of foreign targets outperform the ones for domestic target firms.

The estimates for full sample as well as for acquirers of domestic targets (table 3:8, panels A and B) show that on average bidders earn a significant positive return on the announcement of bid even after controlling for the implications of various determinants of acquirer's gain. Although acquirers of foreign targets gain significant positive returns, their gains are sensitive to model specification. More specifically, the models that control for bidders' size show that acquirers of foreign target earn significant positive gains. The estimates (table 3:8, panel C) reveal that acquisitions of targets based in common-law countries breakeven while, on the other hand, the acquisitions of targets based in civil-law countries and countries under the Socialist legal system add value to shareholders' wealth, consistent with the first hypothesis.[36] Moreover, it appears that

[36] Additional analysis indicates that acquisitions of target firms with shares into common-law countries generate higher returns to bidding firms, suggesting that the difficulty of the integration of the target firm into the acquiring firm business environment reflects the market view for that deal thereby supporting the second hypothesis.

the bidding firm's size (log), growth opportunities, and deal value (log) always explain the bidding firm's excess returns. These estimates show that the announcement period gains of cross-border target bidders depend on the legal origin of the country in which the target operates.

3.6.3 Long-run Performance

Evidence from the analysis of announcement period gains confirms that targets' domicile, listing status, and methods of payment interact with the legal origin of targets' nation in shaping the gains to acquirers. Acquisitions of unlisted targets based in common-law countries generate the highest gains when paid in shares while the overall gains are higher if targets are based in countries with low investor protection. In the absence of efficient stock market the observed differential in announcement period gains may not hold in the long-run. This section deals with analysis of (a) whether acquisitions of domestic targets are superior to acquisitions of cross-border targets in the long-run, and (b) the influence of the legal origin of target's nation on bidders' gains. Excess returns are measured by calendar-time regression intercepts (equation 4). The estimates of excess returns that are controlled for known risk factors (table 9, panel A) show that bidders of domestic targets gain monthly 0.38 for 12 and 60 months following acquisition announcements. This pattern holds for acquirers of all types of domestic and foreign targets – private, public, and subsidiary as well as for all methods of payment – cash, stock, and mixed payments. Evidence also indicates that acquirers engaged in domestic acquisitions outperform the bidders of foreign targets in the long-run. Specifically, for the overall sample, domestic bidders outperform the foreign ones by 0.31% per calendar month (table 3:9, panel A). In addition, when the sample is further restricted according to the target firm's status and the method of payment, domestic bidders of private (table 3:9, panel B), public (table 3:9, panel C), and cash payments

(table 3:9, panel E) found to outperform the foreign ones (of the same target status and method of payment) by 0.36%, 0.74% and 0.30% respectively.

Insert table 3:9 about here

Further analysis of long-term gains from CBA by the legal system of targets' nation (table 3:9, panels A to H) reveals that acquirers gain the most from the acquisitions of targets operating in common-law countries. However, bidders that acquire targets that based in countries with the French, the German, the Scandinavian and the socialist legal systems break even in the long-run (up to 5 years). The results clearly convey that this is target status and method of payment dependent. More specifically, UK bidders acquiring foreign targets under the common-law system generate positive gains to bidders whereas when they acquire targets in civil-law countries suffer a loss. This is more intense when the target firm is a listed one and the method of payment that employed to finance the deal is common stock.

Overall, the evidence shows that the pattern of long-run performance of bidders differs from the pattern of announcement period gains. Specifically, UK acquirers bidding for targets located in the civil-law countries (the French, the German, and the Scandinavian legal systems) appear to have significantly lower abnormal returns than acquiring of targets located in the common-law countries, strongly supporting the fourth hypothesis which states that the host country's legal system plays a significant role in shaping the bidding firms' long-run returns. This supports the view that long-run performance of bidders engaged in acquisitions of targets located in countries with similar corporate governance mechanism and the legal systems gain the most and hence the legal origin of nations in which targets operate matter significantly for British acquirers. Once again, the results confirm that the performance of acquirers from CBA depends upon the legal origin and the level of investors' protection in targets' country.

3.7 Conclusion

This chapter analyses the gains of UK acquirers that bid for domestic and foreign targets and examines the implications of legal traditions of target firms' nations on bidders' gains. To achieve this objective short and long-run share price performance of UK bidders engaged in both CBA and domestic deals are analyzed. Several conclusions emerge.

Overall, once the possible implications of various determinants of acquirers' gains are controlled, the acquirers of foreign targets gain more than the acquirers of domestic targets do. Further analysis indicates that gains to acquirers are highly sensitive to the legal system of the nation in which target firms operate. In short, the market reacts more favourably to the announcement of acquisitions of targets operating in the civil-law countries than to acquisitions of targets based in common-law countries. More detailed analysis conveys that this is more likely to occur only around bids of listed and subsidiary foreign target firms. This is possibly because (a) acquirers face less competition in acquiring targets in such countries and thus they are required to pay lower premium (further supporting the findings of Chari, Ouimet, and Tesar (2006) where the authors highlighted the importance of competition in the bidding contest by reporting higher gains to acquirers when they prefer to engage in foreign acquisitions of targets that operate in emerging markets (due to lower competition)), and (b) the increased likelihood of blockholders creation due to their higher equity ownership concentration (in countries of weak investor protection – LLSV 1998 and LLS 1999).

Along similar lines, evidence suggests that bidders of foreign targets in common-law countries enjoy higher gains than bidders opting for domestic and civil-law targets only when the financing method is by common equity. This market behaviour reflects the investors' view for this type of deals (in common-law countries and stock financing) who consider those deals as positive NPV projects. This is possible due to the similar

managerial traditions, corporate governance mechanisms and investor protection regimes between the bidder country (UK) and the rest of common-law nations. The above findings confirm that the target status and the methods of payment interact with the level of investor protection in target firm's nation to shape announcement period returns of acquirers. Clearly, these findings confirm evidence documented elsewhere in the literature which depicts the influential impact of firm and deal specific characteristics such as target status, method of payment, deal's relative size, size and growth opportunities of acquirers, on shareholders gains of bidders targeting domestic versus foreign firms.

Finally, the long-run analysis records several important findings. Firms acquiring targets in countries that have the common-law traditions (high investor protection) outperform bidders that acquire targets based in countries which follow the traditions of civil-laws (low investor protection). This is possible due to the similarities that exist between the UK country and other common-law countries in terms of managerial traditions, corporate governance systems and investor protection regimes, which are likely to minimize any integration costs of the target firm in the acquiring firm's existing business environment. Overall, the main findings that derived from this empirical chapter contributes to the M&A literature by presenting strong evidence that the legal system of the target firm's country of residence provide additional explanations of the valuation effects to bidders acquiring domestic versus foreign target firms.

3.8 Figures and Tables

Figure 3:1 – The International Corporate Governance System (I)

The figure represents the structure of the international corporate governance system (as discussed in Denis and McConnell, 2003).

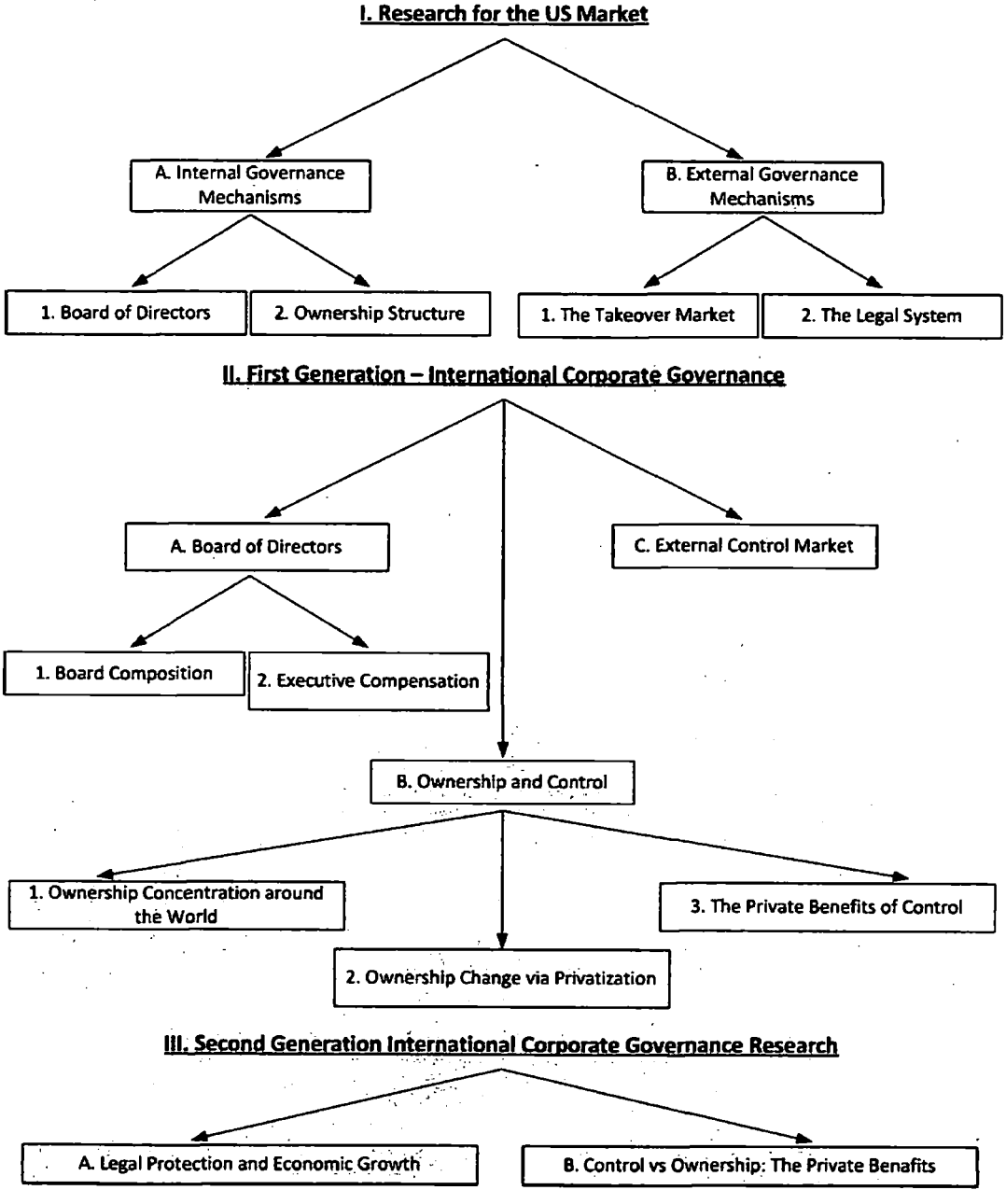

Figure 3:2 – The International Corporate Governance System (II)

The figure represents the structure of the international corporate governance system (as discussed in Denis and McConnell, 2003).

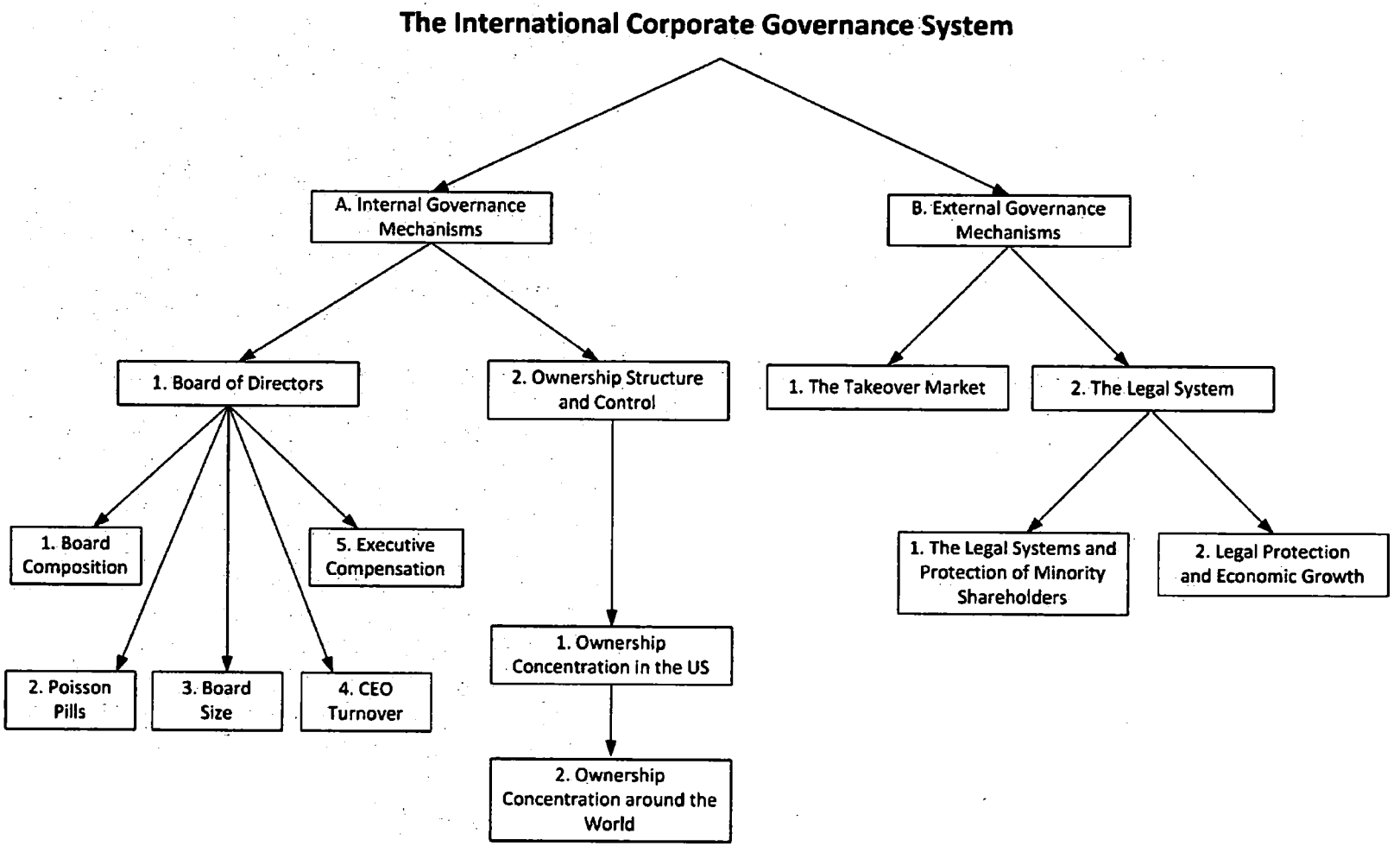

Figure 3:3 – Annual Distribution of M&A Activity by Country of Origin

The figure presents graphically the M&A activity in the domestic and in the foreign market for corporate control for each year over the period between 1986 and 2005.

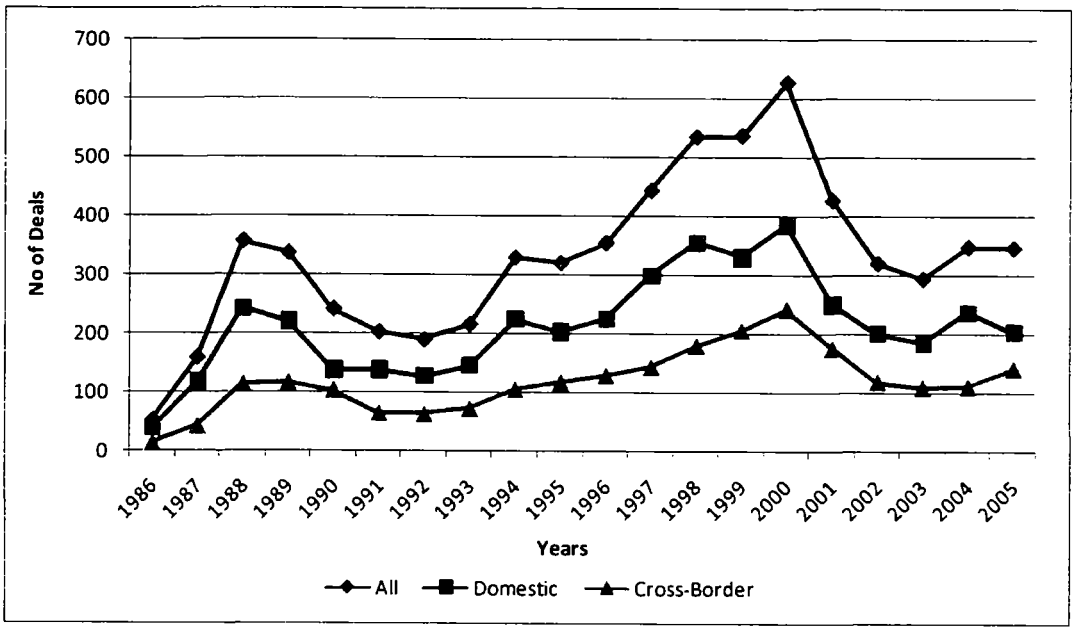

Figure 3:4 – Annual Distribution of CBA Activity by Legal Family (Common-Law and Civil-Law Groups of Countries)

The figure presents graphically the M&A activity into Common-law and Civil-law groups of countries for each year over the period between 1986 and 2005.

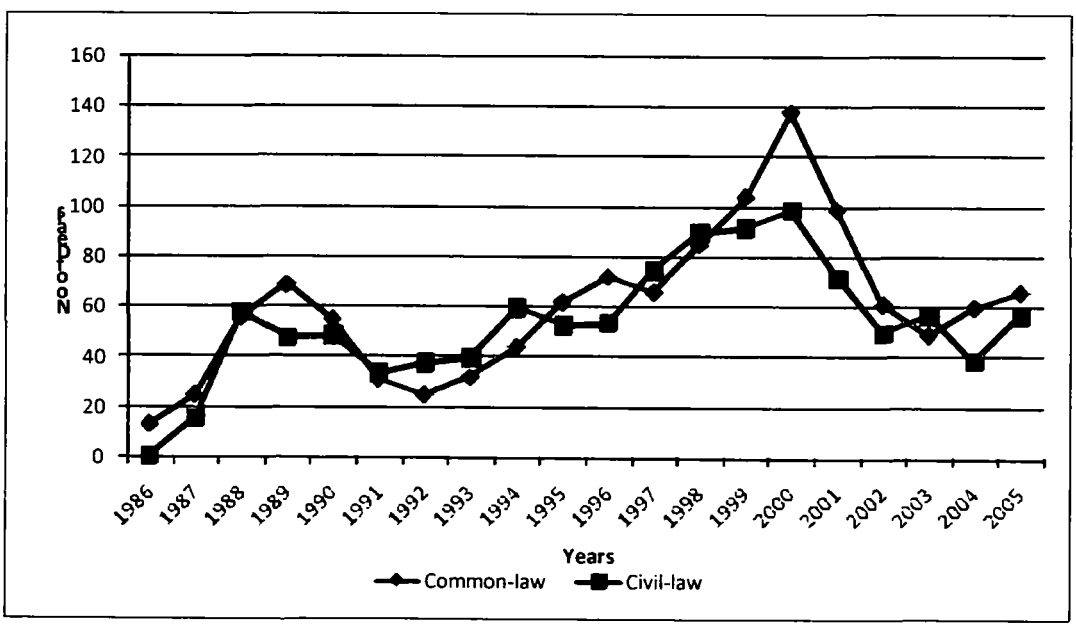

Figure 3:5 – Annual Distribution of CBA by Legal System (French, German, Scandinavian, and Socialist Legal Systems)

The figure presents graphically the M&A activity into countries under the French, German, Scandinavian, and the Socialist legal system.

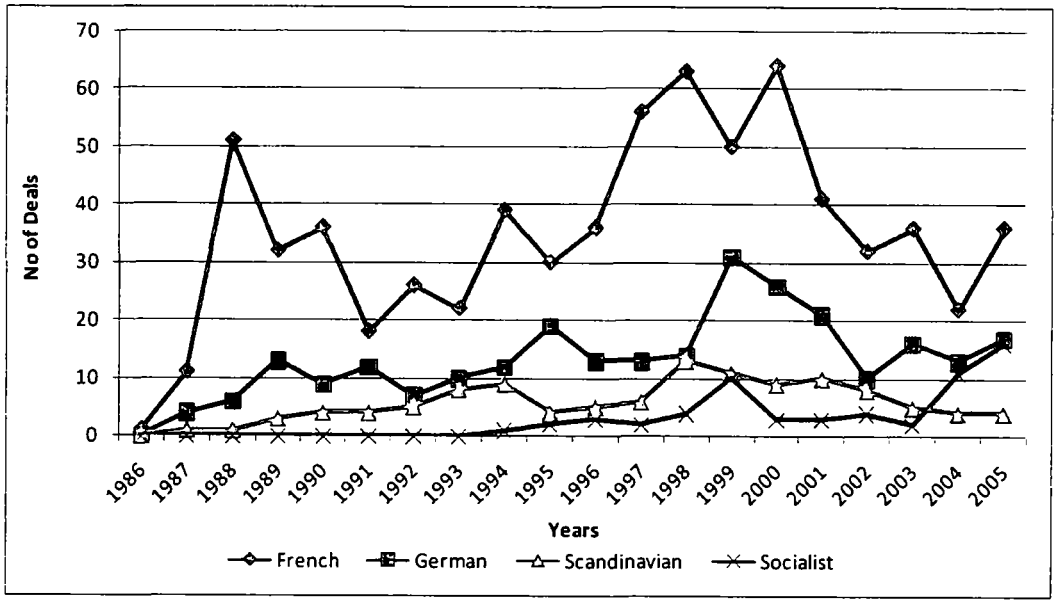

Table 3:1 – Distribution of Sample Deals by Year, Country of Origin, and Legal System of Target Firm Nation

The distribution of sample deals announced by UK bidders between 1986 and 2005 by year and legal origin of targets' nation is presented. Acquirers are UK firms listed on the London Stock Exchange. Targets are either private, listed or subsidiaries, both from home and foreign markets.

Year	All	Domestic	Cross-Border Acquisitions (CBA)							
			All	Common-law	Civil-law	French	German	Scandinavian	Socialist	Un-Specified
1986	52	38	14	13	1	1	0	0	0	0
1987	160	117	43	25	16	11	4	1	0	2
1988	357	243	114	56	58	51	6	1	0	0
1989	337	220	117	69	48	32	13	3	0	0
1990	242	138	104	55	49	36	9	4	0	0
1991	203	138	65	31	34	18	12	4	0	0
1992	190	127	63	25	38	26	7	5	0	0
1993	216	144	72	32	40	22	10	8	0	0
1994	329	224	105	44	60	39	12	9	1	0
1995	320	203	117	62	53	30	19	4	2	0
1996	354	225	129	72	54	36	13	5	3	0
1997	443	299	144	66	75	56	13	6	2	1
1998	534	354	180	85	90	63	14	13	4	1
1999	536	330	206	104	92	50	31	11	10	0
2000	626	384	242	138	99	64	26	9	3	2
2001	426	250	176	99	72	41	21	10	3	2
2002	320	201	119	61	50	32	10	8	4	4
2003	294	185	109	49	57	36	16	5	2	1
2004	348	237	111	60	39	22	13	4	11	1
2005	346	204	142	66	57	36	17	4	16	3
Total	6,634	4,262	2,372	1,212	1,082	702	266	114	61	17
(%)	(100)	(64.24)	(35.76)	(18.27)	(16.31)	(10.58)	(4.01)	(1.72)	(0.92)	(0.26)

Table 3:2 – Summary Statistics of the Sample

A summary of distribution of sample by target status (panel A) and methods of payment (panel B), bidder and deal features (panel C) are provided for all, domestic and cross-border (including their legal origin) acquisitions. 'Cash' and 'shares' indicate cash and share only deals. 'Mixed' includes all deals financed by a combination of cash and stock and/or methods classified as "other" in SDC. Panel C summarizes acquirer and deal features. The sample is restricted to deals equal to or over one million Pounds Sterling. Age measure the number of years between the announcement day and the date of acquirer's birth. Relative size is the ratio of deal value to market value of acquirer one month prior to the acquisition announcement. MV is the market value of the acquirer one month prior to the acquisition announcement and MTBV represents the market-to-book value of equity one month prior to the announcement of deal.

	All	Domestic	Cross-Border	Common	Civil	French	German	Scand.	Socialist
Panel A: Distribution of deals by target Status									
Private	3,600	2,312	1,288	625	628	427	149	52	28
Public	755	494	261	169	86	56	19	11	6
Subsidiary	2,279	1,456	823	418	368	219	98	51	27
Panel B: Distribution of deals by methods of payment									
Cash									
% of cash > 0%	6,026	3,780	2,246	1,146	1,025	667	250	108	60
% of cash ≥ 25%	5,539	3,395	2,144	1,088	986	643	242	101	58
% of cash ≥ 50%	5,040	3,041	1,999	1,017	918	601	223	94	54
% of cash ≥ 75%	4,434	2,633	1,801	918	822	532	205	85	53
% of cash = 100%	3,862	2,265	1,597	808	733	476	183	74	49
Stock									
% of stock > 0%	1,621	1,268	353	183	158	101	32	25	5
% of stock ≥ 25%	1,093	861	232	128	95	60	21	14	3
% of stock ≥ 50%	776	610	166	100	59	39	14	6	3
% of stock ≥ 75%	518	411	107	63	40	28	8	4	1
% of stock = 100%	355	288	67	38	26	16	8	2	1
Mixed/Other									
Mixed/Other	2,418	1,709	709	367	323	210	75	28	11
Panel C: Major features of bidder and deal characteristics									
Age (Years)	18.81	15.55	19.06	19.48	18.47	18.12	19.25	18.81	18.56
Deal Value (£ mill)	50.65	35.21	78.40	87.39	69.73	71.15	74.34	50.29	71.09
Relative Size	0.18	0.22	0.11	0.11	0.10	0.11	0.07	0.10	0.27
MV (£ mill)	1289	559	2601	2051	3161	2791	4783	1639	4133
MTBV Ratio	4.662	4.187	5.515	5.557	5.568	6.371	3.917	4.507	3.429

Table 3:3 – Short-run Excess Returns of Bidders by Target Status, Payment Method and Legal Family of Target Firm Nation

5-day (-2, +2) announcement period cumulative abnormal returns, in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are public, private, and subsidiary firms that operate in the domestic and in the foreign market for corporate control. Panel A shows the gains to acquirers of the entire sample, private targets only, public targets only and subsidiary targets only from different groups of nations as classified by the legal system of the target firm's country of residence. Panel B shows acquirers' gains by methods of payment. 'Cash' indicates cash deals only and 'stock' refers to shares deals only. 'Mixed/Other' includes all other transactions financed with a combination of both cash and stock or more methods of payment (i.e. 'Other' as classified by SDC). Panel C reports acquirers' gains for the entire sample for 'Cash' payment that used to finance the deal as well as for different proportions of the cash payment (less than 50%, greater than or equal to 50%, greater than or equal to 75%, and equal to 100%). Panel D reports acquirers' gains for the entire sample for 'Stock' payment that used to finance the deal as well as for different proportions for the stock payment (less than 50%, greater than or equal to 50%, greater than or equal to 75%, and equal to 100%). Differentials are reported between domestic bids and the ones in each legal systems group for all panes described above. T-statistics testing for the mean equal to zero versus not equal to zero are reported in parentheses below the mean. The sample size, n, for each group is reported bellow T-statistic. a, b, and c denote significance level at 1%, 5%, and 10% respectively.

		All	Domestic	Cross-Border	Commom	Civil	French	German	Sandinavian	Socialist	Domestic vs. Cross-Border	Domestic vs. Common	Domestic vs. Civil	Common vs. Civil
Panel A: Announcement Returns by Target Status														
All	Mean	1.23%[a]	1.22%[a]	1.24%[a]	1.11%[a]	1.30%[a]	1.05%[a]	1.77%[a]	1.67%[a]	2.77%[b]	-0.02%	0.11%	-0.08%	-0.20%
	N	6,634	4,262	2,372	1,212	1,082	702	266	114	61				
Private Targets	Mean	1.44%[a]	1.61%[a]	1.15%[a]	1.37%[a]	0.85%[a]	0.51%[a]	1.68%[a]	1.27%	3.00%	**0.46%[c]**	0.24%	**0.76%[a]**	0.51%
	N	3,600	2,312	1,288	625	628	427	149	52	28				
Public Targets	Mean	-0.34%	-0.72%[b]	0.40%	0.13%	0.85%	0.98%	1.23%	-0.45%	1.53%	**-1.12%[b]**	-0.90%	**-1.60%[b]**	-0.70%
	N	755	494	261	169	86	56	19	11	6				
Subsidiary Targets	Mean	1.41%[a]	1.27%[a]	1.67%[a]	1.13%[a]	2.16%[a]	2.13%[a]	2.03%[a]	2.53%[a]	2.80%[c]	-0.40%	0.14%	**-0.90%[b]**	**-1.00%[c]**
	N	2,279	1,456	823	418	368	219	98	51	27				
	F-Stat	19.54[a]	21.21[a]	3.13[b]	1.90	3.75[a]	3.04[b]	0.16	1.10	0.06				
Panel B: Announcement Returns by Method of Payment														
All	Mean	1.23%[a]	1.22%[a]	1.24%[a]	1.11%[a]	1.30%[a]	1.05%[a]	1.77%[a]	1.67%[a]	2.77%[b]	-0.02%	0.11%	-0.08%	-0.20%
	N	6,634	4,262	2,372	1,212	1,082	702	266	114	61				
Cash	Mean	1.06%[a]	1.11%[a]	0.98%[a]	0.92%[a]	1.03%[a]	0.68%[a]	1.55%[a]	1.94%[a]	1.15%[c]	0.13%	0.19%	0.08%	-0.10%
	N	3,862	2,265	1,597	808	733	476	183	74	49				
Stock	Mean	1.08%[c]	0.17%	4.98%[b]	5.58%[b]	1.78%	0.37%	5.32%[b]	-1.10%[b]	62.13%	**-4.82%[b]**	**-5.40%[a]**	-1.60%	3.80%
	N	355	288	67	38	26	16	8	2	1				
Mixed or Other	Mean	1.53%[a]	1.55%[a]	1.49%[a]	1.06%[a]	1.87%[a]	1.95%[a]	1.94%[b]	1.28%	4.57%	0.06%	0.49%	-0.30%	-0.80%
	N	2,418	1,709	709	367	323	201	75	38	11				
	F-Stat	3.17[b]	5.02[a]	9.89[a]	7.67[a]	1.48	1.93	1.36	0.31	55.18[a]				

Continued

Table 3:3 – Continued

		All	Domestic	Cross-Border	Commom	Civil	French	German	Sandinavian	Socialist	Domestic vs. Cross-Border	Domestic vs. Common	Domestic vs. Civil	Common vs. Civil
Panel C: Announcement Returns by Different Levels of Cash														
% of cash > 0%	Mean	1.30%[a]	1.38%[a]	1.16%[a]	1.02%[a]	1.29%[a]	1.03%[a]	1.72%[a]	1.86%[a]	1.78%[b]	0.22%	**0.36%[c]**	0.09%	-0.30%
	N	6,026	3,780	2,246	1,146	1,025	667	250	108	60				
% of cash ≥ 25%	Mean	1.28%[a]	1.34%[a]	1.20%[a]	1.03%[a]	1.32%[a]	1.10%[a]	1.76%[a]	1.71%[b]	1.89%[b]	0.14%	0.30%	0.01%	-0.30%
	N	5,539	3,395	2,144	1,088	986	643	242	101	58				
% of cash ≥ 50%	Mean	1.25%[a]	1.32%[a]	1.16%[a]	0.97%[a]	1.33%[a]	1.09%[a]	1.75%[a]	1.85%[a]	1.54%[b]	0.16%	0.34%	-0.01%	-0.40%
	N	5,040	3,041	1,999	1,017	918	601	223	94	54				
% of cash ≥ 75%	Mean	1.19%[a]	1.28%[a]	1.07%[a]	0.98%[a]	1.15%[a]	0.79%[a]	1.71%[a]	2.05%[a]	1.44%[b]	0.21%	0.30%	0.13%	-0.20%
	N	4,434	2,633	1,801	918	822	532	205	85	53				
% of cash = 100%	Mean	1.06%[a]	1.11%[a]	0.98%[a]	0.92%[a]	1.03%[a]	0.68%[a]	1.55%[a]	1.94%[a]	1.15%[c]	0.13%	0.19%	0.08%	-0.10%
	N	3,862	2,265	1,597	808	733	476	183	74	49				
Panel D: Announcement Returns by Different Levels of Stock														
% of stock > 0%	Mean	1.51%[a]	1.31%[a]	2.25%[a]	2.03%[b]	1.84%[c]	1.90%	2.13%	1.24%	21.97%	**-0.90%[c]**	-0.70%	-0.50%	0.19%
	N	1,621	1,268	353	183	158	101	32	25	5				
% of stock ≥ 25%	Mean	1.05%[a]	0.62%[b]	2.64%[a]	2.22%[b]	2.16%	3.25%	0.69%	-0.29%	32.70%	**-2.00%[a]**	**-1.60%[c]**	-1.50%	0.06%
	N	1,093	861	232	128	95	60	21	14	3				
% of stock ≥ 50%	Mean	0.70%[c]	0.21%	2.49%[a]	1.78%	1.90%	2.49%	2.15%	-2.54%	32.70%	**-2.30%[b]**	-1.60%	-1.70%	-0.10%
	N	776	610	166	100	59	39	14	6	3				
% of stock ≥ 75%	Mean	0.71%	-0.05%	3.61%[a]	3.67%[b]	2.03%	1.50%	5.32%[b]	-0.82%	62.13%	**-3.70%[a]**	**-3.70%[b]**	-2.10%	1.63%
	N	518	411	107	63	40	28	8	4	1				
% of stock = 100%	Mean	1.08%[c]	0.17%	4.98%[a]	5.58%[b]	1.78%	0.37%	5.32%[b]	-1.14%[b]	62.13%	**-4.80%[a]**	**-5.40%[a]**	-1.60%	3.80%
	N	355	288	67	38	26	16	8	2	1				

Table 3:4 – CAR by Target Status, Payment Method and Legal System of Target Firm Nation

This table presents 5-day (-2,+2) Cumulative Abnormal Returns (CAR) for all deals announced between 1986 and 2005. Abnormal returns are calculated using a modified market-adjusted model as in Fuller et al. (2002): $AR_{i,t}=r_{i,t} - r_{m,t}$ where $r_{i,t}$ is the return of the acquiring firm i in time period t and where $r_{m,t}$ is the value-weighted market index return (FT-All Share) in the period t. Acquirers are publicly traded firms listed in the London Stock Exchange. Targets are private, listed or subsidiaries, both domestic and foreign ones. The sample is divided according to the legal system of the target firm's country. In each type portfolios are further divided by the method of payment. 'Cash' includes transactions made by cash only. Stock offers are defined as transactions made by stock only. 'Mixed/Other' includes all other transactions financed with both cash and stock and/or methods classified as "other" by SDC. Panels A to D displays the mean of portfolios' CAR as classified by the legal system of the target firm's nation, whereas panels E to H display the differentials between these portfolios. T-statistics are reported in parentheses below each estimate. The sample size, *N* for each group is reported bellows the t-statistic. a, b, and c denotes significance level at 1%, 5%, and 10% respectively.

		All	Dom	CBA	AS (Inc. UK)	AS	French	German	Scandinavian	Socialist
Panel A: All Targets										
All	Mean	1.23%[a]	1.22%[a]	1.24%[a]	1.20%[a]	1.11%[a]	1.05%[a]	1.77%[a]	1.67%[a]	2.77%[b]
	t-stat	(13.66)	(10.98)	(8.13)	(12.17)	(5.28)	(3.52)	(4.51)	(2.70)	(2.23)
	N	6,634	4,262	2,372	5,474	1,212	702	266	114	61
Cash	Mean	1.06%[a]	1.11%[a]	0.98%[a]	1.06%[a]	0.92%[a]	0.68%[a]	1.55%[a]	1.94%[a]	1.15%[c]
	t-stat	(11.29)	(9.21)	(6.61)	(10.07)	(4.29)	(2.65)	(3.51)	(2.70)	(1.82)
	N	3,862	2,265	1,597	3,073	808	476	183	74	49
Stock	Mean	1.08%[c]	0.17%	4.98%[b]	0.80%	5.58%[b]	0.37%	5.32%[b]	-1.10%[b]	62.13%
	t-stat	(1.60)	(0.24)	(2.55)	(1.17)	(2.16)	(0.10)	(2.60)	(-20.95)	-
	N	355	188	67	326	38	16	8	2	1
Mixed / Other	Mean	1.53%[a]	1.55%[a]	1.49%[a]	1.46%[a]	1.06%[a]	1.95%[a]	1.94%[b]	1.28%	4.57%
	t-stat	(8.99)	(7.92)	(4.38)	(8.22)	(2.47)	(2.56)	(2.27)	(1.04)	(1.52)
	N	2,418	1,709	709	2,076	367	201	75	38	11
Panel B: Private Targets										
All	Mean	1.44%[a]	1.61%[a]	1.15%[a]	1.56%[a]	1.37%[a]	0.51%[a]	1.68%[a]	1.27%	3.00%
	t-stat	(11.41)	(10.07)	(5.55)	(10.81)	(4.13)	(1.83)	(2.93)	(1.46)	(1.30)
	N	3,600	2,312	1,288	2,937	625	427	149	52	28
Cash	Mean	1.00%[a]	1.14%[a]	0.83%[a]	1.13%[a]	1.11%[a]	0.22%	1.36%[b]	1.35%	0.64%
	t-stat	(6.89)	(5.92)	(3.73)	(6.66)	(3.12)	(0.64)	(2.08)	(1.35)	(0.73)
	N	1,737	975	762	1,327	352	258	96	31	21
Stock	Mean	3.46%[a]	2.08%	7.62%[b]	3.18%[a]	7.81%[b]	1.49%	0.11%	-	62.13%
	t-stat	(2.73)	(1.58)	(2.46)	(2.51)	(2.25)	(0.28)	(0.07)	-	-
	N	140	105	35	130	25	6	3	-	1
Mixed / Other	Mean	1.72%[a]	1.94%[a]	1.18%[a]	1.80%[a]	1.08%[b]	0.95%[b]	2.39%[b]	1.15%	1.42%
	t-stat	(8.91)	(8.36)	(3.39)	(8.38)	(1.96)	(2.01)	(2.06)	(0.72)	(0.77)
	N	1,723	1,232	491	1,480	248	163	50	21	6
Panel C: Public Targets										
All	Mean	-0.34%	-0.72%[b]	0.40%	-0.51%[c]	0.13%	0.98%	1.23%	-0.45%	1.53%
	t-stat	(-1.32)	(-2.18)	(1.05)	(-1.84)	(0.27)	(1.28)	(0.87)	(-0.19)	(0.82)
	N	755	494	261	663	169	56	19	11	6
Cash	Mean	0.50%[c]	0.43%	0.58%	0.40%	0.36%	0.68%	1.67%	1.04%	1.53%
	t-stat	(1.76)	(1.05)	(1.47)	(1.28)	(0.72)	(0.85)	(1.13)	(0.35)	(0.82)
	N	444	237	207	370	133	45	15	8	6
Stock	Mean	-2.14%[a]	-2.36%[a]	0.17%	-2.37%[a]	-2.49%	6.70%	6.70%	-1.20%	-
	t-stat	(-2.98)	(-3.13)	(0.07)	(-3.24)	(-0.78)	(1.01)	(4.43)	-	-
	N	149	136	13	144	8	2	2	1	-
Mixed / Other	Mean	-0.96%[c]	-1.13%[c]	-0.45%	-0.95%	-0.20%	1.20%	-5.77%	-6.05%	-
	t-stat	(-1.66)	(-1.69)	(-0.39)	(-1.58)	(-0.15)	(0.51)	(-0.84)	(-0.99)	-
	N	163	121	42	150	29	9	2	2	-
Panel D: Subsidiary Targets										
All	Mean	1.41%[a]	1.27%[a]	1.67%[a]	1.24%[a]	1.13%[a]	2.13%[a]	2.03%[a]	2.53%[a]	2.80%[c]
	t-stat	(9.67)	(7.56)	(6.08)	(8.44)	(3.75)	(2.80)	(3.63)	(2.75)	(1.94)
	N	2,279	1,456	823	1,874	418	219	98	51	27
Cash	Mean	1.26%[a]	1.24%[a]	1.29%[a]	1.17%[a]	0.95%[a]	1.38%[a]	1.79%[a]	2.67%[b]	1.53%
	t-stat	(9.39)	(7.49)	(5.66)	(8.01)	(3.04)	(3.05)	(2.75)	(2.53)	(1.46)
	N	1,681	1,053	628	1,376	323	173	72	35	22
Stock	Mean	3.27%[b]	3.21%[c]	3.42%	3.60%[b]	7.34%	-2.04%	10.78%[c]	-1.09%	-
	t-stat	(2.01)	(1.74)	(1.01)	(2.04)	(1.12)	(-0.31)	(4.00)	-	-
	N	66	47	19	52	5	8	3	1	-
Mixed / Other	Mean	1.66%[a]	1.09%[a]	2.82%[a]	1.16%[a]	1.41%[c]	6.44%[c]	1.62%	2.43%	8.36%
	t-stat	(4.02)	(2.63)	(3.06)	(3.18)	(1.89)	(1.79)	(1.61)	(1.23)	(1.35)
	N	532	356	176	446	90	38	23	15	5

Continued

Table 3:4 (Continued) – Differentials

		Domestic vs. CBA	AS (All) vs. AS (CB)	AS (All) vs. French	AS (All) vs. German	AS (CB) vs. French	AS (CB) vs. German	AS (CB) vs. Scandin.	AS (CB) vs. Socialist	French vs. German	French vs. Scandin.	French vs. Socialist
Panel E: All Targets												
All	Mean	-0.02%	0.09%	0.14%	-0.58%	0.06%	-0.66%	-0.56%	-1.66%	-0.72%	-0.61%	-1.71%
	t-stat	(-0.12)	(0.37)	(0.46)	(-1.42)	(0.16)	(-1.49)	(-0.85)	(-1.32)	(-1.46)	(-0.89)	(-1.34)
Cash	Mean	0.13%	0.14%	0.38%	-0.49%	0.24%	-0.63%	-1.02%	-0.23%	**-0.87%**[c]	**-1.26%**[c]	-0.47%
	t-stat	(0.69)	(0.58)	(1.37)	(-1.08)	(0.72)	(-1.28)	(-1.36)	(-0.34)	**(-1.70)**	**(-1.65)**	(-0.69)
Stock	Mean	**-4.82%**[b]	**-4.78%**[c]	0.42%	**-4.52%**[c]	5.21%	0.26%	**6.72%**[a]	-	-4.94%	1.52%	-
	t-stat	**(-2.33)**	**(-1.79)**	(0.11)	**(-2.10)**	(1.13)	(0.08)	**(2.61)**	-	(-1.15)	(0.40)	-
Mixed /Other	Mean	0.06%	0.40%	-0.49%	-0.48%	-0.89%	-0.88%	-0.22%	-3.52%	0.01%	0.67%	-2.63%
	t-stat	(0.15)	(0.86)	(-0.63)	(-0.55)	(-1.02)	(-0.92)	(-0.17)	(-1.16)	(0.09)	(0.47)	(-0.85)
Panel F: Private Targets												
All	Mean	**0.46%**[c]	0.19%	**1.04%**[a]	-0.12%	**0.85%**[b]	-0.31%	0.09%	-1.64%	**-1.17%**[c]	-0.76%	-2.49%
	t-stat	**(1.77)**	(0.53)	**(3.32)**	(-0.21)	**(1.97)**	(-0.47)	(0.10)	(-0.70)	**(-1.83)**	(-0.83)	(-1.07)
Cash	Mean	0.31%	0.02%	**0.91%**[b]	-0.23%	**0.89%**[c]	-0.25%	-0.24%	0.47%	-1.14%	-1.14%	-0.42%
	t-stat	(1.05)	(0.05)	**(2.43)**	(-0.34)	**(1.83)**	(-0.33)	(-0.23)	(0.50)	(-1.55)	(-1.08)	(-0.45)
Stock	Mean	**-5.54%**[c]	-4.63%	1.69%	3.07%	6.32%	**7.70%**[c]	-	-	1.38%	-	-
	t-stat	**(-1.64)**	(-1.25)	(0.31)	(1.45)	(1.01)	**(1.99)**	-	-	(0.25)	-	-
Mixed /Other	Mean	**0.76%**[c]	0.72%	**0.85%**[c]	-0.59%	0.13%	-1.31%	-0.07%	-0.35%	-1.44%	-0.21%	-0.48%
	t-stat	**(1.83)**	(1.21)	**(1.65)**	(-0.50)	(0.18)	(-1.02)	(-0.04)	(-0.18)	(-1.16)	(-0.12)	(-0.25)
Panel G: Public Targets												
All	Mean	**-1.12%**[b]	-0.64%	**-1.48%**[c]	-1.73%	-0.85%	-1.10%	0.58%	-1.40%	-0.25%	1.43%	-0.56%
	t-stat	**(-2.22)**	(-1.15)	**(-1.82)**	(-1.20)	(-0.94)	(-0.74)	-0.24	(-0.73)	(-0.16)	(0.56)	(-0.28)
Cash	Mean	-0.16%	0.04%	-0.28%	-1.26%	-0.32%	-1.31%	-0.68%	-1.17%	-0.99%	-0.36%	-0.85%
	t-stat	(-0.28)	(0.07)	(-0.32)	(-0.84)	(-0.34)	(-0.84)	(-0.22)	(-0.61)	(-0.59)	(-0.12)	(-0.42)
Stock	Mean	-2.53%	0.12%	-9.07%	**-7.31%**[b]	-9.19%	**-7.43%**[c]	-	-	1.76%	-	-
	t-stat	(-1.03)	(0.04)	(-1.36)	**(-5.48)**	(-1.25)	**(-2.19)**	-	-	(0.26)	-	-
Mixed /Other	Mean	-0.68%	-0.75%	-2.15%	4.81%	-1.40%	5.56%	5.85%	-	6.96%	7.25%	-
	t-stat	(-0.52)	(-0.50)	(-0.89)	(0.70)	(-0.52)	(0.79)	(0.93)	-	(0.96)	(1.11)	-
Panel H: Subsidiary Targets												
All	Mean	-0.40%	0.11%	-0.89%	-0.79%	-1.00%	-0.90%	-1.40%	-1.67%	0.11%	-0.40%	-0.67%
	t-stat	(-1.24)	(0.32)	(-1.15)	(-1.36)	(-1.22)	(-1.41)	(-1.44)	(-1.13)	(0.11)	(-0.33)	(-0.41)
Cash	Mean	-0.05%	0.22%	-0.20%	-0.62%	-0.42%	-0.84%	-1.72%	-0.58%	-0.41%	-1.30%	-0.16%
	t-stat	(-0.18)	(0.64)	(-0.43)	(-0.92)	(-0.77)	(-1.15)	(-1.56)	(-0.53)	(-0.52)	(-1.13)	(-0.14)
Stock	Mean	-0.22%	-3.74%	5.65%	**-7.17%**[c]	9.39%	-3.43%	-	-	**-12.82%**[c]	-	-
	t-stat	(-0.06)	(-0.55)	(0.83)	**(-2.22)**	(1.01)	(-0.48)	-	-	**(-1.81)**	-	-
Mixed /Other	Mean	**-1.72%**[c]	-0.26%	-5.28%	-0.47%	-5.02%	-0.21%	-1.02%	-6.94%	4.81%	4.01%	-1.92%
	t-stat	**(-1.71)**	(-0.31)	(-1.46)	(-0.44)	(-1.37)	(-0.17)	(-0.48)	(-1.12)	(1.29)	(0.98)	(-0.27)

Table 3:5 – CAR by Target Status, Payment Method and Legal System of Target Firm Nation (*Bidder and* Target are in the Same Industry)

This table presents 5-day (-2,+2) Cumulative Abnormal Returns (CAR) for all deals announced between 1986 and 2005. Abnormal returns are calculated using a modified market-adjusted model as in Fuller et al. (2002): $AR_{i,t}=r_{i,t} - r_{m,t}$ where $r_{i,t}$ is the return of the acquiring firm i in time period t and where $r_{m,t}$ is the value-weighted market index return (FT-All Share) in the period t. Acquirers are publicly traded firms listed in the London Stock Exchange. Targets are private, listed or subsidiaries, both domestic and foreign ones. *Bidders and targets are in the same industry.* The sample is divided according to the legal system of the target firm's country. In each type portfolios are further divided by the method of payment. 'Cash' includes transactions made by cash only. Stock offers are defined as transactions made by stock only. 'Mixed/Other' includes all other transactions financed with both cash and stock and/or methods classified as "other" by SDC. Panels A to D displays the mean of portfolios' CAR as classified by the legal system of the target firm's nation, whereas panels E to H display the differentials between these portfolios. T-statistics are reported in parentheses below each estimate. The sample size, *N*, for each group is reported bellows the t-statistic. a, b, and c denotes significance level at 1%, 5%, and 10% respectively.

		All	Dom	CBA	AS (Inc. UK)	AS	French	German	Scandinavian	Socialist
Panel A: All Targets										
All	Mean	1.27%[a]	1.21%[a]	1.38%[a]	1.23%[a]	1.29%[a]	1.10%[a]	1.98%[a]	1.92%[b]	2.28%[a]
	t-stat	(10.28)	(7.52)	(7.17)	(8.72)	(4.45)	(3.43)	(3.30)	(2.18)	(2.55)
	N	3,465	2,177	1,288	2,800	623	413	128	63	48
Cash	Mean	1.13%[a]	1.11%[a]	1.14%[a]	1.13%[a]	1.17%[a]	0.97%[a]	1.19%[c]	1.69%[c]	1.50%[b]
	t-stat	(8.56)	(6.47)	(5.60)	(7.49)	(3.77)	(2.78)	(1.89)	(1.75)	(2.05)
	N	2,019	1,173	846	1,567	394	282	89	38	38
Stock	Mean	0.75%	-0.08%	3.64%[c]	0.59%	4.74%[b]	-0.29%	10.78%[b]	-1.10%[b]	0.75%
	t-stat	(0.88)	(-0.08)	(1.90)	(0.67)	(2.06)	(-0.06)	(4.00)	(-20.95)	(0.88)
	N	184	143	41	166	23	11	3	2	184
Mixed / Other	Mean	1.59%[a]	1.56%[a]	1.64%[a]	1.48%[a]	1.13%[b]	1.53%[b]	3.22%[b]	2.56%	5.27%
	t-stat	(6.70)	(5.30)	(4.16)	(5.62)	(1.93)	(2.60)	(2.33)	(1.41)	(1.63)
	N	1,263	861	402	1,068	207	120	36	23	10
Panel B: Private Targets										
All	Mean	1.46%[a]	1.63%[a]	1.16%[a]	1.60%[a]	1.51%[a]	0.45%	1.77%[b]	1.77%	1.18%
	t-stat	(8.27)	(7.07)	(4.30)	(7.85)	(3.42)	(1.19)	(2.00)	(1.26)	(1.29)
	N	1,885	1,191	694	1,512	321	241	75	30	21
Cash	Mean	0.96%[a]	1.14%[a]	0.72%[b]	1.13%[a]	1.11%[b]	0.14%	0.99%	1.16%	0.87%
	t-stat	(4.62)	(4.01)	(2.40)	(4.62)	(2.30)	(0.31)	(1.04)	(0.70)	(0.83)
	N	910	512	398	679	167	146	49	17	16
Stock	Mean	3.15%[b]	1.92%	7.14%[b]	3.21%[b]	8.36%[b]	1.87%	-	-	-
	t-stat	(2.36)	(1.34)	(2.30)	(2.32)	(2.31)	(0.35)	-	-	-
	N	68	52	16	65	13	3	-	-	-
Mixed / Other	Mean	1.83%[a]	2.00%[a]	1.45%[a]	1.88%[a]	1.36%[c]	0.88%	3.23%[c]	2.55%	2.18%
	t-stat	(6.46)	(5.71)	(3.03)	(5.94)	(1.82)	(1.38)	(1.79)	(1.03)	(1.05)
	N	907	627	280	768	141	92	26	13	5
Panel C: Public Targets										
All	Mean	-0.56%	-1.41%[a]	0.80%	-0.89%[b]	0.42%	1.71%[c]	1.18%	-0.04%	1.53%
	t-stat	(-1.49)	(-2.84)	(1.49)	(-2.16)	(0.57)	(1.78)	(0.47)	(-0.02)	(0.82)
	N	371	227	144	318	91	35	7	5	6
Cash	Mean	0.51%	-0.03%	1.01%[c]	0.28%	0.76%	1.54%	1.18%	0.32%	1.53%
	t-stat	(1.27)	(-0.05)	(1.78)	(0.62)	(0.97)	(1.53)	(0.47)	(0.12)	(0.82)
	N	223	108	115	178	70	29	7	3	6
Stock	Mean	-2.64%[a]	-3.14%[a]	1.32%	-2.87%[a]	-0.03%	13.31%	-	1.20%	-
	t-stat	(-2.50)	(-2.75)	(0.56)	(-2.69)	(-0.01)	-	-	-	-
	N	80	71	9	78	7	1	-	1	-
Mixed / Other	Mean	-1.57%[c]	-1.98%[b]	-0.63%	-1.75%[b]	-1.01%	0.38%	-	0.07%	-
	t-stat	(-1.88)	(-2.07)	(-0.38)	(-1.96)	(-0.45)	(0.15)	-	-	-
	N	69	48	21	63	15	5	-	1	-
Panel D: Subsidiary Targets										
All	Mean	1.55%[a]	1.35%[a]	1.90%[a]	1.34%[a]	1.32%[a]	2.08%[a]	2.46%[a]	2.42%[c]	3.60%[b]
	t-stat	(8.08)	(5.56)	(6.02)	(6.37)	(3.13)	(3.21)	(3.14)	(1.90)	(2.06)
	N	1,209	759	450	970	211	137	46	28	21
Cash	Mean	1.45%[a]	1.31%[a]	1.69%[a]	1.33%[a]	1.40%[a]	1.94%[a]	1.48%[c]	2.41%[c]	2.11%
	t-stat	(7.87)	(5.79)	(5.33)	(6.53)	(3.01)	(3.24)	(1.82)	(1.87)	(1.70)
	N	886	553	333	710	157	107	33	18	16
Stock	Mean	3.76%	5.61%	1.44%	4.90%	0.19%	-3.16%	10.78%[b]	-	-
	t-stat	(1.53)	(1.63)	(0.41)	(1.63)	(0.22)	(-0.42)	(4.00)	-	-
	N	36	20	16	23	3	7	3	-	-
Mixed / Other	Mean	1.58%[a]	0.99%	2.65%[a]	1.02%[b]	1.12%	4.34%[a]	3.19%[c]	2.84%	8.36%
	t-stat	(3.25)	(1.60)	(3.47)	(1.92)	(1.13)	(2.93)	(1.80)	(0.91)	(1.35)
	N	287	186	101	237	51	23	10	9	5

Table 3:5 (Continued) – Differentials

		Domestic vs. CBA	AS (All) vs. AS (CB)	AS (All) vs. French	AS (All) vs. German	AS (CB) vs. French	AS (CB) vs. German	AS (CB) vs. Scandin.	AS (CB) vs. Socialist	French vs. German	French vs. Scandin.	French vs. Socialist
Panel E: All Targets												
All	Mean	-0.17%	-0.06%	0.13%	-0.75%	0.19%	-0.70%	-0.63%	-0.99%	-0.89%	-0.82%	-1.19%
	t-stat	(-0.66)	(-0.18)	(0.38)	(-1.22)	(0.44)	(-1.04)	(-0.68)	(-1.06)	(-1.30)	(-0.88)	(-1.25)
Cash	Mean	-0.03%	-0.04%	0.16%	-0.06%	0.20%	-0.02%	-0.52%	-0.33%	-0.22%	-0.72%	-0.53%
	t-stat	(-0.10)	(-0.11)	(0.42)	(-0.09)	(0.43)	(-0.03)	(-0.51)	(-0.42)	(-0.30)	(-0.70)	(-0.65)
Stock	Mean	**-3.72%**[c]	**-4.15%**[c]	0.88%	**-10.19%**[c]	5.03%	**-6.04%**	**5.88%**[b]	-	**-11.07%**[c]	0.85%	-
	t-stat	**(-1.74)**	**(-1.69)**	(0.17)	**(-3.59)**	(0.91)	**(-1.70)**	**(5.26)**	-	**(-1.94)**	(0.17)	-
Mixed /Other	Mean	-0.08%	0.35%	-0.05%	-1.74%	-0.40%	-2.09%	-1.43%	-4.14%	-1.69%	-1.03%	-3.74%
	t-stat	(-0.16)	(0.54)	(-0.07)	(-1.24)	(-0.48)	(-1.39)	(-0.75)	(-1.26)	(-1.13)	(-0.54)	(-1.14)
Panel F: Private Targets												
All	Mean	0.47%	0.09%	**1.16%**[a]	-0.16%	**1.07%**[c]	-0.25%	-0.25%	0.34%	-1.32%	-1.32%	-0.73%
	t-stat	(1.31)	(0.18)	**(2.71)**	(-1.18)	**(1.84)**	(-0.25)	(-0.17)	(0.33)	(-1.38)	(-0.91)	(-0.74)
Cash	Mean	0.42%	0.02%	**0.99%**[b]	0.14%	0.97%	0.12%	-0.05%	0.24%	-0.85%	-1.02%	-0.72%
	t-stat	(1.01)	(0.04)	**(1.90)**	(0.15)	(1.45)	(0.11)	(-0.03)	(0.21)	(-0.80)	(-0.60)	(-0.64)
Stock	Mean	-5.22%	-5.15%	1.34%	-	6.48%	-	-	-	-	-	-
	t-stat	(-1.53)	(-1.33)	(0.24)	-	(1.01)	-	-	-	-	-	-
Mixed /Other	Mean	0.55%	0.52%	1.00%	-1.34%	0.48%	-1.87%	-1.19%	-0.82%	-2.34%	-1.67%	-1.29%
	t-stat	(0.93)	(0.64)	(1.40)	(-0.73)	(0.48)	(-0.95)	(-0.46)	(-0.37)	(-1.22)	(-0.65)	(-0.60)
Panel G: Public Targets												
All	Mean	**-2.21%**[b]	-1.31%	**-2.60%**[a]	-2.07%	-1.30%	-0.76%	0.45%	-1.12%	0.54%	1.75%	0.18%
	t-stat	**(-3.03)**	(-1.56)	**(-2.49)**	(-0.81)	(-1.08)	(-0.29)	(0.27)	(-0.59)	(0.20)	(0.97)	(0.09)
Cash	Mean	-1.04%	-0.48%	-1.26%	-0.89%	-0.78%	-0.41%	0.45%	-0.77%	0.37%	1.23%	0.01%
	t-stat	(-1.30)	(-0.53)	(-1.13)	(-0.35)	(-0.61)	(-0.16)	(0.16)	(-0.38)	(0.13)	(0.42)	(0.01)
Stock	Mean	**-4.47%**[c]	-2.84%	-	-	-	-	-	-	-	-	-
	t-stat	**(-1.71)**	(-1.10)	-	-	-	-	-	-	-	-	-
Mixed /Other	Mean	-1.35%	-0.74%	-2.12%	-	-1.38%	-	-	-	-	-	-
	t-stat	(-0.70)	(-0.31)	(-0.79)	-	(-0.41)	-	-	-	-	-	-
Panel H: Subsidiary Targets												
All	Mean	-0.55%	0.02%	-0.74%	-1.12%	-0.76%	-1.14%	-1.11%	-2.28%	-0.38%	-0.34%	-1.52%
	t-stat	(-1.38)	(0.05)	(-1.09)	(-1.38)	(-0.99)	(-1.28)	(-0.82)	(-1.27)	(-0.37)	(-0.24)	(-0.81)
Cash	Mean	-0.38%	-0.07%	-0.61%	-0.15%	-0.53%	-0.08%	-1.01%	-0.71%	0.46%	-0.47%	-0.17%
	t-stat	(-0.97)	(-0.14)	(-0.96)	(-0.18)	(-0.70)	(-0.08)	(-0.74)	(-0.53)	(0.45)	(-0.33)	(-0.12)
Stock	Mean	4.16%	4.71%	8.06%	-5.88%	3.35%	**-10.58%**[b]	-	-	-13.94%	-	-
	t-stat	(0.85)	(1.51)	(1.00)	(-1.46)	(0.45)	**(-3.73)**	-	-	(-1.75)	-	-
Mixed /Other	Mean	**-1.66%**[c]	-0.10%	**-3.32%**[b]	-2.17%	**-3.22%**[c]	-2.07%	-1.72%	-7.24%	1.15%	1.50%	-4.01%
	t-stat	**(-1.69)**	(-0.09)	**(-2.11)**	(-1.17)	**(-1.81)**	(-1.02)	(-0.52)	(-1.16)	(0.50)	(0.43)	(-0.63)

Table 3:6 – CAR by Target Status, Payment Method and Legal System of Target Firm Nation (Bidder and Target are in Different Industries)

This table presents 5-day (-2,+2) Cumulative Abnormal Returns (CAR) for all deals announced between 1986 and 2005. Abnormal returns are calculated using a modified market-adjusted model as in Fuller et al. (2002): $AR_{i,t}=r_{i,t} - r_{m,t}$ where $r_{i,t}$ is the return of the acquiring firm i in time period t and where $r_{m,t}$ is the value-weighted market index return (FT-All Share) in the period t. Acquirers are publicly traded firms listed in the London Stock Exchange. Targets are private, listed or subsidiaries, both domestic and foreign ones. *Bidders and targets are in different industries*. The sample is divided according to the legal system of the target firm's country. In each type portfolios are further divided by the method of payment. 'Cash' includes transactions made by cash only. Stock offers are defined as transactions made by stock only. 'Mixed/Other' includes all other transactions financed with both cash and stock and/or methods classified as "other" by SDC. Panels A to D displays the mean of portfolios' CAR as classified by the legal system of the target firm's nation, whereas panels E to H display the differentials between these portfolios. T-statistics are reported in parentheses below each estimate. The sample size, *N*, for each group is reported bellows the t-statistic. a, b, and c denotes significance level at 1%, 5%, and 10% respectively.

		All	Dom	CBA	AS (Inc. UK)	AS	French	German	Scandinavian	Socialist
Panel A: All Targets										
All	Mean	1.18%[a]	1.23%[a]	1.09%[a]	1.16%[a]	0.93%[a]	0.99%[a]	1.58%[a]	1.36%	4.56%
	t-stat	(9.02)	(8.05)	(4.43)	(8.49)	(3.01)	(1.75)	(3.07)	(1.58)	(0.93)
	N	3,169	2,085	1,084	2,674	589	289	138	51	13
Cash	Mean	0.98%[a]	1.11%[a]	0.80%[a]	0.99%[a]	0.69%[a]	0.27%	1.90%[a]	2.21%[b]	-0.05%
	t-stat	(7.37)	(6.57)	(3.70)	(6.73)	(2.31)	(0.71)	(3.04)	(2.05)	(-0.04)
	N	1,843	1,092	751	1,506	414	194	94	36	11
Stock	Mean	1.42%	0.41%	7.10%[c]	1.01%	6.87%	1.84%	2.04%	-	62.13%
	t-stat	(1.35)	(0.41)	(1.75)	(0.97)	(1.22)	(0.32)	(1.32)	-	-
	N	171	145	26	160	15	5	5	-	1
Mixed / Other	Mean	1.47%[a]	1.53%[a]	1.29%[a]	1.44%[a]	0.97%	2.52%	0.75%	-0.69%	-2.35%
	t-stat	(5.99)	(5.99)	(2.18)	(6.08)	(1.54)	(1.58)	(0.75)	(-0.54)	-
	N	1,155	848	307	1,008	160	90	39	15	1
Panel B: Private Targets										
All	Mean	1.43%[a]	1.59%[a]	1.13%[a]	1.51%[a]	1.21%	0.60%	1.59%	0.60%	8.48%
	t-stat	(7.87)	(7.19)	(3.54)	(7.42)	(2.45)	(1.42)	(2.17)	(0.76)	(0.94)
	N	1,715	1,121	594	1,425	304	186	74	22	7
Cash	Mean	1.05%[a]	1.13%[a]	0.94%[a]	1.12%[a]	1.11%[b]	0.31%	1.74%[c]	1.58%	-0.09%
	t-stat	(5.18)	(4.46)	(2.87)	(4.81)	(2.13)	(0.64)	(1.93)	(1.57)	(-0.05)
	N	827	463	364	648	185	112	47	14	5
Stock	Mean	3.76%[c]	2.23%	8.02%	3.15%	7.22%	1.10%	0.11%	-	62.13%
	t-stat	(1.77)	(1.01)	(1.55)	(1.48)	(1.15)	(0.11)	(0.07)	-	-
	N	72	53	19	65	12	3	3	-	1
Mixed / Other	Mean	1.60%[a]	1.88%[a]	0.82%	1.70%[a]	0.71%	1.03%	1.48%	-1.12%	-2.35%
	t-stat	(6.17)	(6.19)	(1.63)	(5.96)	(0.87)	(1.48)	(1.04)	(-1.09)	-
	N	816	605	211	712	107	71	24	8	1
Panel C: Public Targets										
All	Mean	-0.12%	-0.14%	-0.10%	-0.15%	-0.21%	-0.25%	1.26%	-0.80%	-
	t-stat	(-0.36)	(-0.31)	(-0.18)	(-0.41)	(-0.34)	(-0.20)	(0.71)	(-0.18)	-
	N	384	267	117	345	78	21	12	6	-
Cash	Mean	0.49%	0.80%	0.05%	0.51%	-0.09%	-0.89%	2.09%	1.47%	-
	t-stat	(1.22)	(1.41)	(0.09)	(1.19)	(-0.15)	(-0.73)	(1.15)	(0.31)	-
	N	221	129	92	192	63	16	8	5	-
Stock	Mean	-1.56%[c]	-1.51%	-2.44%	-1.79%[c]	-19.71%	0.09%	4.94%	-	-
	t-stat	(-1.63)	(-1.56)	(-0.41)	(-1.80)	-	-	(4.43)	-	-
	N	69	65	4	66	1	1	2	-	-
Mixed / Other	Mean	-0.51%	-0.58%	-0.27%	-0.38%	0.66%	2.22%	-5.77%	-	-
	t-stat	(-0.64)	(-0.63)	(-0.17)	(-0.47)	(0.40)	(0.48)	(-0.84)	-	-
	N	94	73	21	87	14	4	2	-	-
Panel D: Subsidiary Targets										
All	Mean	1.26%[a]	1.18%[a]	1.39%[a]	1.13%[a]	0.94%[b]	2.21%	1.64%[b]	2.66%[c]	-0.01%
	t-stat	(5.63)	(5.11)	(2.95)	(5.53)	(2.17)	(1.28)	(2.06)	(1.96)	(-0.01)
	N	1,070	697	373	904	207	82	52	23	6
Cash	Mean	1.05%[a]	1.16%[a]	0.85%[a]	1.01%[a]	0.53%	0.47%	2.05%[b]	2.95%[c]	-0.01%
	t-stat	(5.35)	(4.79)	(2.57)	(4.77)	(1.25)	(0.70)	(2.06)	(1.70)	(-0.01)
	N	795	500	295	666	166	66	39	17	6
Stock	Mean	2.68%	1.43%	13.98%	2.58%	18.10%	0.09%	-	-	-
	t-stat	(1.31)	(0.73)	(1.43)	(1.21)	(1.17)	-	-	-	-
	N	30	27	3	29	2	1	-	-	-
Mixed / Other	Mean	1.76%[a]	1.20%[b]	3.03%	1.31%[a]	1.79%	9.64%	0.42%	1.81%	-
	t-stat	(2.53)	(2.20)	(1.59)	(2.67)	(1.56)	(1.08)	(0.38)	(0.95)	-
	N	245	170	75	209	39	15	13	6	-

Table 3:6 (Continued) – Differentials

		Domestic vs. CBA	AS (All) vs. AS (CB)	AS (All) vs. French	AS (All) vs. German	AS (CB) vs. French	AS (CB) vs. German	AS (CB) vs. Scandin.	AS (CB) vs. Socialist	French vs. German	French vs. Scandin.	French vs. Socialist
Panel E: All Targets												
All	Mean	0.15%	0.24%	0.17%	-0.42%	-0.07%	-0.66%	-0.44%	-3.63%	-0.59%	-0.37%	-3.57%
	t-stat	(0.50)	(0.71)	(0.29)	(-0.78)	(-0.11)	(-1.09)	(-0.48)	(-0.74)	(-0.77)	(-0.36)	(-0.72)
Cash	Mean	0.31%	0.30%	0.73%[c]	-0.91%	0.43%	-1.21%[c]	-1.52%	0.74%	-1.63%[b]	-1.95%[c]	0.31%
	t-stat	(1.14)	(0.90)	(1.80)	(-1.41)	(0.89)	(-1.74)	(-1.36)	(0.57)	(-2.24)	(-1.70)	(0.23)
Stock	Mean	-6.69%[c]	-5.86%	-0.83%	-1.03%	5.03%	4.83%	-	-	-0.20%	-	-
	t-stat	(-1.71)	(-1.02)	(-0.14)	(-0.55)	(0.62)	(0.83)	-	-	(-0.03)	-	-
Mixed /Other	Mean	0.25%	0.47%	-1.07%	0.69%	-1.55%	0.21%	1.65%	-	1.76%	3.20%	-
	t-stat	(0.38)	(0.70)	(-0.67)	(0.66)	(-0.90)	(0.18)	(1.17)	-	(0.93)	(1.57)	-
Panel F: Private Targets												
All	Mean	0.46%	0.30%	0.91%[b]	-0.09%	0.61%	-0.38%	0.61%	-7.27%	-0.99%	0.00%	-7.88%
	t-stat	(1.19)	(0.56)	(1.95)	(-0.11)	(0.94)	(-0.43)	(0.66)	(-0.80)	(-1.17)	(0.00)	(-0.87)
Cash	Mean	0.19%	0.02%	0.81%	-0.62%	0.80%	-0.63%	-0.47%	1.19%	-1.43%	-1.27%	0.40%
	t-stat	(0.45)	(0.03)	(1.50)	(-0.66)	(1.12)	(-0.61)	(-0.42)	(0.66)	(-1.39)	(-1.13)	(0.22)
Stock	Mean	-5.79%	-4.06%	2.00%	3.04%	6.10%	7.10%	-	-	1.00%	-	-
	t-stat	(-1.03)	(-0.61)	(0.19)	(1.11)	(0.50)	(1.09)	-	-	(0.09)	-	-
Mixed /Other	Mean	1.06%[c]	1.00%	0.68%	0.22%	-0.32%	-0.78%	1.83%	-	-0.46%	2.15%[c]	-
	t-stat	(1.81)	(1.15)	(0.90)	(0.15)	(-0.30)	(-0.47)	(1.39)	-	(-0.29)	(1.73)	-
Panel G: Public Targets												
All	Mean	-0.04%	0.05%	0.10%	-1.41%	0.05%	-1.46%	0.60%	-	-1.51%	0.55%	-
	t-stat	(-0.06)	(0.08)	(0.08)	(-0.78)	(0.03)	(-0.78)	(0.13)	-	(-0.70)	(0.12)	-
Cash	Mean	0.76%	0.60%	1.40%	-1.58%	0.80%	-2.18%	-1.56%	-	-2.99%	-2.36%	-
	t-stat	(0.97)	(0.83)	(1.08)	(-0.84)	(0.59)	(-1.14)	(-0.33)	-	(-1.36)	(-0.48)	-
Stock	Mean	0.93%	-	-	-6.73%[b]	-	-	-	-	-	-	-
	t-stat	(0.16)	-	-	(-4.51)	-	-	-	-	-	-	-
Mixed /Other	Mean	-0.31%	-1.03%	-2.60%	5.39%	-1.57%	6.42%	-	-	7.99%	-	-
	t-stat	(-0.17)	(-0.56)	(-0.55)	(0.78)	(-0.32)	(0.91)	-	-	(0.97)	-	-
Panel H: Subsidiary Targets												
All	Mean	-0.21%	0.19%	-1.08%	-0.52%	-1.27%	-0.71%	-1.72%	0.95%	0.57%	-0.45%	2.22%
	t-stat	(-0.40)	(0.40)	(-0.62)	(-0.63)	(-0.72)	(-0.78)	(-1.21)	(0.47)	(0.30)	(-0.20)	-0.85
Cash	Mean	0.32%	0.48%	0.54%	-1.05%	0.06%	-1.52%	-2.43%	0.54%	-1.58%	-2.49%	0.48%
	t-stat	(0.78)	(1.01)	(0.77)	(-1.03)	(0.08)	(-1.41)	(-1.36)	(0.27)	(-1.32)	(-1.34)	(0.23)
Stock	Mean	-12.55%	-15.50%	-	-	-	-	-	-	-	-	-
	t-stat	(-1.26)	(-1.00)	-	-	-	-	-	-	-	-	-
Mixed /Other	Mean	-1.84%	-0.49%	-8.34%	0.89%	-7.85%	1.38%	-0.02%	-	9.23%	7.83%	-
	t-stat	(-0.93)	(-0.39)	(-0.93)	(0.75)	(-0.87)	(0.87)	(-0.01)	-	(1.02)	(0.86)	-

Table 3:7 – Announcement Period Gains of Bidders by the Legal Family, Legal System, and Deal Features

The table presents 5-day (-2, +2) Cumulative Abnormal Returns (in percent) of sample bidders by relative size of the deal which is the ratio of the deal value divided by the market value of acquirer one month prior to the announcement of deal (panel A), size of the bidder one month prior to the announcement of the deal (panel B), growth opportunities of bidders which is the MTBV as estimated by dividing the market value of acquirer by its book value one month prior to the deal announcement (panel C), age of the bidder as calculated as the number of days between the announcement day and the bidding firm's birth (panel D), and industry affiliation of bidder and target which is defined by using two-digit SIC codes of bidders and acquirers (panel E). The gains are reported by the legal family and legal system of target firm's nation. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. a, b, c denote statistical significance at the 1, 5 and 10 percent levels respectively. *N* denotes the number of deals in each portfolio. The final columns in the panel show the differentials in the gains from acquisitions of domestic and cross-border targets as well as of portfolios of domestic and each of the legal families of target firms (i.e. civil-law and common-law). F-statistics in the last row of each panel test the null of all means are equal against the alternative of at least one is different.

	All	Domestic	Cross-Border	Commom	Civil	French	German	Sandinavian	Socialist	Domestic vs. Cross-Border	Domestic vs. Common	Domestic vs. Civil	Common vs. Civil
Panel A: Relative Size of the deal													
Low	0.58%[a]	0.52%[a]	0.47%[a]	0.58%[b]	0.10%	-0.23%	1.28%[c]	0.34%	1.39%[c]	0.05%	-0.06%	0.42%	0.48%
N	2,211	1,420	790	404	360	234	88	38	20				
Medium	1.14%[a]	1.27%[a]	1.06%[a]	1.04%[a]	1.36%[a]	1.30%[a]	1.27%[b]	2.51%[a]	0.66%	0.21%	0.22%	-0.10%	-0.30%
N	2,212	1,421	791	404	361	234	89	38	21				
High	1.96%[a]	1.88%[a]	2.20%[a]	1.71%[a]	2.42%[a]	2.09%[a]	2.79%[a]	2.15%[c]	6.35%[c]	-0.30%	0.17%	-0.50%	-0.70%
N	2,211	1,421	791	404	361	234	89	38	20				
F-statistic	19.94[a]	12.48[a]	11.07[a]	2.45[c]	8.94[a]	5.26[a]	1.68	1.18	2.14				
Panel B: Size of the bidding firm													
Low	2.06%[a]	2.00%[a]	1.98%[a]	1.45%[a]	2.10%[a]	1.69%[b]	2.89%[a]	2.83%[a]	4.88%	0.02%	0.55%	-0.10%	-0.60%
N	2,212	1,420	790	404	360	233	88	38	20				
Medium	0.89%[a]	1.19%[a]	0.98%[a]	1.20%[a]	0.78%[b]	0.82%[b]	0.87%	1.32%	2.72%[c]	0.21%	-0.01%	0.41%	0.42%
N	2,210	1,421	791	404	361	235	89	38	21				
High	0.65%[a]	0.47%[a]	0.78%[a]	0.68%[a]	1.01%[a]	0.65%[c]	1.58%[b]	0.85%	0.70%	-0.30%	-0.20%	-0.50%[c]	-0.30%
N	2,212	1,421	791	404	361	234	89	38	20				
F-statistic	22.38[a]	15.87[a]	5.90[a]	1.16	3.23[b]	1.15	2.29[c]	0.93	0.92				
Panel C: MTBV of the bidding firm													
Low	1.69%[a]	1.57%[a]	1.70%[a]	1.25%[a]	1.84%[a]	1.78%[b]	1.99%[a]	2.85%[a]	6.13%[c]	-0.10%	0.32%	-0.30%	-0.60%
N	2,204	1,419	791	403	359	234	86	37	20				
Medium	0.92%[a]	1.02%[a]	0.93%[a]	0.63%[c]	1.30%[a]	0.85%[b]	1.36%[b]	1.93%[c]	1.33%	0.08%	0.39%	-0.30%	-0.70%
N	2,224	1,424	792	404	363	235	92	39	21				
High	1.09%[a]	1.08%[a]	1.10%[a]	1.46%[a]	0.74%[b]	0.53%	1.99%[b]	0.25%	0.91%	-0.02%	-0.40%	0.33%	0.71%
N	2,206	1,419	789	405	360	233	88	38	20				
F-statistic	6.70[a]	2.48[c]	2.33[c]	1.39	1.95	1.57	0.28	1.52	1.85				

Continued

Table 3:7 – Continued

	All	Domestic	Cross-Border	Commom	Civil	French	German	Sandinavian	Socialist	Domestic vs. Cross-Border	Domestic vs. Common	Domestic vs. Civil	Common vs. Civil
Panel D: Age of the bidding firm													
Low	1.34%[a]	1.16%[a]	1.65%[a]	1.33%[a]	1.68%[a]	1.26%[a]	2.97%[a]	1.34%	5.21%	-0.50%	-0.17%	-0.50%	-0.40%
N	2,211	1,420	790	404	360	234	88	38	20				
Medium	1.36%[a]	1.63%[a]	1.04%[a]	1.10%[a]	1.02%[b]	1.05%[c]	0.36%	2.31%[b]	2.13%	0.60%[c]	0.50%	0.61%	0.08%
N	2,211	1,422	790	404	361	234	89	38	21				
High	0.99%[a]	0.88%[a]	1.04%[a]	0.90%[a]	1.18%[a]	0.85%[b]	2.00%[a]	1.35%	1.00%	-0.20%	-0.03%	-0.30%	-0.30%
N	2,212	1,420	790	404	361	234	89	38	20				
F-statistic	1.79	3.92[b]	1.80	0.34	0.78	0.16	3.82[b]	0.27	1.01				
Panel E: Industry affiliation of bidder and target													
Focused	1.27%[a]	1.21%[a]	1.38%[a]	1.29%[a]	1.40%[a]	1.10%[a]	1.98%[a]	1.92%[b]	2.28%[b]	-0.20%	-0.07%	-0.20%	-0.08%
N	3,465	2,177	1,288	623	604	413	128	63	48				
Diversifying	1.18%[a]	1.23%[a]	1.08%[a]	0.92%[a]	1.20%[a]	0.99%[c]	1.58%[a]	1.36%	5.46%	0.15%	0.31%	0.03%	-0.30%
N	3,169	2,085	1,084	589	478	289	138	51	13				
Differential	0.09%	-0.02%	0.29%	0.36%	0.17%	0.10%	0.40%	0.56%	-2.30%				

Table 3:8 – Determinants of Announcement Period Gains of Bidders: Cross Section Analysis

Estimates of cross-section determinants of announcement period gains of acquirers are reported. Announcement period (5-days) excess returns of bidders are regressed against a set of explanatory variables. Equation (3) is estimated using ordinary least square and standard errors are corrected for heteroscedasticity.

$$CAR_i = \alpha + \sum_{i=1}^{N} X_i + \varepsilon_i \quad (3)$$

The intercept (α) measures the excess return to bidders after accounting for the effects of all explanatory variables. The vector of explanatory variables 'X' includes acquirer's age on the day of bid announcement (log), acquirer's market value one month prior to the announcement of deal (log), relative size of the deal measured as the deal value divided by acquirer's market value, bidder's growth opportunity (ratio of market to book value of equity of acquirer one month prior to the acquisition announcement), and deal value (log). Dummy variables, that take the value of one and zero otherwise, are included to represent cross-border deals, diversifying deals (i.e. target and acquirer do not have the same 2-digit SIC), target status and cash only and stock only deals. Further, dummies representing the legal origin of targets' nation are also included where appropriate. The model is estimated for the entire sample (panels A:1 – using the relative size variable and A:2 – using the size of the bidder and the deal value independently), domestic deals only (panel B:1) and cross-border deals only (panel B:2). Panel C report also estimates for acquisitions conducted with solely foreign target firms although in this panel I conduct further analysis as to examine the influence of the various legal traditions across the world on the bidding firm's CAR (I include in my models dummy variables, where necessary, classified by the legal origin of the target firm's nation). a indicates significance at 1% level, b indicates significance at 5% level, while c indicates significance at 10% level.

Continued

Table 3:8 (Continued) – Panel A:1

Dependent Variable: CAR	Model1	Model2	Model3	Model4	Model5	Model6	Model7	Model8	Model9	Model10
Intercept	0.0187[a]	0.0138[b]	0.0174[a]	0.0184[a]	0.0189[a]	0.0208[a]	0.0176[a]	0.0160[b]	0.0194[a]	0.0185[a]
	(2.84)	(2.03)	(2.65)	(2.78)	(2.87)	(3.13)	(2.55)	(2.33)	(2.92)	(2.80)
Log (Age)	-0.0011	-0.0008	-0.0007	-0.0012	-0.0014[c]	-0.0012	-0.0008	-0.0010	-0.0006	-0.0008
	(-1.34)	(-1.01)	(-0.84)	(-1.44)	(-1.77)	(-1.53)	(-1.04)	(-1.21)	(-0.73)	(-0.96)
Acquiror's MTBV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(0.64)	(0.58)	(0.59)	(0.66)	(0.58)	(0.66)	(0.54)	(0.60)	(0.53)	(0.60)
Relative Size	0.0106[a]	0.0109[a]	0.0117[a]	0.0106[a]	0.0104[a]	0.0111[a]	0.0112[a]	0.0114[a]	0.0118[a]	0.0120[a]
	(6.60)	(6.79)	(7.29)	(6.59)	(6.44)	(6.88)	(6.90)	(7.04)	(7.26)	(7.39)
Dummy=1 (foreign target)	0.0017	0.0016	0.0016	0.0017	0.0020	0.0013	0.0016	0.0013	0.0017	0.0014
	(0.87)	(0.85)	(0.82)	(0.88)	(1.03)	(0.68)	(0.85)	(0.67)	(0.91)	(0.72)
Dummy=1 (diff industry)	-0.0005	-0.0006	-0.0004	-0.0005	-0.0006	-0.0005	-0.0006	-0.0006	-0.0004	-0.0004
	(-0.29)	(-0.33)	(-0.21)	(-0.26)	(-0.32)	(-0.28)	(-0.34)	(-0.32)	(-0.24)	(-0.21)
Dummy=1 (private target)		0.0052[a]					0.0041[b]	0.0049[a]		
		(2.85)					(2.17)	(2.71)		
Dummy=1 (public target)			-0.0195[a]						-0.0182[a]	-0.0187[a]
			(-6.86)						(-6.28)	(-6.45)
Dummy=1 (subsidiary target)				0.0030[c]						
				(1.68)						
Dummy=1 (payment with cash)					-0.0055[a]		-0.0037[c]		-0.0039[b]	
					(-2.97)		(-1.84)		(-1.99)	
Dummy=1 (payment with stock)						-0.0092[a]	-0.0109[a]	-0.0087[a]	-0.0071[b]	-0.0047
						(-2.70)	(-3.03)	(-2.55)	(-1.98)	(-1.37)
F-Statisric	9.58[a]	9.35[a]	15.88[a]	8.40[a]	8.34[a]	9.21[a]	8.26[a]	8.95[a]	12.65[a]	13.88[a]
R-Square (in percent)	0.72%	0.84%	1.42%	0.75%	0.75%	0.83%	0.99%	0.94%	1.50%	1.45%
N	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634

Continued

Table 3:8 (Continued) – Panel A:2

Dependent Variable: CAR	Model1	Model2	Model3	Model4	Model5	Model6	Model7	Model8	Model9	Model10
Intercept	0.0281[a]	0.0247[a]	0.0271[a]	0.0277[a]	0.0281[a]	0.0307[a]	0.0281[a]	0.0274[a]	0.0289[a]	0.0286[a]
	(4.31)	(3.65)	(4.16)	(4.24)	(4.31)	(4.65)	(4.09)	(4.01)	(4.38)	(4.35)
Log (Age)	0.0005	0.0006	0.0006	0.0004	0.0005	0.0004	0.0005	0.0005	0.0005	0.0005
	(0.61)	(0.70)	(0.68)	(0.52)	(0.64)	(0.45)	(0.60)	(0.54)	(0.65)	(0.59)
Log (Acquiror's Size)	-0.0050[a]	-0.0049[a]	-0.0050[a]	-0.0050[a]	-0.0049[a]	-0.0052[a]	-0.0050[a]	-0.0051[a]	-0.0050[a]	-0.0051[a]
	(-7.94)	(-7.89)	(-8.07)	(-8.01)	(-7.67)	(-8.22)	(-7.85)	(-8.15)	(-7.90)	(-8.20)
Log (Deal Value)	0.0019[a]	0.0022[a]	0.0033[a]	0.0019[a]	0.0019[a]	0.0021[a]	0.0023[a]	0.0024[a]	0.0033[a]	0.0033[a]
	(2.75)	(3.12)	(4.54)	(2.67)	(2.67)	(3.03)	(3.15)	(3.36)	(4.44)	(4.60)
Acquiror's MTBV	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	(0.99)	(0.93)	(0.89)	(1.03)	(0.97)	(1.02)	(0.92)	(0.96)	(0.87)	(0.91)
Dummy=1 (foreign target)	0.0051[a]	0.0049[b]	0.0044[b]	0.0052[a]	0.0052[a]	0.0048[b]	0.0047[b]	0.0046[b]	0.0043[b]	0.0042[b]
	(2.58)	(2.46)	(2.20)	(2.63)	(2.60)	(2.43)	(2.38)	(2.32)	(2.18)	(2.14)
Dummy=1 (same industry)	-0.0012	-0.0011	-0.0007	-0.0011	-0.0012	-0.0011	-0.0011	-0.0011	-0.0007	-0.0007
	(-0.64)	(-0.62)	(-0.39)	(-0.61)	(-0.64)	(-0.62)	(-0.62)	(-0.60)	(-0.40)	(-0.39)
Dummy=1 (private target)		0.0036[c]					0.0029[c]	0.0033[c]		
		(1.91)					(1.67)	(1.77)		
Dummy=1 (public target)			-0.0187[a]						-0.0175[a]	-0.0177[a]
			(-6.24)						(-5.70)	(-5.79)
Dummy=1 (subsidiary target)				0.0038[b]						
				(2.01)						
Dummy=1 (payment with cash)					-0.0034[c]		-0.0019		-0.0017	
					(-1.77)		(-0.90)		(-0.85)	
Dummy=1 (payment with stock)						-0.0094[a]	-0.0102[a]	-0.0091[a]	-0.0064[c]	-0.0054[c]
						(-2.78)	(-2.83)	(-2.69)	(-1.75)	(-1.66)
F-Statisric	11.49[a]	10.37[a]	15.46[a]	10.43[a]	9.87[a]	10.96[a]	8.97[a]	9.99[a]	12.38[a]	13.83[a]
R-Square (in percent)	1.03%	1.08%	1.61%	1.09%	1.03%	1.14%	1.20%	1.19%	1.65%	1.64%
N	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634

Continued

Table 3:8 (Continued) – Panel B

	Panel B:1 - Domestic Deals						Panel B:2 - Cross-Border Deals					
Dependent Variable: CAR	Model1	Model2	Model3	Model4	Model5	Model6	Model7	Model8	Model9	Model10	Model11	Model12
Intercept	0.0255[a]	0.0297[a]	0.0324[a]	0.0191[a]	0.0237[a]	0.0262[a]	0.0346[a]	0.0293[b]	0.0296[a]	0.0043	0.0021	0.0028
	(3.09)	(3.78)	(4.11)	(2.30)	(2.99)	(3.30)	(2.72)	(2.39)	(2.41)	(0.35)	(0.17)	(0.23)
Log (Age)	0.0006	0.0006	0.0004	-0.0010	-0.0008	-0.0012	0.0008	0.0008	0.0008	0.0003	0.0006	0.0002
	(0.59)	(0.63)	(0.43)	(-1.00)	(-0.82)	(-1.29)	(0.53)	(0.50)	(0.50)	(0.22)	(0.41)	(0.16)
Log (Acquiror's Size)	-0.0048[a]	-0.0050[a]	-0.0047[a]				-0.0058[a]	-0.0056[a]	-0.0057[a]			
	(-6.11)	(-6.26)	(-5.95)				(-5.37)	(-5.18)	(-5.32)			
Log (Deal Value)	0.0017[c]	0.0028[a]	0.0010				0.0033[a]	0.0041[a]	0.0035[a]			
	(1.88)	(2.92)	(1.12)				(2.82)	(3.47)	(2.99)			
Acquiror's MTBV	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	0.0002[b]	0.0002[b]	0.0002[b]	0.0002[b]	0.0002[b]	0.0002[b]
	(-0.70)	(-0.62)	(-0.60)	(-1.08)	(-1.00)	(-0.98)	(2.31)	(2.24)	(2.26)	(2.28)	(2.25)	(2.24)
Relative Size				0.0028[c]	0.0033[c]	0.0023				0.0595[a]	0.0601[a]	0.0594[a]
				(1.61)	(1.88)	(1.33)				(14.62)	(14.78)	(14.62)
Dummy=1 (same industry)	0.0001	0.0007	0.0000	0.0006	0.0009	0.0006	-0.0025	-0.0024	-0.0025	-0.0028	-0.0029	-0.0027
	(0.06)	(0.29)	(0.02)	(0.26)	(0.40)	(0.27)	(-0.82)	(-0.78)	(-0.80)	(-0.93)	(-0.98)	(-0.91)
Dummy=1 (private target)	0.0068[a]			0.0070[a]			-0.0043			-0.0010		
	(2.79)			(2.99)			(-1.30)			(-0.33)		
Dummy=1 (public target)		-0.0207[a]			-0.0199[a]			-0.0083[c]			-0.0120[a]	
		(-5.36)			(-5.47)			(-1.61)			(-2.55)	
Dummy=1 (subsidiary target)			0.0014			0.0013			0.0075[b]			0.0063[b]
			(0.57)			(0.54)			(2.31)			(2.02)
Dummy=1 (payment with cash)	-0.0010	-0.0022	-0.0034	-0.0035	-0.0048[b]	-0.0059[b]	-0.0017	-0.0002	-0.0019	-0.0008	0.0003	-0.0015
	(-0.41)	(-0.90)	(-1.37)	(-1.40)	(-1.99)	(-2.38)	(-0.47)	(-0.05)	(-0.53)	(-0.23)	(0.08)	(-0.44)
Dummy=1 (payment with stock)	-0.0171[a]	-0.0128[a]	-0.0188[a]	-0.0163[a]	-0.0121[a]	-0.0183[a]	0.0187[b]	0.0202[a]	0.0189[b]	1.01%	1.12%	0.98%
	(-4.21)	(-3.07)	(-4.70)	(-4.00)	(-2.89)	(-4.55)	(2.42)	(2.62)	(2.45)	(1.35)	(1.50)	(1.31)
F-Statisric	8.76[a]	11.41[a]	7.82[a]	4.87[a]	7.89[a]	3.63[a]	6.14[a]	6.26[a]	6.61[a]	33.69[a]	34.69[a]	34.31[a]
R-Square (in percent)	1.62%	2.10%	1.45%	0.80%	1.28%	0.59%	2.04%	2.07%	2.19%	9.07%	9.32%	9.22%
N	4,262	4,262	4,262	4,262	4,262	4,262	2,372	2,372	2,372	2,372	2,372	2,372

Continued

Table 3:8 (Continued) – Panel C

Dependent Variable: CAR	Model1	Model2	Model3	Model4	Model5	Model6	Model7	Model8	Model9
Intercept	0.0240[a]	0.0267[a]	0.0272[a]	0.0241[a]	0.0267[a]	0.0272[a]	0.0236[a]	0.0264[a]	0.0269[a]
	(3.53)	(4.07)	(4.16)	(3.56)	(4.06)	(4.16)	(3.48)	(4.03)	(4.11)
Log (Age)	0.0007	0.0006	0.0006	0.0007	0.0006	0.0005	0.0007	0.0006	0.0006
	(0.73)	(0.72)	(0.62)	(0.73)	(0.72)	(0.62)	(0.78)	(0.77)	(0.67)
Log (Acquiror's Size)	-0.0046[a]	-0.0047[a]	-0.0045[a]	-0.0047[a]	-0.0048[a]	-0.0046[a]	-0.0046[a]	-0.0048[a]	-0.0046[a]
	(-7.37)	(-7.73)	(-7.26)	(-7.51)	(-7.82)	(-7.41)	(-7.47)	(-7.85)	(-7.35)
Log (Deal Value)	0.0023[a]	0.0033[a]	0.0017[b]	0.0023[a]	0.0033[a]	0.0018[a]	0.0023[a]	0.0034[a]	0.0018[a]
	(3.09)	(4.53)	(2.48)	(3.16)	(4.59)	(2.59)	(3.19)	(4.62)	(2.58)
Acquiror's MTBV	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001	0.0001
	(0.96)	(0.91)	(1.03)	(0.96)	(0.91)	(1.02)	(1.01)	(0.95)	(1.07)
Dummy=1 (same industry)	-0.0012	-0.0001	-0.0013	-0.0011	-0.0007	-0.0011	-0.0011	0.0006	-0.0011
	(-0.68)	(-0.44)	(-0.69)	(-0.62)	(-0.41)	(-0.62)	(-0.56)	(-0.33)	(-0.57)
Dummy=1 (the target operates in the common law system)	0.0018	0.0018	0.0021						
	(0.74)	(0.76)	(0.87)						
Dummy=1 (the target operates in the Civil law system)				0.0041[c]	0.0033	0.0045[c]			
				(1.71)	(1.34)	(1.82)			
Dummy=1 (the target operates in the Socialist legal system)							0.0213[b]	0.0207[b]	0.0210[b]
							(2.26)	(2.21)	(2.22)
Dummy=1 (private target)	0.0041[b]			0.0038[b]			0.0041[b]		
	(2.04)			(1.95)			(2.08)		
Dummy=1 (public target)		-0.0191[a]			-0.0189[a]			-0.0191[a]	
		(-6.22)			(-6.13)			(-6.21)	
Dummy=1 (subsidiary target)			0.0041[b]			0.0041[b]			0.0039[b]
			(2.07)			(2.09)			(2.02)
Dummy=1 (payment with cash)	0.0083		-0.0014	0.0003		-0.0015	0.0004		-0.0014
	(0.21)		(-0.71)	(0.15)		(-0.76)	(0.19)		(-0.72)
Dummy=1 (payment with stock)		0.0002			0.0002			0.0001	
		(0.04)			(0.05)			(0.03)	
F-Stat	8.39[a]	12.98[a]	8.40[a]	8.65[a]	13.14[a]	8.72[a]	8.96[a]	13.53[a]	8.93[a]
R-Square (in percent)	1.00%	1.54%	1.00%	1.03%	1.56%	1.04%	1.07%	1.61%	1.07%
N	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634	6,634

Table 3:9 – Long-term Performance of Acquirers

This table reports OLS estimates of monthly abnormal returns (in percent), measured by alpha of equation (2), from portfolios comprising of all acquisitions for 1-year, 3 years, and 5-years post event holding periods. Excess returns are estimated using calendar time regressions for each portfolio. Acquirers enter the portfolio on the month following the announcement and remain for 12, 36 or 60 months. This table contains 8 panels. Panels A to D represents post-merger gains of acquisitions of targets (entire sample, private, public, and subsidiary acquisitions only) operating within the domestic and in cross-border market across countries subject to different legal systems. Panels E to G reports post-merger gains of acquisitions financed with cash, stock, and mixed methods of payments. Lastly, panel H reports gains from acquisitions in the socialist legal system. In each panel, differences in post-acquisition gains from domestic deals and CBA, domestic vs. common-law, domestic vs. civil-law, and domestic vs. socialist countries are reported. Portfolios are rebalanced each month to include firms that just announced a deal. The monthly abnormal returns are measured by intercepts in equation (2):

$$R_{p,t} - R_{f,t} = a_p + \beta_p(R_{m,t} - R_{f,t}) + s_p SMB_t + h_p HML_t + \varepsilon_{p,t} \quad (2)$$

The monthly abnormal return differentials are intercepts in equation (2A):

$$R_{p(domestic),t} - R_{p(cross-border),t} = a_p + \beta_p(R_{m,t} - R_{f,t}) + s_p SMB_t + h_p HML_t + \varepsilon_{p,t} \quad (2A)$$

where $R_{p,t}$ is the calendar time portfolio return, $R_{f,t}$ is the return on a one month T-bill during month t, SMB is the difference in returns of value weighted portfolios of small firms and big firms during month t, HML is the return differential of value weighted portfolios of high and low book-to-market firms in month t, β_p, s_p and h_p are regression parameters specific to the portfolio and $e_{p,t}$ is the error term. Heteroscedasticity is corrected by using the Heteroscedasticity Consistent Standard Errors. a, b, or c indicate significance at the 1, 5, 10 percent level respectively.

	1 Year								3 Years								5 Years							
	Emtire Sample	Dom	CBA	Common-law	Civil-law	Dom. Vs CBA	Dom. Vs Comm	Dom. Vs Civil	Emtire Sample	Dom	CBA	Common-law	Civil-law	Dom. Vs CBA	Dom. Vs Common	Dom. Vs Civil	Emtire Sample	Dom	CBA	Common-law	Civil-law	Dom. Vs CBA	Dom. Vs Common	Dom. Vs Civil
Panel A: Entire Sample																								
Constant	0.0038[b]	0.0062[a]	0.0031[c]	0.0038[c]	0.0032	0.0031[c]	0.0023	0.0034[c]	0.0045[a]	0.0052[a]	0.0042[b]	0.0049[a]	0.0042[b]	0.0009	0.0001	0.0014	0.0038[a]	0.0042[a]	0.0037[b]	0.0045[a]	0.0032[C]	0.0004	-0.0004	0.0014
R-Square	78.05%	83.02%	73.77%	72.80%	66.49%	13.68%	6.07%	9.19%	81.98%	86.39%	77.69%	80.98%	69.87%	11.98%	6.97%	7.79%	83.05%	86.29%	78.38%	82.62%	70.51%	12.20%	10.64%	9.38%
Cal. Months	251	251	250	250	240				251	251	250	250	240				251	251	250	250	240			
N	6,498	4,171	2,327	1,189	1,062				5,651	3,637	2,014	1,036	934				4,870	3,142	1,728	893	803			
Panel B: Private Targets Only																								
Constant	0.0048[b]	0.0068[a]	0.0034[d]	0.0042[d]	0.0054[c]	0.0036[d]	0.0029	0.0017	0.0053[a]	0.0061[a]	0.0050[b]	0.0064[a]	0.0040[d]	0.0014	-0.0001	0.0024	0.0047[a]	0.0049[a]	0.0049[a]	0.0055[a]	0.0040[d]	0.0002	-0.0004	0.0012
R-Square	74.82%	76.17%	66.85%	68.14%	56.70%	6.27%	2.02%	3.80%	80.21%	82.14%	75.08%	76.93%	62.57%	11.02%	5.07%	7.87%	81.96%	82.76%	74.75%	76.58%	63.86%	9.02%	5.11%	8.67%
Cal. Months	251	251	245	245	240				251	251	245	245	240				251	251	245	245	240			
N	3,576	2,294	1,282	623	624				3,062	1,961	1,101	529	551				2,624	1,670	954	458	480			
Panel C: Public Targets Only																								
Constant	0.0028	0.0076[a]	0.0002	0.0037	-0.0063[c]	0.0074[b]	0.0039	0.0140[a]	0.0041[b]	0.0070[a]	0.0029[d]	0.0053[a]	-0.0017	0.0042	0.0018	0.0086[b]	0.0022	0.0064[b]	0.0011	0.0030[d]	-0.0017	0.0053[c]	0.0034	0.0087[a]
R-Square	65.66%	63.12%	54.59%	50.74%	39.58%	11.67%	5.63%	7.10%	74.88%	66.68%	68.61%	70.29%	42.08%	15.07%	11.74%	9.76%	76.31%	69.17%	70.10%	72.57%	49.48%	12.82%	8.75%	11.78%
Cal. Months	247	247	247	239	217				247	245	247	247	221				247	247	247	247	218			
N	670	432	238	154	80				588	381	207	133	71				512	342	170	114	54			
Panel D: Subsidiary Targets Only																								
Constant	0.0040[b]	0.0056[a]	0.0037[c]	0.0059[b]	0.0026	0.0019	-0.0004	0.0034	0.0040[d]	0.0045[a]	0.0037[b]	0.0061[a]	0.0036[c]	0.0008	-0.0017	0.0013	0.0035[b]	0.0033[b]	0.0036[b]	0.0042[a]	0.0033[c]	-0.0004	-0.0009	0.0003
R-Square	76.48%	78.67%	69.53%	62.51%	63.75%	7.30%	3.27%	4.21%	81.79%	85.85%	75.61%	71.24%	72.21%	10.66%	6.35%	8.53%	81.61%	83.91%	76.16%	73.83%	72.84%	12.92%	11.59%	10.51%
Cal. Months	250	242	250	250	239				250	242	250	250	239				250	242	250	250	239			
N	2,252	1,445	807	412	358				2,001	1,295	706	374	312				1,734	1,130	604	321	269			

Continued

Table 3:9 (Continued)

	1 Year								3 Years								5 Years							
	Emtire Sample	Dom	CBA	Common-law	Civil-law	Dom. Vs CBA	Dom. Vs Comm	Dom. Vs Civil	Emtire Sample	Dom	CBA	Common-law	Civil-law	Dom. Vs CBA	Dom. Vs Common	Dom. Vs Civil	Emtire Sample	Dom	CBA	Common-law	Civil-law	Dom. Vs CBA	Dom. Vs Common	Dom. Vs Civil
Panel E: Cash Payments Only																								
Constant	0.0032[c]	0.0055[c]	0.0024	0.0032[d]	0.0028	0.0030[c]	0.0022	0.0031	0.0042[a]	0.0050[a]	0.0038[b]	0.0046[a]	0.0040[c]	0.0011	0.0003	0.0014	0.0036[b]	0.0039[a]	0.0035[b]	0.0043[a]	0.0031[c]	0.0003	-0.0005	0.0012
R-Square	77.72%	83.17%	73.18%	71.67%	64.89%	11.33%	5.64%	6.03%	81.10%	86.56%	76.51%	81.00%	68.20%	9.85%	5.27%	5.62%	82.67%	85.39%	78.22%	82.24%	69.91%	11.76%	11.42%	7.56%
Cal. Months	251	251	247	247	240				251	251	247	247	240				251	251	247	247	240			
N	3,792	2,228	1,564	793	717				3,289	1,926	1,363	698	633				2,830	1,660	1,170	604	541			
Panel F: Stock Payments Only																								
Constant	0.0121[a]	0.0075[d]	0.0202	0.0072	0.0096	-0.0131	0.0004	0.0015	0.0078[c]	0.0080[c]	0.0138[c]	0.0171[c]	0.0061	-0.0085	-0.0085	-0.0001	0.0086[b]	0.0077[a]	0.0135[a]	0.0202[a]	-0.0029	-0.0045	-0.0116[d]	0.0119[c]
R-Square	44.86%	47.95%	6.33%	28.63%	18.93%	4.48%	3.40%	4.46%	58.52%	55.68%	28.52%	27.93%	6.26%	5.59%	9.14%	2.14%	61.27%	54.88%	40.53%	34.97%	20.92%	4.09%	7.91%	2.93%
Cal. Months	245	245	211	178	157				247	245	228	222	218				247	247	221	212	220			
N	332	266	66	37	26				297	243	54	29	22				254	212	42	24	17			
Panel G: Mixed/Other Methods of Payment Only																								
Constant	0.0054[b]	0.0068[b]	0.0042[d]	0.0063[b]	0.0006	0.0022	0.0007	0.0064[c]	0.0060[a]	0.0046[b]	0.0070[a]	0.0075[a]	0.0040[d]	-0.0029	-0.0034	0.0007	0.0050[a]	0.0037[c]	0.0054[b]	0.0064[a]	0.0025	-0.0020	-0.0030	0.0014
R-Square	69.85%	69.46%	60.57%	57.66%	49.00%	6.82%	1.98%	2.94%	74.88%	75.67%	67.86%	65.75%	61.74%	7.30%	3.59%	8.65%	76.08%	77.16%	68.77%	69.50%	60.95%	7.88%	4.47%	8.93%
Cal. Months	250	246	250	250	224				250	246	250	250	224				250	246	250	249	224			
N	2,376	1,677	699	361	319				2,067	1,468	599	311	279				1,788	1,270	518	267	245			

Table 3:9 (Continued)

	1 Year						3 Years						5 Years					
	Emtire Sample	Dom	CBA	Socialist	Dom. Vs CBA	Dom. Vs Socialist	Emtire Sample	Dom	CBA	Socialist	Dom. Vs CBA	Dom. Vs Socialist	Emtire Sample	Dom	CBA	Socialist	Dom. Vs CBA	Dom. Vs Socialist
Panel H: Targets from the Socialist Legal Group Only																		
Constant	0.0038[b]	0.0062[a]	0.0031[c]	0.0050	0.0031[c]	0.0016	0.0045[a]	0.0052[a]	0.0042[b]	0.0062[d]	0.0009	0.0008	0.0038[a]	0.0042[a]	0.0037[b]	0.0067[c]	0.0004	-0.0002
R-Square	78.05%	83.02%	73.77%	13.54%	13.68%	6.25%	81.98%	86.39%	77.69%	25.84%	11.98%	24.18%	83.05%	86.29%	78.38%	24.83%	12.20%	21.62%
Cal. Months	251	251	250	148			251	251	250	150			251	251	250	145		
N	6,498	4,171	2,327	59			5,651	3,637	2,014	31			4,870	3,142	1,728	24		

Appendix A: Distribution of number of deals by the legal origin of target's nation

Anglo-Saxon	
Australia	112
Bermuda	2
Canada	69
Gibraltar	2
Hong Kong	17
India	14
Ireland-Rep	71
Israel	7
Jamaica	2
Malaysia	7
New Zealand	12
Nigeria	2
Pakistan	1
Singapore	11
South Africa	36
United Kingdom	4,262
United States	842
Utd Arab Em	1
Thailand	4
Total	**5,474**

French	
Argentina	10
Belgium	49
Brazil	15
Chile	3
Colombia	2
Costa Rica	1
Egypt	3
France	241
Greece	11
Honduras	2
Indonesia	3
Iran	1
Italy	69
Luxembourg	3
Mexico	12
Monaco	6
Netherlands	166
Oman	1
Peru	2
Philippines	7
Portugal	13
Spain	66
Turkey	14
Venezuela	2
Total	**702**

German	
Austria	17
Germany	184
Japan	18
South Korea	10
Switzerland	31
Taiwan	6
Total	**266**

Scandinavian	
Denmark	30
Finland	12
Iceland	1
Norway	20
Sweden	51
Total	**114**

Socialist	
China	12
Croatia	2
Czech Republic	12
Kazakhstan	3
Poland	13
Romania	3
Russian Fed	7
Slovak Rep	2
Ukraine	2
Vietnam	1
Hungary	4
Total	**61**

Un-Specified	
Angola	1
Antigua	2
Bahamas	1
Guernsey	3
Isle of Man	1
Jersey	2
Kyrgyzstan	1
Liechtenstein	1
Mauritius	1
Tajikistan	2
Unknown	2
Total	**17**

Domestic	**4,262**
Cross-Border	**2,372**
Total	**6,634**

Chapter 4: Economic Conditions, Market Valuations, and Gains from Domestic versus Cross-Border Acquisitions

4.1 Introduction

Extant literature records that an increasing number of firms seek to expand their operations by diversifying across different industry sectors and/or countries via mergers and acquisitions (M&A).[1] As a result, a block voluminous literature has emerged on whether domestic and cross-border mergers and acquisitions (CBA) create value to acquiring firms' shareholders. Earlier studies have also attempted to uncover whether bidders acquiring domestic versus foreign targets yield different wealth effects to their shareholders (Moeller and Schlingemann, 2005).[2] More recently, another strand of studies has highlighted the deterministic power of market valuation condition or the stage of the merger wave at the time of the bid announcement on the short and long-run gains of domestic bidding firms (Bouwman et al. 2009).[3] In the same context, Rosen (2006) have also noted that the gains of bidders that announce takeovers bids at different stages of the merger wave, are highly sensitive to the optimistic view of investors about the future prospects of the M&A (i.e. investor's sentiment). On the other hand, although Baker et al. (2009) showed that foreign direct investment (FDI) flows are a function of the source country's stock market performance, supporting the 'cheap financial capital' hypothesis, very little is known about the effect of the market valuation condition and investor's sentiment on the wealth of shareholders of firms acquiring foreign targets. This chapter addresses this issue and further explores the impact of market

[1] Motives that force firms to diversify across markets and industry sectors are the deregulation of a number of industries, the constantly increasing competition within markets and industries, and the globalization of financial markets (Mitchell and Mulherin, 1996; Mulherin and Boone, 2000; Andrade, et al. 2001). In addition, several other studies, such as Gregory and McCorriston (2005) and UNCTAD (2006), reported that the number for cross-border acquisitions has increased substantially within the last decade due to the deregulation of financial markets.

[2] Previous research has mainly been concentrated on the sensitivity of bidding firms' gains to deal and firm-specific characteristics, such as target status (Chang, 1998; Fuller et al. 2002; Draper and Paudyal, 2006), method of payment (Myers and Mjluf, 1984; Travlos, 1987; Asquith et al. 1983; Draper and Paudyal, 1999 and 2006; Fuller et al. 2002), size of the bidding firm (Moeller et al. 2004), relative size of the deal (Asquith et al. 1983), and growth opportunities of the bidding firm (Rau and Vermaelen, 1998; Sudarsanam and Mahate, 2003). Other studies have examined the wealth effects to bidders of operating in the foreign market for corporate control. For example, Doukas and Travlos (1988) examined the impact of the bidding firm's previous operations in the target firm's country, while Gregory and McCorriston (2005) examined the impact of geographical diversification on bidder gains.

[3] Several scholars have individually concluded that the merger activity clusters over time (Weston, 1953; Gort, 1969; Chung and Weaton, 1982; Andrade et al. 2001).

valuations, economic conditions, and investor's sentiment in the source country, on the determination of the short and long-run gains of shareholders of bidders acquiring foreign targets. In similar respects, no previous study has examined the impact of market valuation condition and the stage of business cycle on (a) the merger activities, and (b) the wealth effects of shareholders of firms acquiring domestic versus foreign targets. In this chapter, I also aim to fill this void in the literature by comparing the short and long-run gains of bidders engaged in domestic and CBA at times of booming or depressed market and economic conditions.[4] More specifically, in this chapter I argue that the market and economic conditions in all countries in question affect (a) the competition in the bidding contest, and (b) the level of investor's sentiment at the time of the M&A announcement, which is therefore expected to be reflected in the UK takeover activities and hence in the short and long-run gains of bidders acquiring domestic and foreign targets.

Whereas earlier research has confirmed that the domestic takeover activity clusters over time,[5] several theories have emerged to explain this behaviour, such as the neoclassical theory of mergers, the strategic theory, and the behavioural approach. The neoclassical theory of mergers is associated with the work of Gort (1969)[6] and is based on efficient or rational explanations of merger waves, which posits that the M&A activity spikes with technological, economic, and regulatory shocks within industries (Mitchell and Mulherin, 1996; Mulherin and Boone, 2000; Andrade et al. 2001; and Harford, 2005). On the contrary, the behavioural approach argues that the observed clustering in takeover activity is largely driven by stock market mis-valuations.[7] Dong et al. (2006), Shleifer and Vishny (2003) and Rhodes–Kropf and Viswanathan (2004) developed models which suggest that merger activity spikes

[4] Loughran and Vijh (1997) argued that the announcement returns generated to bidders' shareholders may not fully reflect the wealth effect of that event and therefore the examination of the bidders returns in the post-merger period represent a necessary task.

[5] See for example, Golbe and White (1993), Jovanovic and Rousseau (2001), Maksimovic and Phillips (2001), Rhodes-Kropf and Viswanathan (2004), Rhodes-Kropf, Robinson and Viswanathan (2005), and Bouwman, Fuller and Nain (2009).

[6] Similarly, Coase (1937) supported that technological changes mainly affect merger waves throughout the industrial shocks.

[7] This theory has been empirically supported by Nelson (1959), Maksimovic and Phillips (2001), Jovanovic and Rousseau (2001), Rhodes-Kropf, Robinson, and Viswanathan (2005), Dong et al. (2006), and Ang and Cheng (2006).

with stock market valuations.[8] These studies claimed that stock price deviations from their fundamentals (i.e. mis-valuations) motivate rational managers to arbitrage by engaging in M&A during such times.[9] They also revealed a positive correlation between takeover activity and stock market's performance that derived from firm's and industry's specific mis-valuation components. In similar respects, other scholars have concluded that merger activity clusters with the level of economic performance, measured for example by GNP, or economic growth, and the stage of business cycle.[10] On this very issue, Rosen (2006) investigated the relationship between market valuation and the returns of bidders' shareholders, and concluded that investor's sentiment about takeovers at the time of the announcement is reflected in the market's reaction. In particular, Rosen (2006) claimed that the bidding firms' performance in the sort-run is a function of investors' optimism regarding the general future prospects of M&A, and posits that merger momentum may be also driven by the optimistic view of a group of investors. In other words, the timing of M&A announcements is crucial in driving short-term share price movements. Accordingly, in this chapter, based on the Rosen's (2006) theory I argue that during low (high) market valuation periods bidders should show a strong preference for domestic (foreign) targets firms. These preferences are mainly driven by the low (high) levels of investor's sentiment regarding the nature and the value creation from a takeover bid at a specific time, which is therefore expected to be reflected on the gains generated to bidding firms' shareholders.

Along similar lines, both theoretical and empirical research records some connection between CBA activity and market valuation conditions. Indeed, Baker et al. (2009) noted that FDI increase significantly with the level of stock market valuation in source-countries. These findings, however, become much stronger with (a) the component of valuation that is expected to revert in the subsequent year, and (b)

[8] However, this theory contradicts Roll's (1986) prediction that financial markets are strong-form efficient whereas bidders' managers are infected by hubris when making merger decisions.

[9] One of the most famous examples of this is the Aol - Time Warner merger in January 2001. More specifically, Rhodes–Kropf and Viswanathan (2004) decomposed the mis-valuation effect into two specific factors, the firm specific and the market/industry specific components.

[10] See for example, Nelson (1959), Gort (1969), Steiner (1975), Chung and Weston (1982), Melicher, Ledolter and D'Antionio (1983), Becketti (1986), Golbe and White (1993), Mitchell and Mulherin (1996), Mulherin and Boone (2000), Andrade et al. (2001), and Lambrecth (2004).

the existence of capital account restrictions that prevent other mechanisms of cross-country arbitrage. Di Giovanni (2005) examined the role of macroeconomic and financial variables on the firm's decision to engage in FDI and concluded that financial and other institutional variables play a significant role in CBA flows with the most important among others, being the size of financial markets. Other scholars, such as Vasconcellos and Kish (1996), suggested that bond yields and stock prices are good explanatory variables of CBA trends over time. They also noted that CBA occur more frequently when bond yields in the bidding firm's country are higher than those in the target firm's country. In addition, when the host country's stock market is depressed relative to the home countries' market, CBA activity increases. Other macroeconomic variables are also found to contribute towards the explanation of the overall CBA activity (Vasconcellos et al. 1990; Kish and Vasconcellos, 1993).

Despite the rich array of studies that have attempted to resolve the puzzle on the clustering of domestic and CBA activities, there still remain several important questions that deserve investigation.[11] This chapter examines whether, at the aggregate level, the clustering of domestic and CBA activities are significantly affected by various macroeconomic indicators, such as effective exchange rate (EER), gross national product (GNP), a Coincident Index that depicts the stage of the business cycle, and the Growth Index for the UK economy).[12] Along with macroeconomic indicators, the chapter also empirically examines whether the aggregate stock market performance (as measured with the deviation of the overall market and industry P/E ratios) invites or discourages firms to engage in domestic or CBA activities. It is also expected that investors' sentiment (which spikes with market valuations) at the time of the M&A announcement to significantly influence the bidders' announcement and long-run performance subject to the takeover bid announcement. As a result, the bidding firm's short and long-run performance is examined within the framework of domestic versus CBA at across booming or

[11] Rossi and Volpin (2004) examined the impact of the various laws, corporate governance systems and regulations across the world on the cross-border market for corporate control. Di Giovanni (2005) examined worldwide CBA flows by using the gravity model.

[12] The Effective Exchange Rate (EER) is provided by the Bank of England, www.bankofengland.co.uk. The Coincident Index and the Growth Index are provided by the Economic Cycle Research Institute (ECRI), www.businesscycle.com.

depressed times. In the same framework, I also investigate the roles of other transaction and firm-specific characteristics, such as the target firm's status, the method of payment used, the deal's relative size, the bidder's size, and the bidder's growth opportunities, during periods of high or low M&A activity. This chapter, to the best of my knowledge, examines for the first time in finance literature the determinants of CBA waves in the UK market by taking into account the following factors: (a) market valuation conditions, (b) economic conditions by looking at the different stages of the business cycle, and (c) the impact of the UK currency's EER. It is also the first study that examines the impact of the pre-stated factors on the gains of bidders' shareholders acquired domestic versus foreign target firms.

The overall conclusions derived from this chapter suggest that domestic and CBA activities are highly sensitive to abnormal deviations of market valuations, economic conditions, and the EER. Specifically, when the de-trended P/E ratio, at both aggregate and industry level, is above (below) its normal values, M&A activity tends to be high (low) in terms of number of bids. Similarly, when the various macroeconomic indicators and EER deviate significantly from their fundamental values, both domestic M&A and CBA activity is significantly affected. The findings also suggest that the wealth effects of bidding firms' shareholders in the short and long-run quickly adjust to absorb the either good or bad news subject to the timing of the takeover bid announcement. In fact, both univariate and cross-section analyses convey that in the short-run, domestic bidders realize higher abnormal returns than foreign bidders only when the takeovers is announced during periods of low market valuation, weak EER, and high levels of economic growth. On the other hand, bidders' shareholders enjoy higher gains from foreign than from domestic bids only when takeover announcement is made during periods of high market valuation and strong EER. Overall, the target firm's domicile, the level of M&A activity, and other transaction and firm-specific characteristics shape bidders' gains in the short-run with bidders acquiring domestic targets to outperform the ones bidding for foreign targets in general, though it should be noted that this is not always the case. On the other hand, in the long-run, bidders tend to enjoy positive abnormal returns or experience significant losses depending on the market valuation conditions, the

stage of business cycle, and the power of EER at the time of the bid announcement. These results, while consistent with the findings of the majority of studies in this field of research, add significant value to our existing knowledge. This is due to the unique nature of this research to investigate for the first time the interaction between market valuations, economic conditions, EER, and the level of investors' sentiment in the source country, on the gains of bidders' shareholders engaged in domestic versus foreign acquisitions.

The remainder of this chapter is organized as follows. Section 2 focuses on the history of merger waves between the early part of last century and more recent times, including their likely drivers and implications, section 3 refers to studies that are closely associated with the main questions addressed in this chapter, section 4 discusses the main controls and further considerations, section 5 develops the testable hypotheses, section 6 describes the data, summary statistics, and the methodologies followed, and section 7 reports, interprets and discuss the empirical findings generated from the application of my testing procedure. Finally, section 8 summarizes and concludes this chapter.

4.2 The History of Merger Waves[13]

Although corporate takeovers continue to represent the most universal corporate restructuring strategy, the empirical evidence suggests that the M&A activities come in waves (i.e. merger activity clusters at both aggregate and industry level). The purpose of the present section is to highlight the presence of merger waves since the early part of the last century to more recent times. Specific characteristics that contribute to the emergence of each particular merger wave are reported and discussed in great detail. Although the different characteristics of each merger wave are not mutually exclusive, every merger wave is driven by a particular number/type of forces that are closely related to the function of the economy or industry. Thus,

[13] See figures 4:1 and 4:3 for the history of merger waves diagrammatically.

the various merger waves do not emerge (only) by any random managerial incentive but are instead, motivated by the dynamics of specific economic or industrial forces. In this respect, Shughart and Tollison (1984) examined the existence of merger waves between 1895 and 1979 and failed to reject the hypothesis that merger levels are characterized by a white-noise process or by a stable first-order autoregressive process.

Insert figures 4:1 and 4:3 about here

With respect to merger waves in the US and UK, it is observed that the US has the longest history of M&A activity, which dates from the early twentieth century, while the UK merger experience have been observed from the early 1960s (see figure 4:3). When other countries are considered, it is observed that across Europe (i.e. continental Europe) similar patterns of M&A activity have been recorded. Furthermore, while the majority of M&A occurs between firms operating in the same country (i.e. domestic acquisitions), almost 40 percent of M&A announced during the last twenty years have involved firms operating in foreign countries (i.e. CBA). Thus, given the focus of the present chapter, this section commences by discussing the earlier merger waves since it will offer a direct perspective on the importance of the issue at hand as well as the need for further investigation. Thus the discussion in this section is shaped by the factors or the characteristics that give rise to various merger waves across several time periods.

4.2.1 Horizontal Mergers or Merging for Monopoly

It is well known that the US economy experienced its first major merger wave between the period 1890 and 1904. This merger wave was motivated by simultaneous consolidation[14] of products within industries, which characterized such

[14] In consolidations all the companies combined stop their operations and become part of a newly developed company. Consolidations are often formed when either companies, or all companies combined, have approximately the same size.

merger wave as a 'horizontal consolidation' wave – commonly referred to as the 'merging for monopoly' wave (Stigler, 1950). This wave also coincided with high levels of economic growth. One of the main features characterizing this merger wave was the emergence of several consolidations such as the merger of a number of firms into one entity. For example, many giants in the US, including General Electric, Eastman Kodak, American Can, DuPont, Standard Oil, American Tobacco and US Steel, were formed during that merger wave through consolidation. It is also important to note that the third US merger wave which occurred over the period 1965 and 1970 was restricted owing to the imposition of antitrust legislation which limited horizontal[15] takeovers, resulting in an increase in conglomerate[16] forms of M&A. With respect to UK merger waves, the first peak occurred in 1968 and the second in 1972, all of which were motivated by horizontal mergers. In 1964 the UK Labor Government adopted a new industrial policy which was designed to strength and thus turn UK companies into national champions. This policy was implemented via the Industrial Reorganization Corporation (IRC) which was created in order to revolutionize the UK corporate policy. Over the period 1965 and 1969 the IRC sponsored about 50 horizontal mergers, include among others GEC, AEI, English Electric and British Leyland. The main feature of the second merger wave was again horizontal mergers, but they were slightly less than in the first merger wave even though at the time there existed several conglomerate mergers.

4.2.2 Vertical Mergers or Merging for Oligopoly

Over the period 1925 to 1929 the US economy experienced its second major merger wave which was motivated by vertical[17] mergers. Stigler (1950) defined this merger

[15] In horizontal M&A both the bidder and the target firm are in the same business line. Companies usually engaged into horizontal M&A in an attempt to further pursuit economies of scale.

[16] In conglomerate merger the bidding and the target company operate under different types of business; in other words when the bidding firm acquires a target firm that is unrelated to its core business, this transaction is usually called conglomerate merger.

[17] Vertical M&A initiated by firms at different stages of production; in other words the bidder acquires another company in the same production line although at a different stage (i.e. the bidder buys a supplier or a distributor). Companies usually involved in vertical M&A in an attempt to achieve cost savings through diversification.

wave as a period for merging for oligopoly. In the main, vertical forms of acquisitions had only very limited impact on merger waves and was not considered by corporate managers to be an effective strategy with which to grow corporations.

4.2.3 Market Power, Economic and Industrial Forces

Merger waves have been motivated not only by specific factors such as, for example, horizontal, vertical, conglomerates, and consolidation types of M&A activity but also other factors related to the overall performance of the economy and the stock market. Indeed, almost all mergers waves in the history of merger activity have been inspired by high rates of economic growth, low rates of interest and high levels of stock prices in the economy. Almost all US merger waves, including the merger waves of the 1980s and 1990s in the UK and EU, have coincided with periods of economic expansion and high stock prices. These types of merger waves commenced following a period of sharp economic decline, with a low interest rates and during stock market bubbles. However, for most countries, the merger wave that occurred during the 1990s was characterized by technological advancements and innovations which dominated the industrial landscape of that period. In particular, deregulation in the banking sector, health care and utilities industry gave rise to increased M&A activity, while the defense industry also witnessed substantial M&A activity which was largely driven by advancements in technological innovations. Also new supranational trading blocs such as the creation of the European Single Market, the North Atlantic Free Trade Association (NAFTA), and the creation of the World Trade Organization (WTO) helped, not only to reduce the level of trading barriers and capital mobility, but also to increase opportunities for corporate growth.

4.2.3.1 Government and Central Bank Policy

The Government's and Central Bank's policy have either a direct or an indirect effect on the state of the economy which therefore may have a significant influence on the

level and direction of domestic and CBA activities. Several scholars have studied the implications of the fiscal policy and monetary policy on the M&A activity over time (see for example Grefory and McCorriston, 2005; Kiymaz, 2004). Both fiscal and monetary policies are two of the most important tools that the Governments and Central Banks utilize in order to adjust the economic activity. Any government through its fiscal policy can adjust the Government spending over time which may have significant effects on a number of industry sectors. To an extent, some industries may become more attractive than others after the implementation of a Government's policy to increase for example, the Government spending, or to decrease the taxation on an input that is very important for the cost of production in these particular industries. Along these lines, an adjustment of the fiscal policy is very likely to affect the M&A activity both within industry and country level.

The Central Bank through the monetary policy committee can apply an expansionary or a contractionary policy in the economy, which will influence significantly the interest rates, inflation expectations, exchange rates, and the trading volumes. In fact, expectations of high inflation in the economy are very likely to destabilize competition and increase the uncertainty in terms of the future expected cash flows and discount rates of corporations. Similarly, a change in interest rates, following the Central Bank's policy, is very likely to affect corporate valuations within the economy and thus increase uncertainty in terms of target firm's valuation. Along these lines, Central Banks through monetary policy can cause exchange rate volatility which is very likely to alter competition in the market for corporate control. For example, when the home currency becomes weak against a foreign currency, home firms face a disadvantage in going abroad and acquiring other firms. On the other hand, firms from abroad have an advantage to enter into the home market, thereby intensifying the competition in the home market for corporate control (see Kiymaz, 2004).

4.2.3.2 Industrial Shocks

Extant literature in the field of corporate and investment finance has explicitly linked the association between M&A waves over time with the impact of certain industrial effects (i.e. technological advancements, innovations, deregulations, barriers to entry). The literature in this field of research dates back to Nelson (1959), and Eis (1969), where both authors concluded that M&A cluster at both market and industry level. More recent studies reported similar results in terms of the effect of various industrial effects on M&A activity. For example, Mitchell and Mulherin (1996), Mulherin and Boone (2000), and Andrade et al. (2001) have admitted that M&A waves are mainly driven by economic, regulatory and industrial shocks. A more detailed association between industrial effects and M&A waves is discussed in the next section of this empirical chapter where I focus on the domestic M&A waves experience subject to market valuations.

4.2.4 Managerial Motives and Merger Waves

From the above discussion it becomes clear that M&A activity spikes with different factors related to the type of the deal and the economic or market condition. However, regardless the explanations that have been provided so far in terms of what drives M&A activity, the question of why M&A cluster periodically is still under investigation. More specifically, what are the likely factors that help markets and industries to become either 'attractive' or 'non-attractive' for a set of firms, while not for other firms? And what constitutes the corporate/economic environment as more favourable for a set of firms to engage in domestic and/or CBA, while not for others? The following discussion refers to a number of possible managerial motives that influence M&A activity throughout a number of decades.

4.2.4.1 Hubris

Evidence suggests that M&A activity varies over time as a result of hubris (Roll, 1986) – 'hubris hypothesis'. Indeed, bidding firms' managers consider their own estimations in valuing target firms as superior, opposite to the market makers' valuation estimations. As a result, the likelihood for the acquiring company to overpay for the target firm increases due to the managers' over-optimism when value potential synergies that is likely to arise through M&A. Moreover, the competition among potential bidders is likely to result to the winning bidder to overpay for the target because of hubris, even if a number of important synergies are available for both the bidding and target firm.[18] In fact, managers and members of the Board of Directors tend to be very competitive while in many cases self-important.[19] As a result, 'hubris hypothesis' can be recognized as the most important determinant of the very high percentage of unsuccessful M&A (approximately 70%) within a period of three years following M&A announcements.

4.2.4.2 Market Manias

Following the behavioural finance school of thought, several theories have been developed that have, to a large extent, been able to explain the M&A activity over the course of several decades. In principle, the role of mass behaviour which is the source of several market crashes and bubbles can be attributed as one of the M&A activity determinants. A set of studies have linked the theory of mass behaviour with the M&A activity. Specifically, Kelly (1994) investigated the relationship between market movements and swarms of bees and flock of geese (i.e. herding behaviour). Gleick (1998) and others applied the chaos theory to explain the market's behaviour over time. Along these lines, Shiller (1998) examined the impact of several market

[18] In general, value creation through M&A is achieved once the PV of the potential synergies exist the premium paid to finance the deal.
[19] Hubris is also one of the most important factors that contribute on the winner's curse.

time trends on the M&A activity and concluded that both, group behaviour and gambling, are closely correlated with M&A trends over time.

4.2.4.3 Overvaluation of Stocks and Asymmetric Information

Nelson (1959) argued that the development of a previously undeveloped market may increase M&A activity whereas Golbe and While (1988) noted that M&A activity increases (decreases) by the availability (unavailability) of bargains. Indeed, Golbe and While highlighted that M&A activity increases (decreases) with a low (high) Tobin's Q. Others suggested that the stock prices increase/decrease the level of FDI (Vasconcellos, Madura, and Kish, 1990; Vasconcellos and Kish, 1998; and Baker, Foley, and Wurgler, 2009). Previous research has also examined the impact of market timing, overvaluation of stocks, and M&A activity. For example, Shleifer and Vishny (2003), and Rhodes-Kropf and Viswanathan (2004) and Rhodes-Kropf, Robinson, and Viswanathan (2005) documented evidence in line with the information hypothesis of Myers and Majluf (1984). In fact, the authors noted that while managers have better knowledge in terms of the intrinsic value of their own companies, they have higher decision power in terms of the timing to sell. In fact, when outside shareholders' valuation estimates exceed the insider's (i.e. managers') ones, rational managers take advantage of that situation, thereby selling stock which further enhances the wealth of their current shareholders.

In summary, and in view of what has just been discussed, merger waves would seem as a universal phenomenon of the 20th century which not only benefitted the largest economies but also several economies much smaller in size to the developed countries mentioned above. This is due in part to the fact that M&A corporate restructuring strategy tends to spread worldwide, with perhaps the US, the UK, Canada, Japan, and a few other EU countries maintaining their superiority of M&A activity over time. However, the question of what has driven M&A waves over time is still under investigation. The weak explanations for the wealth effects created to bidding firms that engage in M&A within the framework of domestic versus foreign

acquisitions across booming or depressed time periods, deserve further investigation. Similar questions will be addressed over the course of the subsequent sections and answers to these questions will be provided within the same framework.

4.3 Literature Review

The majority of studies that focus on the relationship between the M&A activity and bidders' gains have mainly focused on acquisitions conducted in the domestic market for corporate control. In spite of the relatively large number of studies in the literature that attempt to resolve the puzzle on (a) why domestic M&A activity clusters over time, and (b) what are the likely effects of M&A waves on the bidding firm's short and long-run wealth effects, still several voids remain unfilled and several questions unanswered. This chapter attempts to fill those voids and answer those questions. However, before the testable hypotheses for this chapter will be established, it is very important for the reader to be aware of the main findings in this field of research thereby allow the contribution of this chapter to become much more transparent. Following the main research question which investigated in this chapter, this section reviews the literature on the implications of (a) the aggregate market and industry performance, and (b) the various economic indicators on (i) the domestic and CBA activities, and (ii) the bidding firm's announcement and post-merger abnormal returns. More specifically, in this section I review only the literature that is related to key issues I examine in this empirical chapter whilst the literature related to common controls I apply across this analysis is reviewed and discussed, in great detail, in the chapter two of the thesis. Studies that examine the wealth effects to bidding firms engaging in domestic versus CBA are also reviewed in chapter two. Therefore, as the main question examined is concerned, I will divide this section into two broad categories, (a) the studies that focus only on the domestic M&A waves and bidders' gains and (b) the studies that focus only on the foreign acquisitions waves and bidders' gains.

4.3.1 Domestic M&A Activity and Bidder Gains

Previous research on whether M&A activity clusters over time includes a wide range of studies, some of which date back to 1950s, with some others being very recent. In fact, numerous studies in this field of research have concentrated on the effects of market valuations and security prices on the M&A activities throughout time. Similarly, another strand of studies records the impact of macroeconomic conditions on the level and direction of domestic acquisitions. Whereas the majority of these studies investigate the behaviour of merger waves over time, others attempt to explain, along with the behaviour of the mergers waves, the stock market reaction in the short and in the long-run, subject to the timing of the M&A announcement. Accordingly, the rest of this sub-section will be divided into two parts; the first one review only studies that investigate only determinants of various merger waves whilst the second one review only studies that concentrate on both the explanation of merger waves and bidders' gains.

4.3.1.1 Domestic Mergers Waves

Numerous conclusions have been recorded in finance literature in terms of the behaviour of merger activity throughout time. In short, both theoretical and empirical research has explicitly documented that the domestic M&A activity clusters over time at both aggregate and industry level. In general, M&A activity tends to be high (low) during periods of high (low) rates of economic growth, low (high) or decreasing (increasing) rates of interests, and when the stock market is, on average, above (bellow) its normal level/values.[20] Concerning the blocks of studies in finance literature that investigate various factors affecting merger waves over time, the most common ones can be categorized into the ones that focus on industrial shocks while others focus on the impact of economic growth and stock prices.

[20] See for example, Weston, 1953; Nelson, 1959; Eis, 1969; Gort, 1969; Steiner, 1975; Beckenstein, 1979; Chung and Weston, 1982; Melicher, Ledolter and D' Antonio, 1983; Shughart and Tollison, 1984; Guerard, 1985; Becketti, 1986; and Andrade, Mitchell, and Stafford, 2001.

Industrial Shocks

Although important economic shocks have been significantly affected the overall economic performance over time and hence provide a favourable environment for many firms to engage in M&A, certain improvements in specific industries (i.e. technological advancements, innovations) still maintain the level and direction of many M&A transactions (see for example, Gort, 1969; and Mutchell and Mulherin, 1996). In that respect, one of the most important theories that attempt to explain the behaviour of M&A activity is the neoclassical theory of mergers. This theory supports the view that the state of the economy and its regulatory framework provide some clear explanations of the observed M&A patterns. Gort (1969), Mitchell and Mulherin (1996), Mulherin and Boone (2000), and Andrade, Mitchell, and Stafford (2001) noted that M&A waves are mainly driven by economic, regulatory and industrial shocks. Given these shocks, M&A are utilized by many corporations as the most effective corporate restructuring strategy/vehicle in order to adjust their operations into the new economic and possibly competitive, environment. In fact, Gort (1969) developed the economic disturbance theory of merger waves. The author has incorporated in his theoretical framework the aggregate level of equilibrium in product markets and suggests that a rise in general economic activity causes disequilibria in product markets thereby affecting merger waves. Evidently, Gort's theory is consistent with the emergence of several merger waves during periods of high economic growth and rising stock market performance in the US, UK and EU.[21] In addition, Gort's theory enabled the existence of some room for error in his model, as the author recognized that different industries may be affected differently by the forces affecting M&A activity over time, and he reported evidence in favour of the industry clustering of merger activity from the 1950s merger wave. Similarly, Eis (1969) used a sample of 3,000 merger transactions during the period between 1919 and 1930 and across 25 different industries. He

[21] However, the existence of several cross effects between merger waves and economic activity is very likely in this case.

recorded similar results in terms of the industry clustering of M&A. Indeed, he concluded that five industries account for 67.5% of the overall merger activity.

More recent studies, such as Mitchell and Mulherin (1996) investigated the impact of industrial shocks on M&A activity over the period between 1982 and 1989. Using a sample of 381 firms operating in 51 industries the authors concluded that the majority of the firms in their sample of interest are experiencing major corporate restructuring. In particular, the authors concluded that various industrial shocks affected significantly the M&A activity during the 1980s (i.e. the banking and broadcasting by deregulation, textiles by liberalized trade policy, energy by oil changes, food processing by a demographic shift or the low population growth). They also observed significant differences in the rate and timing of M&A activity across industries. In short, almost 50% of the M&A deals in one industry announced within the 25% of the entire time period studied. Schoenberg and Reeves (1999) found also that between the period 1990 and 1995 and among 200 industrial sectors, M&A activity clusters by industry. The same authors identify that (a) the exposure to deregulation is the most important determinant that explicitly influences high and low M&A activity, (b) the industry growth rate plays a very important role too (higher growth increase the M&A activity in that sector) and (c) the industry concentration influences M&A activity significantly (lower concentration influence positively M&A activity over time). In addition, Mulherin and Boone (2000) recorded that M&A activity clusters by various industrial characteristics whilst they recognized that the deregulation of a certain number of industries is the most important factor influencing M&A activity over time. Along similar respects, Jovanovic and Rousseau (2001) pointed also out that there exists a positive and significant relationship between large technological changes and M&A activity. Specifically, the authors studied two merger waves; one between 1890 and 1930 and another between 1971 and 2001. They concluded that the first merger wave was mainly driven by the diffusion of electricity while the second one was driven by the diffusion of information technology.

A more recent study investigated by Lambrecth (2004) who expanded the industry theory in a real option framework. The author noted that most corporations would prefer to acquire others instead of growing organically. Indeed, positive shocks would increase the volatility of the firms' asset values thereby they would raise the value of the merger option which therefore would result to a rise in M&A activity. He also investigated the question on whether mergers are motivated by economies of scale and found that firms have an extra incentive to engage in M&A in periods of economic expansion. The same author further concluded that, by relaxing the assumption that firms are price takers, market power further encourage firms' motivations to merge and accelerates merger activity on average. Lastly, Harford (2005) investigated the question of what originally affected industrial level merger waves within the past two decades. He presented evidence supporting that the market timing has little explanatory power in merger waves whereas he confirmed the neoclassical theory of mergers. In fact, he found that industrial, technological, and regulatory shocks drive merger activity over the course of several decades.

The Impact of Economic Growth and Stock Prices

Prior studies have explicitly investigated the impact of growth levels in the economy, stock prices, and bond yields, on the level and direction of merger activity. Weston (1953) employed a multiple regression analysis framework to analyze annual merger data for the period between the First and the Second World War (1918 and 1939). The author concluded that the mergers are highly positively sensitive to security prices and to the wholesale commodity prices whereas they are not sensitive to industrial production levels. Similar findings reported from other studies. For example, Nelson (1959) investigated whether the US merger activity for the period between 1895 and 1956, with some primary focus on the period between 1895 and 1920. He found that in general M&A activity is sensitive to the development of the security markets in the US, industrial production, growth rates in the US economy, and transportation costs. Initially, for the analysis between 1895 and 1920 the author found evidence against the proposition that mergers are affected by (a) the slowdown of growth in the US economy, and (b) the decrease of the transportation

costs. However, Nelson (1959) concluded that both the development of the US security markets and the market power are significantly encouraged merger activity. In addition, although he found a highly significant positive relationship between quarterly merger data and the level of security prices, he also found an insignificant relationship between merger activity and industrial production. When the author extended his analysis for the period between 1895 and 1954, he found similar results with the merger activity being highly sensitive to security prices although he still found no relationship between merger activity and industrial production.

Along similar lines, Steiner (1975) explained the annual merger activity, in terms of both number and value, for the period between 1949 and early 1970s. By utilizing multiple regression models, the author found that both the GNP and the change in the level of security prices had a positive and significant influence on the merger activity. Beckenstein (1979) examined possible factors that affect merger activity (both in terms of number and value) between 1949 and 1975 and by using a similar approach with Steiner (1975) he supported the importance of the nominal level of security prices and the nominal rate of interest on the explanation of merger activity.

Earlier studies have also examined the relationship between merger activity and corporate bonds. In short, Chung and Weston (1982) utilized a multiple regression framework in their attempt to identify factors that significantly affect the annual number of large conglomerate mergers over time. The authors found that the activity of conglomerate mergers is positive and significant with (a) a proxy calculated by the difference between yields on lower and higher grade corporate bonds, (b) the ratio of short to long-term bond yields, and (c) the rate of growth of GNP. On the other hand, Chung and Weston (1982) found a negative relationship between the activity of conglomerate mergers and the rate of return on corporate bonds.

In addition, Melicher, Ledolter, and D'Antionio (1983) investigated the determinants of quarterly merger data between 1947 and 1977. By employing the so called "prewhitened" logarithmic first difference transformations methodology, the

authors found (a) a positive and significant relationship between merger activities and lagged stock prices, (b) a negative and significant relationship between merger activity and lagged bond yields, and (c) no relationship between merger activity and industrial activity or business failure levels. Similarly, Guerard (1985) employed a similar methodology with Melicher, Ledolter, and D'Antionio (1983), and found evidence supporting that the quarterly merger data between 1895 and 1950 are positively related to lagged stock prices and lagged bond yields whilst they are unrelated to the level of industrial production. On the other hand, Shugart and Tollison (1984) examined annual merger data for the periods between (a) 1895 and 1920, and (b) 1947 and 1979, and found evidence against the characterization of the merger data as occurring in waves. In fact, the authors concluded that the annual mergers time series follow a "white-noise process with possible drift" or by a "stable first order autoregressive scheme". In respect to that, Golbe and White (1993) investigated the hypothesis that the US merger activity has occurred in waves by utilizing a direct time series analysis. The authors found evidence supporting that the M&A activity comes in waves, which is in contrast with the main findings of Shugart and Tollison's (1984) paper. Golbe and White criticized the work by Shugart and Tollison by asking, "Why did Shugart and Tollison's (1984) indirect test apparently fail to find waves? Their autoregressive models imply that these merger series can be described as random walks with drift..." (see footnote 15, Golbe and White, 1993).

Lastly, Becketti (1986) investigated the determinants of the M&A activity over the period between 1960 and 1985 using quarterly merger data. The author employed simple OLS regression analysis and having lagged values on the explanatory variables he concluded that the M&A activity was affected positively by (a) the security prices, (b) the general level of debt in the economy, and (c) the level of capital utilization. Conversely, the author found that the M&A activity for the same period was affected negatively by (a) the real interest rates, and (b) the real GNP. Several other studies, more recent ones, have provided numerous of evidence in terms of the effects of industrial shocks, economic growth, and stock prices, on the level and direction of M&A activities. However, the majority of these studies have been reviewed and

discussed, in great detail, in the introduction part, where the key motivations, and the main research question examined in this chapter, are formed/established.

4.3.1.2 Domestic Mergers Waves and Bidder Gains

Based on the above findings, which clearly confirm the existence of merger waves throughout time, several scholars have attempted to identify the connection between the merger waves and the announcement and post-merger wealth effects of bidders' and targets' shareholders. Several conclusions have been recorded by a rich array of studies in this field of research. In short, several scholars have noted that periods of low (high) M&A activity correlate with periods of low (high) market valuations while the latter is clearly positively correlated with the use of cash (stock) as the method of financing in the transaction (Maksimovic and Phillips, 2001; Jovanovic and Rousseau, 2001; and Ang and Cheng, 2006). Recent studies examined whether the bidding firms' stock returns around the M&A announcement and in the long-run are sensitive with the quality of merger announcement (Bouwman et al. 2009). Indeed, the authors proxy for the quality of the merger announcement based on the level of market valuations at the time of the bid announcement (i.e. whether the M&A is announced during a depressed or a booming time period). To an extent, this one of the most important studies that examines the long-run wealth effects to bidding firms that engage in M&A across depressed and/or booming periods. The authors found that in the short-run bidders enjoy higher (lower) abnormal returns when they engage in M&A during high-valuation (low-valuation) periods. The situation however reverses in the long-run with the bidding firms acquiring targets during low-valuation periods to outperform the ones bidding for targets during high-valuation periods. Similarly, bidders acquiring targets during low-valuation periods experience higher operating performance than the ones bidding for targets during high-valuation periods. The authors claimed that this market reaction in the short and in the long-run is consistent with the managerial herding hypothesis.

Overall, the review of the above studies suggests that merger activity is not only a random behaviour of managerial incentives but it spikes with industrial shocks, economic growth, and the stock market's performance over time. Another strand of studies has also confirmed that bidders' short and long-run gains are significantly influenced by merger activity. In spite of the numerous research outcomes in this field of research, several research questions remain to be investigated. This chapter aims to address a number of those questions as the principle motivation underpinning this chapter is to compare the short and long-run bidders' gains from domestic versus foreign acquisitions at different market and economic conditions.

4.3.2 CBA Activity and Bidder Gains

In general, studies investigating the level and direction of CBA appear relatively fewer, compared to the ones that examine the level and direction of domestic M&A.[22] However, in spite of the volume of studies in this area, several important conclusions have been recorded regarding the significant factors that influence CBA activity over time. Along these lines, the majority of studies suggest that there is a significant relationship between the level of the various macroeconomic indicators and the FDI activity. On the other hand, very little is known about the implication of market timing on CBA activity (i.e. market valuations and industry valuations). In the forthcoming discussion, I review studies on (a) the market valuations and (b) the economic conditions, on the level and direction of CBA activity whilst I review the literature on the wealth effects generated to bidding firms engaging in CBA, subject to foreign merger waves.

Although very little is known about the impact of market valuations on the level and direction of CBA activity, Vasconcellos, Madura, and Kish (1990) found that stock

[22] At this point it is worth mentioning that the CBA activity stared to rise significantly within the last two decades (i.e. from the second half of 1980s) implying that the cross-border merger waves started to appear more often by that time. Further, the majority of the studies in the literature that attempt to discuss possible determents of the CBA waves over time appear at early-mid 1990s thereby they do not account for the biggest M&A wave that took place by late 1990s which was mainly overpopulated by CBA deals.

prices in the US were significantly affected the M&A activity in favour of UK companies between 1979 and 1987. Similarly, Vasconcellos and Kish (1998) utilized both logit and multiple regression models to investigate the implications of bond yields, exchange rates, and stock prices, on the CBA activity between US and Germany, Italy, UK, and France for the period between 1982 and 1994. The authors found through regression analysis that stock prices influence significantly both the number and direction of CBA between firms in the US and each of the European markets. Specifically, the authors pointed out that when the US market is depressed relative to foreign stock markets (the four European ones), foreign bidders are encouraged more in acquiring US target firms. In the same respect, a more recent study investigated by Baker, Foley, and Wurgler (2009) examined the role of cross-border arbitrage by multinationals. The authors provided evidence consistent with multinational arbitrage as a determinant of foreign direct investment (FDI) patterns. Indeed, their results clearly indicate that FDI activity increase sharply with source-country stock market valuations. Their results further suggest the existence of a cheap financial capital channel in which FDI flows reflect, in part, the use of relatively low-cost capital available to overvalued parents in the source country.[23]

In addition, Di Giovanni (2005) addressed the question of whether a set of macroeconomic and financial variables encourage FDI decisions over time by using a simple *'gravity model'*. In fact, the author recorded that the size of the financial markets (measured by the stock market capitalization over the GDP ratio) is positively associated with the ability of firms to invest abroad, whereas the taxes have a negative effect on the level of CBA. The same author found also that proxies related to, (1) distance between the two firms in the transaction, (2) telephone traffic, (3) language of the target and bidding firm's domicile, (4) regional trade,[24] (5) real exchange rates, (6) nominal exchange rate volatility, (7) economic size, and (8)

[23] In this study I examine the same hypothesis for the UK market. See hypothesis development section for more clarification.

[24] The regional trade has a significant impact on CBA activity with the type of trade agreement to play a significant role (e.g. custom unions and free trade agreement have a negative effect on CBA while service agreements have a positive effect).

wage differential, have all a significant impact on the level and direction of foreign acquisitions.

Overall, while the above studies suggest that there is a strong relationship between CBA activities and market or economic conditions, very little is known about the relationship between CBA activities and bidders' short and long-run gains. The present chapter aims to fill this void in finance literature. Furthermore, this chapter aims to study the gains generated to shareholders of bidders of domestic versus foreign targets that announced during different economic and market conditions.

4.4 Main Controls and Further Considerations

This chapter investigates the question on whether there is a fundamental difference on the wealth effects to bidding firms that engage in domestic versus CBA across booming and/or depressed time periods. To classify the periods as booming and/or depressed ones, or to classify the market or economic condition for UK firms as favourable, or more favourable than others, to engage in domestic and/or foreign acquisitions, I employ three proxies: (a) both aggregate stock market and industry performance (FTSE All Share) – i.e. the market valuations proxy, (b) the state of the UK economy measured by the GNP, GDP, the Coincidence Index, and the Growth Index – the UK macroeconomic indicators, and (c) the EER of the British Starling (GBP).

4.4.1 Market Valuations

Several studies in the M&A literature have investigated the implications of market valuations on the performance and direction of corporate takeovers over the course of several decades (see for example Andrade et al. 2001; Harford, 2005; Bouwman et al. 2009). Within the same framework, several theories have been developed in an attempt to explain the M&A patterns over time. Among others, the neoclassical

theory of mergers and the behavioural approach are the most commonly accepted ones.[25] Along similar respects, in this chapter I control for the market valuations in the source country by utilizing both the P/E for the aggregate stock market performance and the P/E of the 10 industry Classification as indicated by Fama and French (1993). More specifically, in order to classify the periods as high-neutral-low, I de-trend the P/E time series for the FTSE All Share (figure 4:4) and the 10 industries thereby I classify the periods as in Bouwman et al. (2009) (a detailed discussion of this approach is referred in the Data and Methodology, section 4.6.3).

Insert figure 4:4 about here

4.4.2 Macroeconomic Indicators

In addition to market valuations, this chapter aims to control for the economic conditions in the source country. The macroeconomic indicators that are utilized to classify the period as favourable versus non-favourable for UK firms that engage in domestic M&A and in CBA, are the GDP, the GNP, the Coincidence Index and the Growth Index. The stage of the economy at the time of the acquisitions' announcement may affect significantly the short and long-run wealth effects generated to bidding firms. Specifically, from the deal-characteristics point of view, the stage of the economy may affect the method of payment used to finance the transaction, the premiums paid, and hence the transaction's value, which are all expected to reflected on bidding firm's short and long-run gains.

[25] For related studies, see for example, Nelson (1959), Gort (1969), Mitchell and Mulherin (1996), Mulherin and Boone (2000), Shleifer and Vishny (2003), and Rhodes-Kropf and Viswanathan (2004).

4.4.2.1 Stage of the Business Cycle

The economic performance or the stage of the business cycle at different times (specified by leading, coincidence, and lagging indicators)[26] reflects very important information with regards to the current and future wealth effects to both acquiring and target firms, as well as the combined entity. The Business cycle is basically defined as the long-term pattern of booms and recessions in the economy. In general, a business cycle is characterized by four major stages: recession, depression, normal growth, and booming cycles, not necessarily in that order. Specifically, the business cycle moves between periods of relatively rapid growth of output (recovery and prosperity), and periods of relative decline (recession). The real[27] gross domestic product (GDP) is one of the main measures of business cycles. Further, employment levels, retail sales, and industrial productivity are some other economic indicators that show whether a business cycle is shifting from one stage to another. In my analysis, the states of business cycle (booming and recession periods) are obtained from the Economic Cycle Research Institute (www.businesscycle.com). The coincidence index that used to depict the four stages of the business cycle (recession, depression, normal growth, and booming cycles) needs to be de-trended (a detailed discussion of this approach is referred in the Data and Methodology,

[26] *Leading Economic Indicator*: it depicts the business cycle's peaks and troughs three to twelve months before they actually occur. This indicator is basically estimated by employing ten measures, which are: (1) manufacturers' new orders for consumer goods and materials, (2) an index of vendor performance, (3) manufacturers' new orders for non defense capital goods, (4) the Standard & Poor's 500 index of stock prices, (5) new building permits for private housing, (6) the interest rate spread between U.S. Treasury bonds and Federal Funds, (7) the M2 real money supply, (8) average workweek in manufacturing, (9) an index of consumer expectations, and (10) average weekly initial claims for unemployment insurance. *Coincident Economic Indicators*: it depicts the business cycle's peaks and troughs at the time they actually occur. This indicator is basically estimated by employing four measures, which are: (1) the number of employees on nonagricultural payrolls, (2) industrial production, (3) real personal income (after subtracting transfer payments), and (4) real manufacturing and trade sales. The coincident economic indicator is the primary source of information used to document the "official" business cycle turning points. Finally, *Lagging Economic Indicators*: it depicts the business cycle's peaks and troughs three to twelve months after they actually occur. This indicator is basically estimated by employing seven measures, which are: (1) labor cost per unit of output in manufacturing, (2) the average prime interest rate, (3) the amount of outstanding commercial and industrial debt, (4) the Consumer Price Index for services, (5) consumer credit as a fraction of personal income, (6) the average duration of unemployment, and (7) the ratio of inventories to sales for manufacturing and trade.

[27] In economics, the nominal values of an indicator are its money values across different time periods. Alternatively, real values, adjust for differences in the price level in those years.

section 4.6.3) to enable the identification of the different stages (figure 4:5). Previous studies have applied similar research efforts. For example, Becketti (1986) examined the relationship between the aggregate cyclical fluctuations and M&A activity. Among other variables that are considered, the changes in real interest rates affect significantly the M&A activity over time. Specifically, the author noted also that this may reflect the dependence of acquiring firm on dept financing.

Insert figure 4:5 about here

4.4.2.2 GNP and its Growth Index

The GNP and the rate of growth of the GNP reflect the most influential determinants of most of corporate investment decisions. Several studies in previous research have individually concluded that the M&A activity is highly sensitive to the level of GNP.[28] In this study, apart from the de-trended GNP and GDP (a detailed discussion of this approach is referred in the Data and Methodology, section 4.6.3), I use the growth index of the UK economy (figures 4:6, 4:7, and 4:8) over the period between 1986 and 2007 as provided by the Economic Cycle Research Institute (ECRI), www.businesscycle.com.

Insert figure 4:6, 4:7, and 4:8 about here

4.4.3 Effective Exchange Rate (EER)

A set of studies in the corporate and investment finance literature investigate whether there is a significant relationship between the level of the exchange rate[29]

[28] For related studies, see for example, Weston (1953), Gort (1969), Steiner (1975), Chung and Weston (1982), Melicher et al. (1983), Becketti (1986), Golbe and White (1993), Andrade et al. (2001), and Lambrecth (2004).

[29] In general, the exchange rate (ER) is the price of one currency in terms of another. The ER of the pound sterling is therefore defined as the number of units of currency X that is required to buy one pound sterling on the foreign exchange market. Likewise, it is referred as the number of units of the

of one currency against another and the level or direction of CBA throughout time. In short, firms operating in countries with overvalued currencies have a comparative advantage to the ones operating in countries with undervalued currency. Furthermore, several scholars have reached to the conclusion that M&A activity varies significantly with the volatility of the exchange rate of the US dollar and other currencies over time. In other words, in periods where the dollar value is much higher against other currencies, the CBA activity for US target firms appears very low while the opposite occurs when the value of the US dollar is low against other currencies.

The exchange rate volatility has significant implications on the direction and magnitude of CBA. Theoretical and empirical work investigated by Cushman (1985), Froot and Stein (1991), and Blonigen (1997) provided evidence explaining why US dollar depreciation might have boosted the inflow of foreign capital into the US during the 1980s. In general, exchange rate depreciation leads to increase FDI inflows into the depreciating country. In addition, Cushman (1985) and Goldberg and Kolstad (1995) examined the impact of exchange rate volatility on FDI with both of the papers to suggest that exchange rate volatility should positively affect FDI flows. The authors further suggested that their conclusion is conditional on different behavioural assumptions and on the types of shock that hit the economy over time.

In addition, the effect of exchange rate volatility on M&A flows is still ambiguous for a number of reasons. When exchange rate volatility is high (meaning more uncertainty and higher risk), firms will more likely delay their acquisitions. Bidding firms may also delay (or even cancel) their intent to acquire a target company depending on how its cash flows correlate with those of the potential target company's cash flows. If there is a strong correlation in cash flows (for any reason), then exchange rate volatility is a cause for concern. Exchange rate risk may offset a target company's cash flows before they reach the target company.

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domestic currency that is required to buy one unit of the foreign currency. Basically, the ER of a currency may influence the price (and hence the quantity) of a country's exports, which to an extent determine the level of output and the level of employment or unemployment in the domestic economy (specifically, in the exporting industries and companies).

For the main purpose of this chapter I employ the Effective Exchange Rate (EER) of the UK Sterling (see figure 4:9). This type of exchange rate is essentially used so as to take into account the variability of the pound sterling against a basket of other currencies, some of which are more important than others in UK's trading relationship. The ERR is computed as a trade weighted average of the individual or bilateral rates, and is expressed as an index number relative to the base year. Therefore, the ERR is a multilateral trade weighted exchange rate. The Effective Exchange Rate (EER) is provided by the Bank of England, www.bankofengland.co.uk.

Insert figure 4:9 about here

4.5 Hypothesis Development

The main objective of this section is to address the implications on the wealth effects of acquiring firms' shareholders that engage in domestic and/or foreign acquisitions and guided by market and economic conditions, and the level of the EER. In so doing, this chapter not only compares the wealth effects of domestic and CBA that occur across booming or depressed economic conditions, but it also identifies additional factors that lead to differential (if any) in performance. For example, when stock market valuations in the bidding firm's country are high (low), or when the bidding firm's country's business cycle is at the peak (trough), or when the EER of the bidding firm's country is strong (week), the takeover activity is expected to be high (low), which may have several implications on the bidding firms' announcement and post-takeover valuation effects. To test for this, in this chapter I examine several propositions which are summarized below.

4.5.1 Merger Waves[30]

This chapter's analysis starts with an investigation of whether domestic and CBA activity clusters over time, i.e. comes in waves. Further, it investigates whether the short and long-run gains to the acquirers of domestic and foreign targets are sensitive to market valuation conditions, economic conditions, and the level of the EER at the time of bid announcement and whether there is a fundamental difference between the gains obtained to bidders' shareholders from domestic deals with those obtained by cross-border deals.

Merger Activity in General

The neoclassical theory of mergers argues that bidding firm's managers engage only in positive NPV projects. Most of the literature in this field of research investigates whether M&A activity is affected by economic and industrial shocks,[31] both in qualitative and quantitative terms, and concludes that periods of low (high) M&A activity are highly correlated with periods of low (high) market valuations. Market valuation conditions also affect the choice of the method of financing the transaction.[32] In addition, the size and direction of CBA activity is affected by various macroeconomic indicators such as the exchange rate regime, bond yields, the business cycle and economic growth.[33] Further evidence suggests that there is a significant relationship between the source-country stock market valuation conditions and the FDI activity.[34] Indeed, Baker et al. (2009) examined the sensitivity of FDI flows on market valuation and concluded that FDI activity increased sharply with source-country stock market valuations. In response to this observation, in this

[30] In this edge I discuss and hypothesize based on possible merger wave determinants the likely outcomes of merger activity across all sample groups (i.e. domestic, CBA, and all subsamples of CBA).
[31] See for example Nelson, 1969; Gort, 1969; Eis, 1969; Mitchell and Mulherin, 1996; Mulherin and Boone, 2000; Andrade, Mitchell, and Stafford, 2001; and Schoenberg and Reeves, 1999.
[32] For related studies see for example, Maksimovic and Phillips (2001); Jovanovic and Rousseau (2001); Shleifer and Vishny (2003); and Ang and Cheng (2006).
[33] See for example, Weston, 1953; Nelson, 1959; Gort, 1969; Steiner, 1975; Chung and Weston, 1982; Golbe and White, 1993; Andrade et al. 2001; and Kiymaz, 2004.
[34] See for example, Vasconcellos et al. 1990; Vasconcellos and Kish, 1998; Kiymaz, 2004; and Gregory and McCorriston, 2005.

chapter I test whether the stock market valuations in the bidding firm's country influence CBA activities as well as whether they influence domestic acquisitions activities in different ways.

The above discussion indicates that domestic and CBA activity is highly sensitive to (a) the stock market performance at both aggregate and industry level, and (b) the state of the economy at the time of the M&A announcement. All things equal, I would expect that the UK's market, industrial, and macroeconomic dynamics to positively affect the number of both domestic and foreign acquisitions initiated by UK bidders.[35] Arguably, macroeconomic indicators that reflect economic expansion, such as the level of GDP, GNP, coincidence index, the growth index, and market conditions such as the equilibrium level of the FTSE All Share Index in the UK, are the most influential determinants for most of corporate investment decisions. Accordingly, it may be argued that, during periods of economic expansion and high market valuations, companies would much prefer to take advantage of the overall market and macroeconomic conditions in order to grow and maintain shareholder's wealth maximization as an objective. This discussion gives rise to the first testable hypothesis:

H1: ***'Takeover activity is expected to be higher during periods of high market valuations and economic expansion than during periods of low market valuation and economic contraction, irrespective of the target firm's domicile'.***

Merger Activity in the Foreign Market

This section explains the main reasons that motivate the split/division of CBA sample in two groups. The first group of CBA contains only takeovers that occur with target firms operating in the group of six countries (G6=G7-UK), whereas the second group contains only transactions that occur with target firms operating in the rest-of-the-world (RoW=World-G7) group of countries. The division of CBA sample into two

[35] This chapter leaves open the question of whether in the foreign market, industrial, institutional, and macroeconomic conditions of the target's country affect merger waves differently.

groups is based on the likelihood that the economic activity and stock market performance of the six most wealthy countries across the world (US, Canada, Germany, France, Italy, and Japan) would be more integrated than for countries in the rest of the world (Hornstein, 2000; Jensen and Stokman, 2004). Moreover, evidence suggests that the national stock market indices for these six countries (G6) are co-integrated (Chou, Ng, and Pi, 1994).

Given that M&A activity is highly correlated with the performance of the stock market at both aggregate and industry level, the M&A activity in the G6 countries is expected to rise during times of high stock market valuation (in the UK). It is also likely that, on average, technologies and innovations developed in the more industrialized or more advanced countries would lead to an industrial effect, suggesting therefore that UK bidders would have an extra incentive to engage in CBA in G6 countries during these times (or they might prefer to stay in the domestic market during those times).

Previous literature states also that periods of high economic growth accommodate several industrial shocks, giving rise to new developments and innovations in certain industries. Bidding firms are expected to attempt to take advantage of these technologies and innovation by involving themselves in M&A, since M&A represent the most widely accepted method of reallocation of capital, which is expected to be higher during periods of market overvaluations, economic shocks, and industrial innovations. This leads to the second testable hypothesis:

H2: ***'In periods subject to high market valuations and economic expansion in the UK, CBA activity in G6 countries is expected to be higher than CBA activity in the RoW countries'.***

4.5.2 Market Valuations, Economic Conditions, and Bidder Gains[36]

Earlier studies suggest that merger waves represent an ordinary phenomenon for several markets across the world as well as their valuation effects (both short and long-run) to bidders during those times appear very important (Bouwman et al. 2009). In principle, M&A represent one of the most widely accepted ways of reallocation of capital (i.e. (skilled) human capital, intangible assets, patents, etc). The potential synergies to bidders from M&A announced during periods of high market valuations, industrial shocks, and economic expansion are expected to be more valuable than in periods of low valuation and recession. Thus, deals announced during times of expansion are expected to reflect higher future cash flows and thus higher NPV, which in turn are expected to be interpreted by investors as good news. This leads to positive abnormal returns to bidding firms in the short-run. Moreover, during periods of major technological advancements and innovations, firms that have otherwise limited access to such opportunities would rather prefer to adopt these technologies and innovations through M&A, instead of pursuing them through organic growth. This argument supports the neoclassical theory of mergers, and provides the setting for the third testable hypothesis:

H3: ***'M&A announcements during high market valuation periods and economic expansion generate higher abnormal returns than deals announced during low market valuation periods and economic contraction, both in the short and in the long-run, irrespective of the target firm's domicile '.***

Investors' Sentiment, Market Valuations, and Domestic versus Foreign Bidder Gains

Rosen (2006) noted that the short-run bidding firm's performance is a function of the investors' optimism regarding the M&A future prospect. Rosen also showed that merger momentum may be driven by the optimistic view of a group of investors who time the market, since during high (low) market valuation periods investor's

[36] In this edge I argue and discuss all possible factors that are likely to affect acquiring firms' performance from domestic and foreign bids.

optimism is expected to be higher (lower). In addition, Shleifer and Vishny (2003) and Rhodes–Kropf and Viswanathan (2004) suggested that firms during high market valuations tend to curry overvalued stock, and they tend to overpay for target firms. This may have significant implications on the bidding firm's performance. Specifically, during periods of high (low) market valuations investors will interpret acquisitions with foreign target firms as good (bad) news. Thus, investors would prefer to take long (short) positions in the stock of bidders that prefer to stay in the domestic market during low (high) valuation periods, due to investor's optimism about the M&A announcement. This leads to the fourth testable hypothesis:

H4: ***'Bidding firms engaging in domestic (foreign) acquisitions during low (high) market valuation periods outperform those bidding for foreign (domestic) target firms during the same time periods'.***

Economic Activity and Domestic versus Foreign Bidder Gains

Earlier studies showed that M&A activity clusters at both aggregate and industry levels and attributes that to technological, economic, and/or regulatory shocks.[37] Thus M&A deals during times of great technological and regulatory shocks would be interpreted by market participants as positive NPV projects.

Following the main research question that are addressed in this chapter, which rests on the fact that UK bidding firms choose to engage in domestic and or foreign acquisitions only when market valuations, economic conditions, and the level of exchange rate is in favour of such decision making, I would expect that UK bidders to choose to invest in the home market during periods of economic and regulatory shocks. This implies that when the variables employed to capture the level of economic performance in the UK (i.e. GNP, GDP, Coincidence Index, and the Growth Index) are above their equilibrium levels, domestic investments would increase the PV of potential synergies which further increase the likelihood of positive NPV

[37] For a related discussion see for example Mitchell and Mulherin (1996), Mulherin and Boone (2000), Andrade et al. (2001), and Harford (2005).

project (as high growth periods spike with technological advancements and innovations). Therefore, this leads to the fifth testable hypothesis:

H5: ***'Bidding firms engaging in domestic (foreign) acquisitions during expansion (contraction) periods outperform firms bidding for foreign (domestic) target firms during the same periods'.***

Market Valuations and Bidder Gains by Foreign Country Groupings

The following discussion is designed to investigate whether any gains or losses realized by bidding firms' shareholders from domestic versus foreign acquisitions are mainly driven by deals of foreign target firms in a particular group of countries.[38] The investigation is following several arguments that developed previously in this section. The possible co-movements of the business cycle among the G7 countries as well as the possible co-integration of the main stock market indices among the G7 countries suggest that different country groupings should be investigated (Hornstein, 2000; Jensen and Stokman, 2004; Chou, Ng, and Pi, 1994). To an extent, the above evidence further decreases the likelihood of the co-movement of (a) the business cycles and (b) the main stock market indices, between the G6 countries and the RoW ones.

According to Rosen (2006) and the main argument raised above regarding the relationship between the market valuations, investor's sentiment and bidders' decision to invest either domestically or internationally, during low market valuation periods investors would try to avoid further risks by investing in the domestic rather than foreign market. This would lead to higher abnormal returns to domestic bids versus bids that target foreign firms. The higher gains to domestic bidders' shareholders sustain not only for the entire sample of CBA but also for both sub-

[38] In the overall context of this chapter, I firstly estimate the differentials in bidders' short and long-run abnormal returns within the framework of domestic versus CBA. Subsequently, to identify any incremental effect of legal origin, I further examine the gains of bidders by the foreign country groupings. The same procedure is applied for the entire sample, as well as for samples comprised by deals announced only during depressed or during booming periods.

groups of the CBA sample, the G6 and the RoW one. In the first case (UK bidders acquiring G6 targets), a low market valuation period in the UK would coincide to a similarly low valuation period in the G6 countries, and thus low premiums for both domestic and foreign bids (due to low competition). However, bids with foreign targets are associated with the bidder's exposure into additional foreign market's risks (i.e. political risks, exchange rate ones, economic ones, government policy ones, central bank policy ones, etc), and thus bids targeted to domestic firms during low market valuation periods are likely to generate higher gains compared to bids targeted to foreign firms. On the contrary, low market valuation periods in the UK may coincide with high market valuations in the RoW countries. In this case, M&A activity would be high in the RoW countries, and thus higher premiums are required for bidding in these markets. Therefore, domestic bids should generate higher gains than targeting foreign companies. In addition, when considering CBA only, bids for firms in the G6 countries should outperform bids for firms in the RoW countries, due to lower competition levels and lower premiums paid in the G6 countries as well as due to likely expectations about higher future values. Overall, from the above discussion, UK firms acquiring domestic targets during low market valuations are expected to outperform CBA in both the G6 and in the RoW countries.

The expected outcome changes in high market valuation periods. In this case, investors would more likely prefer foreign target firms since bidders would choose to invest in foreign markets during times of optimistic investors' sentiment (Rosen, 2006). During high market valuation periods in the UK, market valuations in the G6 (RoW) countries are likely to be high (low), which leads to high (low) M&A activity in G6 (RoW) and higher (lower) premiums paid for bids in the G6 (RoW). This would have a direct effect on the benefits from CBA and generate higher gains from bids of firms in the RoW countries. In addition, UK bidders during those times would rather prefer to invest in the domestic and or G6 countries rather than in the RoW ones,[39] in order to take advantage of the new technologies and innovations which spike with

[39] One might expect higher gains from bids in the G6 countries although in this case I argue that any synergetic benefit generated due to the acquisition of new technologies and innovations (technologies and innovations spike with the high market valuations) – PV of the synergy – would be cancelled out by the high premiums paid.

high market valuations.[40] Lastly, acquisitions of target firms operating in countries with similar market and economic status with the UK (i.e. the G6 ones) will be more likely to sustain better synergies and better economies of scale in the long-run. On the other hand, the lower premiums paid for targets in the RoW group of countries during booming periods allow for higher short-run gains to these bidders. Whether the bidders enjoy higher gains from deals in the G6 countries (with better synergies) or from deals in the RoW countries (with lower premiums), is an open question that deserves further investigation. In this chapter, I argue that bidders acquiring targets in the RoW group during booming periods (with lower premiums) to outperform bidders acquiring targets in both domestic and G6 group (with higher premiums).[41] Therefore, this allows for the setting of the last testable hypothesis of this chapter which states that:

H6: ***'During low market valuations periods domestic (G6) acquisitions outperform both G6 and RoW (RoW) groups although during high market valuation periods acquisitions of targets in the RoW outperform the ones in the domestic market and the ones in the G6 markets'.***

4.5.3 Control Variables

Factors that are known to affect bidders' gains are also controlled in the analysis.

Bidders' size: Moeller, Schlingemann, and Stulz (2004) reported that larger acquirers earn about 2% less than smaller acquirers. Therefore, to allow for this effect I control for the size of the bidder. The size of the bidder is measured by their pre-bid market capitalization (MV).

[40] One might expect higher gains from domestic bids as well. However, given that investors prefer foreign bidders during those times, it is more plausible for the gains from CBA to outperform the domestic ones.

[41] To an extent, in the general context that M&A create value when the PV of the synergy exceeds the premiums required to finance the deal, I argue that the benefit from the premium component outperforms the one related to the PV of the synergy (in this case it is obvious that the higher PV of synergy is delivered from domestic or G6 bids).

Growth opportunities of the bidder: It has also been documented that the growth opportunities of bidding firms affects their gains. Sudarshanam and Mahate (2003) and Conn et al. (2005) showed that value acquirers (with low MTBV) outperform glamour bidders both in the short and long-run. Thus, I control for growth opportunities of the bidding firm. I measure the growth opportunity of the bidder with their market-to-book value (MTBV) ratio and the price-to-earnings (P/E) ratio one month prior to the announcement of the deal.

Age of the bidder: I also control for the age of the bidding firm. This is because firms with a long trading history have more information available in public domain (Barry and Brown, 1985; Zhang, 2006). Mature firms are more likely to be in more mature industries, while firm's age may also capture the underlying volatility at the industry level. I measure the age of the firm with the number of days that the firm has been recorded in DataStream.

Relative size of the deal: Several authors have concluded that the bidding firm's abnormal returns within a small window surrounding the acquisition announcement's day increases as the target size increases relative to acquirer size (Asquith et al. 1983; Jensen and Ruback, 1983; Jarrell and Poulsen, 1989; Kang, 1993; Fuller et al. 2002, and Draper and Paudyal, 2006). This is due to the fact that the larger the target firm's size relative to the bidder, the more the original structure of the acquiring firm changes as a result of the acquisition.[42]

[42] The relative size is measured by the ratio of the bidder's market capitalization (MV) and the transaction value of the deal (DV), MV/TV.

4.6 Data and Methodology

4.6.1 Sample Description

The information on the deal announcements is extracted from Securities Data Corporations (SDC). The sample comprises of bids announced by UK firms between 01/01/1986 and 31/12/2007. SDC records 59,051 deals announcements by UK firms during this period. The final sample meets the following criteria.

- The acquirer is a UK company traded in the London Stock Exchange (LSE).
- The target is a private, a public, or a subsidiary domestic and cross-border firm.
- The sample is restricted when the acquirer aims to obtain more than 50% of the target firm.
- The deal value is equal to or greater than £1 million.
- The market value of the acquirer is greater than £1 million (one month prior to the announcement of the deal).
- Acquiring firms are not involved in other bids within 5-days (-2 to + 2) around the announcement of the deal.
- Data for the acquirer is available from DataStream.

Finally, 7,633 acquisitions meet the above criteria.

For the purpose of classification of the time periods (i.e. months and quarterly) as depressed, neutral, and booming, a set of time series is required. The time series under consideration are available from the following sources:

- The monthly P/E ratio for the FTSE All Share and the 10 monthly P/E ratios for the 10 industries according to Fama and French 48 industry classification are collected from Thomson Financial DataStream.

- The quarterly Gross National Product (GNP) and Gross Domestic Product (GDP) are collected from Thomson Financial DataStream.
- The monthly Coincidence Index and the monthly Growth Index are provided from the Economic Cycle Research Institute (ECRI).[43]
- The monthly EER for the UK currency is provided from the Central Bank of England.[44]

4.6.2 The Sample Features

Figure and table 4:1 represent the annual distribution of the M&A deals announced by UK bidders between 01/01/1986 and 31/12/2007. Figure 4:1 clearly shows the two major UK mergers waves in my sample, the first during late 1980s and the second during late 1990s. Moreover, the same figure and table depicts the third merger wave in my sample, which has started in 2004 and it is still ongoing.[45] A more detailed examination of the table shows that whereas the domestic M&A activity declines after 2006, the entire CBA activity, as well as the activity in G6 and in the RoW countries, continues to increase after 2006. Among others, some of the main drivers for the last three major M&A waves in the UK market are, (a) the economic expansion of the late 1990s, (b) the technological advancements, (c) the improvement in the information dissemination across the word (i.e. internet), (d) the European's Union formation, (e) the macroeconomic (i.e. government) policy of a large number of countries across the world and (f) the stock market movements over time.

Insert table 4:1 and figure 4:1 about here

[43] The Coincident Index and the Growth Index are provided by the Economic Cycle Research Institute (ECRI), www.businesscycle.com

[44] The Effective Exchange Rate (EER) is provided by the Bank of England, www.bankofengland.co.uk

[45] Although in my sample there is small and insignificant decline of the M&A activity after 2006 (this is due to sample eliminations caused by the limited availability of data from other data sources), the third M&A wave is still ongoing.

Furthermore, according to table 4:2, panel A, all samples (i.e. the entire group, the domestic, CBA, G6, and RoW ones) are overpopulated by acquisitions of privately held target firms (they represent approximately the 50% of the entire sample across all groups), with the portfolio of subsidiary targets to be the next largest one (it accounts of almost 30% of the entire sample across all groups) and the portfolio of deals with listed target firms to account for the smallest proportion (almost 20% in each group correspondingly). These patents confirm the findings of Faccio and Massulis (2005) for 13 European countries and Draper and Paudyal (2006) for the UK market. The distribution of sample according to the various methods of payment (table 4:2, panel B) reflect that the bidders prefer to finance the majority of M&A deals with cash (almost 55% of the entire sample in all groups), following with a combination of both cash and stock and other payments (almost 35% of the entire sample in each group) thereby leaving the smaller proportion for deals financed with stock (almost 10% of the entire sample across all groups correspondingly).

Insert table 4:2 about here

Table 4:2, panel C, summarizes the summary statistics of the sample. Specifically, the bidding firms prefer to pay higher *deal value or transaction value* for targets in the foreign market (£160.67 millions on average) as opposite to the ones in the domestic market (£86.36 millions on average). In fact, among the targets bought in the foreign market for corporate control, the highest deal values are paid for targets that operate in the rest of the world (RoW) group (£167.58 millions on average). The *bidding firm's age* analysis shows that relatively more mature bidders chose to invest in the foreign market (6,315 days on average) compared to bidders that chose to invest in the domestic market (4,978 days on average). Among the bidders that invest in the foreign market, similar mature bidders tend to enter in the G6 group of countries and in the RoW group of countries (6,410 days and 6,168 days on average respectively). Further analysis regarding the *bidders' size* depicts that small bidders prefer to acquire targets in the domestic market (£651.83 millions on average) as opposite to the large ones which prefer to exposure themselves in the foreign market (£13,899.71 millions on average). Among the ones that bid for target firms in

the foreign market, the largest ones prefer to acquire target in countries under the rest of the world (RoW) group (£29,789.24 millions on average) contrary to the ones that bid for target in countries under the G6 group (£3,631.78 millions on average). Regarding the *relative size* of the deal, *P/E ratio*, and *MTBV ratio* the average deviation among all sample groups appear very small, thereby do not allow for any further analysis.

4.6.3 Classification of the Market and Economic Condition as Depressed (Low), Neutral, and Booming (High)

For the purpose of this study, which is to examine the valuation effects to bidding firms that acquire domestic versus foreign target firms across depressed and/or booming periods, the classification of the period as depressed, neutral, and booming, according to the UK stock market's performance and the stage of the UK economy, comprises a very important part that requires very careful consideration. In fact, the methodology employed to de-trend the various time series under consideration may lead to spurious cycles – i.e. to depict the peak, contraction, trough, and expansion stages of the cycle (see Canova, 1993b; King and Rebello, 1993; and Osborn, 1995).

For the purpose of this examination, I de-trend the time series under investigation by considering the following three steps: Firstly, I de-trend the market and the Industry P/E ratios, Coincidence Index, GNP, and GDP by removing the best straight-line fit from the P/E, Coincidence Index, GNP, and GDP of the month in question and the five preceding years. In the next step, each month (or quarter) is categorized as above (below) average if the de-trended market P/E, Coincidence Index, GDP, and GNP of the month/quarter in the question is above (below) this past five-year average. Next, the top half of the above-average months/quarters are classified as booming periods and the bottom half of the below-average months/quarters are classified as depressed periods. All other months/quarters are classified as neutral periods. This approach leaves the mid-50 percent of the months/quarters in the

question to lie within the neutral-period whereas both the booming and depressed month/quarter period to represent the other 50 percent.

4.6.4 Summary Statistics Based on the M&A Activity

This section presents the summary statistics related to the M&A activity during depressed and or booming time periods. Specifically, in this section I investigate whether the M&A activity varies with the (a) market valuations at both aggregate and industry level and (b) the average deviation of a set of macroeconomic variables such as the coincidence index, the GDP, GNP and its growth index in the UK economy. Figure 4:2 shows the distribution of the M&A activity over time subject to the above mentioned proxies. Clearly, both the market and the industry P/E ratios indicate that the M&A activity increases during periods of high market valuations, regardless the target firm's domicile (i.e. all, domestic, CBA). The results on the M&A activity subject to macroeconomic indicators show that the M&A activity increases substantially from periods of economic contraction to periods of economic expansion. Indeed, the coincidence index, the GNP and the GDP show the highest differences between the low and high M&A activity periods. Overall, figure 4:2 explicitly conveys that the M&A activity clusters over time regardless the target firm's domicile. This supports the first and the second hypotheses of this investigation which further allows the investigation of the rest of the hypotheses (given that both domestic and CBA activity clusters over time).

Insert figure 4:2 about here

4.6.5 Announcement Period (Short-Run) Gains

For the short-run analysis, this chapter follows the tradition event study methods as summarized in Brown and Warner (1985). Cumulative Average Returns (CAR) for 5-

days [-2, to +2] surrounding the announcement day (day 0) are estimated. The abnormal return of acquirer is estimated using equation (3).

$$AR_{i,t} = R_{i,t} - R_{m,t} \tag{3}$$

Where:

$AR_{i,t}$ = The abnormal return for security i in time period t;

$R_{i,t}$ = The return for the security i in time period t, $\left[\frac{(RI_{i,t} - RI_{i,t-1})}{RI_{i,t-1}}\right]$; and

$R_{m,t}$ = The return for the market (the FT-All Share measured as the percentage difference of the Market Index) equally weighted index in time period t.

Finally, equation (4) estimates the Cumulative Abnormal Returns (CAR) for the five-days around the announcement day (t).

$$CAR_i = \sum_{t=-2}^{t=+2} (R_i - R_m)_t \tag{4}$$

4.6.6 Long Run Performance

To assess the post-acquisition performance of bidders I estimate one, three and five year holding period excess returns after controlling for known risk factors identified in Fama and French (1996). Average monthly post-merger excess returns for 12, 36, and 60 months are estimated under a calendar time portfolio regression (CTPR) framework. The CTPR accounts for the cross-sectional dependence of stock returns, particularly due to the inclusion of frequent acquirers, caused by the lack of independence among observations. This problem arises from overlapping returns and the non-random timing of acquisitions.[46] For each calendar month in the period from January 1986 to December 2007, excess returns are calculated for all sample

[46] For a detailed explanation of the CTPR method see Lyon et al. (1999).

firms that announced bids with unlisted target firms during the previous 12, 36 and 60 months. The calendar-time portfolio excess returns are estimated with equation (5):

$$\left(R_{p,t} - R_{f,t}\right) = \alpha_p + \beta_p\left(R_{m,t} - R_{f,t}\right) + s_p SMB_t + h_p HML_t + \varepsilon_t \quad (5)$$

In equation (5), the intercept (α_p) measures the monthly average excess return of bidders after controlling for the effects of three risk factors. The dependent variable $\left(R_{p,t} - R_{f,t}\right)$ is the monthly excess return of the calendar-time portfolio of bidders over risk free rate; $\left(R_{m,t} - R_{f,t}\right)$ is the excess return of market portfolio; SMB (Small minus Big) is the excess return of a portfolio of small firms (value weighted) over a portfolio of large firms; and HML (High minus Low) is the excess return of a portfolio of value firms (value weighted) over glamour firms. SMB and HML are estimated using the method outlined in Fama and French (1996).

4.7 Empirical Findings

This section reports and interprets the findings from this empirical chapter. Initially, it focuses only on the analysis of the short-run and the cross-section results whereas it concentrates on the analysis of the post-acquisition findings towards the end of this section. The main research question that is addressed in this chapter is to uncover performance differentials from domestic versus CBA in the short and in the long-run across periods of different economic conditions and market valuations. Accordingly, portfolios are formed based on specific proxies chosen to capture the level of market valuations and economic conditions throughout time. Abnormal returns differentials are also uncovered in each case between portfolios of domestic bidders versus foreign ones (and domestic versus the sub-groups of foreign ones only) for all periods as well as across periods subject to high or low market valuations, high or low economic conditions and strong or weak EER.

4.7.1 Announcement Period (Short-Run) Gains

Bidding firms' announcement period (short-run) cumulative abnormal returns (hereafter CAR) are only reported in this sub-section. They are reported in a two-dimension framework: initially CAR is reported (vertically) for the entire sample of acquisitions, following sub-portfolios of only domestic acquisitions, foreign acquisitions, and the foreign acquisitions' sub-groups (i.e. G6 countries and the RoW countries).[47] The same portfolios, as stated above, will be reported for acquisitions that occur during low-neutral-high market valuations or low-neutral-high economic conditions or weak-neutral-strong EER (horizontally). Accordingly, differentials will be uncovered between portfolios of domestic bidders versus foreign ones. In order to further explore the source of any significant differential detected in performance in the framework of domestic versus CBA, further differentials are estimated for bidders investing in the framework of domestic versus G6 countries, domestic versus RoW, and finally for the G6 versus RoW groups of countries. Along with the main research question of this chapter, differentials for the same portfolios as above will be recorder but only for bids that occurred either during low or high market valuations, low or high economic conditions, and weak or strong EER. In the same context, results will be reported based on their further division according to target status (i.e. private, public, and subsidiary) and method of payment (i.e. cash, stock, and mixed/other). All tables are divided in 3 panels which include the entire sample (panel A) and panels according to the target firm status (panel B: private, public, subsidiary) and the method of payment (panel C: cash, stock, mixed/other).

The results are reported initially according to market valuations' proxies. The FTSE All Share P/E ratio is used to capture the aggregate's market valuation while the 10 industry classification P/E ratios are used to capture the industries' market valuations in the UK market. Next, results are reported according to proxies that capture the economic condition in the UK market. This sub-section starts with the

[47] Where G6=G7-UK and RoW=World-G7, as discussed extensively in previous sections.

business cycle indicators and follows with the GNP and its growth rate index in the UK market. Finally, the short-run results are reported according to the EER of the UK Sterling Pound. In addition, along with the univariate analysis, the results based on the cross-section analysis follows.

4.7.1.1 Announcement Gains Subject to Market Valuations

Tables 4:3 and 4:4 record CAR for UK acquirers sorted according to the de-trended FTSE All Share's P/E index and the 10 industry classification P/E ratios for the UK market respectively. Panels A of both tables report CAR for the entire sample. Accordingly, the CAR for the entire sample is 1.32% and highly significant whereas this figure is clearly driven by bids of public target firms (2.29%) and for bids financed with cash (1.67%). Further, the CAR for bidders engaging in M&A with domestic targets firms (1.47%), foreign ones (0.98%), and firms operating in the foreign market in the G6 (0.80%) and in the RoW countries (1.26%) are similarly all driven by the results subject to targets firms status and the various methods of payment utilized (panels B to C of both tables 4:3 and 4:4).

Along similar lines, for the entire sample (i.e. all periods) bidding firms acquiring targets that operate in the domestic market outperform the ones buying targets operating in the foreign market by a highly statistically significant margin of 0.49%. Further analysis conveys that acquiring firms bidding for domestic targets firms (a) outperform the ones bidding for targets in the G6 group of countries with 0.67% (highly statistically significant) and (b) yield similar CAR with the ones buying targets in the RoW group of countries (0.22% statistically insignificant higher CAR for domestic bidders). Moreover, within the framework of CBA only, bidders enjoy 0.50% higher CAR when acquiring targets in the RoW group of countries than in the G6 one. Whether these gains to bidders in the framework of domestic versus CBA are driven by the dynamics of market valuations and economic conditions over time is an empirical question that will be addressed in the next few sections.

Insert tables 4:3 and 4:4 about here

The discussion is now concentrating on the results obtained according to market valuations over time; it appears that when moving from the portfolio subject to low market valuations to the one subject to high market valuations bidder gains increase geometrically. Indeed, according to panel A of table 4:3 (4:4), for the entire sample, the gains to bidders increase geometrically from 0.61% (0.79%) during low market valuation periods to 1.50% (1.75%) during high market valuation periods (these findings are similar with the ones reported by Bouwman et al. 2009). The same pattern holds for all portfolios according to target firm's domicile. These results clearly support the third hypothesis which further supports the neoclassical theory of mergers (Nelson, 1969; Gort, 1969; Eis, 1969; Mitchell and Mulherin, 1996; Mulherin and Boone, 2000; Andrade et al. 2001). Further analysis in terms of the performance to bidding firms acquiring targets in the domestic versus foreign market suggest that the market valuations constitute a very important role in the explanation of bidder gains. In short, bidders earn higher returns when they invest in the home (foreign) market during low (high) market valuations periods. In general, the univariate analysis suggests that bidders enjoy on average 0.83% (significant at 5% level) higher gains by investing in the domestic market during low market valuations than investing in the foreign market. Further, when taking into account other deal and firm-specific characteristics (in cross-section analysis) the findings confirm the above pattern. Indeed, bidders enjoy higher gains from domestic (foreign) bids during low (high) market valuation periods of 0.72% and 0.65% (0.47% and 0.25%) – see table 4:8, panel D. This is the first indication for the deterministic power of market valuations on the gains to domestic versus foreign bidders' shareholders. This finding confirm the forth hypothesis of this chapter which is also consistent with the findings recorded by Rosen (2006).

In order to derive the source of this outcome, further investigation according to target firms' domicile and market valuations is required. The findings indicate that bidders enjoy the highest gain (1.26%) from acquisitions in the domestic market than the acquisitions in the G6 group of countries during low market valuations. In

addition, during low market valuations, bidders enjoy the highest gain when investing the RoW group of countries rather than in the G6 one (1.10% on average). The same pattern holds when the 10 industry classification P/E ratio is used (table 4:4, panel A). While these findings provide answers to the main questions that are addressed in this chapter and further support the sixth hypothesis of this study, they also add significant value to our existing knowledge in terms of the wealth effects to bidders acquiring domestic versus foreign target firms across different market valuation conditions.

Having investigate and provide clear answers with regards the impact of market valuations (i.e. both at the aggregate and industry level) on the stock price reaction around domestic and foreign mergers, the next consideration is to investigate the deal and firm-specific characteristics that may have a significant impact on such stock price reaction around M&A announcements (similar discussion will be provided in the cross-section analysis). Basically, from both tables 4:3 and 4:4, the higher gains to bidders acquiring domestic target firms versus foreign ones are clearly driven by bids of privately held targets firms and from bids that financed with cash payments (see panels B and C). Indeed, during low market valuations, bidders acquiring domestic private target firms earn on average higher CAR than foreign bidders of private target firms of 1.73%, 2.12%, and 1.13% (similarly 1.13%, 1.05%, and 1.28% for the 10 industry classification P/E ratios). Along these lines, during low market valuations, domestic bidders financing acquisitions with cash payments outperform the ones acquiring foreign targets with the same mean of payment by 1.55% and 2.19% (similarly 1.02% and 1.30% for the 10 industry classification P/E ratios). Overall, it appears that acquiring firms' shareholders are taking long positions in bidders' stock that prefer to acquire in the domestic market during low market valuation periods while it has also been found that the target status and the method of payment play a significant role in the same framework. Similarly, UK investors show a strong preference on bidders' stock that avoid expanding internationally during times where the source market experience low market valuations. To an extent, the market valuations along with the target status and the method of

payment in M&A represent very important determinants for any short-run gains or losses realized by bidders acquiring domestic versus foreign targets firms.

4.7.1.2 Announcement Gains Subject to Economic Conditions

The economic condition in the home market at the time of an M&A announcement is expected to play a significant role in shaping the acquiring firm's announcement returns. To an extent, in cases of the acquiring firm's exposure in the foreign market, the economic condition of both the home and the host market are likely to affect bidders' gains.[48] Tables 4:5 to 4:7 record the CAR for portfolios of UK acquirers sorted according to the economic condition in the UK economy at the time of the M&A announcement, which therefore is expected to influence the M&A activity and thus premiums paid to finance the deals thereby the announcement gains displayed to bidders' shareholders. Across all three tables, results convey that bidding firms gains decrease as we move from the portfolio subject to low rates of economic growth to the one subject to high rates of economic growth. This is likely to happen as during periods of high rates of economic growth the M&A activity increase significantly (compared with the one at low rates of economic growth – see section 4.6.4 – Summary Statistics Based on the M&A Activity – for more information related to the influence of the rates of economic growth on M&A activity), implying that the competition among bidders is higher, the premiums paid by the winning bidder during those periods are higher than otherwise, and thus the gains earned by bidding firm decrease. However, during different levels of economic growth bidders acquiring domestic and or foreign targets either earn higher gains or experience significant losses. The following two sub-sections investigate the impact (likely impact) of the economic condition in the source's (host's) country, as measured by (a) the coincidence index and (b) the GNP and the growth index, on the stock price reaction around merger announcements of domestic versus foreign target firms.

[48] This chapter investigates the impact of the likely growth level in the foreign market on bidders' gains.

4.7.1.2.1 Business Cycle Conditions

Accordingly, table 4:5 reports results based on the de-trended coincidence index which captures the UK's stage of the business cycle over the course of several decades. When the entire sample is concerned (panel A), differentials generated from bids of domestic versus foreign target firms are on average higher during times when the business cycle is at its though stage, rather than its peak one (they appear 0.64% and 0.45% respectively for the though and the peak stage of the business cycle). These findings are clearly driven by the differentials generated from bids in the context of domestic versus G6 markets.[49] On the other hand, not only the differentials between domestic and the RoW group appear negative, but the differentials between the G6 and the RoW groups appear negative and significant in both statistic and economic terms. Overall, these findings suggest that domestic bids always outperform the ones in the foreign market, irrespective of the stage of the business cycle at the time of the M&A announcement, partially supporting the fifth testable hypothesis of this study.[50]

Insert table 4:5 about here

However, when other firm and transaction-specific characteristics are concerned, domestic bids during the peak stage of the business cycle outperform foreign ones. In fact, when private or subsidiary firms are acquired, and when the method of payment utilized is common stock, domestic bids during the peak stage of the business cycle generate higher gains than the foreign ones. Clearly, this finding fully support the fifth hypothesis of this chapter which predicts higher gains to domestic bidders, rather than to foreign ones, during periods subject to high levels of

[49] Accepting the argument that the business cycles between the UK market and the G6 ones are moving together over time, the M&A activity in the G6 countries is expected to be high as well. This implies that the premiums required for UK firms to enter the G6 ones are high, which therefore constitute M&A in the G6 countries as either zero or negative NPV projects (i.e. the PV of synergy <= premium paid).

[50] However, when I control for simultaneous effects in the cross-section analysis, I fully support this hypothesis. In fact, cross-section analysis suggests that domestic acquisitions during the periods of high economic activity (when the business cycle is at the peak) bidders enjoy on average 0.68% higher gains than foreign target firms bidders.

economic growth. This outcome is mainly driven by the fact that investors dislike firms that exposure themselves in the foreign market (especially in the G6 countries) during periods of high economic growth in the home market. This is as bidding firms (a) face high competition in the foreign market during these times (especially in the G6 countries) which in turn decrease the abnormal returns to bidders' shareholders, and (b) bidders do not prefer to stay in the home market by taking advantage from available domestic opportunities during these times.[51]

Overall, the above analysis shows that the stage of the UK business cycle provides important information regarding the shape of the M&A activity over time and thus the gains generated to bidders in the framework of domestic versus CBA. It has also been suggested that the fundamental role of the target status and the method of payment in the gains to bidders acquiring domestic versus foreign target firms during high and or low levels of economic growth is very important. Similar findings will be reported in a subsequent section where I interpret my findings from the cross-section analysis.

4.7.1.2.2 Gross National Product (GNP) and the Growth Index

Tables 4:6 and 4:7 record results based on the de-trended Gross National Product (GNP) and the levels of economic growth in the UK. These proxies are employed to capture the economic conditions in the UK at the time of the acquisition's announcement and to generate information regarding the M&A activity during those times thereby about the bidders' gains. Accordingly, for the entire sample (panels A from both tables), bidders acquiring domestic target firms outperform the ones bidding for foreign targets firms during periods subject to high economic growth. Indeed, panel A (table 4:6) indicates that UK bidders gain on average 0.61% higher gains from domestic bids rather than from bids of foreign target firms. The gain

[51] Periods of high economic performance spike with several technological improvements and innovations. Therefore, domestic investments during these times should generate positive NPV investments (PV of synergy > Premium paid). On the other hand, investments in the G6 countries they can still generate positive PV of synergies, although these gains may cancel out due to high premiums will be paid out (i.e. the PV of synergies <= premium paid).

generated to domestic versus the G6 bidders (0.92% and 0.59%) confirms the above finding. These findings are in line with my fifth hypothesis which clearly suggests that domestic bidders should outperform foreign ones during periods of high economic activity.[52] Moreover, the portfolio of bidders acquiring targets in the RoW group of countries outperform the one of bidders acquiring targets in the G6 countries during periods of high economic activity/performance, suggesting that the target firm's domicile along with the level of economic performance at the time of the M&A announcement shape the bidding firm's gains. Furthermore, these gains are mainly driven by acquisitions of listed targets and acquisitions financed with cash payments, indicating the important of transaction- and firm-specific characteristics in the same framework.

Insert table 4:6 and 4:7 about here

Some explanations for the above mentioned bidders' performance are discussed bellow. It is very likely that the business cycles of the G7 economies (including the UK) to move together over time. In addition, it is very likely that periods subject high economic performance to curry high M&A activity as well (Weston, 1953; Nelson, 1959; Gort, 1969; Steiner, 1975; Chung and Weston, 1982; Golbe and White, 1993; and Andrade et al. 2001). Thus, when economic performance and the M&A activity in the UK are in high levels, the economic performance and the M&A activity of the other G6 countries are very likely to reach high levels too. This may have two important implications of the above results. First, the higher gains to domestic bidders versus the foreign ones and also the higher gains to domestic bidders versus the ones investing in the G6 group of countries are mainly driven by (a) the limited premiums required to be paid by bidders when buying domestic target firms (comparing with the ones acquiring foreign targets firms), and (b) the bidder's prevention of face that additional foreign market's risks (i.e. political risks, exchange rate ones, economic ones, government policy ones, central bank policy ones, etc).

[52] Similar findings are reported from the cross-section analysis. In fact, when I control for simultaneous effects in the cross-section analysis it appear clear that during periods of high economic growth, domestic bidders enjoy higher gains than foreign ones of about 0.51%.

The former is very likely to happen as the high competition in the G6 countries will eventually increase the premiums required from the bidder to enter these markets (by forcing the winning bidders to overpay for that deal generating thereby a negative NPV for that project as the initial investment is higher than all discounted future cash flows). In addition, the business cycles of the RoW countries are very unlikely to move closely with the business cycles of the G6 ones, implying that the gains to bidders acquiring in the RoW countries to be higher than the gains to bidders acquiring in the G6 countries (due to lower premiums required to enter these markets during such times). The above two arguments provide some explanations on the wealth effects generated to bidders acquiring domestic versus foreign targets, domestic versus targets in the G6 countries and acquisitions in the G6 countries versus the RoW ones.

Overall, it appears from the above discussion that both the de-trended UK's GNP and the growth index can provide further explanations for the wealth effects generated to UK bidders when acquire domestic versus foreign target firms. It appears also that the gains to bidders within the same framework are a function of deal and firm-specific characteristics. Similar findings will be reported in a subsequent section where it interprets the findings from the cross-section analysis.

1.6.3.1 Cross-Section Analysis

Although the results from univariate analysis focus (individually) on the impact of market valuations, the stage of the economy, the targets status and method of payment, they cannot account for simultaneous effects of multiple factors and allow for interaction between various determinants of acquirer's gains. To overcome such limitations, announcement period (5-days) excess returns (CAR) of bidders are regressed against a set of explanatory variables that are likely to be responsible in shaping the gains of acquirers engaging in acquisitions with domestic and foreign target firms.

$$CAR_i = \alpha + \sum_{i=1}^{N} X_i + \varepsilon_i \quad (6)$$

The intercept, (α) in equation (6), measures the excess return to bidders after accounting for the effects of all explanatory variables, while the vector of explanatory variables, 'X', includes variables likely to explain the CAR of bidding firms. The vector of explanatory variables, 'X', includes acquirer's age on the day of bid announcement (log), acquirer's market value one month prior to the announcement of deal (log), relative size of the deal measured as the deal value divided by acquirer's market value, bidder's growth opportunity (ratio of market to book value of equity and price to earnings of acquirer one month prior to the acquisition announcement), and deal value (log). Dummy variables that take the value of one and zero otherwise, are included to represent cross-border deals, private targets, listed targets, and cash only and stock only deals. Further, constant and slope dummies representing the low and high market valuation period, low and high economic condition, and weak and strong EER are also included where appropriate. Table 4:8 presents the results from my multivariate analysis.

Insert table 4:8 about here

Following the table 4:8, empirical findings display that the impact of market valuations and economic conditions over time along with firm and transaction-specific characteristics appear, simultaneously, very important factors in shaping the bidding firms' CAR. Initially, models 1 to 12 (table 4:8, panel A) depict only the importance of deal and firm-specific characteristics on the explanation of the bidders' CAR. In fact, I find that the bidders' abnormal returns are very sensitive to the *bidding firms' age*, which further supports the findings of Zhang (2006) with regards the level of the information uncertainty in the bidding firm's business environment at the time of the deal announcement. In addition, I find across all models a negative and statistically significant relationship between CAR and *bidders' size*, consistent with the findings of Moeller et al. (2004). On the other hand, the *relative size* coefficients appear positive and highly statistically significant across all

models. This in line with several studies that have proposed that the bidding firm's abnormal returns within a small window surrounding the acquisition announcement's day increase as the target size increases relative to acquirer size (Asquith et al. 1983; Jensen and Ruback, 1983; Jarrell and Poulsen, 1989; Kang, 1993; and Fuller et al. 2002). This relationship implies that the larger the target firm's size relative to the bidder, the more the original structure of the acquiring firm changes as a result of the acquisition.

Furthermore, the relationship between the CAR and the *MTBV ratio* is negative and significant across most models. This finding implies that bidders with higher growth opportunities during the pre-bid period yield higher CAR within a small window surrounding the time of the M&A announcement (Rau and Vermaelen, 1998; Sudarsanam and Mahate, 2003). Along similar lines, this analysis depicts that a positive and significant relationship between (a) the CAR and the *P/E ratio* as well as (b) the *value of the deal*. Further analysis shows that bidders acquiring target firms in the foreign market for corporate control experience significant losses in the short-run (models 6 to 12, panel A). Indeed, model 12 indicates that on average when UK bidders acquiring foreign target firms experience significant losses of about -0.69%. Lastly, panel A further shows that the target status and method of payment in M&A plays a very important role in the determination of the bidding firms' CAR. Consistent with several studies in the literature, bidders enjoy significant gains when they acquire private and listed targets with cash, although they experience significant losses when they utilize their equity to finance their projects.[53]

Panels B and C depict the sensitivity of bidders' gains on the market valuations and the stage of the UK economy over time. Clearly, models 13 to 20 show the impact of market valuations (at both industry and aggregate terms) on the bidders' CAR; bidders enjoy positive and significant abnormal returns in the short-run when M&A are announced during high market valuations (0.55% and 0.51% on average)

[53] For related studies see for example, Myers and Mjluf (1984), Travlos (1987), Chang (1998), Draper and Paudyal (1999), Fuller et al. (2002), Draper and Paudyal (2006), Antoniou, Petmezas, and Zhao (2007), and Alexandridis, Antoniou, and Zhao (2006 and 2008).

whereas they lose significantly when the M&A occurs during periods of low market valuation (-0.96% and -0.71% on average). These findings are clearly support the third testable hypothesis of this study and the neoclassical theory of mergers (Mitchell and Mulherin, 1996; Andrade, et al. 2001; Bouwman, et al. 2009). Along similar lines, proxies that capture the stage of the UK economy at the time of the M&A announcement indicate that the coincidence index, the growth index as well as the de-trended GNP, influence bidders' gains in the short-run (models 21 to 32). In fact, all three proxies suggests that on average bidders enjoy the highest gains when acquire target firms during periods of low economic activity. Lastly, the EER shapes the bidders gains in the same framework (models 33 to 36). The coefficients of the EER suggest that bidders enjoy positive and significant abnormal returns during strong EER periods whereas when the EER is weak the coefficients appear negative and highly significant.[54]

The answer to the question on whether the gains to bidders from domestic versus CBA are function to market valuations, the economic condition and the power of the EER over time is provided from the results in panel D (models 37 to 50). These records clearly display that market valuation shape to a great extent the gains to bidders from domestic versus CBA (models 37 to 40). Bidders enjoy positive and significant gains from domestic acquisitions during low market valuation (0.72% and 0.65%) whereas they experience significant gains when they acquire foreign targets during high market valuation periods (0.47% and 0.25%). These findings fully support the forth hypothesis of this study. Concerning the macroeconomic indicators (models 41 to 48), bidders always enjoy higher gains when they chose to invest in the domestic market during periods of high economic growth and when the business cycle in at the peak stage (i.e. booming periods). Similarly, these findings support the fifth hypothesis of this chapter which suggests that bidders prefer to stay in the domestic market when the economy experiences high levels of economic growth. Lastly, models 49 and 50 suggest that domestic bidders yield higher abnormal

[54] This could be due to the fact that the majority of M&A deals in the sample are domestic ones.

returns when the EER is weak (0.64%) whereas foreign bidders yield higher (or generate zero) wealth effects during periods of high EER.

In general, the cross-section analysis depicts the importance of market valuations and the stage of the UK economy at the time of the M&A announcement, along with the significant impact of several deal and firm-characteristics, on the overall view of this examination. Specifically, research outcomes from this analysis add significant value on our existing knowledge on the explanation of gains of acquirers in the context of domestic versus CBA by suggesting the influential impact of (a) the market valuations, (b) growth levels in the UK economy, and (c) the movements of the Pound Sterling EER at the time of the bid announcement, as additional factors affecting short and long-run performance.

4.7.2 Long-Run Analysis

The findings based on the short-run analysis (both univariate and cross-section one) confirm that market valuations, economic conditions, and the power of the UK Sterling at the time of the M&A announcement, are significant determinants of the domestic versus foreign bidding firm's short-run performance. The question on whether the long-run gains to domestic bidders versus foreign bidders are shaped by the pre-stated proxies is still an open question in the M&A literature. However, the main discussion and interpretation of the long-run results of this chapter add significant value to our existing knowledge. Excess returns are measured by using the calendar-time portfolio regression (CTPR) market adjusted returns and calendar-time regression intercepts, and alphas. The Fama and French (1996) three factor model is used.

Table 4:9, panels A, B, C, D and E represent results for all deals, deals with only domestic target firms, deals with only foreign target firms, deals with targets in the G6 countries and deals with targets in the rest-of-the-world (RoW) countries respectively. Panel A shows that, on average, UK bidders gain positive post-merger

monthly returns (i.e. 0.67% within a window of 60 months following the M&A announcement) irrespective of the event window whereas this finding is clearly driven by domestic deals. In addition, results for the entire sample indicate that bidders enjoy higher gains in the long-run when they announce bids during high market valuation periods. This finding remains the same across all portfolios subject to target firm's domicile. The latter finding clearly supports the neoclassical theory of mergers while it supports recent studies in the finance literature (see for example Bouwman et al. 2009). Clearly, the long-run analysis in this study's framework suggests that market valuations shape the bidder gains after 1, 3, and 5 years following the M&A announcement.

Insert table 4:9 about here

Further analysis suggests that bidders' returns in the long-run are affected by the stage of the UK economy at the time of the M&A announcement. In fact, bidders enjoy positive and significant gains in the long-run when the M&A deal is announced during periods of high growth rates or during the peak of the business cycle. These findings are observed for domestic M&A announcements whereas for foreign bids they appear positive (as in the domestic) only when the target firm is operating in the G6 group of countries. Lastly, post-merger results subject to the level of the EER at the time of the M&A announcement suggest that, on average, bidders' returns are shaped by the power of the EER only when they acquire foreign target firms. In general, bidders enjoy the highest gains from foreign acquisitions in the long-run during periods of strong EER at the time of the deal announcement. Overall, the above discussion reflects the importance of market valuations, the stage of the home market's economy as well as the level of the EER at the time of the M&A announcement on the bidding firm's long-run gains determination.

4.8 Conclusion

This chapter examines whether the short and long-run wealth of shareholders of UK bidders acquiring domestic versus foreign targets is affected by market valuation conditions, economic conditions and the EER of the Pound Sterling at the time of the M&A announcement. Several control variables supported by extant literature are applied, along with the pre-stated proxies, in order to provide additional explanations to any gains or losses detected between domestic M&A and CBA. The main conclusions of the chapter suggest that market valuation and economic conditions in the source country, and the level of the source country's EER, play a very important role in shaping domestic and CBA activities over time as well as bidders' gains both in the short and in the long-run.

In general, the findings confirm that in the context of domestic M&A versus CBA, domestic acquirers enjoy higher announcement gains than acquirers of foreign targets, only when the deal is announced during low market valuation periods. On the other hand, acquirers opting to acquire foreign target firms, outperform the ones opting for domestic targets in the short-run, only when the deal is made during high market valuation periods. These findings support the main hypothesis of this chapter, which states that due to investors' optimism at the time of the M&A announcement, investors prefer bidders that acquire targets in the domestic (foreign) market during low (high) market valuation periods. Along similar lines, bidder gains in the short-run are found to be affected significantly by the economic conditions in the UK and the level of pound sterling's EER at the time of the M&A announcement. Bidders enjoy also higher announcement gains from domestic deals only when the bid is made during periods of high economic growth and/or during the peak of the business cycle. Further, domestic bidders outperform foreign ones only when the EER is weak at the time of the M&A announcement. Along with the above findings, the target status and the method of payment, as well as other firm and transaction-specific characteristics such the relative size of the deal, the size and

the growth opportunity of the bidder are also found to play a very important role in the determination of the gains of bidders in the short-run.

Results also confirm that bidders' long-run performance is shaped by market valuations at the time of the M&A announcement. Specifically, bidders enjoy positive and significant gains in the post-merger period only when the M&A is announced during high market valuation periods. In addition, bidders enjoy the highest gains from the acquisitions made at times when the economic growth is high and the business cycle is at its peak stage. These findings suggest that the post-merger performance to UK bidders is significantly influenced by the economic condition at the time of the deal announcement. Overall, the main findings that derived from this empirical chapter contributes to the M&A literature by presenting strong evidence that the market valuation and economic conditions, and the EER at the time of the takeover bid announcement, provide additional explanations of the valuation effects of bidders acquiring domestic versus foreign target firms.

4.9 Figures and Tables

Figure 4:1 – Annual Distribution of M&A Activity by Country of Origin

The figure presents the annual distribution of takeovers of UK bidding firms, acquiring both domestic and foreign target firms over the period 1986 and 2007.

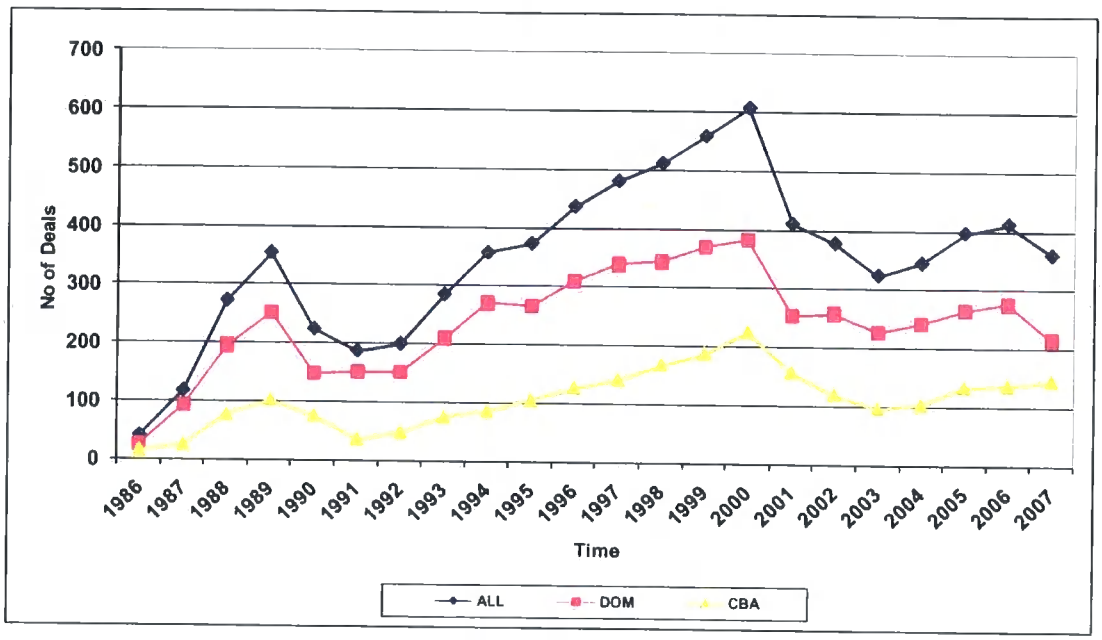


Figure 4:2 – Distribution of M&A Activity by Country of Origin, Market Valuations, Economic Conditions, and the Level of Effective Exchange Rate at the Time of the Deal Announcement

The figure presents the M&A activity for UK bidding firms acquiring targets operating in the UK and in the foreign market for corporate control during periods subject to high versus low market valuations, high versus low level of economic performance and strong versus weak effective exchange rate at the time of the deal announcement over the period between 1986 and 2007.

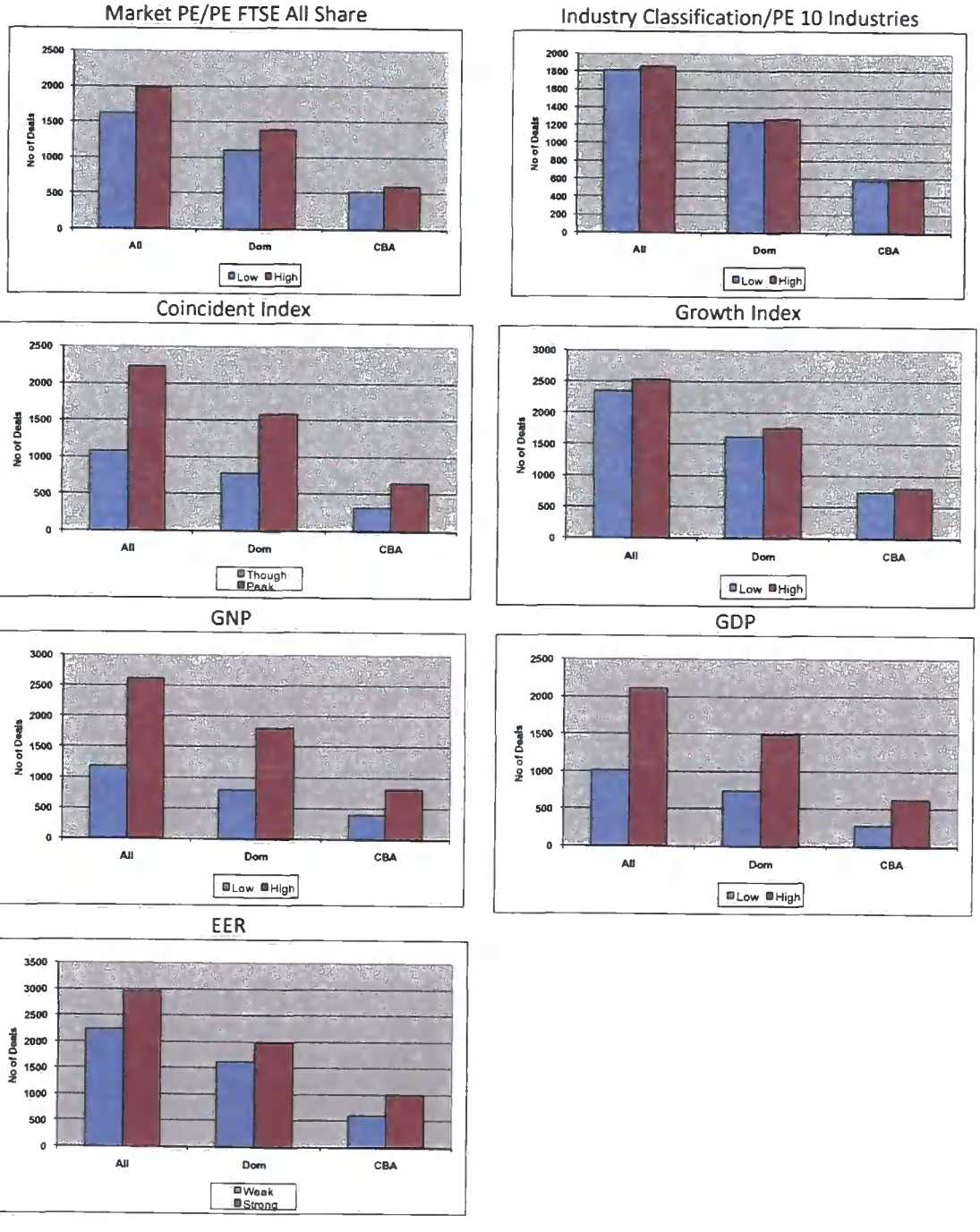
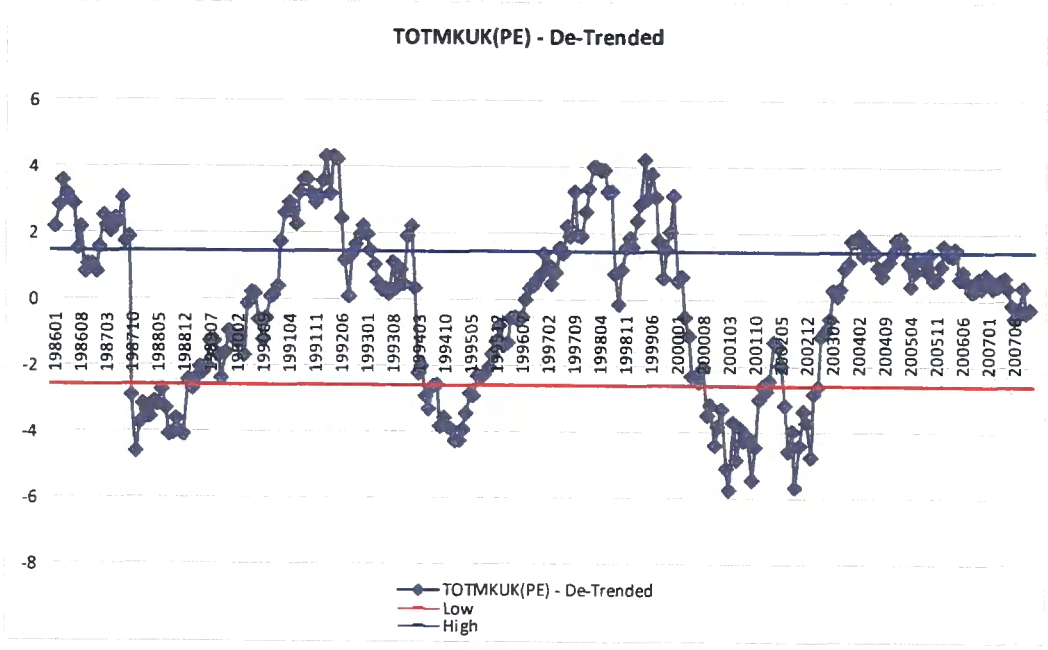


Figure 4:3 – The History of Merger Activity (Covers US and UK Merger Waves)

The figure represents the history of merger activity since the early stages of the 20th century until recent years.

Figure 4:4 – A Graphical Representation of the Low-Neutral-High Classification of the Period Based on the De-Trended Time Series of the (UK) FTSE All Share P/E Index



Low	Neutral	High
$-5.76 \le y_t \le -2.62$	$-2.61 \le y_t \le 1.44$	$1.45 \le y_t \le 4.33$

Figure 4:5 – A Graphical Representation of the Low-Neutral-High Classification of the Period Based the De-Trended Time Series of the UK Coincidence Index

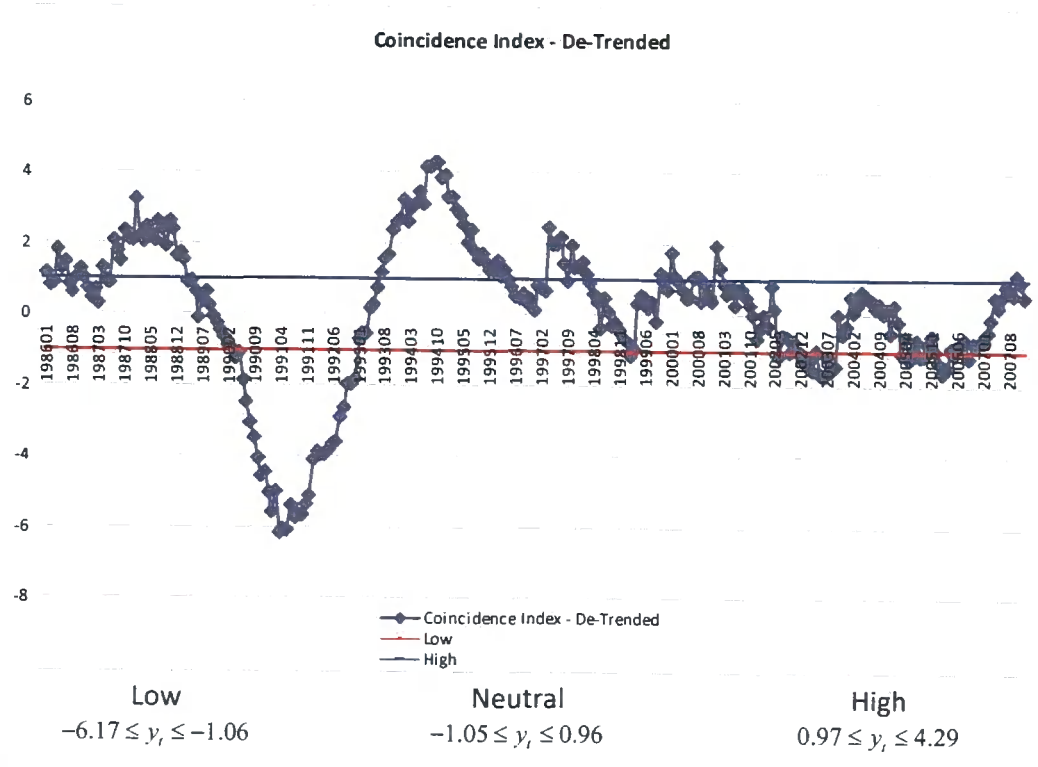


Figure 4:6 – A Graphical Representation of the Low-Neutral-High Classification of the Period Based the De-Trended Time Series of the UK GNP

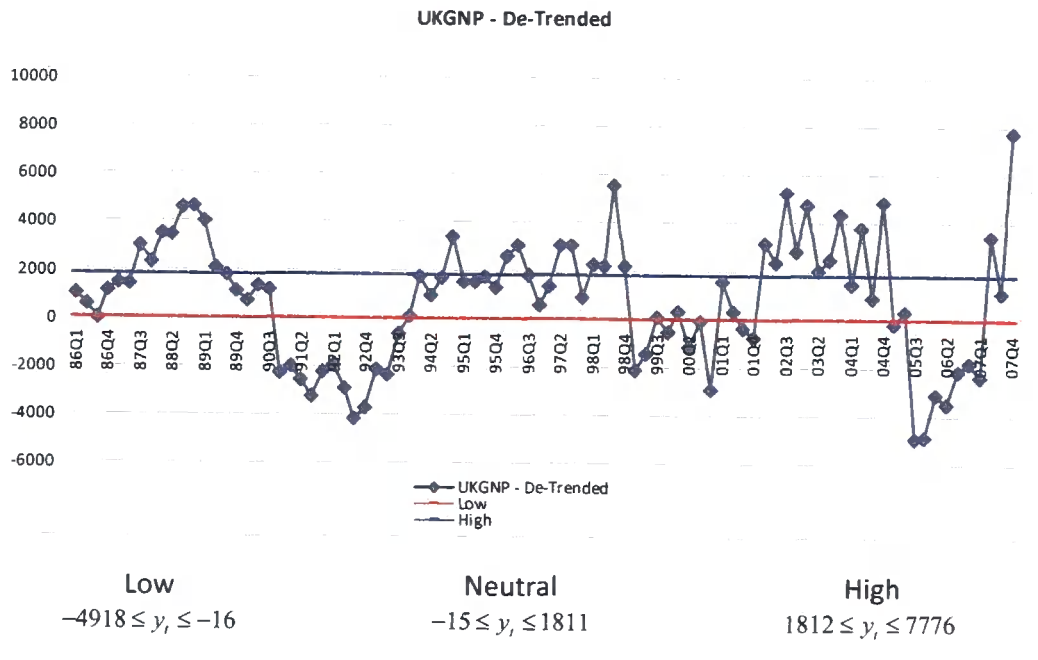
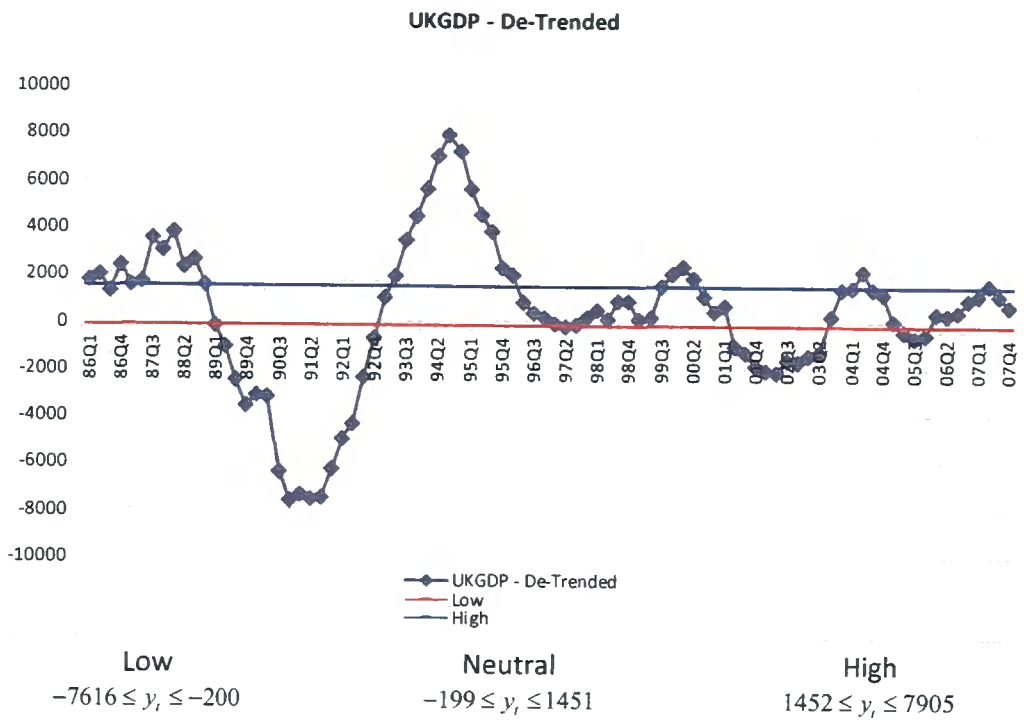


Figure 4:7 – A Graphical Representation of the Low-Neutral-High Classification of the Period Based the De-Trended Time Series of the UK GDP

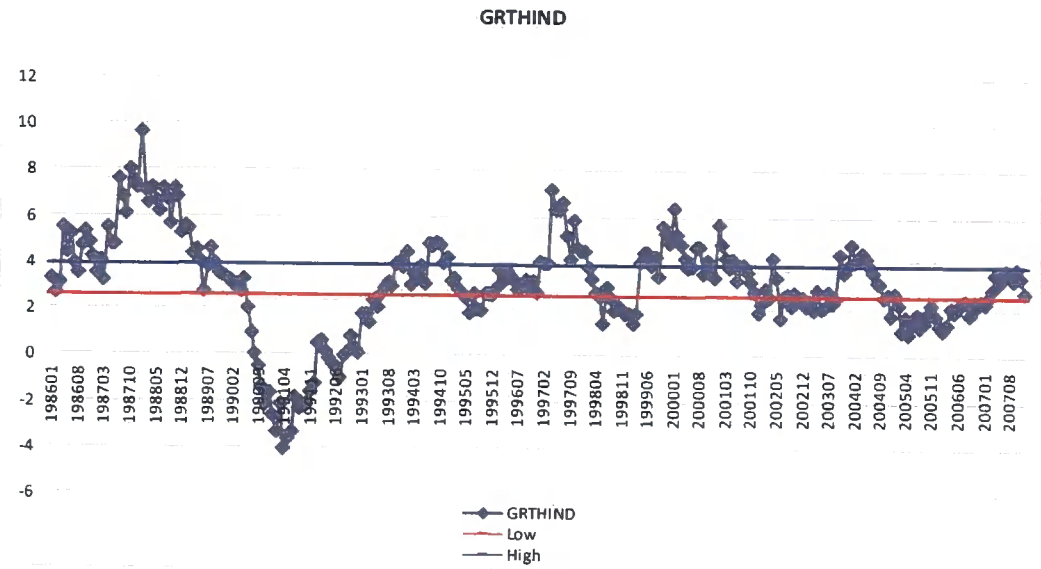


Low
$-7616 \le y_t \le -200$

Neutral
$-199 \le y_t \le 1451$

High
$1452 \le y_t \le 7905$

Figure 4:8 – A Graphical Representation of the Low-Neutral-High Classification of the Period Based the UK Growth Index (Raw Data)



Low
$-4.10 \le y_t \le 2.55$

Neutral
$2.56 \le y_t \le 3.88$

High
$3.89 \le y_t \le 9.68$

Figure 4:9 – A Graphical Representation of the Low-Neutral-High Classification of the Period Based the Sterling Pound's Effective Exchange Rate (Raw Data)

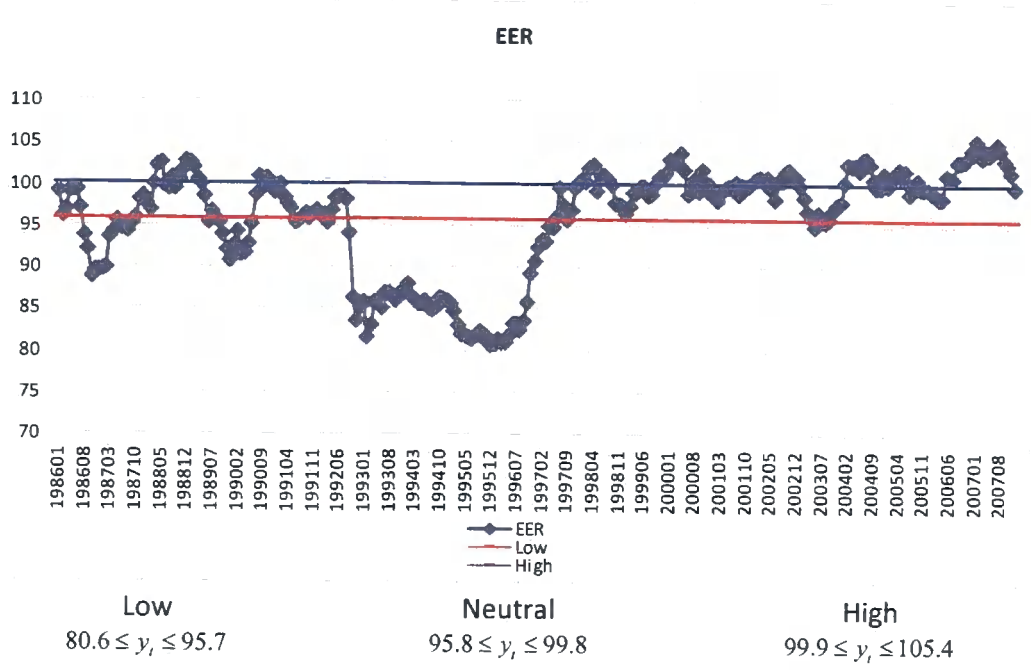


Table 4:1 – Distribution of M&A Activity by the Year of Deal and Target Firm's Domicile
The table presents the annual distribution of takeovers of UK bidding firms, acquiring both domestic and foreign target firms, over the period 1986 and 2007.

YEAR	ALL	DOM	CBA		
			CBA - ALL	CBA - G6	CBA - RoW
1986	40	25	15	15	0
1987	117	92	25	21	4
1988	272	195	77	53	24
1989	354	252	102	76	26
1990	224	148	76	57	19
1991	187	151	36	25	11
1992	200	151	49	38	11
1993	285	210	75	45	30
1994	357	271	86	52	34
1995	373	268	105	70	35
1996	437	310	127	82	45
1997	481	339	142	85	57
1998	512	344	168	98	70
1999	559	371	188	123	65
2000	608	383	225	129	96
2001	411	254	157	103	54
2002	378	258	120	59	61
2003	324	227	97	56	41
2004	345	242	103	52	51
2005	397	264	133	73	60
2006	412	276	136	66	70
2007	360	215	145	72	73
Total	7,633	5,246	2,387	1,450	937

Table 4:2 – Summary Statistics of the Sample

Table 2 presents a summary of distribution of sample by target status (panel A) and methods of payment (panel B) and bidder and deal features (panel C) for all, domestic and cross-border (including the G6 countries and the rest of the world – RoW – ones) acquisitions. 'Private' indicates the acquisitions conducted with privately held target firms; 'Public' indicates the acquisitions conducted with publicly held or listed target firms and 'Subsidiary' indicates the acquisitions conducted with subsidiary target firms. 'Cash' and 'shares' indicate cash and share only deals. 'Mixed' includes all deals financed by a combination of cash and stock and/or methods classified as "other" in SDC. Panel C summarizes acquirer and deal features. The sample is restricted to deals over or equal to one million Pounds Sterling. Relative size is the ratio of deal value to market value of acquirer. MV is the market value of the acquirer one month prior to the acquisition and MTBV and PE represents the market-to-book value of equity and price to equity respectively one month prior to the announcement of deal. Age of the bidding firm is defined as the number of days since the firm was first covered by the DataStream and the acquisition's announcement day.

	All	Dom	CBA	G6	RoW
Panel A: Distribution of Deals by Target Status					
Private	3,766	2,586	1,180	755	425
Public	1,569	1,084	485	264	221
Subsidiary	2,298	1,576	722	431	291
Panel B: Distribution of Deals by Methods of Payment					
Cash	3,764	2,381	1,383	823	560
Stock	746	599	147	78	69
Mixed/Other	3,123	2,266	857	549	308
Panel C: Major Features of Bidder and Deal Characteristics					
Deal Value (£ mil)	109.61	86.36	160.67	156.21	167.58
Bidding Firm's Age	5396	4978	6315	6410	6168
MV (£ mil)	4,794.71	651.83	13,899.71	3,631.78	29,789.24
Relative Size	0.38	0.45	0.22	0.17	0.29
MTBV Ratio	3.34	3.17	3.71	3.68	3.77
PE Ratio	36.07	40.58	26.28	28.17	23.21

Table 4:3 – Announcement Period Excess Returns of Bidders by the Market P/E Ratio

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t.

Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the domestic and in the foreign market. The table presents gains to acquirers subject to the de-trended FTSE All Share P/E Ratio. The results are presented into two dimensions; according to the market valuation condition (high-medium-low) and according to target firm's domicile. Specifically, panel (a) A shows results for the entire sample, (b) B shows results for acquisitions with privately, publicly, and subsidiary target firms, and (c) C shows results for acquisitions conducted with cash, stock, and mixed or other methods of financing/payment. The final three rows in each panel shows the differentials in the gains from acquisitions conducted with targets firms operating in (a) the domestic market and the foreign (CBA) one, (b) the domestic market and the G6 countries, (c) the domestic market and the Rest of the World (RoW) countries, and (d) the G6 countries and the Rest of the World (RoW) ones. The sample size, *N*, for each group is reported bellow each estimate. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Entire Sample							
		All	Low	Neutral	High	HML	F-Stat
All	Mean	1.32%***	0.61%***	1.51%***	1.50%***	**0.90%*** **	**10.89*** **
	N	7633	1624	4024	1985		
Dom	Mean	1.47%***	0.88%***	1.66%***	1.58%***	**0.70%*** **	**5.24*** **
	N	5246	1105	2752	1389		
CBA	Mean	0.98%***	0.05%	1.20%***	1.32%***	**1.30%*** **	**6.32*** **
	N	2387	519	1272	596		
G6	Mean	0.80%***	-0.38%	1.07%***	1.24%***	**1.60%*** **	**6.17*** **
	N	1450	315	753	382		
RoW	Mean	1.26%***	0.70%*	1.39%***	1.47%***	0.80%	0.87
	N	937	204	519	214		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.49%*** **	**0.67%*** **	0.22%	**-0.50%***		
Low Periods		**0.83%** **	**1.26%*** **	0.18%	**-1.10%***		
High Periods		0.26%	0.34%	0.12%	-0.20%		

Continued

Table 4:3 (Continued)

Panel B - Target Status							
		All	Low	Neutral	High	HML	F-Stat
Private							
All	Mean	1.07%***	0.31%	1.16%***	1.52%***	**1.20%*** **	**8.45*** **
	N	3766	818	2015	933		
Dom	Mean	1.27%***	0.84%***	1.24%***	1.71%***	**0.90%** **	**3.01** **
	N	2586	570	1372	644		
CBA	Mean	0.62%***	-0.89%**	0.99%***	1.10%***	**2.00%*** **	**8.61*** **
	N	1180	248	643	289		
G6	Mean	0.52%**	-1.29%**	1.02%***	0.83%*	**2.10%*** **	**7.13*** **
	N	755	149	408	198		
RoW	Mean	0.81%***	-0.29%	0.93%**	1.68%**	**2.00%** **	**2.41***
	N	425	99	235	91		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.65%*** **	**0.75%*** **	**0.46%***	-0.30%		
Low Periods		**1.73%*** **	**2.12%*** **	**1.13%** **	-1.00%		
High Periods		0.62%	**0.89%***	0.03%	-0.90%		
Public							
All	Mean	2.29%***	1.03%**	3.05%***	1.37%***	0.30%	**8.18*** **
	N	1569	274	918	377		
Dom	Mean	2.55%***	0.95%	3.54%***	1.17%***	0.20%	**9.77*** **
	N	1084	166	647	271		
CBA	Mean	1.71%***	1.16%*	1.87%***	1.87%***	0.70%	0.29
	N	485	108	271	106		
G6	Mean	1.58%***	0.23%	1.99%**	2.16%**	**1.90%***	1.16
	N	264	68	134	62		
RoW	Mean	1.88%***	2.75%***	1.75%**	1.47%	-1.28%	0.28
	N	221	40	137	44		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.84%***	**0.97%***	0.68%	-0.30%		
Low Periods		-0.20%	0.72%	**-1.80%***	**-2.50%***		
High Periods		-0.70%	-1.00%	-0.30%	0.69%		
Subsidiary							
All	Mean	1.07%***	0.86%***	0.87%***	1.55%***	**0.70%** **	**3.03** **
	N	2298	532	1091	675		
Dom	Mean	1.06%***	0.91%***	0.77%***	1.63%***	**0.70%***	**3.03** **
	N	1576	369	733	474		
CBA	Mean	1.08%***	0.73%*	1.08%***	1.36%***	0.60%	0.49
	N	722	163	358	201		
G6	Mean	0.83%***	0.58%	0.59%*	1.46%***	0.90%	0.92
	N	431	98	211	122		
RoW	Mean	1.44%***	0.95%*	1.79%***	1.20%*	0.30%	0.51
	N	291	65	147	79		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		-0.02%	0.23%	-0.40%	-0.60%		
Low Periods		0.18%	0.33%	-0.04%	-0.40%		
High Periods		0.27%	0.17%	0.43%	0.25%		

Continued

Table 4:3 (Continued)

Panel C - Methods of Payment							
		All	Low	Neutral	High	HML	F-Stat
Cash							
All	Mean	1.67%***	1.09%***	1.95%***	1.56%***	**0.50%***	**4.78*****
	N	3764	740	2032	992		
Dom	Mean	2.06%***	1.70%***	2.35%***	1.75%***	0.05%	**2.57***
	N	2381	449	1284	648		
CBA	Mean	1.01%***	0.14%	1.25%***	1.19%***	**1.00%****	**3.26****
	N	1383	291	748	344		
G6	Mean	0.89%***	-0.49%	1.12%***	1.48%***	**2.00%*****	**4.99*****
	N	823	169	435	219		
RoW	Mean	1.18%***	1.03%***	1.44%***	0.69%	0.34%	0.66
	N	560	122	313	125		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**1.06%*****	**1.18%*****	**0.88%*****	-0.30%		
Low Periods		**1.55%*****	**2.19%*****	0.67%	**-1.50%*****		
High Periods		0.56%	0.27%	**1.06%***	0.79%		
Stock							
All	Mean	0.56%*	-0.16%	0.43%	1.32%***	**1.50%***	1.56
	N	746	159	375	212		
Dom	Mean	0.51%*	-0.32%	0.39%	1.30%***	**1.60%***	1.49
	N	599	123	301	175		
CBA	Mean	0.76%	0.42%	0.61%	1.39%	1.00%	0.15
	N	147	36	74	37		
G6	Mean	0.52%	1.07%	0.61%	-0.16%	-1.23%	0.12
	N	78	18	40	20		
RoW	Mean	1.03%	-0.24%	0.61%	3.20%*	3.40%	0.83
	N	69	18	34	17		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		-0.30%	-0.01%	-0.50%	-0.50%		
Low Periods		-0.70%	-1.40%	-0.08%	1.31%		
High Periods		-0.90%	1.46%	-1.90%	-3.40%		
Mixed							
All	Mean	1.07%***	0.29%	1.22%***	1.48%***	**1.20%*****	**6.52*****
	N	3123	725	1617	781		
Dom	Mean	1.10%***	0.47%*	1.22%***	1.47%***	**1.00%*****	**3.45****
	N	2266	533	1167	566		
CBA	Mean	0.98%***	-0.18%	1.21%***	1.51%***	**1.70%****	**3.40****
	N	857	192	450	215		
G6	Mean	0.72%**	-0.44%	1.07%***	1.07%**	**1.50%***	**2.24***
	N	549	128	278	143		
RoW	Mean	1.44%***	0.34%	1.45%***	2.39%***	**2.10%***	1.37
	N	308	64	172	72		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		0.13%	0.39%	-0.30%	**-0.70%***		
Low Periods		0.65%	0.90%	0.13%	-0.80%		
High Periods		-0.03%	0.40%	-0.90%	-1.30%		

Table 4:4 – Announcement Period Excess Returns of Bidders by the Industry P/E Ratio

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the domestic and in the foreign market. The table presents gains to acquirers subject to the de-trended 10 P/E Industry Classification Ratios. The results are presented into two dimensions; according to the industry valuation condition (high-medium-low) and according to target firm's domicile. Specifically, panel (a) A shows results for the entire sample, (b) B shows results for acquisitions with privately, publicly, and subsidiary target firms, and (c) C shows results for acquisitions conducted with cash, stock, and mixed or other methods of financing/payment. The final three rows in each panel shows the differentials in the gains from acquisitions conducted with targets firms operating in (a) the domestic market and the foreign (CBA) one, (b) the domestic market and the G6 countries, (c) the domestic market and the Rest of the World (RoW) countries, and (d) the G6 countries and the Rest of the World (RoW) ones. The sample size, *N*, for each group is reported bellow each estimate. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Entire Sample							
		All	Low	Neutral	High	HML	F-Stat
All	Mean	1.32%***	0.79%***	1.36%***	1.75%***	**1.00%*** **	**9.18*** **
	N	7633	1817	3964	1852		
Dom	Mean	1.47%***	0.97%***	1.51%***	1.89%***	**0.90%*** **	**5.67*** **
	N	5246	1237	2744	1265		
CBA	Mean	0.98%***	0.40%*	1.03%***	1.45%***	**1.10%*** **	**3.53** **
	N	2387	580	1220	587		
G6	Mean	0.80%***	0.25%	0.92%***	1.13%***	**1.00%***	1.73
	N	1450	364	721	365		
RoW	Mean	1.26%***	0.66%*	1.19%***	1.98%***	**1.30%** **	**2.10***
	N	937	216	499	222		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.49%*** **	**0.67%*** **	0.22%	**-0.50%***		
Low Periods		**0.56%***	**0.72%***	0.30%	-0.40%		
High Periods		0.43%	**0.75%***	-0.09%	-0.90%		

Continued

Table 4:4 (Continued)

Panel B - Target Status							
		All	Low	Neutral	High	HML	F-Stat
Private							
All	Mean	1.07%***	0.73%***	0.93%***	1.70%***	**1.00%*** **	**6.36*** **
	N	3766	948	1905	913		
Dom	Mean	1.27%***	1.07%***	1.03%***	2.00%***	**0.90%*** **	**5.48*** **
	N	2586	665	1310	611		
CBA	Mean	0.62%***	-0.06%	0.70%***	1.09%***	**1.20%** **	**2.41***
	N	1180	283	595	302		
G6	Mean	0.52%**	0.02%	0.60%*	0.81%*	0.80%	0.73
	N	755	182	376	197		
RoW	Mean	0.81%***	-0.21%	0.87%**	1.64%**	**1.90%***	**2.23***
	N	425	101	219	105		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.65%*** **	**0.75%*** **	**0.46%***	-0.30%		
Low Periods		**1.13%*** **	**1.05%** **	**1.28%** **	0.23%		
High Periods		**0.90%***	**1.19%** **	0.36%	-0.80%		
Public							
All	Mean	2.29%***	1.25%**	2.88%***	1.88%***	0.60%	**3.88** **
	N	1569	299	920	350		
Dom	Mean	2.55%***	1.36%**	3.21%***	1.68%***	0.30%	**4.48*** **
	N	1084	185	655	244		
CBA	Mean	1.71%***	1.07%*	1.75%***	2.33%***	1.30%	0.61
	N	485	114	265	106		
G6	Mean	1.58%***	0.57%	1.89%***	2.15%*	1.60%	0.73
	N	264	73	137	54		
RoW	Mean	1.88%***	1.95%*	1.59%**	2.52%**	0.60%	0.23
	N	221	41	128	52		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.84%***	**0.97%***	0.68%	-0.30%		
Low Periods		0.30%	0.79%	-0.60%	-1.40%		
High Periods		-0.60%	-0.50%	-0.80%	-0.40%		
Subsidiary							
All	Mean	1.07%***	0.63%***	0.93%***	1.75%***	**1.10%*** **	**5.48*** **
	N	2298	570	1139	589		
Dom	Mean	1.06%***	0.60%**	0.88%***	1.84%***	**1.20%*** **	**4.82*** **
	N	1576	387	779	410		
CBA	Mean	1.08%***	0.70%*	1.04%***	1.54%***	0.80%	0.89
	N	722	183	360	179		
G6	Mean	0.83%***	0.41%	0.84%**	1.22%**	0.80%	0.51
	N	431	109	208	114		
RoW	Mean	1.44%***	1.14%*	1.31%***	2.10%**	1.00%	0.52
	N	291	74	152	65		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		-0.02%	0.23%	-0.40%	-0.60%		
Low Periods		-0.10%	0.19%	-0.50%	-0.70%		
High Periods		0.30%	0.62%	-0.30%	-0.90%		

Continued

Table 4:4 (Continued)

Panel C - Methods of Payment							
		All	Low	Neutral	High	HML	F-Stat
Cash							
All	Mean	1.67%***	1.05%***	1.85%***	1.90%***	**0.80%*** **	**5.04*** **
	N	3764	866	2028	870		
Dom	Mean	2.06%***	1.45%***	2.33%***	2.03%***	**0.60%***	**3.25****
	N	2381	528	1306	547		
CBA	Mean	1.01%***	0.43%	0.98%***	1.67%***	**1.20%*** **	**3.07****
	N	1383	338	722	323		
G6	Mean	0.89%***	0.14%	1.00%***	1.45%***	**1.30%*** **	**2.15***
	N	823	210	418	195		
RoW	Mean	1.18%***	0.89%*	0.96%***	2.01%***	**1.10%***	1.39
	N	560	128	304	128		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**1.06%*** **	**1.18%*** **	**0.88%*** **	-0.30%		
Low Periods		**1.02%****	**1.30%*** **	0.56%	-0.70%		
High Periods		0.36%	0.58%	0.02%	-0.60%		
Stock							
All	Mean	0.56%*	0.58%	1.16%	1.28%**	0.70%	1.23%
	N	746	168	375	203		
Dom	Mean	0.51%*	0.57%	-0.05%	1.51%**	0.90%	**2.09***
	N	599	137	302	160		
CBA	Mean	0.76%	0.58%	1.03%	0.43%	-0.16%	0.08
	N	147	31	73	43		
G6	Mean	0.52%	1.61%	0.42%	-0.02%	-1.63%	0.21
	N	78	16	37	25		
RoW	Mean	1.03%	-0.51%	1.66%	1.04%	1.60%	0.35
	N	69	15	36	18		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		-0.30%	-0.01%	-0.50%	-0.50%		
Low Periods		0.01%	-1.00%	1.08%	2.12%		
High Periods		1.08%	1.53%	0.46%	-1.10%		
Mixed							
All	Mean	1.07%***	0.54%**	1.02%***	1.70%***	1.20%***	5.83***
	N	3123	783	1561	779		
Dom	Mean	1.10%***	0.61%**	0.98%***	1.85%***	1.20%***	5.23***
	N	2266	572	1136	558		
CBA	Mean	0.98%***	0.33%	1.11%***	1.33%***	1.00%*	1.21
	N	857	211	425	221		
G6	Mean	0.72%**	0.25%	0.86%**	0.90%*	0.70%	0.41
	N	549	138	266	145		
RoW	Mean	1.44%***	0.50%	1.52%***	2.16%***	1.70%	1.01
	N	308	73	159	76		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		0.13%	0.39%	-0.30%	**-0.70%***		
Low Periods		0.28%	0.37%	0.11%	-0.30%		
High Periods		0.52%	**0.95%***	-0.30%	-1.30%		

Table 4:5 – Announcement Period Excess Returns of Bidders by the Coincidence Index

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the domestic and in the foreign market. The table presents gains to acquirers subject to the de-trended UK Coincidence Index. The results are presented into two dimensions; according to the economic condition (high-medium-low) and according to target firm's domicile. Specifically, panel (a) A shows results for the entire sample, (b) B shows results for acquisitions with privately, publicly, and subsidiary target firms, and (c) C shows results for acquisitions conducted with cash, stock, and mixed or other methods of financing/payment. The final three rows in each panel shows the differentials in the gains from acquisitions conducted with targets firms operating in (a) the domestic market and the foreign (CBA) one, (b) the domestic market and the G6 countries, (c) the domestic market and the Rest of the World (RoW) countries, and (d) the G6 countries and the Rest of the World (RoW) ones. The sample size, *N*, for each group is reported bellow each estimate. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Entire Sample							
		All	Low	Neutral	High	HML	F-Stat
All	Mean	1.32%***	1.64%***	1.48%***	0.85%***	**-0.80%*** **	**7.57*** **
	N	7633	1079	4328	2226		
Dom	Mean	1.47%***	1.83%***	1.65%***	0.98%***	**-0.85%*** **	**5.99*** **
	N	5246	772	2890	1584		
CBA	Mean	0.98%***	1.18%***	1.14%***	0.53%**	**-0.66%***	**2.25***
	N	2387	307	1438	642		
G6	Mean	0.80%***	0.79%**	1.11%***	0.18%	-0.61%	**2.60***
	N	1450	201	836	413		
RoW	Mean	1.26%***	1.93%***	1.18%***	1.15%***	-0.78%	0.58
	N	937	106	602	229		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.49%*** **	**0.67%*** **	0.22%	**-0.50%***		
Low Periods		**0.64%***	**1.03%** **	-0.10%	**-1.10%***		
High Periods		**0.45%***	**0.80%*** **	-0.20%	**-1.00%** **		

Continued

Table 4:5 (Continued)

Panel B - Target Status							
		All	Low	Neutral	High	HML	F-Stat
Private							
All	Mean	1.07%***	1.07%***	1.06%***	1.07%***	0.00%	1.01
	N	3766	464	2171	1131		
Dom	Mean	1.27%***	1.27%***	1.29%***	1.23%***	-0.05%	0.97
	N	2586	322	1461	803		
CBA	Mean	0.62%***	0.62%	0.58%**	0.70%**	0.08%	0.03
	N	1180	142	710	328		
G6	Mean	0.52%**	0.18%	0.61%*	0.47%	-0.30%	0.18
	N	755	97	446	212		
RoW	Mean	0.81%***	1.57%*	0.54%*	1.11%*	-0.46%	0.71
	N	425	45	264	116		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.65%*** **	**0.75%*** **	**0.46%***	-0.30%		
Low Periods		0.65%	**1.09%***	-0.30%	-1.40%		
High Periods		**0.53%***	**0.75%***	0.11%	-0.64%		
Public							
All	Mean	2.29%***	2.92%***	2.88%***	0.22%	**-2.70%*** **	**12.48*** **
	N	1569	279	940	350		
Dom	Mean	2.55%***	3.36%***	3.19%***	0.15%	**-3.21%*** **	**10.95*** **
	N	1084	215	631	238		
CBA	Mean	1.71%***	1.44%*	2.26%***	0.35%	-1.09%	**2.22***
	N	485	64	309	112		
G6	Mean	1.58%***	0.59%	2.80%***	-0.46%	-1.05%	**4.05****
	N	264	35	154	75		
RoW	Mean	1.88%***	2.47%*	1.73%**	2.00%*	-0.47%	0.09
	N	221	29	155	37		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.84%***	**0.97%***	0.68%	-0.30%		
Low Periods		**1.92%***	**2.27%****	0.89%	-1.90%		
High Periods		-0.20%	-0.61%	**-1.85%***	**-2.50%***		
Subsidiary							
All	Mean	1.07%***	1.38%***	1.14%***	0.81%***	**-0.57%***	1.21
	N	2298	336	1217	745		
Dom	Mean	1.06%***	1.19%***	1.08%***	0.98%***	-0.21%	0.11
	N	1576	235	798	543		
CBA	Mean	1.08%***	1.82%***	1.25%***	0.34%	**-1.47%****	**2.47***
	N	722	101	419	202		
G6	Mean	0.83%***	1.76%**	0.97%**	0.07%	**-1.69%****	**2.23***
	N	431	69	236	126		
RoW	Mean	1.44%***	1.93%	1.62%***	0.80%*	-1.13%	0.62
	N	291	32	183	76		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		-0.02%	0.23%	-0.40%	-0.60%		
Low Periods		-0.63%	-0.57%	-0.70%	-0.17%		
High Periods		**0.64%***	**0.91%***	0.18%	-0.73%		

Continued

Table 4:5 (Continued)

Panel C - Methods of Payment							
		All	Low	Neutral	High	HML	F-Stat
Cash							
All	Mean	1.67%***	2.23%***	1.97%***	0.79%***	**-1.44%*** **	**13.67*** **
	N	3764	561	2134	1069		
Dom	Mean	2.06%***	2.87%***	2.36%***	1.02%***	**-1.85%*** **	**12.48*** **
	N	2381	378	1326	677		
CBA	Mean	1.01%***	0.91%**	1.33%***	0.40%*	-0.51%	**2.73***
	N	1383	183	808	392		
G6	Mean	0.89%***	0.91%*	1.43%***	-0.09%	**-1.00%***	**4.44*** **
	N	823	117	451	255		
RoW	Mean	1.18%***	0.91%	1.19%***	1.30%***	0.40%	0.08
	N	560	66	357	137		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**1.06%*** **	**1.18%*** **	**0.88%*** **	-0.30%		
Low Periods		**1.96%*** **	**1.96%*** **	**1.96%****	0.00%		
High Periods		**0.62%***	**1.10%*** **	-0.30%	**-1.40%*** **		
Stock							
All	Mean	0.56%*	-0.31%	0.45%	1.16%**	**1.50%***	1.24
	N	746	106	416	224		
Dom	Mean	0.51%*	-0.55%	0.21%	1.51%***	**2.10%****	**2.37****
	N	599	87	324	188		
CBA	Mean	0.76%	0.81%	1.31%*	-0.68%	-1.50%	0.78
	N	147	19	92	36		
G6	Mean	0.52%	0.47%	0.65%	0.18%	-0.28%	0.02
	N	78	15	47	16		
RoW	Mean	1.03%	2.13%	2.00%*	-1.38%	-3.50%	1.18
	N	69	4	45	20		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		-0.30%	-0.01%	-0.50%	-0.50%		
Low Periods		-1.40%	-1.00%	-2.70%	-1.70%		
High Periods		**2.20%***	1.33%	**2.89%***	1.56%		
Mixed							
All	Mean	1.07%***	1.35%***	1.13%***	0.84%***	**-0.51%***	0.94
	N	3123	412	1778	933		
Dom	Mean	1.10%***	1.21%***	1.25%***	0.80%***	-0.41%	1.09
	N	2266	307	1240	719		
CBA	Mean	0.98%***	1.73%**	0.83%***	0.96%***	-0.77%	0.69
	N	857	105	538	214		
G6	Mean	0.72%**	0.67%	0.75%*	0.66%	-0.01%	0.01
	N	549	69	338	142		
RoW	Mean	1.44%***	3.77%***	0.97%*	1.57%***	**-2.20%***	**2.33***
	N	308	36	200	72		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		0.13%	0.39%	-0.30%	**-0.70%***		
Low Periods		-0.52%	-0.54%	**-2.60%****	**-3.10%****		
High Periods		-0.16%	-0.14%	-0.77%	-0.90%		

Table 4:6 – Announcement Period Excess Returns of Bidders by UK's GNP

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the domestic and in the foreign market. The table presents gains to acquirers subject to the de-trended UK GNP. The results are presented into two dimensions; according to the economic condition (high-medium-low) and according to target firm's domicile. Specifically, panel (a) A shows results for the entire sample, (b) B shows results for acquisitions with privately, publicly, and subsidiary target firms, and (c) C shows results for acquisitions conducted with cash, stock, and mixed or other methods of financing/payment. The final three rows in each panel shows the differentials in the gains from acquisitions conducted with targets firms operating in (a) the domestic market and the foreign (CBA) one, (b) the domestic market and the G6 countries, (c) the domestic market and the Rest of the World (RoW) countries, and (d) the G6 countries and the Rest of the World (RoW) ones. The sample size, *N*, for each group is reported bellow each estimate. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Entire Sample							
		All	Low	Neutral	High	HML	F-Stat
All	Mean	1.32%***	1.72%***	0.98%***	1.63%***	-0.08%	**9.39*** **
	N	7633	1177	3841	2615		
Dom	Mean	1.47%***	1.87%***	1.11%***	1.82%***	-0.05%	**7.24*** **
	N	5246	788	2652	1806		
CBA	Mean	0.98%***	1.40%***	0.68%***	1.22%***	-0.18%	**2.35***
	N	2387	389	1189	809		
G6	Mean	0.80%***	1.38%***	0.58%**	0.91%***	-0.47%	1.24
	N	1450	213	755	482		
RoW	Mean	1.26%***	1.43%***	0.87%***	1.67%***	0.24%	1.36
	N	937	176	434	327		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.49%*** **	**0.67%*** **	0.22%	**-0.50%***		
Low Periods		0.47%	0.49%	0.45%	-0.05%		
High Periods		**0.61%** **	**0.92%*** **	0.15%	**-0.80%***		

Continued

Table 4:6 (Continued)

Panel B - Target Status							
		All	Low	Neutral	High	HML	F-Stat
Private							
All	Mean	1.07%***	1.29%***	0.92%***	1.18%***	-0.11%	1.06
	N	3766	580	1909	1277		
Dom	Mean	1.27%***	1.66%***	1.12%***	1.32%***	-0.34%	1.18
	N	2586	383	1312	891		
CBA	Mean	0.62%***	0.56%	0.49%*	0.85%***	0.30%	0.38
	N	1180	197	597	386		
G6	Mean	0.52%**	0.13%	0.50%*	0.71%*	0.60%	0.31
	N	755	112	390	253		
RoW	Mean	0.81%***	1.13%*	0.47%	1.12%**	-0.01%	0.56
	N	425	85	207	133		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.65%*** **	**0.75%*** **	**0.46%***	-0.30%		
Low Periods		**1.10%*** **	**1.53%*** **	0.53%	-1.00%		
High Periods		0.47%	0.61%	0.20%	-0.40%		
Public							
All	Mean	2.29%***	3.11%***	1.33%***	3.17%***	0.06%	**8.36*** **
	N	1569	272	740	557		
Dom	Mean	2.55%***	3.17%***	1.35%***	3.98%***	0.80%	**9.85*** **
	N	1084	186	531	367		
CBA	Mean	1.71%***	2.99%***	1.27%**	1.62%***	-1.37%	1.27
	N	485	86	209	190		
G6	Mean	1.58%***	4.74%***	1.30%*	0.006	**-4.14%*** **	**3.70***
	N	264	42	122	100		
RoW	Mean	1.88%***	1.33%	1.24%	2.76%**	0.014	0.82
	N	221	44	87	90		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.84%***	**0.97%***	0.68%	-0.30%		
Low Periods		0.17%	-1.60%	**1.84%***	**3.40%***		
High Periods		**2.36%*** **	**3.38%*** **	1.22%	**-2.20%***		
Subsidiary							
All	Mean	1.07%***	1.31%***	0.86%***	1.28%***	-0.03%	1.43
	N	2298	325	1192	781		
Dom	Mean	1.06%***	1.14%***	0.95%***	1.19%***	0.05%	0.26
	N	1576	219	809	548		
CBA	Mean	1.08%***	1.67%***	0.66%***	1.49%***	-0.18%	**2.27***
	N	722	106	383	233		
G6	Mean	0.83%***	1.36%**	0.34%	1.52%***	-0.16%	**2.24***
	N	431	59	243	129		
RoW	Mean	1.44%***	2.06%**	1.23%***	1.44%**	-0.62%	0.33
	N	291	47	140	104		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		-0.02%	0.23%	-0.40%	-0.60%		
Low Periods		-0.53%	-0.20%	-0.90%	-0.70%		
High Periods		-0.30%	-0.33%	-0.30%	-0.08%		

Continued

Table 4:6 (Continued)

Panel C - Methods of Payment							
		All	Low	Neutral	High	HML	F-Stat
Cash							
All	Mean	1.67%***	2.31%***	1.23%***	1.98%***	-0.33%	**8.26*** **
	N	3764	588	1800	1376		
Dom	Mean	2.06%***	2.59%***	1.51%***	2.56%***	0.03%	**7.55*** **
	N	2381	369	1134	878		
CBA	Mean	1.01%***	1.84%***	0.76%***	0.97%***	**-0.87%***	**2.30***
	N	1383	219	666	498		
G6	Mean	0.89%***	2.50%***	0.57%*	0.67%*	**-1.84%*** **	**4.42*** **
	N	823	121	418	284		
RoW	Mean	1.18%***	1.02%*	1.09%***	1.37%***	-0.35%	0.15
	N	560	98	248	214		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**1.06%*** **	**1.18%*** **	**0.88%*** **	-0.30%		
Low Periods		0.75%	0.09%	**1.57%** **	**1.49%***		
High Periods		**1.59%*** **	**1.90%*** **	**1.19%** **	-0.70%		
Stock							
All	Mean	0.56%*	0.85%	0.26%	0.93%*	0.08%	0.58
	N	746	111	401	234		
Dom	Mean	0.51%*	0.85%	0.37%	0.59%	-0.27%	0.13
	N	599	82	323	194		
CBA	Mean	0.76%	0.86%	-0.21%	2.58%**	1.70%	1.57
	N	147	29	78	40		
G6	Mean	0.52%	0.14%	0.03%	1.93%	1.79%	0.39
	N	78	19	40	19		
RoW	Mean	1.03%	2.22%	-0.46%	3.16%**	0.90%	0.01
	N	69	10	38	21		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		-0.30%	-0.01%	-0.50%	-0.50%		
Low Periods		-0.01%	0.71%	-1.40%	-2.10%		
High Periods		**-2.00%***	-1.30%	**-2.60%***	-1.20%		
Mixed							
All	Mean	1.07%***	1.19%***	0.88%***	1.32%***	0.13%	1.36
	N	3123	478	1640	1005		
Dom	Mean	1.10%***	1.34%***	0.94%***	1.26%***	-0.08%	0.77
	N	2266	337	1195	734		
CBA	Mean	0.98%***	0.83%	0.72%**	1.47%***	0.64%	0.96
	N	857	141	445	271		
G6	Mean	0.72%**	-0.16%	0.66%*	1.18%**	1.34%	0.95
	N	549	73	297	179		
RoW	Mean	1.44%***	1.90%**	0.85%*	2.04%**	0.14%	0.96
	N	308	68	148	92		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		0.13%	0.39%	-0.30%	**-0.70%***		
Low Periods		0.51%	**1.50%***	-0.44%	**-2.10%***		
High Periods		-0.20%	0.08%	-0.80%	-0.90%		

Table 4:7 – Announcement Period Excess Returns of Bidders by UK's Growth Index

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the domestic and in the foreign market. The table presents gains to acquirers subject to the UK Growth Index. The results are presented into two dimensions; according to the economic condition (high-medium-low) and according to target firm's domicile. Specifically, panel (a) A shows results for the entire sample, (b) B shows results for acquisitions with privately, publicly, and subsidiary target firms, and (c) C shows results for acquisitions conducted with cash, stock, and mixed or other methods of financing/payment. The final three rows in each panel shows the differentials in the gains from acquisitions conducted with targets firms operating in (a) the domestic market and the foreign (CBA) one, (b) the domestic market and the G6 countries, (c) the domestic market and the Rest of the World (RoW) countries, and (d) the G6 countries and the Rest of the World (RoW) ones. The sample size, *N*, for each group is reported bellow each estimate. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Entire Sample							
		All	Low	Neutral	High	HML	F-Stat
All	Mean	1.32%***	1.73%***	1.29%***	0.97%***	**-0.76%*** **	**7.45*** **
	N	7633	2346	2750	2537		
Dom	Mean	1.47%***	1.97%***	1.42%***	1.07%***	**-0.90%*** **	**7.17*** **
	N	5246	1614	1880	1752		
CBA	Mean	0.98%***	1.19%***	1.03%***	0.73%***	-0.46%	0.91
	N	2387	732	870	785		
G6	Mean	0.80%***	1.06%***	0.89%***	0.48%*	-0.58%	0.91
	N	1450	435	514	501		
RoW	Mean	1.26%***	1.38%***	1.23%***	1.16%***	-0.22%	0.08
	N	937	297	356	284		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.49%*** **	**0.67%*** **	0.22%	**-0.50%***		
Low Periods		**0.78%*** **	**0.91%** **	0.59%	-0.32%		
High Periods		0.34%	**0.59%***	-0.09%	-0.70%		

Continued

Table 4:7 (Continued)

Panel B - Target Status							
		All	Low	Neutral	High	HML	F-Stat
Private							
All	Mean	1.07%***	1.22%***	0.96%***	1.04%***	-0.18%	0.54
	N	3766	1111	1398	1257		
Dom	Mean	1.27%***	1.53%***	1.09%***	1.24%***	-0.29%	1.05
	N	2586	744	971	871		
CBA	Mean	0.62%***	0.60%*	0.67%**	0.58%*	-0.02%	0.02
	N	1180	367	427	386		
G6	Mean	0.52%**	0.52%	0.68%*	0.33%	-0.19%	0.19
	N	755	232	275	248		
RoW	Mean	0.81%***	0.74%	0.64%	1.05%*	-0.31%	0.16
	N	425	135	152	138		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.65%***	**0.75%***	**0.46%***	-0.30%		
Low Periods		**0.93%****	**1.01%****	**0.79%***	-0.22%		
High Periods		**0.66%***	**0.91%****	0.19%	-0.71%		
Public							
All	Mean	2.29%***	3.11%***	2.74%***	0.75%***	**-2.36%*****	**10.20*****
	N	1569	578	531	460		
Dom	Mean	2.55%***	3.66%***	3.00%***	0.46%***	**-3.20%*****	**11.93*****
	N	1084	422	360	302		
CBA	Mean	1.71%***	1.62%**	2.19%***	1.30%**	-0.32%	0.46
	N	485	156	171	158		
G6	Mean	1.58%***	1.92%**	2.23%*	0.85%	-1.07%	0.69
	N	264	74	82	108		
RoW	Mean	1.88%***	1.35%*	2.14%***	2.26%*	0.90%	0.25
	N	221	82	89	50		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**0.84%***	**0.97%***	0.68%	-0.30%		
Low Periods		**2.04%*****	**1.75%***	**2.31%****	-0.56%		
High Periods		-0.84%	-0.40%	**-1.80%***	-1.40%		
Subsidiary							
All	Mean	1.07%***	1.35%***	0.92%***	0.98%***	-0.37%	1.04
	N	2298	657	821	820		
Dom	Mean	1.06%***	1.10%***	0.95%***	1.14%***	0.04%	0.16
	N	1576	448	549	579		
CBA	Mean	1.08%***	1.90%***	0.88%***	0.59%*	**-1.31%****	**3.12****
	N	722	209	272	241		
G6	Mean	0.83%***	1.54%***	0.57%	0.48%	**-1.06%***	1.32
	N	431	129	157	145		
RoW	Mean	1.44%***	2.48%***	1.30%***	0.75%	**-1.73%***	**2.15***
	N	291	80	115	96		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		-0.02%	0.23%	-0.40%	-0.60%		
Low Periods		**-0.80%***	-0.44%	**-1.40%***	-0.90%		
High Periods		0.55%	0.66%	0.39%	-0.30%		

Continued

Table 4:7 (Continued)

Panel C - Methods of Payment							
		All	Low	Neutral	High	HML	F-Stat
Cash							
All	Mean	1.67%***	2.10%***	1.86%***	1.05%***	**-1.05%*** **	**8.42*** **
	N	3764	1212	1335	1217		
Dom	Mean	2.06%***	2.67%***	2.15%***	1.34%***	**-1.33%*** **	**7.87*** **
	N	2381	785	828	768		
CBA	Mean	1.01%***	1.05%***	1.37%***	0.55%*	-0.49%	**2.10***
	N	1383	427	507	449		
G6	Mean	0.89%***	1.11%***	1.28%***	0.33%	**-0.78%***	1.74
	N	823	244	280	299		
RoW	Mean	1.18%***	0.96%*	1.48%***	1.00%*	0.04%	0.43
	N	560	183	227	150		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		**1.06%*** **	**1.18%*** **	**0.88%*** **	-0.30%		
Low Periods		**1.63%*** **	**1.56%*** **	**1.71%*** **	0.15%		
High Periods		**0.79%** **	**1.01%** **	0.34%	-0.70%		
Stock							
All	Mean	0.56%*	0.90%*	-0.09%	0.89%	0.01%	1.21
	N	746	226	254	266		
Dom	Mean	0.51%*	0.64%	-0.26%	1.13%**	0.50%	1.57
	N	599	177	206	216		
CBA	Mean	0.76%	1.80%*	0.65%	-0.15%	-1.96%	0.72
	N	147	49	48	50		
G6	Mean	0.52%	0.41%	0.24%	0.95%	0.54%	0.05
	N	78	30	24	24		
RoW	Mean	1.03%	4.01%**	1.06%	-1.17%	**-5.19%** **	**2.30***
	N	69	19	24	26		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		-0.30%	-0.01%	-0.50%	-0.50%		
Low Periods		-1.20%	0.24%	**-3.40%***	**-3.60%***		
High Periods		1.29%	0.18%	2.31%	2.12%		
Mixed							
All	Mean	1.07%***	1.43%***	0.95%***	0.89%***	**-0.54%***	1.82
	N	3123	908	1161	1054		
Dom	Mean	1.10%***	1.48%***	1.10%***	0.79%***	**-0.69%** **	1.87
	N	2266	652	846	768		
CBA	Mean	0.98%***	1.31%***	0.54%	1.16%***	-0.16%	0.95
	N	857	256	315	286		
G6	Mean	0.72%**	1.11%**	0.45%	0.68%*	-0.43%	0.39
	N	549	161	210	178		
RoW	Mean	1.44%***	1.65%**	0.72%	1.94%***	0.30%	0.82
	N	308	95	105	108		
		DOM vs. CBA	DOM vs. G6	DOM vs. RoW	G6 vs. RoW		
All Periods		0.13%	0.39%	-0.30%	**-0.70%***		
Low Periods		0.17%	0.37%	-0.20%	-0.50%		
High Periods		-1.20%	0.11%	**-1.20%***	**-1.30%***		

Table 4:8 – Determinants of Announcement Gains to Bidders - Cross Section Analysis

Estimates of cross-sectional determinants of announcement period gains of acquirers are reported. Announcement period (5-days) excess returns of bidders are regressed against a set of explanatory variables. The following equation is estimated using ordinary least square and standard errors are corrected for heteroscedasticity.

$$CAR_i = \alpha + \sum_{i=1}^{N} X_i + \varepsilon_i$$

The intercept (α) measures the excess return to bidders after accounting for the effects of all explanatory variables. The vector of explanatory variables 'X' includes acquirer's age on the day of bid announcement (log), acquirer's market value one month prior to the announcement of deal (log), deal value of the acquisitions (log), bidder's growth opportunity (ratio of market to book value of equity and price to earning ratio of acquirer one month prior to the acquisition announcement), relative size of the deal measured as the deal value divided by acquirer's market value. Dummy variables (intercept (panels B and C) and slope ones (panel D)) that take the value of one and zero otherwise are included to account for low and high market valuations, low and high economic growth and low and high EER. In addition, dummy variables (only intercept ones) that take the value of one and zero otherwise are included to represent target status (i.e. private and public) and method of payment (i.e. cash and stock). a, b, or c indicate significance at the 1, 5, 10 percent level respectively.

Panel A												
Dep. Variable (CAR)	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model(7)	Model (8)	Model (9)	Model (10)	Model (11)	Model (12)
Intercept	0.0140[a]	0.0165[a]	0.0174[a]	0.0283[a]	0.0285[a]	0.0189[a]	0.0171[a]	0.0241[a]	0.0158[a]	0.0142[a]	0.0177[a]	0.0199[a]
Log (BAGE)	0.0012[c]	0.0010[d]	0.0009	-0.0002	0.0001	0.0011[c]	0.0007	0.0008	0.0011[c]	0.0006	0.0004	-0.0019[a]
Log (MV)	-0.0022[a]	-0.0048[a]	-0.0048[a]	-0.0051[a]							-0.0052[a]	
Log (DV)		0.0055[a]	0.0055[a]	0.0058[a]							0.0055[a]	0.0028[a]
RS					0.0054[a]	0.0051[a]	0.0056[a]	0.0053[a]	0.0046[a]	0.0053[a]		
MTBV			-0.0001[a]	0.0001	0.0001	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	
P/E				0.0001[b]	0.0001[b]							0.0001[b]
CBA Dummy						-0.0010	-0.0018	-0.0014	-0.0013	-0.0019	-0.0024	-0.0069[a]
Market P/E (LOW)												
Market P/E (HIGH)												
Ind. P/E (LOW)												
Ind. P/E (HIGH)												
Coin. Index (LOW)												
Coin. Index (HIGH)												
Detr. GNP (LOW)												
Detr. GNP (HIGH)												
Grth Index (LOW)												
Grth Index (HIGH)												
EER (LOW)												
EER (HIGH)												
Dummy (Private=1)						0.0020	0.0014	0.0025[c]	0.0006	0.0038[b]	0.0034[c]	0.0035[a]
Dummy (Public=1)									0.0069[a]	0.0065[a]	0.0076[a]	0.0108[a]
Dummy (Cash=1)							0.0112[a]			0.0110[a]	0.0086[a]	0.0043[b]
Dummy (Stock=1)								-0.0139[a]			-0.0105[a]	-0.0121[a]
F-Statistic	14.48[a]	49.12[a]	38.84[a]	32.47[a]	40.10[a]	31.07[a]	33.42[a]	30.99[a]	27.45[a]	29.82[a]	24.92[a]	14.77[a]
R-Squared (in %)	0.38%	1.90%	2.01%	2.46%	2.43%	2.01%	2.56%	2.38%	2.11%	2.67%	2.86%	1.80%
N	7,630	7,630	7,630	6,442	6,442	7,630	7,630	7,630	7,630	7,630	7,630	6,442

Panel B												
Dep. Variable (CAR)	Model (13)	Model (14)	Model (15)	Model (16)	Model (17)	Model (18)	Model (19)	Model (20)	Model (21)	Model (22)	Model (23)	Model (24)
Intercept	0.0229[a]	0.0230[a]	0.0164[a]	0.0166[a]	0.0207[a]	0.0208[a]	0.0163[a]	0.0164[a]	0.0174[a]	0.0177[a]	0.0190[a]	0.0191[a]
Log (BAGE)	0.0003	0.0003	0.0004	0.0005	0.0004	0.0005	0.0004	0.0005	0.0004	0.0005	0.0005	0.0005
Log (MV)	-0.0052[a]		-0.0053[a]		-0.0052[a]		-0.0053[a]		-0.0052[a]		-0.0052[a]	
Log (DV)	0.0054[a]		0.0056[a]		0.0054[a]		0.0055[a]		0.0056[a]		0.0054[a]	
RS		0.0053[a]		0.0054[a]		0.0053[a]		0.0054[a]		0.0054[a]		0.0053[a]
MTBV	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]
CBA Dummy	-0.0023	-0.0021	-0.0023	-0.0021	-0.0022	-0.0021	-0.0023	-0.0022	-0.0024	-0.0021	-0.0025[a]	-0.0024
Market P/E (LOW)	-0.0096[a]	-0.0096[a]										
Market P/E (HIGH)			0.0055[a]	0.0055[a]								
Ind. P/E (LOW)					-0.0071[a]	-0.0071[a]						
Ind. P/E (HIGH)							0.0051[a]	0.0051[a]				
Coin. Index (LOW)									0.0025	0.0024		
Coin. Index (HIGH)											-0.0049[a]	-0.0051[a]
Detr. GNP (LOW)												
Detr. GNP (HIGH)												
Grth Index (LOW)												
Grth Index (HIGH)												
EER (LOW)												
EER (HIGH)												
Dummy (Private=1)	0.0031[c]	0.0031[c]	0.0035[c]	0.0034[c]	0.0033[c]	0.0032[c]	0.0034[c]	0.0033[c]	0.0034[c]	0.0033[c]	0.0032[c]	0.0031[c]
Dummy (Public=1)	0.0072[a]	0.0074[a]	0.0077[a]	0.0081[a]	0.0073[a]	0.0075[a]	0.0078[a]	0.0081[a]	0.0075[a]	0.0078[a]	0.0072[a]	0.0074[a]
Dummy (Cash=1)	0.0083[a]	0.0083[a]	0.0086[a]	0.0085[a]	0.0084[a]	0.0084[a]	0.0086[a]	0.0086[a]	0.0086[a]	0.0085[a]	0.0085[a]	0.0085[a]
Dummy (Stock=1)	-0.0104[a]	-0.0105[a]	-0.0108[a]	-0.0108[a]	-0.0106[a]	-0.0107[a]	-0.0107[a]	-0.0107[a]	-0.0105[a]	-0.0106[a]	-0.0104[a]	-0.0104[a]
F-Statistic	25.95[a]	28.83[a]	23.52[a]	26.11[a]	24.38[a]	27.07[a]	23.37[a]	25.95[a]	22.56[a]	25.02[a]	23.27[a]	25.85[a]
R-Squared (in %)	3.29%	3.27%	2.99%	2.99%	3.10%	3.10%	2.98%	2.97%	2.87%	2.87%	2.96%	2.96%
N	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630

Continued

Table 4:8 (Continued)

Panel C												
Dep. Variable (CAR)	Model (25)	Model (26)	Model (27)	Model (28)	Model (29)	Model (30)	Model (31)	Model (32)	Model (33)	Model (34)	Model (35)	Model (36)
Intercept	0.0175[a]	0.0177[a]	0.0161[a]	0.0163[a]	0.0168[a]	0.0171[a]	0.0195[a]	0.0198[a]	0.0185[a]	0.0186[a]	0.0151[a]	0.0152[a]
Log (BAGE)	0.0004	0.0005	0.0005	0.0006	0.0004	0.0005	0.0004	0.0004	0.0007	0.0007	0.0006	0.0006
Log (MV)	-0.0053[a]		-0.0052[a]		-0.0052[a]		-0.0052[a]		-0.0052[a]		-0.0053[a]	
Log (DV)	0.0055[a]		0.0055[a]		0.0055[a]		0.0055[a]		0.0053[a]		0.0054[a]	
RS		0.0054[a]		0.0053[a]		0.0053[a]		0.0053[a]		0.0053[a]		0.0053[a]
MTBV	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]
CBA Dummy	-0.0024	-0.0022	-0.0024	-0.0021a	-0.0024	-0.0022	-0.0024	-0.0022	-0.0028[c]	-0.0028[c]	-0.0025[d]	-0.0024[d]
Market P/E (LOW)												
Market P/E (HIGH)												
Ind. P/E (LOW)												
Ind. P/E (HIGH)												
Coin. Index (LOW)												
Coin. Index (HIGH)												
Detr. GNP (LOW)	0.0047[b]	0.0047[b]										
Detr. GNP (HIGH)			0.0038[b]	0.0038[b]								
Grth Index (LOW)					0.0042[a]	0.0042[a]						
Grth Index (HIGH)							-0.0038[b]	-0.0038[b]				
EER (LOW)									-0.0084[a]	-0.0085[a]		
EER (HIGH)											0.0052[a]	0.0052[a]
Dummy (Private=1)	0.0033[c]	0.0032[c]	0.0033[c]	0.0032[c]	0.0033[c]	0.0031[c]	0.0033[c]	0.0031[c]	0.0032[c]	0.0031[c]	0.0031[c]	0.0030[c]
Dummy (Public=1)	0.0074[a]	0.0077[a]	0.0075[a]	0.0078[a]	0.0072[a]	0.0076[a]	0.0073[a]	0.0077[a]	0.0072[a]	0.0073[a]	0.0073[a]	0.0075[a]
Dummy (Cash=1)	0.0086[a]	0.0086[a]	0.0084[a]	0.0084[a]	0.0085[a]	0.0084[a]	0.0085[a]	0.0085[a]	0.0085[a]	0.0085[a]	0.0085[a]	0.0085[a]
Dummy (Stock=1)	-0.0105[a]	-0.0106[a]	-0.0105[a]	-0.0105[a]	-0.0105[a]	-0.0105[a]	-0.0104[a]	-0.0104[a]	-0.0102[a]	-0.0102[a]	-0.0103[a]	-0.0104[a]
F-Statistic	22.92[a]	25.44[a]	22.98[a]	25.50[a]	23.07[a]	25.40[a]	22.97[a]	25.49[a]	24.89[a]	27.66[a]	23.51[a]	26.11[a]
R-Squared (in %)	2.92%	2.92%	2.93%	2.92%	2.94%	2.93%	2.93%	2.92%	3.16%	3.16%	2.99%	2.99%
N	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630

Panel D														
Dep. Variable (CAR)	Model (37)	Model (38)	Model (39)	Model (40)	Model (41)	Model (42)	Model (43)	Model (44)	Model (45)	Model (46)	Model (47)	Model (48)	Model (49)	Model (50)
Intercept	0.0184[a]	0.0187[a]	0.0180[a]	0.0184[a]	0.0184[a]	0.0177[a]	0.0185[a]	0.0183[a]	0.0182[a]	0.0179[a]	0.0184[a]	0.0182[a]	0.0176[a]	0.0183[a]
Log (BAGE)	0.0005	0.0004	0.0005	0.0004	0.0004	0.0004[a]	0.0004	0.0004	0.0005	0.0004	0.0004	0.0004	0.0006	0.0004
Log (MV)		-0.0056[a]		-0.0055[a]		-0.0053[a]		-0.0054[a]		-0.0053[a]		-0.0053[a]		-0.0055[a]
Log (DV)		0.0055[a]		0.0056[a]		0.0055[a]		0.0055[a]		0.0055[a]		0.0056[a]		0.0055[a]
RS	0.0054[a]		0.0054[a]		0.0055[a]		0.0055[a]		0.0054[a]		0.0055[a]		0.0054[a]	
MTBV	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]	-0.0001[a]
CBD*[Mrkt P/E (L)]	-0.0072[a]													
CBD*[Mrkt P/E (H)]		0.0047[b]												
CBD*[Ind. P/E (L)]			-0.0065[a]											
CBD*[Ind. P/E (H)]				0.0025										
CBA*[Coin. Index (L)]					0.0018									
CBA*[Coin. Index (H)]						-0.0068[b]								
CBA*[Detr. GNP (L)]							0.0043							
CBA*[Detr. GNP (H)]								0.0001						
CBA*[Detr. GDP (L)]									-0.0057					
CBA*[Detr. GDP (H)]										-0.0047[c]				
CBA*[Grth Index (L)]											0.0013			
CBA*[Grth Index (H)]												-0.0051[b]		
CBA*[EER (L)]													-0.0064[b]	
CBA*[EER (H)]														0.0011
Dummy (Private=1)	0.0032[a]	0.0032[c]	0.0032[a]	0.0032[a]	0.0032[c]	0.0034[c]	0.0032[c]	0.0032[c]	0.0031[c]	0.0033[c]	0.0032[c]	0.0033[c]	0.0033[c]	0.0032[c]
Dummy (Public=1)	0.0078[a]	0.0077[a]	0.0078[a]	0.0077[a]	0.0077[a]	0.0075[b]	0.0076[a]	0.0076[a]	0.0077[a]	0.0076[a]	0.0077[a]	0.0076[a]	0.0077[a]	0.0076[a]
Dummy (Cash=1)	0.0086[a]	0.0084[a]	0.0086[a]	0.0084[a]	0.0084[a]	0.0087[a]	0.0084[a]	0.0084[a]	0.0085[a]	0.0086[a]	0.0084[a]	0.0085[a]	0.0086[a]	0.0084[a]
Dummy (Stock=1)	-0.0106[a]	-0.0104[a]	-0.0106[a]	-0.0105[a]	-0.0105[a]	-0.0105[a]	-0.0105[a]	-0.0105[a]	-0.0104[a]	-0.0104[a]	-0.0105[a]	-0.0105[a]	-0.0105[a]	-0.0104[a]
F-Statistic	28.87[a]	25.07[a]	28.69[a]	24.82[a]	27.87[a]	25.39[a]	28.01[a]	24.72[a]	28.05[a]	25.03[a]	27.84[a]	25.14[a]	28.43[a]	24.72[a]
R-Squared (in %)	2.94%	2.88%	2.92%	2.85%	2.84%	2.91%	2.85%	2.84%	2.86%	2.87%	2.84%	2.88%	2.90%	2.84%
N	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630	7,630

Table 4:9 – Long-term Performance of Acquirers

This table reports OLS estimates of monthly abnormal returns, measured by alpha of the following equation, from portfolios comprising of all acquisitions for 1- 3- 5- year post-event holding periods. Excess returns are estimated using calendar time regressions for each portfolio. Acquirers enter the portfolio on the month following the announcement and remain for 12-36-60 months. This table contains five panels. Specifically, Panel A represents all acquisitions remaining for 1-3-5 years in the portfolio, starting from the next month from the month of the acquisition's announcement. Panel B represents only domestic acquisitions remaining for 1-3-5 years in the portfolio, starting from the next month from the month of the acquisition's announcement. Panels C, D, and E represents only cross-border acquisitions (Entire Sample, G6 and RoW ones) remaining for 1-3-5 years in the portfolio, starting from the next month from the month of the acquisition's announcement. Portfolios are rebalanced each month to include firms that just announced a deal. The monthly abnormal returns are measured by intercepts in the following equation:

$$\left(R_{p,t} - R_{f,t}\right) = a_p + \beta_p (R_{m,t} - R_{f,t}) + s_p SMB_t + h_p HML_t + \varepsilon_{p,t}$$

where $R_{p,t}$ is the calendar time portfolio return, $R_{f,t}$ is the return on a one month T-bill during month t, SMB is the difference in returns of value weighted portfolios of small firms and big firms during month t, HML is the return differential of value weighted portfolios of high and low book-to-market firms in month t, β_p, s_p and h_p are regression parameters specific to the portfolio and $\varepsilon_{p,t}$ is the error term. Standard errors are corrected for heteroscedasticity. a, b, or c indicate significance at the 1, 5, 10 percent level respectively.

	All	Low MRK Valuations	High MRK Valuations	Low IND Valuations	High IND Valuations	Low Coinc. Index	High Coinc. Index	Low GNP Level	High GNP Level	Low Grwth Index	High Grwth Index	Low EER	High EER
PANEL A - ALL DEALS													
1 YEAR													
α_p	-0.0003	0.0030	0.0041	-0.0031	0.0029	**0.0069**^{c}	0.0094	0.0065	-0.0028	**0.0071**^{a}	0.0012	0.0024	**0.0105**^{a}
β_p	1.0700^a	0.9698^a	1.0787^a	1.1986^a	1.1083^a	1.2386^a	1.3407^a	0.8214^a	1.0123^a	1.0117^a	1.2634^a	0.9612^a	0.9374^a
s_p	0.1241	0.0483	0.0912	0.1427	0.1260	0.1413	0.8079^a	0.0471	-0.0136	0.1564^b	0.4074^b	0.0925	0.0852
h_p	-0.1927	0.1858	-0.3820^b	0.0760	-0.3474^b	-0.3411^c	-1.2847^b	-0.1721	0.0961	-0.2177^c	-0.7423^b	-0.1286	-0.1407
F-Stat	59.42^a	27.64^a	84.05^a	43.31^a	94.92^a	56.20^a	23.35^a	8.44^a	37.77^a	89.89^a	43.29^a	106.78^a	36.50^a
R^2	42%	48%	62%	38%	55%	62%	34%	22%	45%	65%	44%	69%	41%
3 YEAR													
α_p	0.0039	0.0031	**0.0036**^{a}	0.0014	**0.0041**^{c}	0.0051	0.0108	0.0045	0.0017	**0.0033**^{b}	0.0078	**0.0044**^{b}	**0.0056**^{b}
β_p	1.0816^a	0.8557^a	1.1072^a	1.1535^a	1.1669^a	1.2952^a	1.1435^a	0.8544^a	1.0513^a	1.0643^a	1.1784^a	1.0700^a	1.0101^a
s_p	0.2404^c	-0.0479	0.1083^d	0.4555^b	0.1171^c	0.2728^b	0.7314^b	0.0955	0.1159	0.1771^a	0.4309^b	0.0282	0.0942
h_p	-0.2964	0.0565	-0.2356^b	-0.5265^a	-0.2220^c	-0.4022^b	-1.4024^b	-0.1307	0.0151	-0.1532^c	-0.7942^b	-0.0811	-0.1832^d
F-Stat	41.87^a	54.11^a	169.17^a	27.65^a	178.22^a	71.10^a	13.58^a	15.52^a	65.46^a	201.62^a	29.33^a	177.68^a	105.39^a
R^2	33%	50%	68%	26%	67%	59%	17%	28%	48%	75%	27%	72%	63%
5 YEAR													
α_p	**0.0067**^{c}	0.0012	**0.0068**^{a}	0.0034	**0.0068**^{a}	**0.0057**^{a}	0.0091	0.0007	**0.0043**^{b}	**0.0029**^{c}	**0.0091**^{a}	**0.0057**^{b}	0.0030
β_p	1.1769^a	0.8805^a	1.0635^a	1.2290^a	1.1261^a	1.2014^a	1.3585^a	0.7932^a	1.0426^a	1.0126^a	1.2876^a	1.0169^a	1.0210^a
s_p	0.4323^a	-0.0079	0.1429^b	0.5632^a	0.1754^b	0.2704^b	0.9346^a	-0.0492	0.1808^a	0.1662^a	0.6934^a	0.0735	0.0552
h_p	-0.1484	0.1013	-0.2893^b	-0.1434	-0.2022^c	-0.3836^c	-0.4955	0.0193	-0.0958	-0.1180^d	-0.3955	-0.0607	0.0005
F-Stat	54.64^a	92.49^a	184.84^a	27.24^a	166.89^a	166.89^a	19.89^a	18.79^a	194.37^a	194.45^a	29.64^a	358.44^a	128.18^a
R^2	39%	55%	72%	25%	67%	67%	20%	25%	71%	74%	27%	86%	65%
PANEL B - DOMESTIC DEALS													
1 YEAR													
α_p	**0.0061**^{a}	0.0058	**0.0061**^{b}	0.0039	0.0031	0.0041	**0.0168**^{a}	0.0056	**0.0037**^{c}	0.0034	**0.0058**^{b}	0.0036	**0.0115**^{a}
β_p	1.0512^a	1.2607^a	1.0873^a	1.2288^a	1.1346^a	1.2308^a	1.0740^a	1.2209^a	1.0978^a	1.1079^a	1.0691^a	1.0738^a	1.0287^a
s_p	0.1434^a	0.3188^a	0.2426^a	0.3078^a	0.2868^a	0.3117^b	0.2579^c	0.3900^a	0.2688^a	0.2149^c	0.2646^a	0.4077^a	0.1677^b
h_p	-0.3902^a	-0.0930	-0.3643^a	-0.1430	-0.5703^a	-0.7862^a	-1.0056^a	-0.5082^a	-0.3081^a	-0.4905^a	-0.2634^c	-0.2553	-0.3967^a
F-Stat	337.89^a	75.24^a	133.40^a	108.01^a	100.18^a	52.41^a	59.92^a	43.06^a	196.62^a	84.73^a	165.93^a	112.47^a	88.75^a
R^2	80%	72%	72%	60%	56%	60%	57%	59%	81%	63%	75%	70%	63%
3 YEAR													
α_p	**0.0054**^{a}	**0.0040**^{b}	**0.0029**^{c}	**0.0031**^{c}	**0.0064**^{a}	0.0049	**0.0061**^{a}	**0.0070**^{b}	**0.0028**^{b}	**0.0040**^{b}	**0.0062**^{a}	**0.0107**^{a}	**0.0077**^{a}
β_p	1.0562^a	1.1026^a	1.1147^a	1.0762^a	1.1186^a	1.3041^a	1.0680^a	1.1313^a	1.0731^a	1.0881^a	1.0883^a	1.1484^a	1.1566^a
s_p	0.1051^b	0.1419^b	0.1991^a	0.3405^a	0.1489^b	0.3307^b	0.1462^b	0.3129^a	0.1831^a	0.1724^a	0.1367^b	0.2865^a	0.1967^a
h_p	-0.2432^a	-0.2026^c	-0.2532^a	-0.2291^a	-0.3752^a	-0.6601^a	-0.2092^c	-0.3411^c	-0.2720^a	-0.1398^d	-0.2467^b	-0.2817^a	-0.1797^b
F-Stat	378.66^a	176.86^a	265.80^a	265.80^a	241.00^a	52.82^a	272.77^a	74.01^a	460.01^a	171.01^a	208.54^a	79.07^a	218.65^a
R^2	82%	77%	77%	77%	74%	51%	81%	65%	87%	72%	73%	54%	78%
5 YEAR													
α_p	**0.0034**^{a}	0.0019	**0.0047**^{a}	0.0007	**0.0046**^{a}	0.0054	**0.0033**^{b}	0.0035	**0.0031**^{b}	**0.0032**^{c}	**0.0046**^{b}	**0.0062**^{b}	**0.0063**^{a}
β_p	1.0952^a	1.1016^a	1.0562^a	1.0611^a	1.0778^a	1.1854^a	1.0624^a	1.0438^a	1.1037^a	1.0805^a	1.0586^a	1.0332^a	1.1807^a
s_p	0.1637^a	0.2395^a	0.2001^a	0.2051^a	0.1302^a	0.2498^b	0.1056^b	0.3094^a	0.2746^a	0.2406^a	0.1303^b	0.0849	0.2738^a
h_p	-0.0944	-0.0954	-0.3077^a	0.04704	-0.2472^a	-0.5721^a	-0.0936	-0.3174^b	-0.1198^c	-0.1794^b	-0.1756^c	0.1206	-0.1066
F-Stat	454.76^a	216.84^a	347.52^a	337.99^a	314.11^a	52.23^a	437.37^a	85.21^a	461.26^a	207.11^a	208.44^a	143.79^a	251.09^a
R^2	84%	74%	83%	81%	79%	46%	85%	60%	86%	75%	72%	70%	79%

Continued

Table 4:9 (Continued)

	All	Low MRK Valuations	High MRK Valuations	Low IND Valuations	High IND Valuations	Low Coinc. Index	High Coinc. Index	Low GNP Level	High GNP Level	Low Grwth Index	High Grwth Index	Low EER	High EER
PANEL C - CROSS-BORDER DEALS													
1 YEAR													
α_p	-0.0024	-0.0006	0.0025	-0.0044	0.0003	0.0077[d]	0.0055	0.0060	-0.0037	0.0057[c]	-0.0040	0.0019	0.0110[b]
β_p	1.0694[a]	0.9493[a]	1.0437[a]	1.2399[a]	1.0443[a]	1.1075[a]	1.3569[a]	0.7376[a]	0.9949[a]	0.9869[a]	1.5451[a]	1.0116[a]	0.9860[a]
s_p	0.1277	-0.0278	0.0848	0.2870[c]	0.1086	0.1647	0.8942[a]	0.0250	-0.0518	0.1321[d]	0.4767[b]	0.0541	0.1198
h_p	-0.1288	0.3147	-0.3520[c]	0.1947	-0.2962	-0.2496	-1.0851[c]	-0.2717	0.1730	-0.0866	-0.5266	-0.0062	-0.2396
F-Stat	45.17[a]	21.09[a]	52.88[a]	34.77[a]	58.63[a]	29.95[a]	18.22[a]	6.33[a]	29.26[a]	55.98[a]	38.28[a]	67.20[a]	26.86[a]
R^2	35%	42%	50%	33%	42%	46%	28%	17%	39%	53%	41%	58%	34%
3 YEAR													
α_p	0.0027	0.0031	0.0035	0.0019	0.0018	0.0058	0.0105	0.0051	0.0014	0.0026	0.0068	0.0024	0.0061[c]
β_p	1.0862[a]	0.8474[a]	1.0967[a]	1.2307[a]	1.2017[a]	1.2315[a]	1.1424[a]	0.8250[a]	1.0533[a]	1.0791[a]	1.2056[a]	1.0678[a]	0.9286[a]
s_p	0.2480[d]	-0.1181	0.0781	0.3782[c]	0.1065	0.3067[b]	0.7806[b]	0.0845	0.0992	0.1160[d]	0.4847[a]	-0.0017	0.0831
h_p	-0.2895	0.0970	-0.1672	-0.3678	-0.1399	-0.1971	-1.5001[b]	-0.1561	0.0637	-0.0624	-0.8193[b]	0.04121	-0.1434
F-Stat	31.80[a]	44.53[a]	101.58[a]	26.53[a]	124.67[a]	41.86[a]	11.57[a]	12.97[a]	51.18[a]	104.20[a]	21.35[a]	180.03[a]	50.49[a]
R^2	27%	45%	56%	26%	60%	45%	15%	24%	42%	61%	23%	73%	45%
5 YEAR													
α_p	0.0065	0.0023	0.0073[a]	0.0041	0.0071[b]	0.0038	0.0089	0.0009	0.0045[c]	0.0027	0.0085	0.0059[a]	0.0011
β_p	1.1696[a]	0.8647[a]	1.0434[a]	1.2466[a]	1.1334[a]	1.2687[a]	1.3392[a]	0.7646[a]	1.0264[a]	1.0143[a]	1.3186[a]	1.0176[a]	0.9548[a]
s_p	0.4383[a]	-0.0829	0.0933	0.4949[b]	0.1786[c]	0.3832[a]	0.9775[a]	-0.0790	0.1245[c]	0.1487[b]	0.7307[a]	0.0623	-0.0290
h_p	-0.1572	0.1092	-0.2814[c]	-0.1546	-0.1776	-0.1396	-0.5678	0.0098	-0.0748	-0.0599	-0.4522	-0.1760[c]	0.02047
F-Stat	39.63[a]	72.01[a]	111.90[a]	22.89[a]	105.15[a]	54.18[a]	16.12[a]	15.90[a]	113.76[a]	121.88[a]	22.38[a]	316.28[a]	75.96[a]
R^2	32%	49%	60%	22%	56%	47%	17%	22%	59%	64%	21%	84%	52%
PANEL D - DEALS IN G6 COUNTRIES													
1 YEAR													
α_p	0.0034	-0.0032	0.0028	0.0027	0.0019	0.0022	0.0121[b]	0.0087	0.0055[c]	0.0043	0.0009	0.0048[d]	0.0098[c]
β_p	0.9225[a]	0.9236[a]	1.0055[a]	1.0931[a]	1.0557[a]	1.1047[a]	1.1395[a]	0.6507[a]	0.9848[a]	1.0121[a]	1.4599[a]	1.0515[a]	0.8709[a]
s_p	-0.0082	-0.0595	0.0845	0.0772	0.2432[b]	0.2404[d]	0.3926[b]	-0.0209	0.1474[d]	0.1935[c]	0.3982[a]	0.2994[a]	0.1326
h_p	-0.3497[b]	0.3493	-0.4847[a]	0.1396	-0.6098[a]	-0.6791[b]	-1.2868[a]	-0.5294[d]	-0.4035[b]	-0.5407[a]	-0.3281	-0.5691[a]	-0.5393[b]
F-Stat	96.34[a]	14.68[a]	65.70[a]	57.79[a]	68.88[a]	23.12[a]	60.33[a]	4.97[a]	92.87[a]	39.67[a]	85.19[a]	92.16[a]	19.39[a]
R^2	53%	33%	56%	45%	47%	40%	57%	14%	67%	45%	61%	66%	27%
3 YEAR													
α_p	0.0031	0.0030	-0.0001	0.0010	0.0031	0.0063	0.0067[a]	0.0080	0.0049[b]	-0.0008	0.0054[a]	0.0026	0.0032
β_p	0.9713[a]	0.8144[a]	1.1452[a]	1.0434[a]	1.2179[a]	1.2213[a]	1.0786[a]	0.7418[a]	1.0596[a]	1.1728[a]	1.0889[a]	1.0425[a]	0.9353[a]
s_p	0.0464	-0.1719	0.1058	-0.0082	0.1613[b]	0.3512[a]	0.2201[a]	0.0932	0.1735[b]	0.2425[a]	0.1255[b]	0.1481[c]	0.2189[c]
h_p	-0.1145	0.1555	-0.1878[d]	0.2131	-0.4190[a]	-0.3039	-0.4728[a]	-0.4284	-0.2553[b]	-0.1166	-0.2755[a]	-0.4072[a]	-0.1198
F-Stat	141.93[a]	30.39[a]	164.22[a]	66.84[a]	211.91[a]	41.10[a]	174.80[a]	9.66[a]	144.09[a]	73.87[a]	257.09[a]	117.57[a]	33.03[a]
R^2	63%	37%	68%	47%	71%	45%	73%	19%	67%	52%	77%	64%	34%
5 YEAR													
α_p	0.0013	0.0005	0.0054[a]	-0.0006	0.0044[b]	0.0027	0.0047[a]	0.0013	0.0032[d]	0.0023	0.0046[a]	0.0053[a]	0.0009
β_p	0.9352[a]	0.8479[a]	1.0137[a]	0.9405[a]	1.0794[a]	1.2786[a]	1.0032[a]	0.7006[a]	0.9799[a]	1.0102[a]	1.0297[a]	0.9756[a]	0.9051[a]
s_p	-0.0791	-0.1727[c]	0.0853[d]	-0.2126[b]	0.1136[c]	0.3675[a]	0.0847[c]	-0.0846	0.1133[c]	0.1878[b]	-0.0017	-0.0525	-0.0336
h_p	0.0129	0.2196[d]	-0.5012[a]	0.2577[c]	-0.5572[a]	-0.1313	-0.1282	-0.1231	-0.1443	-0.1411	-0.1861[c]	-0.1428	0.0016
F-Stat	152.37[a]	53.23[a]	277.04[a]	76.41[a]	231.87[a]	54.61[a]	270.51[a]	11.40[b]	156.58[a]	83.01[a]	272.27[a]	247.32[a]	43.86[a]
R^2	64%	41%	79%	48%	74%	47%	78%	17%	67%	55%	77%	80%	38%
PANEL E - DEALS IN REST-OF-THE-WORLD COUNTRIES													
1 YEAR													
α_p	-0.0037	-0.0002	0.0069	-0.0189[b]	0.0025	0.0018	0.0087	-0.0065	-0.0048	0.0030	0.0012	0.0015	0.0033
β_p	1.1976[a]	1.1460[a]	1.1603[a]	1.6193[a]	1.2791[a]	0.9033[a]	1.5499[a]	1.0762[a]	0.9909[a]	0.9072[a]	1.5080[a]	1.1943[a]	1.3510[a]
s_p	0.3353[c]	0.1758[d]	0.2112	0.8492[a]	0.2589[c]	0.2347[c]	1.1787[a]	0.2892[c]	-0.0103	0.0050	0.3848	0.2801[d]	0.3712[b]
h_p	-0.0893	0.1443	0.0446	0.6831[d]	0.0775	0.2337	-0.6385	0.0546	0.2957	0.5233[a]	-0.1956	0.6315[c]	0.1888
F-Stat	27.64[a]	53.37[a]	30.09[a]	17.96[a]	33.99[a]	17.54[a]	11.55[a]	15.94[a]	18.22[a]	28.54[a]	21.90[a]	30.35[a]	34.63[a]
R^2	26%	6%	40%	22%	34%	34%	23%	35%	29%	37%	31%	41%	40%
3 YEAR													
α_p	0.0031	0.0037[c]	0.0065[d]	0.0044	0.0039	-0.0001	0.0116	0.0029	0.0006	0.0049[d]	0.0054	0.0001	0.0081[a]
β_p	1.2211[a]	1.0514[a]	1.2760[a]	1.6429[a]	1.2447[a]	1.0520[a]	1.2175[a]	1.1641[a]	1.0406[a]	1.0049[a]	1.2167[a]	1.2027[a]	1.2419[a]
s_p	0.4896[b]	0.1038[d]	0.3515[a]	0.9528[a]	0.1689	0.1779[d]	0.9953[b]	0.1435	0.0836	0.0430	0.5923[b]	0.1676[d]	0.1104
h_p	-0.5189	-0.2109[c]	-0.0471	-1.0396[c]	0.0466	0.2376	-1.5189[c]	0.2138	0.2219	0.2548[d]	-0.7895[c]	0.3036	-0.0758
F-Stat	16.24[a]	158.77[a]	53.47[a]	18.40[a]	52.63[a]	39.38[a]	9.18[a]	39.55[a]	33.24[a]	44.07[a]	13.57[a]	66.41[a]	92.71[a]
R^2	17%	75%	43%	21%	43%	52%	14%	50%	33%	39%	16%	52%	61%
5 YEAR													
α_p	0.0119[c]	0.0070[a]	0.0072[d]	0.0035	0.0083[c]	0.0031	0.0111	0.0013	0.0075[b]	0.0044[c]	0.0099	0.0053[d]	0.0048[b]
β_p	1.3124[a]	0.9694[a]	1.3137[a]	1.5128[a]	1.3499[a]	0.9638[a]	1.4406[a]	1.0745[a]	1.0372[a]	1.0390[a]	1.3867[a]	1.1786[a]	1.1049[a]
s_p	0.7633[a]	0.1545[a]	0.2705[c]	0.9694[a]	0.2421[c]	0.4103[a]	1.2007[a]	0.1721[c]	0.1041	0.0603	0.9227[a]	0.3225[a]	0.0582
h_p	-0.4295	-0.3911[a]	0.1475	-0.5846	0.3228	0.0350	-0.5233	-0.0461	-0.1281	0.03118	-0.4965	0.0843	-0.2294[c]
F-Stat	20.79[a]	148.72[a]	55.01[a]	14.38[a]	42.64[a]	20.56[a]	13.44[a]	47.95[a]	54.32[a]	94.17[a]	14.68[a]	92.40[a]	128.56[a]
R^2	21%	66%	46%	16%	38%	30%	16%	46%	41%	58%	16%	62%	66%

Chapter 5: Target Value Ambiguity and Gains from Acquisitions of Unlisted Targets

5.1 Introduction

Recent literature shows that a large proportion of mergers and acquisition (M&A) deals involve unlisted targets.[1] As a result, a block of voluminous literature has emerged that concentrates on whether M&A of unlisted targets create value to shareholders of acquiring firms. These studies compare the announcement period and post-merger wealth effects of firms acquiring unlisted targets with the wealth effects of acquiring firms opting for listed targets. The main conclusions derived from these studies suggest that while bidders of unlisted targets enjoy positive and significant abnormal returns, bidders of listed targets either breakeven (i.e. deliver the required rate of return) or experience small losses in the short-run.[2] The majority of studies in the same field of research have also recognized the method of payment as one the most influential factors of bidders' performance in the short-run. However, in spite of the rich array of studies that have attempted to resolve the puzzle related to the listing effect,[3] additional factors regarding the explanation of the sources of the positive gains to bidders of unlisted targets are required. Indeed, the literature falls short in fully explaining the behaviour of the bidding firm's stock price behaviour when they acquire unlisted targets. Their results are exposed to criticism for failing to include the level of the unlisted target firm's valuation-ambiguity/uncertainty in their analysis.[4]

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[1] Faccio and Masulis (2005) showed that approximately 90% of UK (and Irish) acquisitions involve unlisted target firms; Draper and Paudyal (2006) reported also that approximately 87% of the UK acquisitions involved privately held targets. However, Moeller et al. (2007) showed that approximately 53% of US acquisitions involve unlisted targets.

[2] See for example Hansen and Lott, 1996; Chang, 1998; Ang and Kohers, 2001; Fuller et al. 2002; Da Silva Rosa et al. 2004; Moeller et al. 2004; Conn et al. 2005; Draper and Paudyal, 2006; Faccio et al. 2006.

[3] Attention has also been received by other factors that affect bidders' gain during announcement and post-acquisition periods. The factors include the methods of payment, the relative size of the deal, bidders' growth opportunities, etc.

[4] Numerous of reasons and explanations that serve unlisted targets as value-ambiguous/uncertain, compared to listed targets are discussed extensively in section 2 of the present chapter. In addition, in contrast with the majority of studies in corporate takeovers that concentrate on information asymmetry issues, in this analysis I consider that in unlisted target firm acquisitions the lack of the availability of information leads to value-ambiguity issues.

This chapter fills this void by closely investigating the roles of ambiguities in the valuation of unlisted targets on the short and long-run gains of shareholders of bidding firms. More specifically, this chapter examines whether the gains of shareholders of unlisted target acquirers vary significantly with the degree of target firm's valuation-ambiguity or with the difficulty that bidders face in correctly estimating the value of the unlisted target or with the quality of available information regarding the unlisted target. In similar respects, recent theoretical research has confirmed that if information quality of an asset is far from good (i.e. poor or uncertain quality), ambiguity-averse market participants tend to react more strongly to bad news than to good news (Epstein and Schneider, 2008). The same authors have also suggested that investors are ambiguity-averse when the information quality is uncertain and that investors avoid assets followed by poor information quality, which is more intense when the assets' underlying fundamentals are volatile. Zhang (2006) have also claimed that there is a negative relationship between the level of information uncertainty/quality and the expected stock returns. As a result, bids of unlisted target firms that are subject to high levels of value ambiguity or they are followed by poor quality of information should generate low or negative returns to bidders' shareholders during the announcement period.[5] Along with the target firm's valuation ambiguities, several other firm and transaction-specific characteristics, including the method of payment, the likelihood of outside blockholder creation, and the bargaining power of targets, are expected to affect the short-run bidders' gains, as suggested by the majority of studies in the same field of research.

Earlier studies have also examined numerous factors that explain the bidders' gains from acquisitions of unlisted targets. In a recent study, Draper and Paudyal (2006) articulated three possible reasons of the superiority of unlisted target acquisition gains. They are: (a) the managerial motive hypothesis, (b) the illiquidity hypothesis, and (c) the bargaining power hypothesis. Similarly, Ang and Kohers (2001) argued that the premium paid for privately held targets could be higher than that for publicly traded targets,

[5] The asset pricing literature suggest that return is a compensation for bearing risk and thus attributes any observed profitable investment strategies to significant risk exposure involved.

especially due to the strong bargaining power of the privately held firms and the options available to them in selling the firm as they can choose how, when, and to whom to sell.[6] Along similar lines, other studies have suggested that the information environment of the target firms involved in M&A deals affect, to a great extent, the bidding firm's announcement and post-acquisition returns. For example, in an investigation of small manufacturing firms, Shen and Reuer (2005) showed that in the presence of the adverse selection problems the acquiring firm is more likely to acquire a public target rather than a private one. Similarly, Officer, Poulsen, and Stegemoller (2008) have attempted to explain the variation of the bidding firm's announcement returns by using a number of accounting variables extracted from the private target firms' annual reports in order to proxy for asymmetric information effects. They found that acquirer returns are highly associated with factors that make the valuation of the target more difficult. They also concluded that this relationship is more intense in cases where stock-swap acquisitions are involved, consistent with Hansen's (1987) model.[7] [&] [8] Ekkayokkaya, Holmes, and Paudyal, (2007) found that acquirers of private targets enjoy short-run gains although suffer a loss in the long-run, especially because of limited information related to unlisted targets. Lastly, consistent with the information diffusion hypothesis, Doukas, Gonenc, and Plantinga (2007) showed that the gains of bidders buying unlisted targets are higher compared to acquirers' gains of listed targets in 16 Western European countries.

The balance of current evidence suggests also that the gains from private target acquisitions dependent upon the methods of payment. Draper and Paudyal (2006)

[6] On the other hand, Officer (2008) documented on average 15% – 30% acquisitions discounts for stand alone firms and subsidiaries of other firms relative to acquisitions of publicly traded targets.

[7] In contrast with Officer et al. (2008), in this chapter I consider the issue related to unlisted target firm's lack of availability of information as the source of value ambiguity (see footnote 4 for further clarification).

[8] It is very important to distinguish between information asymmetry and value-ambiguity at this stage. Basically, issues related to information asymmetry are different to the ones of value-ambiguity given the availability of information received my market participants and the accuracy of the (same) information received. Overall, in both cases, where information is either *not accurate* or *not available* in the market, issues related to value-ambiguity or uncertainties are more likely to emerge. In other words, when the probability distribution for the expected return of a particular investment or asset is not known, investors behave differently than they do in cases with a known probability distribution for the expected return.

showed that stock financed acquisitions of unlisted targets generate the largest gains. Chang (1998) attributed this to the potential effective monitoring of bidder managers by external blockholders created through stock payment. Studies also suggest that the asymmetric information problem proposed by Myers and Majluf (1984) will be mitigated in private acquisitions as the managers-owners of private firms (a small number of shareholders or a family) will be very careful when they accept the bidding firm's stock (Chang, 1998). Therefore, while examining the effects of target firms' value-ambiguities on bidders' gains, I also control for the potential effects of the method of payment. Several considerations may arise when unlisted, and value uncertain target firms involved in the transaction, along with the different methods of payment utilized, some of which stand of major importance in finance literature. For example, what would the optimal method of payment be in bids of unlisted and value ambiguous target firms? Do bidders' and targets' managers base their choice of the optimal method of payment on different incentives than the ones proposed by Chang (1998)? Or, how likely is for the optimal method of payment in bids with unlisted and value uncertain target firms to be selected under different incentives than the ones proposed by Chang (1998)? It is important to be noted here that the value uncertainty in this case is originated from the target firm's side, contrary to the uncertainty concerning the value of the bidding firm (as discussed by Myers and Majluf, 1984), which mitigated in stock offers (as discussed by Chang, 1998).[9] In short, one may expect that the bidder and the target firms' managers have other incentives in engaging in acquisitions with unlisted and value-ambiguous target firms, or pay with common equity for these deals. Specifically, stock financing in acquisitions of value-ambiguous target firms might not necessarily generate positive and significant, or higher than other cases, gains to bidders' shareholders.[10] To an extent, one may expect higher (lower) abnormal returns

[9] Noteworthy, this is not mutually exclusive here.

[10] Epstein and Schneider (2008) have suggested that investors are ambiguity-averse when the information quality is uncertain and also they dislike assets followed by poor information quality. Accordingly, bids of unlisted (and value ambigious) targets with stock payments are associated with bad news twice; firstly, as that the announcement itself is ambiguous given the poor quality of information that follows the target firm that involved in the deal and secondly, assuming that bidders are aware of the investors' risk/return

from bids of low or zero (high) value-uncertain unlisted targets, irrespective to the method of payment used as the exchange ratio. However, cash or stock financing bids may lead to different short and long-run wealth effects to shareholders of bidders given both the risks shared and the incentives of the managers, between the merger partners.[11] Overall, in spite of several possible explanations of the listing effect, and its interaction with the methods of payment, some important considerations remain unaddressed.

This chapter contributes in finance literature by addressing the implications of the unlisted target firms' valuation-uncertainty and method of payment on the announcement and post-acquisition gains of UK acquiring firms. The analysis rests on several issues pertinent to acquisitions involving unlisted targets. Typical questions that deserve investigation include: (a) why do shareholders enjoy positive announcement period returns when unlisted targets are acquired? (b) Do short and long-run gains from unlisted target acquisitions vary significantly with the level of target firms' valuation-uncertainties? (c) Are bidders of unlisted target firms that financed with stock enjoy always positive gains around the event? (d) What is the role of the method of payment, or what is the optimal method of payment, in acquisitions of unlisted targets that are subject to value-ambiguities? (e) What are the key determinants of the announcement period and post-merger share price behaviour of acquiring firms that bid for unlisted and value uncertain target firms? In the process, this analysis also controls for acquirer-specific features (such as bidding firm growth opportunities, bidding firm age, bidding firm size), and transaction-specific features (such as focused versus diversifying deals, and relative size of the deal).

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preferences in the case of poor quality of information, they should have no incentive of offering stock to finance the deal – it may also signal overvaluation of the bidding firm's stock.

[11] In the latter case (cash financing), if the takeover market is competitive, the bidding firm will deliver the required rate of return to its shareholders as any additional gains will be wiped out by the higher premiums required due to high competition. Indeed, the sample used in this chapter includes one of the biggest merger waves in the history of the M&A activity and thus a very active bidding contest.

Within the overall context of the present chapter, the major conclusions suggest that short and long-run gains of shareholders of bidders acquired unlisted targets vary significantly with the target firm's valuations ambiguities. More specifically, evidence shows that target firms' characteristics that cause difficulty in valuation (such as age, size, intangibility of assets, and investments) can explain the variations in bidding firm's abnormal returns both during the announcement and the post-merger period. Acquirers of large (mature) unlisted targets outperform the acquirers of small (young) ones during the announcement period, especially in share deals. On the contrary, the examination of the bidding firm's gains in the post-merger period conveys that bids of small (young) targets generate higher gains than bids of large (mature) ones - overreaction. In addition, bids of unlisted target firms that have laden balance sheets of intangible assets are negative (positive) related to bidders' announcement (post-merger) gains. Overall, the results confirm that the short and long-run gains from unlisted target bids, depend upon the level of difficulty in valuing the targets and the method of payment utilized – acquirers of targets that are easier to value gain the most in the short-run, especially in the event of share deals.

The remainder of this chapter is organized as follows. Section (2) discusses the reasons that render unlisted target firms value ambiguous or the reasons that render unlisted target firms more value ambiguous than other firms (i.e. listed firms), section (3) discusses the effects of risk sharing between the bidding and the target firm, section (4) refers to the key literature that is closely associated with the main issue I examine in this chapter, section (5) develops the testable hypotheses, section (6) describes the data, summary statistics, and the methodologies I follow, and in section (7) I report the empirical findings and the interpretations of the results. Finally, section (8) concludes this empirical chapter.

5.2 Unlisted Target Firms and Value Ambiguity

The main scope of this chapter is to investigate the behaviour of bidding firms' share price (both the short and long-run) when acquiring unlisted target firms that are subject to different levels of value ambiguity. In fact, in this chapter I argue that the valuation-uncertainty concerning unlisted target firms is much more prominent, contrary to the one concerning listed firms, which is therefore expected to be reflected in the announcement and post-merger gains to bidding firms' shareholders that acquire unlisted targets. Accordingly, in this section I discuss and analyze a number of likely reasons that constitute unlisted target firms as value ambiguous, contrary to listed ones, and why some unlisted target firms are more value-uncertain than others.

In practice, some firms are more forthcoming about their financial affairs than other firms, and the financial statements of a few firms are designed to obscure rather than reveal information. This is more likely to occur for unlisted firms, where their 'informational environment' is much more complex (opaque) in comparison to that of listed firms.[12] A considerable debate in the literature of economics and finance is concentrating on the different informational environments of listed versus unlisted firms, which mainly documents that the latter is suffering from high levels of complexity or value ambiguity. Indeed, several scholars conclude that although a number of common characteristics, as well as principles of valuation, are shared between listed and unlisted firms, several important differences exist that can affect, to some degree, the way that the value of these firms is estimated. For example, the standard techniques for estimating risk parameters (such as beta and standard deviation) require market prices for equity, an input that is missing for unlisted firms. As a result, M&A bids of unlisted, and overpopulated by risky assets (i.e. intangible assets, investments) targets, along with the issue which is associated with their opaque informational environment,

[12] I do discuss later on the main reasons that led to the 'informational environment' of the unlisted firms as 'opaque'.

constitute their valuation even more difficult and the risk exposure for a bidder acquiring these firms even more severe (due to, for example, difficulty in the estimation of forecast parameters accurately).

Several other important considerations for the valuation process of listed versus unlisted firms emerge due to the availability of information regarding both types of firms. In short, the data availability with respect the valuation of unlisted firms tends to be much more limited, in both qualitative and quantitative terms, contrary to listed firms. This is more likely to occur due to the absence of (a) government regulations with the strict accounting and reporting standards of publicly traded firms, and (b) investors in financial markets that require information with respect to the business. In other words, listed firms are governed by a set of accounting standards that require the disclosure of a certain amount of information in the market, which further allow investors to identify, not only what each item in the financial statement includes, but also to compare items across firms and times. The latter is not required for unlisted firms, making the valuation of these firms difficult and the risk exposure by undertaking these firms into account much higher. Similarly, equity prices of publicly held/listed firms reveal collective judgments for dispersed investors (Hayek, 1945) and very credible information about the business. It has also been suggested that equity prices offer performance information that cannot be extracted from the firm's past, current or future accounting data/information (Holmstrom and Tirole, 1993).[13] Therefore, regardless of the absence of pressure for information disclosure of unlisted firms, the only information we may have available (i.e. accounting information extracted from the firm's annual reports) is inadequate to provide a clear estimation of the firm's value. This is another indication that unlisted firms are subject to higher value ambiguity in comparison to listed ones as the only available information they provide (accounting

[13] Although, examining the accounting data of unlisted targets is the only way to figure out their fundamental value. Therefore, the complex environment of unlisted firms might lead to any incorrect value estimation, which can affect in this case, the value of the final entity (after the completion of the acquisition).

information), does not represent the actual or fair firm's value (Holmstrom and Tirole, 1993), though it must be subject to certain characteristics.[14]

In addition, other considerations that affect the way we estimate the value of a listed versus an unlisted firm are related to the frequency of the data availability concerning these firms. Without a doubt, there is less information availability regarding unlisted firms, compared to listed ones, in terms of the number of years of data and the amount of information available each year. In short, for listed firms we may have data with regards the value of the firm on daily, weekly, monthly, quarterly and yearly basis. It is also possible to have access to intra-day data for listed firms. On the other hand, unlisted firms usually provide data (accounting data) only once a year, which can make it very difficult to estimate the actual value of the firm. For instance, in an attempt to calculate the "accounting beta" for an unlisted company by using the firm's accounting earnings would be a very difficult task due to the limited amount of observations in the regression model, which therefore will reduce the statistical power of the model/estimation. For the reasons explained above, in this chapter I argue that issues associated with the value ambiguity are more severe for bids of unlisted target firms, rather than with listed ones.

Accordingly, in spite of the complexities discussed in the above paragraphs, in this chapter I restrict the sample to only bids of unlisted targets (both private and subsidiaries of other unlisted firms) in an attempt to examine whether the different informational environments (or the value ambiguous one) concerning unlisted target firms can yield any statistical significant wealth effects to bidding companies engaging in acquisitions with unlisted target firms. In other words, I intend to control for various proxies that can capture the value ambiguity of unlisted firms, and therefore to estimate their impact on the announcement and post-acquisition bidding firms' stock returns. Given the limited availability of data regarding the unlisted firms, as well as the

[14] Such characteristics can be the firm's size, the age, industry classification, profitability ratios, as well as the firm's market share.

estimation problems that distinguish the unlisted firms, I focus on the only available data I can obtain for these firms. Thus, I use a number of firm specific characteristics/items, from asset specific and cash flow ones, to the size and the age of the unlisted company, in an attempt to capture the value ambiguity concerned with unlisted companies.

5.3 Risks Sharing Between the Bidding and Target Firms

In this chapter I have attributed the inferior performance of acquiring firms in the case when the target firms' valuation is uncertain to the risk that acquiring firms' investors face. There are however important considerations when looking at the issue from the target firms' edge. While accepting overvalued stock is very unlikely due to the blockholder and information hypotheses (Chang, 1998), there several cases when the target firms still accept the bidding firm's overvalued stock. In fact, one may consider that when the private target firm holds (a large) amount of value uncertain assets that are difficult to be valued, the managers of the private firm may have an incentive to accept the bidding firm's overvalued stock with the incentive to immediately cash-out. In addition, this is more likely to occur during high valuation periods where the bidding firms' stock is highly likely to be overvalued and bidders are also very likely to overpay for target firms during those times. Indeed, recent literature on market timing and merger activity highlights that when the stock market valuations in the bidding firm's country are high (low) the takeover activity appears higher (lower) whereas the use of stock (cash) is expected to be higher too (Shleifer and Vishny, 2003; Rhodes–Kropf and Viswanathan, 2004). The period covered in this chapter is between 1997 and 2007. This period includes the largest M&A waves in the UK M&A history to-date.

Unlisted target firms might also face liquidity problems, consistent with the liquidity hypothesis (Draper and Paudyal, 2006). The authors have admitted that the market for

corporate control for private target firms is illiquid thereby increases the bargaining power of the acquiring firm which therefore leads the bidder to acquire private or unlisted target firms at a discount. In the framework of the present discussion, share deals of difficult to value unlisted target firms may interpreted by market participants as a negative NPV project given that private firms face the liquidity problem ex-post. Moreover, there are several cases in the context of this chapter where, not only the bidding firm is overvalued but the target firm to be risky or overvalued too. It is highly likely then that the target firm will find it hard to value its own corporation and so to fail in securing the best possible exchange ratio in share deals. In these cases the target firms have greater risk in getting it wrong so acquiring firms recognize this through lower abnormal returns.

5.4 Literature Review

This section reviews the literature associated with the main scope of this empirical investigation, the unlisted target firm's valuation-ambiguity. I concurrently direct the reader to the second chapter of the thesis for more detailed literature related to bidders' gains from acquisitions with privately held and subsidiary target firms (i.e. unlisted targets). Although the main source of value ambiguity is not always information asymmetry or the quality of available information in the market, in this section I firstly review the array of studies that focus on value ambiguity issues in financial markets and secondly I review the studies on the impact of information asymmetry to bidders' gains.

5.4.1 Value Ambiguity in Financial Markets

Market participants constantly rebalance their portfolios based on the news and information attached to financial markets every day. In addition, the source of the same

information/news can be either an accurate one, or not, thereby affecting investment decisions to a higher degree. Along similar lines, in several occasions the necessary information required for valuation purposes by investors in financial markets is not available. Overall, in both cases, where information is either *not accurate* or *not available* in the market at all, issues related to value ambiguity or uncertainties emerge. In other words, when the probability distribution for the expected return of a particular investment or asset is not known, investors behave differently than they do in cases with a known probability distribution for the expected return.

The literature related to value ambiguity, or uncertainty in financial markets, dates back to, Knight (1921) and Keynes (1936) who argued that agents distinguish between risk (known probability distribution) and uncertainty (unknown probability distribution). Both authors have also pointed out that uncertainty is more common in economic decisions-making. Literature in more recent times has investigated similar research efforts on value ambiguity. For example, Epstein and Wang (1994) developed a model of asset pricing determination in which Knightian uncertainty plays a significant role in this framework. In similar respects, Uppal and Wang (2003) proposed a model that shows that when the overall degree of ambiguity is high, then a small difference in ambiguity about the marginal distribution of asset returns will lead to a strong bias in portfolio holdings. Similarly, Cagetti, Hansen, Sargent, and Williams (2002) showed that the dynamic evolution of the risk-return trade-off is dominated by movements in the growth-state probabilities and that the evolution of the dividend-price ratio is driven primarily by the capital technology ratio. In addition, a number of other authors in finance literature have attempted to explain the equity premium puzzle (high average returns on equity and low average risk-free rate) by appealing to ambiguity on the basis of a model with an ambiguity-averse representative agent.[15]

[15] See for example, among others, Epstein and Wang (1994), Uppal and Wang (2003), Cagetti, Hansen, Sargent and Williams (2002), Maenhout (2000), Skiadas (2005), and Trojani, Leippold and Vanini (2005).

Along similar lines, Zhang (2006) studied the implications of information uncertainty in short-run price continuation anomalies and in the cross-sectional variations of stock returns. The major conclusions that derived from this study suggest that, whereas following good news, a positive relationship between the level of information uncertainty and the expected stock returns exists, the opposite happens in the case of bad news. Indeed, following bad news, a negative relationship between the level of information uncertainty and the expected stock returns exists. The author have also claimed that this phenomenon is a function of how much the level of information uncertainty affects the speed of incorporation of information into the stock prices. The author measured the level of information uncertainty by employing six variables, including the size of the firm, the age of the firm, the analyst coverage, the dispersion in analyst coverage, return volatility, and cash flow volatility.

One of the major studies that contribute towards the design of the research in this chapter is the one by Epstein and Schneider (2008). The authors proposed a theoretical model in which they admitted that if information quality for an asset is far from good (i.e. poor or uncertain quality) ambiguity-averse market participants tend to react more strongly to bad news than to good news. In other words, Epstein and Schneider (2008) have suggested that investors are ambiguity-averse when the information quality is uncertain. They also have claimed that investors avoid assets followed by poor information quality whereas this is more intense when the assets' underlying fundamentals are volatile. Specifically, the authors proposed a model on information processing by ambiguity-averse agents that developed on the axiomatic foundations of recursive multiple-priors utility (as discussed by Epstein and Schneider, 2003). This model assumes that investors perceive a range of signal precisions, and take the worst-case assessment of precision when evaluating actions. As a result, they react asymmetrically to signals: they discount good news, but take bad news seriously. The paper has also emphasized three new effects of uncertain information quality on asset prices. Firstly, investors require compensation for low future information quality.

Expected excess returns are thus higher when information quality is more uncertain, holding fixed the distribution of the variation of the fundamentals. Secondly, investors require more compensation for low information quality when fundamentals are more volatile. Third, investors' asymmetric responses to signals skew the distribution of observed returns: when there are signals of uncertain quality, which generate negative skewness, signals of known quality generate positive skewness.

In summary, from the above discussion it appears that when information quality is poor, ambiguity-averse investors tend to react more strongly to bad news than to good news. Others have also suggested that there is a negative relationship between the level of information uncertainty and the expected stock returns. Given these observations, several important considerations related to the short and long-run returns of bidding firms may emerge when they acquire unlisted, and value ambiguous target firms. In short, typical questions that deserve investigation in this field of research include: how the gains of bidders acquiring value uncertain target firms are shaped? What is the role of the method of payment in takeovers of unlisted and value ambiguous target firms? And how one can measure the level of value ambiguity concerning unlisted target firms? Answers to these questions should fill several voids in finance literature whereas they will enhance our understanding on the corporate takeover process and their implications to merger partners.

5.4.2 Information Asymmetry in Mergers and Acquisitions

It has been extensively documented in finance literature that the concept of information asymmetry in takeovers may have significant implications on the likelihood of the M&A success, as well as on the announcement and post-merger gains to bidders' shareholders (Eckbo, Giammarino, and Heinkel, 1990; Balakrishnan and Koza, 1993; and Coff, 1999a). Earlier research has also shown that under asymmetric information

conditions, firms can benefit from contingent forms of consideration such as stock payments (Eckbo et al. 1990). However, more recent findings on the same field of research have provided additional conclusions on this very issue. For instance, Officer, Poulsen, and Stegemoller (2008) have investigated the question on whether the acquiring firm's announcement returns are mainly shaped by the information asymmetry that bidders face when valuing target firms. In fact, the authors have investigated the one side information asymmetry between the two firms involved in the transaction and by using only takeovers of privately held targets, for which the information asymmetry is more severe in contrast to takeovers of public targets, they found higher announcement abnormal returns to acquiring firms when, (a) they use shares as the currency to pay for the acquisition, (b) the target firm is small, and (c) when the target firms has intensive R&D or have balance sheets overloaded with intangible assets, which are very difficult to be valued by the bidding firm. Officer et al. (2008) have claimed that, in case that the bidders face high information asymmetries, they offer shares as a contingency pricing contract, which partly offsets any overpayment ex-post (further supporting the Hansen (1987) theory). Similarly, shareholders face a dilemma about the value of the acquiring firm, as at the time of the announcement the financials of the privately held targets are not disclosed. In similar respects, Moeller, Schlingemann, and Stulz (2004) have also concluded that the announcement period returns to bidding firms for cash based public and private acquisitions increase with idiosyncratic volatility (measure of information asymmetry).

In addition, Shen and Reuer (2005) in their investigation of small manufacturing firms have compared bids of private and public targets and they concluded that, private targets tend to involve higher transaction costs in the presence of adverse selection problems than the public targets. They further concluded that bidders choose to acquire public targets rather than private targets when (a) acquiring young firms, and (b) when engaging in inter-industry transaction. The authors have further documented that acquirers avoid targets with significant intangible assets that have not disclosed the

value of these assets through other means such as collaborative agreements. Along similar lines, Ekkayokkaya, Holmes, and Paudyal (2007) examined the information quality and quantity for private versus public targets and concluded that although bidding firms acquiring private targets enjoy positive short-run gains, they do suffer a loss in the long-run. The authors have suggested that the announcement period gains for acquirers of privately held targets are mainly driven from the investors' over-reliance on the 'no news is good news' viewpoint when faced with differential information. Moreover, Draper and Paudyal (2008) have suggested that when high information asymmetry between undervalued companies and investors exists, companies announce takeover bids in order to attract the attention of investors and analysts, thereby to increase the share price through revaluation. They concluded that in the presence of high pre-bid information asymmetry, bidding firms gain the most from early bids while the gains decline with the number of takeover bids announced within three years.

5.5 Hypotheses Development

The main basis of this empirical chapter is that bidding firms acquiring unlisted targets are exposed to different levels of valuation risks due to unlisted firms' value-ambiguous informational environments. This may have several important implications on the bidding firms' value. To test for this, in this empirical investigation I examine several propositions that summarized below.

5.5.1 Bidder Gains and Value Ambiguity

It has been widely documented in finance literature that several explanatory variables, including the methods of payment, the relative size of the deal, the bidding firm size, and the growth opportunities of bidding firm, can affect the announcement and post-

merger stock-returns of bidders.[16] Further, several studies have also documented that the abnormal return to bidding firms buying unlisted target firms is associated with the level of information available about the target firm at the time of the deal announcement (see for example, Chang 1998; Shen and Reuer, 2005; Draper and Paudyal, 2006; Faccio et al. 2006; Officer et al. 2008; Ekkayokkaya et al. 2007; Draper and Paudyal, 2008). However, several other studies have provided a different approach in the informational environment of unlisted firms and they have concluded that unlisted firms suffer from high level of value-ambiguities due to several reasons (mainly due to their less known informational environment or the poor quality of information that follows them).[17] The level of unlisted target firms' valuation-ambiguities is also very likely to increase in higher levels for some firms, compared to other firms, due to (a) the nature of their fundamentals (i.e. intangible assets) and (b) issues related to their opaque informational environment in general. In short, bids with unlisted targets that fall in these two categories may affect differently the net gains from the M&A. Specifically, bids with value-ambiguous unlisted targets (i.e. with balance sheets laden with intangible assets) are very likely to leave the final entity of the M&A as value-ambiguous too (with an unknown probability of expected return). In the event of acquisitions of unlisted targets, high levels of value-ambiguity can also arise from the fact that target firm managers or owners may conceal the true information, especially related to bad news.

Along similar lines, related asset pricing literature has provided a different approach in terms of the relationship of the information uncertainty and the cross-section of stock returns. In fact, Zhang (2006) found that there exists a positive (negative) relationship between the level of information uncertainty and the expected stock returns following good (bad) news. In addition, Epstein and Schneider (2008) have suggested that

[16] See, for instance, Chang (1998), Ang and Kohers (2001), Fuller, Netter, and Stegemoller (2002), Draper and Paudyal (2006), Faccio, McConnell, and Stolin (2006), Officer (2006), and Officer, Poulsen, and Stegemoller (2008).

[17] For related studies, see for example: Shen and Capron (2003) and Officer, Poulsen and Stegemoller (2008).

investors are ambiguity-averse when the information quality is uncertain. They have also admitted that investors avoid assets followed by poor information quality whereas this is more intense when the assets' underlying fundamentals are volatile. Following these two studies that, not only prompted a series of research questions but also served as the motivation behind this empirical chapter, I would expect that bids with difficult to value unlisted targets or bids with targets that followed by poor quality of information, to generate low positive, zero, or negative announcement returns.

Overall, following the main arguments developed in this chapter, which focus on whether the level of (a) the difficulty to value unlisted target firms and (b) the risk exposure of the bidding firm acquiring unlisted targets that have balance sheets laden with risky assets (i.e. intangible assets), generate lower wealth effects to bidding firms' shareholders, both in the short and in the long-run. In short, in a bid of a value-ambiguous unlisted target that is overpopulated by risky assets, any overpayment is likely.[18] Further, the exposure of the final outcome of the M&A into higher risks, which increase the likelihood of wealth-destruction in the long-run, is also likely as the expected value of the assets is hard to be estimated. Therefore, the first testable hypothesis states that:

H1: *'Bidders that buy difficult to value unlisted targets yield lower abnormal returns than bidders that acquire unlisted targets which are easier to value'*. This should prevail in both the announcement period, as well as in the long-term.

[18] The opposite can be also possible but given that unlisted target firms have the ability to wait until they will receive an offer from a, at least, non-overvalued bidder, thereby this decrease the likelihood of underpayment.

5.5.2 Value Ambiguity and the Methods of Payment

The issue described above can further interact with the methods of payment, the size and growth opportunities of the bidder and target, as well as the bargaining power of target. Alternative methods of payment signal different valuation effects of bidder, target, and the expected performance of the combined entity. Observations from previous research, such as Myers and Majluf (1984) and Travlos (1987), suggest that bidding companies opt for stock payments only when their stocks are overvalued. On the other hand, Chang (1998) have admitted that in privately acquisitions the target firms' managers have the power to identify the overvalued stock (due to their strong bargaining power or the option available to them to 'wait and sell'). However, when unlisted and value-ambiguous targets are involved in the transaction several important considerations may emerge with regards the optimal method of payment used. In short, one may expect that the managers of unlisted and value-uncertain targets (a) are prepared to accept the bidder's overvalued equity as the method of financing (due to several reasons that discussed throughout this section) and (b) are likely to find it hard to value their own corporation (i.e. due to the nature of their fundamentals) and so to fail in securing the best possible exchange ratio. Hence, the use of common equity or cash to pay for risky (or value ambiguous) assets, which to some degree renders the final outcome of the M&A as value ambiguous, would be expected to signal the following market perceptions (see figure 5:1, cases A to D):

- **Case A:** *The bidding firm is not overvalued and the unlisted target firm is not subject to value-ambiguity.* In this case the selection of the method of payment (cash, stock, or combination of both cash and stock) will be decided based upon other firm-specific (bidder or target) and transaction-specific characteristics. *However, the optimal method of payment for both target and bidding firm is expected to be* ***stock*** (figure 5:1, case A).

- The use of **stock** in that case will be in favour of both target and bidder for the following reasons: (a) it will signal to market participants that the bidding firm's stock is at least not overvalued, (b) it will increase the likelihood of creation of outside blockholders thereby providing more effective monitoring to the firm's managers in the post-merger period (figure 5:1, case A). *Such a deal will therefore generate positive abnormal returns to bidding firm.*
- On the other hand, the use of **cash** in a deal with a non-overvalued bidder and a non-value-uncertain unlisted target firm may generate either small positive or zero abnormal returns in the short-run, as recorded by numerous studies in the M&A literature. In short, following the limited competition hypothesis by Chang (1998) and the liquidity hypothesis by Draper and Paudyal (2006), the market for corporate control of unlisted target firms should be subject to low competition and also it should be illiquid. Both hypotheses suggest that bidders engaged in M&A with private targets are very likely to yield positive returns to their shareholders. On the other hand, the period covered in this investigation is between 1997 and 2007 which includes the largest M&A wave in the UK M&A history to-date. In short, this period is characterized as high competitive. Therefore, whereas deals with unlisted and non-value-uncertain target firms may expected to be positive NPV projects (as the PV of the synergy exceeds the premium required), a highly competitive time period may force bidders to pay higher premiums which in turn may offset any gains obtained due to 'limited competition' and 'liquidity' hypotheses (as the premiums paid may be equal to, or greater than, the PV of the synergy). Thus, deals of unlisted and non-value-uncertain target firms with cash financing should generate either small positive or zero abnormal returns to bidders' shareholders (figure 5:1,

case A). *Overall, the equity financing is remaining the optimal method of financing in this type of deals.*

- ~ ***Overall, this deal is expected to be 'good news' (good-neutral-news) for the bidding firm if stock (cash) is utilized to finance the deal.***

- **Case B:** *The bidding firm is overvalued and the unlisted target firm is not subject to value-ambiguity.* In this case the bidding firm managers should have an extra incentive to use their *'cheap equity'* (stock) as the exchange ratio in this transaction (as discussed by Myers and Mjluf, 1984). On the other hand, the target firm managers will not have any incentive for accepting the bidding firm's overvalued shares (a) as they carefully assess the stock and accept it only when it is at least not overvalued (as discussed by Chang, 1998) and (b) as their fundamentals are not value ambiguous, it helps the managers of the unlisted firm to value their own corporation correctly thereby to secure the best exchange ratio. *Therefore, the optimal method of payment to finance this type of deal is* ***cash*** (figure 5:1, case B).

  - ~ Following the above discussion, the use of **cash** as the exchange ratio in the case when the bidders' stock is overvalued and the target firm is not subject to value ambiguity reflects good news and thus value creation in the short-run. This is consistent with several studies that examine gains from acquisitions of privately held targets, such as Chang (1998) due to 'limited competition hypothesis' and in Draper and Paudyal (2006) due to 'liquidity hypothesis' (as discussed in case A). However, the period analyzed in this investigation is between 1997 and 2007, covering the largest M&A wave in the UK M&A history to-date. In short, this period is characterized as high competitive which therefore force the winning bidder to overpay for this deal (i.e. higher premiums required). This will eventually offsets any gains obtained due to 'limited competition' and

'liquidity' hypotheses (as the premiums paid may be equal to, or greater than, the PV of the synergy) (figure 5:1, case B). *Thus, deals of unlisted and non-value-uncertain target firms with cash financing should generate either small positive or zero abnormal returns to bidders' shareholders.*

- The use of **stock** as the exchange ratio when the target is not value ambiguous and the bidders is overvalued is very unlikely as the target firm's managers have an extra incentive to identify whether the bidders' stock is overvalued and thus accept it only when it is, at least, not overvalued (as discussed by Chang, 1998) (figure 5:1, case B). *Overall, the cash financing is remaining the optimal method of financing in this type of deals.*
- ***Overall, this deal is expected to be 'good-neutral-news' (bad-news) for the bidding firm if cash (stock) is utilized to finance the deal.***

- **Case C:** *The bidding firm is not overvalued but the unlisted target firm is subject to value-ambiguity.* In general, deals with target firms subject to high levels of value ambiguity (i.e. poor quality of information) should yield lower gains to bidders' shareholders, compared to deals with target firms subject to low or zero levels of value-ambiguity, irrespective of the method of payment used to finance the deal, as discussed in the first hypothesis' formulation (Epstein and Schneider, 2008). However, the cash or stock financing in this type of deals may generate different wealth effects to shareholders of bidders due to the considerations that will be discussed bellow.

The bidding firm's managers have no obvious reason to pay in shares for an unlisted and value-ambiguous target firm. Thus, the best exchange ratio for the bidding firm in this case would be cash, thereby giving bidders the option to save their **stock as the 'safe currency'**.

On the other hand, the target firm's managers are able to see that the bidding firm's stock is not overvalued and they may be prepared to accept it. However, since private firms' owners recognize the nature of their fundamentals, they would prefer non-equity instruments due to the following reasons: (a) they would prefer to minimize the likelihood to become outside blockholder for the combined entity as it will eventually contain during the after-bid period assets that will be subject to the same value uncertainty with their own ones during the pre-bid period, and (b) as overpayment is likely, they would prefer it in cash instead of stock (if stock was overvalued it could further motivate them to accept it only if they were intending to immediately cash out – extreme case which is discussed in case D). *Therefore, from both perspectives - the bidder and the target - the optimal method of payment to finance this type of deals remains* ***cash*** (figure 5:1, case C).

- ~ Irrespective of the type of payment, bidders' shareholders are expected to experience low positive or negative returns due to the poor quality of information that follows the unlisted target firm (Epstein and Schneider, 2008).
- ~ The use of **cash** instruments signal neutral or bad-news due to the reasons discussed above. In addition to this, bids of unlisted and value-uncertain target firms will generate ambiguous future cash flows, which to an extent will render the PV of the synergy ambiguous. Therefore, regardless the premiums required for this deal, the overall signal from an acquisition with an unlisted and value ambiguous target firm would be ambiguous. Furthermore, although the likelihood of overpayment in this type of transactions is high, the use of cash in this case prevents 'safe currency' (stock) and thus the bidding firms to exposure into additional risks (figure 5:1, case C). *The use of cash generates zero or negative abnormal returns to acquiring firm's shareholders.*

- Similarly, the use of **stock** signals bad news due to (a) the additional risks that the bidding firm is exposed to when acquiring unlisted and value-uncertain target firms by using its 'safe currency' and (b) the high likelihood of overpayment for this type of transactions (figure 5:1, case C). *The use of stock then will generate negative abnormal returns for the bidding firm's acquirers.*
- ***Overall, this deal is expected to be 'neutral-bad news' (bad-news) for the bidding firm if cash (stock) is utilized to finance the deal.***

Case D: *The bidding firm's common stock is overvalued and the unlisted target firm is subject to value-ambiguity.* As in case C, bids with target firms subject to high levels of value-ambiguity (i.e. poor quality of information) should generate low positive or negative gains to bidders' shareholders than the deals with target firms subject to low or zero levels of value-ambiguity, as discussed in the first hypothesis' formulation (Epstein and Schneider, 2008). However, in the present case, both the bidding and the target firm's managerial incentives in using cash or stock financing are different than in case C.

In particular, in the present case (D), the managers of the bidding firm would have an extra incentive to use their overvalued shares as the exchange ratio and buy value-uncertain assets, thereby save their **cash as the 'safe currency'**. This is an attempt to use their *'cheap equity'* to buy value-uncertain assets (with an unknown probability of expected return). However, using shares to acquire unlisted target firms that followed by poor quality of information, further expose the bidder to additional risks, which to an extent may motivate its shareholders to avoid its stock (Epstein and Schneider, 2008).

On the other hand, while accepting overvalued stock is very unlikely due to the blockholder and information hypotheses (Chang, 1998), there several cases

when the target firms still accept the bidding firm's overvalued stock. In fact, they should have a plan to cash-out immediately. To an extent, the managers of the unlisted and value-ambiguous target firm, (a) knowing that the bidder's stock is overvalued, and (b) knowing that overpayment is likely, would be prepared to accept stock as the optimal method of payment, *only* if they are willing to immediately cash-out (as discussed in Schleifer and Vishny, 2003). Alternatively, cash payment, in this particular case, would allow unlisted target owners to avoid the overvalued stock and the bidders to be exposed into extra uncertainties by using its cash which is its 'safe currency'. *Therefore, from both perspectives - the bidder and the target - the optimal method of payment to finance this type of deals remains* ***stock*** (figure 5:1, case D).

- Irrespective of the type of payment, bidders' shareholders are expected to experience low positive or negative returns due to the poor quality of information that follows the unlisted target firm (Epstein and Schneider, 2008).
- The use of **stock** as the exchange ratio for this type of deals will signal bad news due to any overpayment and the immediate cash-out during the after-bid period (figure 5:1, case D). *The use of stock then will generate negative abnormal returns for the bidding firm's acquirers.*
- On the other hand, the use of **cash** will signal bad news due to the following: (a) bidders might overpay and (b) bidders face additional risks due to further exposure in higher uncertainties (since they use their 'safe currency' [cash] instead of their 'cheap equity' [stock]) (figure 5:1, case D). However, whether in acquisitions that involve overvalued bidders that use their safe-currency [cash] for bids of value-uncertain targets allow for zero or small positive gains to bidders, as proposed by limited competition hypothesis, liquidity hypothesis and bargaining power hypothesis, is an open question that deserves further investigation.

Accordingly, the bad or neutral effects discussed above should be reflected in the gains of bidders. *Overall, the use of cash then will generate negative or zero abnormal returns for the bidding firm's acquirers.*

~ ***Overall, this deal is expected to be 'neutral-bad news' (bad-news) for the bidding firm if cash (stock) is utilized to finance the deal.***

From case C and D, although similar wealth effects to gains of bidders shareholders are generated, in case D they are more severe due to the fact that the uncertainties are originated from both the bidder and the target firms' sides.

Insert figure 5:1 about here

Therefore, my next testable hypothesis states that:

H2: *'Bidding firms buying difficult to value unlisted targets and paying with shares yield lower abnormal returns when compared to the returns of bidders buying easier to value targets and paying with shares'*. This effect should prevail in both the announcement period as well as the in the long-term.

5.5.3 Characteristics of Target Firms and Bidders' Gains

Size of the Target: The size of an unlisted firm may vary from a small family business to one that is able to compete even with large publicly traded firms. Small unlisted firms are less known, a fact that reduces the amount of information availability in the market about the same firms. This makes their valuation more difficult. Small firms may also have fewer customers, fewer suppliers, and fewer analysts watching them. This makes their information environment even more complex and ambiguous. In addition, the

information acquisition cost for small firms will be higher, making them less attractive targets. On the other hand, smaller firms are more likely to integrate easily into the acquirer's business and hence are more attractive. In the UK, larger firms, even if they are not listed in stock exchanges, are required to disclose more information about their operational and financial activities than small non-listed firms. This makes their valuation less difficult. When larger unlisted targets are acquired with stocks, the likelihood of outside blockholder creation increases significantly, a fact that is more intense once the size of the unlisted target increases relative to the size of the bidding firm. I also expect the structure of the bidder to change significantly when the acquisition involves large targets (relative size effect). Hence, larger firms overpopulated with risky assets are more likely to create higher uncertainty into the final outcome of the M&A. Therefore, the size of the unlisted target should be one of the important factors in determining the level of value-ambiguity. This leads to my next testable hypothesis which states that:

H3: ***'Bidding firms buying small unlisted target firms yield lower abnormal returns when compared to the gains of bidders buying large unlisted target firms'.*** **This effect should prevail in both the announcement period as well as the in the long-term.**

I measure the size of the unlisted target firms by employing four alternative proxies, namely, total assets, fixed assets, number of employees, and tangible assets.

Age of the Target: It is likely for newly established firms to exhibit higher uncertainty than older firms due to several reasons. In general, it has been widely documented in the literature that firms with long history have more information available in the market (Barry and Brown, 1985). Mature companies tend to be commonly known by more customers, more suppliers, and also they might tend to be operating within more mature industries. Hannan and Freeman (1989) argued that young firms are likely to lack reliability and accountability in their organizational routines and performance. In

terms of institutional constrains, young firms lack legitimacy, which occur due to the lack of support from relevant organization (Baum, 1989) and due to segmentation within the market for inter-organizational relationships (Carter and Manaster, 1990; Podolny, 1993). More recently, Zhang (2006) used the age of a large number of US firms to proxy for informational uncertainties in the business environment. In short, the author found a negative relationship between information uncertainties and the cross-section of expected returns, further suggesting that the information quality following firms (as measured with the age of the firm) destroy of enhance shareholder wealth. Hence, the valuation of older targets should be easier than the valuation of newly established companies. The age of the unlisted firm is measured as the difference between the announcement date of the acquisition and the date of the firm's incorporation. This leads to the next hypothesis which states that:

H4: *'Bidding firms buying young unlisted targets yield lower abnormal returns than the bidders buying mature unlisted target firms'*. This effect should prevail in both the announcement period and in the long-run.

Investments of the Target: Investment is divided into two categories: the capital investment and financial investment. Capital investments include the purchase of capital goods, such as plant and machinery in a factory in order to produce goods for future consumption. The higher the level of capital investment in a company, the faster it is expected its growth rate to be. On the other hand, financial investment is defined as the purchase of assets, such as securities, bank and building society deposits, etc, with the primary view to their financial return, either in the form of income or capital gain. In general, high levels of investments may be interpreted as higher expected future cash flows and thus positive (or higher) NPV (assuming that M&A create value only when the PV of the synergy exceeds the premiums paid).

On the other hand, one may expect that providing information for unlisted firms are limited in both qualitative and quantitative terms, market participants and also bidders find it hard to accurately estimate the PV of the investments undertaken by unlisted target firms. This is very likely to minimize the accuracy of the estimation of the PV of the synergy, which might be considered as poor quality of information by investors thereby enforce rational investors to avoid the equity of the bidding firm. In spite of these considerations, in general, the higher amount of investments should be perceived as good news on average, which is therefore expected to be reflected in the announcement and post-merger gains of bidders.

This leads to the next hypothesis which states that:

H5: ***'Bidding firms buying targets whose balance sheets are overloaded with investments yield higher abnormal returns than the bidders of targets with a small amount of investments in their balance sheets'.*** **This effect should prevail in both the announcement period as well as in the long-run.**

Intangible Assets of the Target: Intangible assets include intellectual property, brand names, franchise, reputation, trademark, and patent rights. They are difficult to trade as it is difficult to assess their quality (Chi, 1994; Coff, 1999a) and therefore buyers are not certain as to what will be transferred due to their complex and simultaneously uncertain future cash flows. However, acquisitions are important means of transferring intangible resources that are otherwise non-marketable (Wernerfelf, 1984); this implies that acquisitions of unlisted target firms laden with intangible assets will further expose the bidding firm to higher valuation uncertainties in the future. When the target firms reveal information regarding their intangible assets (even if they are value-ambiguous), it is likely that bidders offer higher premiums. In an acquisition of an unlisted target whose balance sheet is laden with intangible assets, the valuation effects on the final outcome

of the M&A is neither known to bidding firm managers nor to the target firm owners. This leads to the next hypothesis which states that:

H6: *'Bidding firms buying unlisted targets with a large proportion of intangible assets yield lower abnormal returns than the bidders buying the targets with a small proportion of intangible assets'*. This effect should prevail in both the announcement period and in the long-run.

5.5.4 Characteristics of Bidders and their Gains (Control Factors)

Bidders' size: Moeller, Schlingemann, and Stulz (2004) showed that larger acquirers earn about 2% less than smaller acquirers. Therefore, to allow for this effect I control for the size of the bidder. The size of the bidder is measured by their pre-bid market capitalization.

Growth opportunities of the bidder: It has also been documented that the growth opportunities of bidding firms affects their gains. Sudarshanam and Mahate (2003) and Conn et al. (2005) showed that value acquirers (with low MTBV) outperform glamour bidders both in the short and a long-run. Thus, I control for growth opportunities of the bidding firm. I measure the growth opportunity of the bidder with their market-to-book value (MTBV) ratio and the price-to-earnings (P/E) ratio one month prior to the announcement of the deal.

Age of the bidder: I also control for the age of the bidding firm. This is because firms with a long trading history have more information available in public domain (Barry and Brown, 1985). Mature firms are more likely to be in more mature industries, while firm's age may also capture the underlying volatility at the industry level. I measure the age of the firm with the number of days that the firm has been recorded in DataStream.

Relative size of the deal: Several authors have concluded that the bidding firm's abnormal returns within a small window surrounding the acquisition announcement's day increases as the target size increases relative to acquirer size (Asquith et al. 1983; Jensen and Ruback, 1983; Jarrell and Poulsen, 1989; Kang, 1993; and Fuller et al. 2002). This is due to the fact that the larger the target firm's size relative to the bidder, the more the original structure of the acquiring firm changes as a result of the acquisition. The relative size is measured as the ratio of the bidder's market capitalization (MV) one month prior to the bid announcement and the transaction value of the deal or the deal value (DV).

5.6 Data and Methodology

5.6.1 Sample Description

The information on the announcements of deals is extracted from Securities Data Corporations (SDC). The sample comprises of bids announced by listed UK firms between 01/01/1996 and 31/12/2007. The choice of the sample period is guided by the availability of data in FAME which holds firm specific financial data for 10 years. SDC records 16,316 deals announcements by UK firms during this period. The final sample meets the following criteria.

- The acquirer is a UK company traded in the London Stock Exchange (LSE).
- The target is a private or subsidiary (unlisted) domestic firm.
- The subsidiary's parent (if any) is an unlisted company.
- The deal value is equal to or greater than £1 million.

- The market value of the acquirer is greater than £1 million (one month prior to the announcement of the deal).
- The sample is restricted when the acquirer aims to obtain more than 50% of the target firm.
- Acquiring firms are not involved in other bids within 5-days (-2 to + 2) around the announcement of the deal.
- Data for the acquirer is available in DataStream.
- Data for the target firm is available in FAME.

Finally, 2,038 acquisitions meet the criteria.

5.6.2 The Sample Features

Figure 5:2 and table 5:1 show the annual distribution of sample deals and reveal the merger wave of late 1990s. The M&A activity over that period is overpopulated by acquisitions of unlisted target firms, covering almost 88% of deals. This pattern is consistent with the distribution of the sample of Faccio and Massulis (2005) and Draper and Paudyal (2006). The merger wave of the late 1990s can be attributed, to a large extent, to the sustained economic expansion, the growth of the internet and information dissemination in general, and the movements in stock market. Table 5:2 summarizes the distribution of M&A activities by industry sectors of both bidders and targets. Table 5:2 shows that the collapse of consumer confidence in several industries, as well as the overcapacity in traditional sectors, caused an unexpected reduction in merger activity in these industries. Within the same period, the high technology, consumer products and services, industrials, and media and entertainment industries are remain most active.

Insert figure 5:2 and tables 5:1 and 5:2 about here

Table 5:3 summarizes transaction, acquirer, and target specific characteristics. The average size (MV) of the bidders is £582 million with a median of £76 million reflecting a skewed distribution in bidders' size. With regards the growth opportunities of the bidding firms, the mean (median) MTBV ratio is 3.54 (1.89), while the P/E ratio is 36.87 (16.00). The median value of the relative size of the deals (TV/MV) is lower than its mean, reflecting that a considerable number of small deals are in the sample. The table also shows that bidding firms are more mature than their targets (bidders' and targets' age). Finally, the mean (median) liquidity ratio is 2.01 (1.06), current ratio is 2.22 (1.22), and the gearing ratio is 288.41 (62.12).

Insert table 5:3 about here

5.6.3 The Methodologies

5.6.3.1 Measurement of announcement excess returns

For the short-run analysis in this chapter I follow the tradition event study methods as summarized in Brown and Warner (1985). Cumulative Average Returns (CAR) for 5-days [-2, to +2] surrounding the announcement day (day 0) are estimated. The abnormal return of acquirer is estimated using equation (1).

$$AR_{i,t} = R_{i,t} - R_{m,t} \qquad (1)$$

Where:

$AR_{i,t}$ = The abnormal return for security i in time period t;

$R_{i,t}$ = The return for the security i in time period t, $\left[\frac{\left(RI_{i,t} - RI_{i,t-1}\right)}{RI_{i,t-1}}\right]$; and

$R_{m,t}$ = The return for the market (the FT-All Share measured as the percentage difference of the Market Index) equally weighted index in time period t.

Finally, equation (2) estimates the Cumulative Abnormal Returns (CAR) for the five-days around the announcement day (t).

$$CAR_i = \sum_{t=-2}^{t=+2} (R_i - R_m)_t \quad (2)$$

5.6.3.2 Long Run Performance

To assess the post-acquisition performance of bidders I estimate one, three and five year holding period excess returns after controlling for known risk factors identified in Fama and French (1996). Average monthly post-merger excess returns for 12, 36, and 60 months are estimated under a calendar time portfolio regression (CTPR) framework. The CTPR accounts for the cross-sectional dependence of stock returns, particularly due to the inclusion of frequent acquirers, caused by the lack of independence among observations. This problem arises from overlapping returns and the non-random timing of acquisitions.[19] For each calendar month in the period from January 1996 to December 2005, excess returns are calculated for all sample firms that announced bids with unlisted target firms during the previous 12, 36 and 60 months. The calendar-time portfolio excess returns are estimated with equation (3):

$$(R_{p,t} - R_{f,t}) = \alpha_p + \beta_p (R_{m,t} - R_{f,t}) + s_p SMB_t + h_p HML_t + \varepsilon_t \quad (3)$$

In equation (3), the intercept (α_p) measures the monthly average excess return of bidders after controlling for the effects of three risk factors. The dependent variable

[19] For a detailed explanation of the CTPR method see Lyon et al. (1999).

$(R_{p,t} - R_{f,t})$ is the monthly excess return of the calendar-time portfolio of bidders over risk free rate; $(R_{m,t} - R_{f,t})$ is the excess return of market portfolio; SMB (Small minus Big) is the excess return of a portfolio of small firms (value weighted) over a portfolio of large firms; and HML (High minus Low) is the excess return of a portfolio of value firms (value weighted) over glamour firms. SMB and HML are estimated using the method outlined in Fama and French (1996).

5.7 Empirical Findings

This section reports and interprets the empirical findings following the short-run, the long-run, and the cross-sectional analyses of the gains to bidders of unlisted targets. Deals are grouped on the proxies chosen to capture the level of target's value-ambiguity, and thus are expected to explain the bidding firm's announcement and post acquisition abnormal returns. Abnormal returns differentials between portfolios are also reported.

5.7.1 Announcement Period Gains

The main purpose of the announcement period analysis is to uncover differentials in short-run abnormal returns between acquirers engaging in takeovers with unlisted target firms subject to different level of value-ambiguity. Initially, the cumulative abnormal return (hereafter CAR) is reported for the entire sample of takeovers involving unlisted targets firms, measured within a small window (t-2, t+2) surrounding the acquisition's announcement day, t. The subsequent discussion concentrates on the stock market reaction, and is based on proxies that capture the target firm's valuation uncertainty. In each case, the sample is further divided according to the method of payment.

5.7.1.1 Bidders' Announcement Period Gains and Bidders' Characteristics

Table 5:4 reports the CAR for all acquisitions and proxies based on previous research, namely, bidder's size (MV), bidder's market-to-book value (MTBV) ratio, deal's relative size, and bidder's price-to-earning (P/E) ratio, divided into portfolios according to alternative methods of financing. Panel A reports CAR for the entire sample of acquirers (2,038 bids) as well as for portfolios classified according to the different means of payment. In this case the abnormal return for all bids is 2.18% while abnormal returns for the acquisitions financed with cash (equity) are 1.80% (4.01%) respectively, both statistically significant at a 1%. Their differences are also significant at the 1%. These findings are in line with the vast majority of studies in the literature of corporate and investment finance,[20] and they reflect the market's views with regards to the bidding firm's valuation effects. Panel B reports the CAR after controlling for the bidding firm's size and the alternative means of financing. Evidently, the CAR decrease as the size of the bidding firm increase with the largest differential to be obtained among deals financed with shares (-6.10%). These findings are consistent with the majority of studies in the literature supporting the view that small bidders gain on average higher abnormal returns than large bidders (Moeller et al. 2004).[21]

Insert table 5:4 about here

Panel D reports CAR of the bidding firms based on the relative size of the deal. It has been argued that the relative size of the target firm to the bidding firm is a major factor in explaining the bidding firm's CAR (Asquith et al. 1983, Jensen and Ruback, 1983,

[20] For related studies see for example, Chang (1998), Ang and Kohers (2001), Draper and Paudyal (2006), Officer (2006), Faccio et al. (2006), Officer et al. (2008), and Ekkayokkaya et al.(2007).

[21] Managerial decisions in large firms are more likely to be hubris's motivated (Roll, 1986), since managers in such firms are more often covered by the media, they are in general relatively more successful, and they tend to have a wider availability of resources when making investment decisions.

Jarrell and Poulsen, 1989, Kang, 1993, Fuller et al. 2002, Conn et al. 2005, and Draper and Paudyal, 2006).[22] For all three sub-groups (all cases, cash, and stock) it is clear that the CAR of bidding companies increases as we move from the low relative size portfolio to high relative size deal group suggesting that the greater the structural change of the bidding firms (high relative size), the higher the CAR to bidding firm. In addition, the higher bidders' CAR in the high relative size portfolio when unlisted targets are acquired may be partly driven due to illiquidity discount.

The market-to-book value (MTBV) ratio and the price-to-earnings (P/E) ratio are used to capture the growth opportunities of the bidding firms. The MTBV of the acquiring firm reflects important information about the past, and hence the potential future stock performance of the bidder. Among others, Rau and Vermaelen (1998), and Sudarsanam and Mahate (2003) have concluded that value acquirers (low MTBV) outperform glamour acquirers (high MTBV) around takeover announcements and after controlling for the mode of payment.[23] In panel C, CAR decrease as MTBV increases, suggesting that value acquirer's gains are mainly due to their future high growth opportunities. Lastly, panel E reports CAR for acquirers classified according to their P/E ratio. Evidently, CAR increases with the P/E ratio. However, the differential for the entire sample appears significant in both economic and statistical terms when the sample is divided into five portfolios and the differential between high P/E and low P/E portfolios are examined.

[22] The stock market reaction to an acquisition's announcement is expected to be more intense the larger the target size and thus the more the original structure of the acquiring firm changes as a result of the acquisition.

[23] Glamour acquirers are those firms that are overvalued on the basis of their past stock market performance. Such stocks receive premium ratings in the form of high MTBV. On the other hand, firms with low MTBV ratings may be undervalued, but may have the potential for subsequent value gains. Glamour acquirers are high growth while firms, since their high market valuation reflects the expected high growth, or investment opportunities.

5.7.1.2 Announcement Period Bidder Gains by the Age of the Unlisted Target Firm

Table 5:5 and 5:6 report gains to bidding firms by the age of the unlisted target. Table 5:6 presents the sample that is further divided according to the size (total assets) of the unlisted target firm.[24] Table 5:5 clearly indicates that the age of the unlisted target firm has a significant impact on the bidding firm's CAR, although this appears to be the case only when stock is used to finance the deal. More specifically, when the common stock used to finance the deals is equal to, or higher than, 75%, the differential between the portfolio of mature targets and the portfolio of young targets appears to be significant in both economical and statistical terms (this pattern holds when the sample is divided into three as well as five portfolios – see table 5:5, panes B and D). These findings suggest that the valuation of mature companies is less difficult than the valuation of younger firms. It also implies that mature unlisted targets are subject to lower information asymmetries as they are more widely known, have a longer trading history, more analysts following them, and reveal more information (both qualitative and quantitative) to public thereby making their valuation easier. In addition, the risk exposure of the acquirer is relatively lower while the final outcome of the acquisition may be considered as less value ambiguous. Hence, the use of equity to pay for the acquisition of older unlisted firms reflects significant gains to bidders, contrary to the use of equity to pay for bids against younger, and thus more risky, unlisted targets. Overall, one may consider that the age of the unlisted target captures the level of target firm's valuation-ambiguity and explains bidders' gains, thereby support the hypothesis 4 of this chapter.

Insert tables 5:5 and 5:6 about here

[24] In table 6 the sample is initially divided into three groups according to the target's size. Subsequently, the sample is further divided into three portfolios, only within the big and the small size group, according to the age of the unlisted target firm. This is in an attempt to further capture the level of target valuation-uncertainty, and gain additional explanatory power for the bidder's CAR.

Table 5:6 shows that the target firm valuation ambiguity varies significantly with the size and the age of the unlisted target firm, as well as with the method of payment used. The findings show that when bidders use their equity to acquire small-mature unlisted targets, they gain on average 4.80% and 10.20% more than the bidders of small-young unlisted targets. Small-young unlisted firms may be subject to higher value-ambiguity for several reasons, including the scarce availability of information. Given the risk of acquiring a small-young unlisted target, it is reasonable to expect stock financing to generate lower CAR to bidders, in comparison with bids of small-mature firms when the same method of payment is used. Basically, these two portfolios fall under the small firms' group (small firms do not required to disclosure information). Hence, this is very likely to be one of the main reasons why in panel D (big unlisted firms) I do not obtain any significant differential between portfolios comprised by acquisitions with large-mature versus large-young firms.[25] The findings indicate that young unlisted target firms suffer from higher levels of value-ambiguity once they are compared with mature ones, even though this is more intense when the target is a small firm, supporting further my general as well as more specific predictions. In fact, bidding firms buying difficult to value unlisted targets yield lower abnormal returns when compared to the returns of bidders buying less difficult to value targets, which is more severe in the case when stock used as the exchange ratio, thereby further supporting the hypothesis 3 and 4 of this chapter.

5.7.1.3 Bidders' Announcement Period Gains by the Size of the Target

Unlisted target firms' size may vary from a very small family firm to a very large company able to compete even with large listed firms. The size of unlisted firms may provide an important measure of the firm's information availability in the market, a fact

[25] On the other hand, when big unlisted target firm are acquired it is more likely for the bidder to enjoy much higher gains on average (as opposite to the gains generated to in the case of acquisitions with small unlisted target firms) due to the higher relative size (Asquith et al. 1983).

that decreases the level of the firm's valuation difficulty which therefore constitutes the final outcome of the M&A as less ambiguous.[26] In addition to the greater availability of information for larger firms, acquisitions with large unlisted target firms are also more likely to involve outside blockholders, or to change the original structure of the bidding firm substantially (as measured through the relative size). Unlisted target firm's total assets are used to capture the size of the target firms, and hence to proxy for the level of their valuation-uncertainty.

Table 5:7 reports CAR for portfolios sorted according to proxies capturing the size of the unlisted target firms. Specifically, table 5:7 reports CAR according to the total assets and the age of the unlisted target firms. Panels A and B presents CAR before controlling for the age of the unlisted target firm. The findings indicate that stock-financed acquisitions of large unlisted target firms generate higher abnormal returns to bidders than bids for small-unlisted targets (3.60% and 4.80% on average). This is the first indication that the size of the target firm as measured by its total assets, along with the method of payment employed, reflects significant valuation effects to bidding firm.[27] Further, panel C and D report CAR for bidding firms buying young-unlisted target firms while panel E and F show CAR for acquisitions involved with mature-unlisted target firms. Clearly, for acquisitions conducted with common stock, bidders gain more when they buy young-large companies than when they buy young-small ones by on average 5.30% and 10.50% (when the proportion of stock employed is equal to, or greater than 75% and equal to 100% respectively). These figures imply that among young companies, bidders face more difficulty to value small firms because they are not required to disclose information with regards to their operation in the market, as opposite to big firms, further supporting the hypothesis 3 of this chapter.

[26] Indeed, large unlisted firms are required by the UK disclosure information requirements to disclose more information regarding their financial and operational performance relative to smaller ones.

[27] The larger the unlisted target firm the higher the change of the original structure of the bidding firm and the higher the abnormal returns. To an extent, the outside blockholding creation following acquisitions with large unlisted target firms is more likely too once stock is utilized as the method of payment.

Insert tables 5:7 and 5:8 about here

Table 5:8 reports the CAR for bids with unlisted targets firms, divided into portfolios according to the size of both the bidder (MV) and the unlisted target firm (total assets). Specifically, panels C and D reports CAR for small bidders buying targets with their size to vary substantially. On average, bidders that acquire small versus big unlisted target firms and pay with stock enjoy on average 3.80%, 5.30% and 7.40% higher CAR. Given that the bidding firm is a small one, the acquisition with a large unlisted target firm is more likely to create outside blockholders, as well as to change the original structure of the bidder significantly (this is a finding that further confirms the relative size hypothesis). Similarly, large unlisted target firms are required to disclose more information into the market and therefore their valuation would be an easier task, leaving the final outcome of the M&A less value ambiguous.

5.7.1.4 Bidders' Announcement Period Gains by Asset (In) Tangibility of Targets

In this section I examine the relationship between the bidders' CAR and the proportion of intangible assets of target.[28] Table 5:9 reports announcement returns of the bidding firms acquiring unlisted targets with intangible-laden balance sheets.

Insert table 5:9 about here

Table 5:9 presents the CAR, and their differentials from portfolios formed according to three proxies computed by using various assets from the target firms. Panels A and B show bidders' gains by targets intangible asset. In equity finance deals, bidders of

[28] I expect the intangible assets held by the unlisted target firm to reflect significant valuation effects to bidders due to: a) the high target valuation-uncertainty, and b) neither the bidders nor the target can estimate the exact value of the intangible assets as well as the final outcome of the M&A.

targets with low intangible assets significantly outperform the acquirers of targets with high intangible assets. This suggests that the level of intangible assets owned by targets makes their valuation more difficult. Similarly, panels C and D (E and F) report CAR for portfolios formed according to the ratio computed by dividing the proportion of intangible assets held by an unlisted target firm with its corresponding proportion of total assets (fixed assets). The expectation is that the higher the ratio, the lower the CAR, as the amount of intangible assets held by the target firm cover, among others, a significant proportion of the firm's assets. Thus, the higher the ratio the higher the target firm valuation-uncertainty. This relationship is expected to be more intense as the proportion of equity used to finance the deal increases too (due to the significant risk exposure of the bidding firm). Evidently, my findings confirm to a great extent my hypothesis 6, with the acquisitions under the portfolio subject to low proportion of intangible assets to outperforming the ones in the portfolio subject to high proportion of intangible assets by generating both economically and statistically significant differentials. Lastly, panels G and H report CAR after controlling for a ratio between the intangible assets and the deal value.[29] Evidently, the higher ratio generates lower bidder gains, indicating that the bidding firm faces more difficulty in valuing the target firm and hence the higher the target firm's valuation-uncertainty.

Specifically, I measure the target firm valuation uncertainty, which is the overpopulation of the target firm's balance sheet with intangible assets, by computing the ratios between intangible assets over (a) the total assets and (b) the fixed assets of the target firm. Indeed, the higher the ratio between the intangible assets held with the total and fixed assets, the lower the CAR indicating that the bidder acquires more value uncertain target firms as their balance sheets are overpopulated with intangible assets. Moreover, the higher the ratio of intangible assets over the deal value the lower the CAR as the bidding firm acquires more value uncertain unlisted target firms. In other words, keeping the transaction value constant, the ratio (intangible assets/deal value) will

[29] We assume that the more the intangible assets bought by 'keeping' the deal value constant (i.e. the ratio IA/DV increases too), the higher the risk exposure of the bidding firm.

increase as the level of intangible assets bought is increasing. The latter may have significant valuation effects on the bidding firm as, (a) the bidding firm exposes itself into higher risk as it buys more intangible assets, and (b) the target firm finds it too hard to value its own assets thereby it is very likely to fail in securing the best possible exchange ratio in a share deal.

5.7.1.5 Bidders' Announcement Period Gains by the Investments of Targets

This section analyzes the CAR of acquirers involved in acquisitions of targets that have investment-loaded balance sheets. Table 5:10 reports CAR and their differentials for acquisitions of unlisted target firms subject to different levels of investments. My findings show a positive and statistically significant relationship between the proportion of investments held by the unlisted target firms and the bidder's CAR. Indeed, the CAR increases monotonically as we move from the portfolio subject to low investment (1.05%) to the portfolio subject to high investment (2.85%), with a statistically significant differential of about 1.80%. The same relationship is evident when the sample is divided by the methods of payment. However, the relationship is more intense for bids financed with equity. When stock (cash) is used to finance 75% or more of the transaction, bidders experience a loss on average -1.09% (0.69%) from the portfolio subject to low investment, whereas they gain 7.43% (2.35%) from the portfolio subject to high investments, with a statistically significant differential of about 8.50% (1.70%) respectively. Overall, bids with target firms subject to high value ambiguity (low proportion of investments) generate lower gains to bidders whereas bids with target firms subject to low value ambiguity (high proportion of investments) generate higher gains to bidders. These findings suggest that the method of payment along with the investments held by the unlisted target firm play a significant role for the bidding firm's CAR determination.

Insert table 5:10 about here

5.7.2 Cross-section Analysis

Although the results from univariate analysis are revealing, they cannot account for simultaneous effects of multiple factors and allow for interaction between various determinants of acquirer's gains. To overcome such limitations, announcement period (5-days) excess returns of bidders are regressed against a set of explanatory variables that are likely to be responsible in shaping the gains of acquirers engaging in acquisitions with unlisted target firms.

$$CAR_i = \alpha + \sum_{i=1}^{N} X_i + \varepsilon_i \qquad (4)$$

The intercept, (α) in equation (4), measures the excess return to bidders after accounting for the effects of all explanatory variables, while the vector of explanatory variables, 'X', includes variables likely to explain the CAR of bidding firms. The vector 'X' includes the following variables: acquirer's age on the day of bid announcement (log), acquirer's market value one month prior to the announcement of deal (log), deal value of the acquisitions (log), bidder's growth opportunity (ratio of market to book value of equity and price to earning ratio of acquirer one month prior to the acquisition announcement), relative size of the deal measured as the deal value divided by acquirer's market value, target firm's age on the day of bid announcement (log), target firm's total assets (log), target firm's fixed assets (log), target firm's investment (log), target firm's intangible assets (log), target firm's tangible assets (log), target firm's number of employees (log), target firm's liquidity ratio, target firm's current ratio, target firm's gearing ratio. Dummy variables that take the value of one and zero otherwise, are included to represent cash only and stock only deals. Table 5:11 presents the results from my multivariate analysis.

Insert table 5:11 about here

Throughout all models in the analysis, a positive and significant relationship has been found between CAR and the log of deal value, P/E ratio, as well as the relative size of the deal. The findings presented in table 5:11 are consistent with the findings of several other studies across the M&A literature. Specifically, with regards to the relative size of the deal, several scholars have proposed that the bidding firm's abnormal returns within a small windows surrounding the acquisition announcement's day increase as the target size increases relative to acquirer size (Asquith et al. 1983; Jensen and Ruback, 1983; Jarrell and Poulsen, 1989; Kang, 1993; and Fuller et al. 2002). This relationship implies that the larger the target firm's size relative to the bidder, the more the original structure of the acquiring firm changes as a result of the acquisition. On the contrary, the chapter's findings present a negative and statistically significant relationship between CAR and bidders' size, consistent with the findings of Moeller, Schlingemann, and Stulz (2004). Further, the relationship between the CAR and the MTBV ratio appears to be negative, though statistically insignificant in all models.

The unique feature of this chapter is that it concentrates not only on the bidder's site in the determination of the bidder's CAR, but also on the under-theorized unlisted target firm's side. Accordingly, a number of target firm characteristics employed in order to explain the bidding firms' CAR in a small window surrounding the acquisition announcement's day. Specifically, I find a positive and significant relationship between bidders' CAR and the log of target firm's age, which is consistent with my hypothesis 4 of this investigation. Similarly, in this study I find a positive and statistically significant relationship between proxies capturing the size of the unlisted target firm (i.e. fixed assets and total assets) and bidders' CAR. In fact, bidders CAR increase significantly with the level of total assets and fixed assets held by the target firms further supporting the hypothesis 3 of this study. Finally, one of the most important determinants of the bidding firms' CAR is the investments held by the unlisted target firm. My estimates (coefficients) of the investment in all the cross-section regressions is always positive and

significant at a 1 and 5 percent level, implying the when bidders announce takeovers of unlisted target firms with their balance sheets overloaded of investment, they enjoy positive and significant CAR supporting the hypothesis 5 of this study. On the other hand, acquirers experience a significant losses when they engage into acquisitions of unlisted target firms with their balance sheets laden of intangible assets (the coefficients appear always negative and significant at either 1 or 5 percent), further supporting the hypothesis 6 in this chapter. Other important variables that found to have an influential impact upon the explanation of unlisted target bidders' gains are the current ratio, the liquidity ratio and the gearing ratio of the unlisted target firm. Across the majority of the models examined, the coefficients of the liquidity ratio and the current ratio found to be negative and significant, suggesting that when the acquired unlisted target firms face financial distress, this affects bidders gains negatively. Thus controlling for these variables is essential given their deterministic power on the bidders gains.

In general, the cross-section approach, while confirms the majority of evidence from the univariate analysis, it captures several cross valuations-effects that are shared between the bidding and the target firm, as well as effects that are closely related to several deal characteristics. Accordingly, an overall view of the short-run analysis conveys that the gains of shareholders of bidders that acquire unlisted and value-ambiguous targets are shaped, to a great extent, by the different levels of value-ambiguities concerning the unlisted targets. These findings, while supporting my main predictions and confirm the findings from the majority of studies in this field of research, they fill several voids in finance literature regarding the valuation effects of bidder that acquire unlisted target firms.

5.7.3 Targets' Value Ambiguity and Bidders' Long-term Performance

The findings of the short-run analysis confirm that target firm's valuation-uncertainty and the method of payment are significant determinants of the bidder's gains when unlisted targets are acquired. This section aims to answer the question: do acquisitions of unlisted target firms that are subject to value-ambiguity influence bidders' gains in the long-run? Long-term excess returns are estimated by the calendar-time portfolio regression (CTPR) intercepts, the alphas. The Fama and French (1996) three factor model is used.

Table 5:12, panels A, B and C shows that on average UK bidders gain positive post-acquisition returns irrespective of the event window size.[30] This pattern remains the same when I focus on acquirers bidding for unlisted target firms using cash or stock as the method of payment to finance their acquisitions. In addition, this chapter examines whether other transaction characteristics reported in the literature can individually explain post-acquisition return for acquiring firms buying unlisted targets. All three tables and panels reports abnormal returns sorted by the bidder's size, growth opportunities, and relative size. Specifically, all results indicate that for the 1-, 3-, and 5-year post-event window smaller acquirers outperform larger ones. Within the same framework, low-MTBV acquirers (value) outperform high-MTBV (glamour) firms, irrespective of the post-event window and the method of payment utilized.[31] Similarly, bidders subject to a high relative size ratio outperform those subject to low relative-size in the long run, irrespective of the post-event window.

Insert table 5:12 about here

[30] Note that the intercepts from the FF 3-factor model indicate that acquirers are subject to statistically insignificant average monthly abnormal return of 0.81%, 0.75%, and 0.68% per month in 12-, 36-, and 60-months respectively, starting from the next month of acquisition's announcement.

[31] These findings are consistent with Rau and Vermaelen (1998) and Sudarsanam and Mahate (2003) who found similar results in the long-run for the US and the UK markets respectively.

Further table 5:12 reports FF's alphas for portfolios constructed according to proxies that capture the level of the unlisted target firm's value-ambiguity. Firstly, the model controls for the target firm's age. The findings show that FF's alphas decrease monotonically moving from the portfolio of bids of young-unlisted target firms (high value-ambiguity) to the portfolio of bids of mature unlisted target firms (low value-ambiguity). Along similar lines, evidence also shows that FF's alphas decrease monotonically as we move from the portfolio of bids of small-unlisted target firms (high value-ambiguity) to the portfolio of bids of large unlisted target firms (low value-ambiguity). These findings contradict the results of the earlier short-run analysis, and thus indicate that the unlisted target's value-ambiguity plays a significant role in the bidding firm's CAR determination in the post-event period. Furthermore, the level of intangible assets held in the unlisted target's balance sheets is used. As shown in all three panels, FF's 3-factor CTRP alphas increase with the level of intangible assets. Finally, the level of investments held in the unlisted target firm's balance sheet plays a significant role as well in the explanation of the bidding firm's abnormal returns in the long-run. Clearly, and consistent with the earlier short-run results, FF's 3-factor CTRP alphas increase moving from the portfolio subject to low investment to the portfolio subject to high investment.

5.8 Conclusion

This chapter examines the impact of the unlisted target firm's valuation uncertainty or ambiguity on the bidding firm's announcement period and post-acquisition abnormal returns. In the process of the analysis, bidding and target firm specific as well as transaction specific characteristics such as the method of payment, relative size of the deal, bidder's market-to-book value ratio and bidder's market capitalization have been controlled in the same way. The findings that derived from this chapter suggest that the

unlisted target firm's value-ambiguities have a significant impact upon the bidding firm's short and long-run share price performance.

The findings suggest that acquirers buying unlisted targets that are subject to low value-ambiguity enjoy higher announcement abnormal returns compared to acquirers buying targets subject to high value-ambiguity. This evidence is more prominent when the payment is made in shares and the target is young, small, and/or holds significant amount of intangible assets. Several proxies are employed to capture the unlisted target firm's value-ambiguity, namely the firm's (a) age, (b) size, (c) intangible assets, and (d) investment. Evidently, acquirers of large (mature) unlisted targets outperform the acquirers of small (young) ones in share deals during the announcement period. Indeed, takeovers of large unlisted target firms generate higher short-run abnormal returns to bidding firms' shareholders due to (a) their less value-ambiguity (i.e. relatively easier to value), and (b) the higher probability of creating outside blockholders (as shares used to finance the deal). In similar ways, takeovers of mature unlisted targets deliver higher short-run gains to bidders' shareholders due to their long history and thus their less-opaque informational environment. On the contrary, the examination of the bidding firm's gains in the post-merger period conveys that bids of small (young) unlisted targets generate higher gains than bids of large (mature) targets. In addition, whereas bidders acquiring targets with laden balance sheets of intangible assets generate low short-run abnormal returns in share deals, they enjoy high long-run returns.

The announcement period lower return is possibly due to market's presumption that bidding firm faces difficulty to value the target, and is exposed to high risk when the transaction involves acquisition of risky targets. However, such overreaction is corrected in the long-run as the firm's value moving towards to its equilibrium level. Finally, the results suggest that the bidders encounter more difficulty in valuing targets with higher investments, possibly due to target limited availability of information to assess the investments' future expected returns. Overall, this empirical chapter contributes to the

M&A literature by adding significant value to our knowledge on the short and long-run share price behaviour of bidders engaged in takeovers of unlisted target firms.

5.9 Figures and Tables

Figure 5:1 - Second Hypothesis Design

The figure shows the design of the second hypothesis of this chapter which is based on the different levels of the bidding firm's overvaluation and the level of the unlisted target firm's value-ambiguity or value-uncertainty.

Bidding Firm's Stock ⇒ **Target Firm's Valuation Uncertainty ⇓**	**Bidding Firm is not Overvalued**	**Bidding Firm is Overvalued**
Target Firm **IS NOT DIFFICULT TO VALUE** (No Subject to Value Ambiguity or Good Quality of Information)	Case: A **Optimal Exchange Ratio: Stock** **Deals Financed with Stock: + AR** • Signal no overvaluation of the bidder stock • Increase the likelihood of blockholder creation **Deals Financed with Cash: Zero or small +AR** • Small positive gains due to the limited competition hypothesis and the liquidity hypothesis • Mitigation of these gains due to the competition of the period's examined	Case: B **Optimal Exchange Ratio: Cash** **Deals Financed with Cash: Zero or small +AR** • Small positive gains due to the limited competition hypothesis and the liquidity hypothesis • Mitigation of these gains due to the competition of the period's examined **Deals Financed with Stock: - AR** • Very unlikely method of payment as target firm's managers will be able to identify the bidders' overvalued common equity
Target Firm **IS DIFFICULT TO VALUE** (Subject to Value Ambiguity or Far From Good Quality of Information)	Case: C **Optimal Exchange Ratio: Cash** **Deals Financed with Cash: Zero or - AR** • Preferable by targets as they would not become outside blockholders and overpayment is likely • Uncertain FCF **Deals Financed with Stock: - AR** • Overpayment is likely • Bidders' shareholders dislike assets that followed by poor quality of information (Epstein and Schneider, 2008)	Case: D **Optimal Exchange Ratio: Stock** **Deals Financed with Stock: - AR** • Overpayment is likely • Unreliable quality of information for the bidding firm's shareholders which further enforce them to avoid its stock • Bidders use their 'cheap equity' to pay for risky assets **Deals Financed with Cash: Zero or - AR** • Overpayment is likely which is preferred to be by cash by the target firm's owners • Bidders are not exposed to even higher risks/uncertainties
***Notes:* B = Bidder; T = Target; C = Cash; S = Stock; BE = Break-Even; AR = Abnormal Returns**		

Figure 5:2 - Annual Distribution of M&A Activity by Target Status

The figure presents the annual distribution of takeovers of both listed and unlisted target firms over the period between 1996 and 2007.

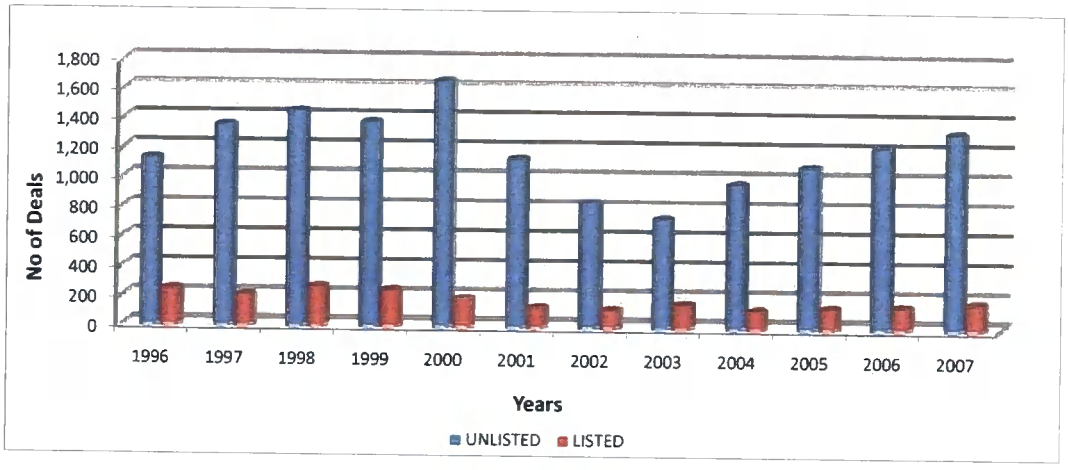

Table 5:1 - Distribution of M&A Activity by Year of Announcement and the Target Firm Status

The table presents the annual distribution of takeovers of unlisted target firms over the period 1996 and 2007. Acquirers are UK firms listed on the London Stock Exchange whereas the unlisted target firms are both private and subsidiary of other (unlisted) firms, both operating in the UK market.[32]

YEAR	ALL	PRIVATE	SUBSIDIARY	PUBLIC	UNLISTED	LISTED
1996	1,365	739	388	238	1,127	238
1997	1,557	858	497	202	1,355	202
1998	1,704	912	535	257	1,447	257
1999	1,615	895	482	238	1,377	238
2000	1,841	1,094	562	185	1,656	185
2001	1,257	736	398	123	1,134	123
2002	949	524	315	110	839	110
2003	878	430	301	147	731	147
2004	1,080	640	329	111	969	111
2005	1,220	775	316	129	1,091	129
2006	1,362	855	368	139	1,223	139
2007	1,488	966	359	163	1,325	163
Total	16,316	9,424	4,850	2,042	14,274	2,042
(%)	(100)	(57.76)	(29.73)	(12.52)	(87.48)	(12.52)

[32] Excluded bidders with Government, Investor, Joint Venture, Mutual, Private, Subsidiary, and Unknown public status; targets with government, Joint Venture, Mutual, and Unknown public status.

Table 5:2 - Distribution of M&A Deals Based on Industry Classification

The table presents the industry classification of both the bidding and the target firm company for a sample of 2,038 M&A deals over the period 1996 and 2007. Bidders are UK firms listed on the London Stock Exchange and targets are unlisted firms, both private and subsidiary of other (unlisted) firms, both operating in the UK market.

Industry Classification	Acquiror	Target
Consumer Products and Services	335	434
Consumer Staples	116	104
Energy and Power	32	39
Financials	173	141
Healthcare	65	64
High Technology	300	328
Industrials	322	283
Materials	132	105
Media and Entertainment	275	243
Real Estate	94	89
Retail	145	177
Telecommunications	48	31

Table 5:3 - Summary Statistics for the Sample

The table presents summary of deal-, acquirer-, and target- specific statistics, for a sample of 2,038 acquisitions announced by UK listed acquirers over the period 1996 and 2007. The sample is collected from SDC (Security Data Corporation) mergers and acquisitions database. The sample is restricted to deals equal to, or over one million pounds. The sample is restricted to the percentage of shares acquired; it is restricted when the acquirer aims to obtain more than 50% of the target firm. Deals where the acquirer has announced two or more deals within 5-day window [t-2, t+2] – where *t* is the acquisition announcement date – are excluded. Market value (MV) is the market value of the acquirer one month prior to the acquisition's announcement day. MTBV ratio and P/E ratio represents the market-to-book value of equity and the price-to-earnings ratio one month prior to the acquisition's announcement day. Relative size of the deal is the ratio calculated by dividing the transaction value of the deal over the acquirer's market value one month prior to the acquisition's announcement day (TV/MV). Age of the bidding firm is defined as the number of days since the firm was first covered by the DataStream and the acquisition's announcement day. Age of the target firm is defined as the number of days since the firm's registration (as obtained by the FAME company information) and the acquisition's announcement day. Target firm's total assets, fixed assets, tangible assets, intangible assets, investments, No of employees, liquidity ratio, current ratio, and gearing ratio, represent the mentioned unlisted target firm's proxies/variables. The data for these variables are collected from the FAME company information.

	Variable	N	Mean	Med.	Min.	Max.	Std Dev	t.Value	Pr> |t|
Bidding Firm's S.	CAR(-2,+2)	2,038	0.0218	0.0100	-0.2531	0.3710	0.0798	12.35	<.0001
	Market Value (MV)	2,038	582	76	0.34	78597	2913	9.01	<.0001
	MTBV Ratio	2,038	3.54	1.89	0.03	1073.97	27.41	5.83	<.0001
	PE Ratio	1,465	36.87	16	0.30	3046.50	173.16	8.15	<.0001
	Relative Size	2,038	0.2309	0.0478	0.01	25.8835	1.0356	10.07	<.0001
	Firm's Age	2,038	5172	3625	198	15660	4391	53.17	<.0001
Target Firm's Side	Firm's Age	2,030	4747	2754	14	38663	5919	36.13	<.0001
	Total Assets	1,859	24281	1540	100	8823287	274625	3.81	0.0001
	Fixed Assets	1,719	10610	367	100	5412800	140302	3.14	0.0017
	Tangible Assets	1,588	5276	249	100	1101691	41272	5.09	<.0001
	Intangible Assets	461	3987	244	100	237100	16906	5.06	<.0001
	Investments	725	12487	74	100	5178850	195617	1.72	0.0861
	No of Employees	1,270	221.22	46.00	1.00	18638.67	965.63	8.16	<.0001
	Liquidity Ratio	1,730	2.01	1.06	1.00	80.69	5.19	16.09	<.0001
	Current Ratio	1,731	2.22	1.22	1.00	80.69	5.26	17.57	<.0001
	Gearing Ratio	1,396	288.41	62.12	1.00	8100.00	763.49	14.11	<.0001

Table 5:4 - Announcement Period Excess Returns of Bidders by Size, Relative Size, Growth Opportunities and Payment Method

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the UK. Panel A shows the gains to acquirers for the entire sample divided into three groups based on the method of payment utilized. 'Cash' represents the deals announced with pure cash, 'Stock' represents the deals announced with pure stock and 'Mixed' represents the deals financed with both cash and stock as well as with 'Other' methods of financing. The final column in this panel shows the difference in the gains from acquisitions financed with pure cash versus the ones financed with pure stock. Panel B shows acquirers' gains by the bidding firm's size (MV) – 3 groups – one month prior to the acquisition's announcement day for the entire sample and the alternative methods of payment (cash and stock). Panel C reports acquirers' gains by the bidding firm's growth opportunities (MTBV ratio) – 3 groups – one month prior to the acquisition's announcement day for the entire sample and the alterative methods of payment. Panel D reports acquirers' gains by the relative size of the deal (TV/MV) – 3 groups – for the entire sample and the alternative methods of payment. Finally, panel E shows acquirer's gains by the bidding firm's P/E ratio – 5 groups – one month prior to the acquisition's announcement day for the entire sample and the alternative methods of financing. The final column in panels from B to E shows the difference in the gains from acquisitions between the portfolios subject to high proportion of each proxy with the one subject to low proportion of the same proxy. T-statistics testing for the mean equal to zero versus not equal to zero are reported in parentheses below the mean. The sample size, n, for each group is reported bellow T-statistic. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Entire Sample					
	All	Cash	Stock	Mixed	Diff: Stock vs. Cash
Mean	2.18%***	1.80%***	4.01%***	2.31%***	2.20%***
t-value	(12.35)	(7.31)	(3.41)	(9.45)	(2.72)
n	2,038	875	109	1,054	
Panel B - Bidder Returns by Bidder's Size (MV)					
	All	Low (1)	Medium (2)	High (3)	HML (3-1)
All					
Mean	2.18%***	3.39%***	2.03%***	1.13%***	-2.26%***
t-value	(12.35)	(8.51)	(7.62)	(5.17)	(-4.98)
n	2,038	679	680	679	
Cash					
Mean	1.80%***	3.17%***	1.88%***	0.90%***	-2.27%***
t-value	(7.31)	(4.83)	(4.76)	(3.10)	(-3.58)
n	875	228	279	368	
Stock					
Mean	4.01%***	5.91%***	3.08%	-0.19%	-6.10%**
t-value	(3.41)	(3.36)	(1.53)	(-0.09)	(-2.24)
n	109	59	30	20	

Continued

Table 5:4 – Continued

Panel C - Bidder Returns by Bidder's MTBV					
	All	Low (1)	Medium (2)	High (3)	HML (3-1)
All					
Mean	2.18%***	3.27%***	1.68%***	1.59%***	-1.68%***
t-value	(12.35)	(8.79)	(6.49)	(5.91)	(-3.65)
n	2,038	681	677	680	
Cash					
Mean	1.80%***	2.62%***	2.03%***	0.66%**	-1.96%***
t-value	(7.31)	(5.10)	(5.24)	(1.97)	(-3.20)
n	875	307	292	276	
Stock					
Mean	4.01%***	6.15%***	0.50%	3.15%	-3.00%
t-value	(3.41)	(3.38)	(0.23)	(1.55)	(1.10)
n	109	50	21	38	
Panel D - Bidder Returns by Relative Size of the Deal					
	All	Low (1)	Medium (2)	High (3)	HML (3-1)
All					
Mean	2.18%***	1.08%***	1.35%***	4.12%***	3.04%***
t-value	(12.35)	(4.10)	(5.61)	(10.79)	(6.54)
n	2,038	679	680	679	
Cash					
Mean	1.80%***	0.97%***	1.46%***	4.29%***	3.30%***
t-value	(7.31)	(2.85)	(3.71)	(6.67)	(4.98)
n	875	407	291	177	
Stock					
Mean	4.01%***	2.12%	2.62%*	6.61%***	4.50%*
t-value	(3.41)	(1.07)	(1.67)	(3.07)	(1.64)
n	109	39	27	43	
Panel E - Bidder Returns by Bidder's P/E					
	All	Low (1)	Medium (3)	High (5)	HML (5-1)
All					
Mean	1.89%***	1.39%***	2.05%***	2.73%***	1.30%**
t-value	(10.52)	(3.37)	(4.93)	(5.36)	(2.05)
n	1,465	296	287	293	
Cash					
Mean	1.60%***	1.39%**	1.52%***	1.84%***	0.40%
t-value	(6.39)	(2.44)	(2.77)	(2.64)	(0.50)
n	654	155	130	97	
Stock					
Mean	3.33%**	2.72%	3.94%	4.00%	1.30%
t-value	(2.13)	(1.27)	(0.94)	(1.34)	(0.35)
n	53	8	10	23	

Table 5:5 - Announcement Period Excess Returns of Bidders by Age of the Unlisted Target Firm and Payment Method

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the UK. The table is divided into four panels, based on the method of payment utilized, and the number of groups the sample is divided according to the unlisted target firm's age. Specifically, panels A and B show gains to acquirers by the unlisted target firm's age – three groups – and the alternative methods of financing. Panels C and D show gains to acquirers by the unlisted target firm's age – five groups – and the alternative methods of financing. Each panel is divided into six groups according to the proportion of either cash or stock used (i.e. all sample, either cash or stock is grater than zero, either cash or stock is greater than or equal to 25%, either cash or stock is greater than or equal to 50%, either cash or stock is greater than or equal to 75%, and finally either cash or stock is equal to 100%). The final row in each panel shows the difference in the gains from acquisitions of mature unlisted targets firms versus acquisitions of young unlisted targets. The sample size, *N*, for each group is reported bellow each estimate. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Bidder Returns by Target Firm's Age						
	All	**Cash > 0%**	**Cash ≥ 25%**	**Cash ≥ 50%**	**Cash ≥ 75%**	**Cash = 100%**
All	2.15%***	2.08%***	2.01%***	1.98%***	1.94%***	1.80%***
N	2,030	1,812	1,581	1,348	1,086	875
Low (1)	1.90%***	1.79%***	1.81%***	1.86%***	1.96%***	1.68%***
N	676	569	470	403	326	270
Medium (2)	2.41%***	2.34%***	2.21%***	2.13%***	2.07%***	1.89%***
N	677	610	522	430	333	261
High (3)	2.15%***	2.10%***	1.99%***	1.96%***	1.83%***	1.83%***
N	677	633	589	515	427	344
HML (3-1)	0.30%	0.30%	0.20%	0.10%	-0.13%	0.10%
Panel B - Bidder Returns by Target Firm's Age						
	All	**Stock > 0%**	**Stock ≥ 25%**	**Stock ≥ 50%**	**Stock ≥ 75%**	**Stock = 100%**
All	2.15%***	2.88%***	2.94%***	3.19%***	2.81%***	3.47%***
N	2,030	753	458	264	164	104
Low (1)	1.90%***	2.26%***	2.07%***	2.24%**	1.35%	1.68%
N	676	267	178	110	76	47
Medium (2)	2.41%***	3.29%***	3.81%***	4.14%***	3.43%**	3.68%*
N	677	270	163	98	56	35
High (3)	2.15%***	3.12%***	3.05%***	3.40%***	5.21%***	6.98%***
N	677	216	117	56	32	22
HML (3-1)	0.30%	0.90%	1.00%	1.20%	3.90%*	5.30%*

Continued

Table 5:5 – Continued

Panel C - Bidder Returns by Target Firm's Age						
	All	**Cash > 0%**	**Cash ≥ 25%**	**Cash ≥ 50%**	**Cash ≥ 75%**	**Cash = 100%**
All	2.15%***	2.08%***	2.01%***	1.98%***	1.94%***	1.80%***
N	2,030	1,812	1,581	1,348	1,086	875
Low (1)	1.70%***	1.72%***	1.60%***	1.76%***	2.01%***	1.72%***
N	406	331	273	237	196	165
Medium (3)	2.68%***	2.58%***	2.29%***	2.06%***	2.00%***	1.87%***
N	406	368	310	254	198	153
High (5)	2.38%***	2.14%***	2.01%***	2.05%***	2.16%***	1.97%***
N	406	378	352	319	272	223
HML (5-1)	0.70%	0.40%	0.40%	0.30%	0.10%	0.20%
Panel D - Bidder Returns by Target Firm's Age						
	All	**Stock > 0%**	**Stock ≥ 25%**	**Stock ≥ 50%**	**Stock ≥ 75%**	**Stock = 100%**
All	2.15%***	2.88%***	2.94%***	3.28%***	2.81%***	3.47%***
N	2,030	753	456	259	164	104
Low (1)	1.70%***	1.76%**	1.01%	1.70%	0.58%	-0.17%
N	406	152	102	68	49	32
Medium (3)	2.68%***	3.89%***	4.97%***	5.82%***	4.32%**	3.83%
N	406	159	96	56	33	20
High (5)	2.38%***	3.95%***	4.29%***	5.39%***	7.14%***	8.77%***
N	406	117	71	37	24	17
HML (5-1)	0.70%	2.20%**	3.30%**	3.70%**	6.60%***	8.90%***

Table 5:6 - Announcement Period Excess Returns of Bidders by Age and the Size of the Unlisted Target Firm and Payment Method

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the UK. The table presents gains to acquirers into two dimensions; by the unlisted target firm's size and age. The table is divided into four panels (by the size of the unlisted target firm and the method of payment utilized). Specifically, panels A and B show gains to acquirers by the unlisted target firm's size *(small targets only)* and age – three groups. Panels C and D show gains to acquirers by the unlisted target firm's size *(big targets only)* and age – three groups. Each panel is divided into six groups according to the proportion of either cash or stock used (i.e. all sample, either cash or stock is grater than zero, either cash or stock is greater than or equal to 25%, either cash or stock is greater than or equal to 50%, either cash or stock is greater than or equal to 75%, and finally either cash or stock is equal to 100%). The final row in each panel shows the difference in the gains from acquisitions of mature unlisted targets firms versus acquisitions of young unlisted targets. The sample size, *N*, for each group is reported bellow each estimate. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Bidder Returns by Target Firm's Age (Small targets only (33.3% of the target's size))						
	All	**Cash > 0%**	**Cash ≥ 25%**	**Cash ≥ 50%**	**Cash ≥ 75%**	**Cash = 100%**
All	1.99%***	1.96%***	1.84%***	1.75%***	1.59%***	1.50%***
N	617	534	434	364	288	241
Low (1)	2.11%***	2.11%***	1.84%***	1.81%**	1.87%**	1.75%**
N	205	158	113	94	73	65
Medium (2)	2.24%***	2.40%***	2.38%***	2.15%**	2.19%**	2.42%*
N	206	184	149	129	98	75
High (3)	1.61%***	1.42%***	1.36%**	1.34%**	0.92%*	0.65%
N	206	192	172	141	117	101
HML (3-1)	-0.49%	-0.70%	-0.47%	-0.47%	-0.95%	-1.10%
Panel B - Bidder Returns by Target Firm's Age (Small target only (33.3% of the target's size))						
	All	**Stock > 0%**	**Stock ≥ 25%**	**Stock ≥ 50%**	**Stock ≥ 75%**	**Stock = 100%**
All	1.99%***	2.44%***	2.39%***	2.04%*	0.77%	-1.04%
N	617	269	174	88	55	28
Low (1)	2.11%***	2.37%**	1.37%	-0.04%	-0.97%	-4.22%*
N	205	102	68	40	27	13
Medium (2)	2.24%***	2.46%***	3.25%**	4.18%*	1.06%	-1.96%
N	206	90	55	26	14	8
High (3)	1.61%***	2.52%**	2.81%**	3.29%**	3.84%*	5.94%*
N	206	77	51	22	14	7
HML (3-1)	-0.49%	0.10%	1.40%	3.30%*	4.80%*	10.20%***

Continued

Table 5:6 – Continued

Panel C - Bidder Returns by Target Firm's Age (Big targets only (33% of the target's size))						
	All	Cash > 0%	Cash ≥ 25%	Cash ≥ 50%	Cash ≥ 75%	Cash = 100%
All	2.19%***	1.94%***	1.86%***	2.06%***	2.16%***	1.76%***
N	617	559	507	442	366	293
Low (1)	1.69%***	1.42%***	1.60%***	1.86%***	2.39%***	1.79%***
N	205	183	161	140	111	88
Medium (2)	2.68%***	2.29%***	2.06%***	2.10%***	1.89%***	1.19%*
N	206	186	168	142	116	88
High (3)	2.18%***	2.12%***	1.91%***	2.21%***	2.21%***	2.16%***
N	206	190	178	160	139	117
HML (3-1)	0.50%	0.70%	0.30%	0.40%	-0.18%	0.40%
Panel D - Bidder Returns by Target Firm's Age (Big targets only (33% of the target's size))						
	All	Stock > 0%	Stock ≥ 25%	Stock ≥ 50%	Stock ≥ 75%	Stock = 100%
All	2.19%***	3.43%***	2.98%***	4.01%***	4.66%***	5.60%***
N	617	195	128	77	48	37
Low (1)	1.69%***	1.79%*	0.82%	2.47%	2.95%	4.15%
N	205	71	48	28	19	14
Medium (2)	2.68%***	5.34%***	6.24%***	7.53%***	8.70%**	8.33%*
N	206	68	42	26	14	12
High (3)	2.18%***	3.19%***	2.11%***	1.92%	3.04%	4.47%*
N	206	56	38	23	15	11
HML (3-1)	0.50%	1.40%	1.30%	-0.55%	0.09%	0.30%

Table 5:7 - Announcement Period Excess Returns of Bidders by Size and Age of the Unlisted Target Firm and Payment Method

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the UK. The table is initially divided into two panels (panels A and B), based on the method of payment utilized, and the unlisted target firm's size. Further, this table contains another four panels that present gains to acquirers into two dimensions; by the unlisted target firm's age and size (panels C – F). Each panel (from A to F) is divided into six groups according to the proportion of either cash or stock used (i.e. all sample, either cash or stock is grater than zero, either cash or stock is greater than or equal to 25%, either cash or stock is greater than or equal to 50%, either cash or stock is greater than or equal to 75%, and finally either cash or stock is equal to 100%). The final row in each panel shows the difference in the gains from acquisitions of big unlisted targets firms versus acquisitions of small unlisted targets. The sample size, *N*, for each group is reported bellow each estimate. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Bidder Returns by Target Firm's Size (Total Assets)						
	All	**Cash > 0%**	**Cash ≥ 25%**	**Cash ≥ 50%**	**Cash ≥ 75%**	**Cash = 100%**
All	2.20%***	2.09%***	2.00%***	1.98%***	1.94%***	1.76%***
N	1859	1662	1443	1228	982	789
Low (1)	2.10%***	1.99%***	1.87%***	1.79%***	1.65%***	1.50%**
N	619	533	433	363	287	241
Medium (2)	2.32%***	2.33%***	2.25%***	2.05%***	1.94%***	2.02%***
N	620	568	502	422	328	255
High (3)	2.20%***	1.94%***	1.97%***	2.07%***	2.17%***	1.76%***
N	620	561	508	443	367	293
HML (3-1)	0.10%	-0.05%	0.10%	0.30%	0.50%	0.30%
Panel B - Bidder Returns by Target Firm's Size (Total Assets)						
	All	**Stock > 0%**	**Stock ≥ 25%**	**Stock ≥ 50%**	**Stock ≥ 75%**	**Stock = 100%**
All	2.20%***	3.03%***	2.96%***	3.21%***	3.22%***	3.78%***
N	1859	707	433	248	143	95
Low (1)	2.10%***	2.63%***	2.67%***	2.61%**	1.38%	0.92%
N	619	272	177	91	54	31
Medium (2)	2.32%***	3.14%***	3.34%***	3.12%**	3.57%*	4.38%
N	620	237	126	78	42	26
High (3)	2.20%***	3.44%***	2.99%***	4.01***	5.01%***	5.71%***
N	620	198	130	79	47	38
HML (3-1)	0.10%	0.80%	0.30%	1.40%	3.60%*	4.80%*

Continued

Table 5:7 – Continued

Panel C - Bidder Returns by Target Firm's Size (Total Assets) - young targets only						
	All	Cash > 0%	Cash ≥ 25%	Cash ≥ 50%	Cash ≥ 75%	Cash = 100%
All	1.89%***	1.70%***	1.66%***	1.81%***	1.94%***	1.60%***
N	617	527	435	371	289	240
Low (1)	1.99%***	2.10%***	1.83%***	1.95%***	2.18%***	1.70%**
N	205	166	123	108	85	73
Medium (2)	1.91%***	1.77%***	1.80%***	1.88%***	1.36%*	1.48%*
N	206	178	151	123	92	79
High (3)	1.77%***	1.26%***	1.41%***	1.64%***	2.24%***	1.64%***
N	206	183	161	140	112	88
HML (3-1)	-0.22%	-0.83%	-0.43%	-0.31%	0.06%	-0.06%
Panel D - Bidder Returns by Target Firm's Size (Total Assets) - young targets only						
	All	Stock > 0%	Stock ≥ 25%	Stock ≥ 50%	Stock ≥ 75%	Stock = 100%
All	1.89%***	2.25%***	1.77%**	1.69%	1.24%	1.30%
N	617	252	167	99	67	40
Low (1)	1.99%***	2.34%**	0.61%	-0.31%	-0.52%	-3.78%*
N	205	102	68	35	25	11
Medium (2)	1.91%***	2.26%*	3.49%*	1.96%	-0.22%	-0.59%
N	206	80	48	35	21	14
High (3)	1.77%***	2.12%*	1.68%	3.80%*	4.79%*	6.71%*
N	206	70	51	29	21	15
HML (3-1)	-0.22%	-0.22%	1.10%	4.10%	5.30%*	10.50%**
Panel E - Bidder Returns by Target Firm's Size (Total Assets) - mature targets only						
	All	Cash > 0%	Cash ≥ 25%	Cash ≥ 50%	Cash ≥ 75%	Cash = 100%
All	2.14%***	2.14%***	2.04%***	1.97%***	1.83%***	1.75%***
N	617	577	536	470	391	317
Low (1)	1.83%***	1.76%***	1.78%***	1.74%***	1.30%**	0.95%
N	205	195	180	154	126	107
Medium (2)	2.48%***	2.44%***	2.33%***	1.79%***	1.78%**	2.04%**
N	206	193	178	159	130	93
High (3)	2.12%***	2.21%***	1.99%***	2.36%***	2.36%***	2.24%***
N	206	189	178	157	135	117
HML (3-1)	0.30%	0.40%	0.20%	0.60%	1.10%	1.30%*
Panel F - Bidder Returns by Target Firm's Size (Total Assets) - mature targets only						
	All	Stock > 0%	Stock ≥ 25%	Stock ≥ 50%	Stock ≥ 75%	Stock = 100%
All	2.14%***	3.04%***	2.77%***	2.82%***	4.11%***	5.50%***
N	617	194	107	52	30	20
Low (1)	1.83%***	2.83%***	3.14%**	3.86%*	4.03%	6.16%
N	205	74	44	15	9	4
Medium (2)	2.48%***	3.70%***	3.76%***	4.18%*	8.21%***	8.71%**
N	206	62	26	15	7	6
High (3)	2.12%***	2.59%***	1.63%*	1.20%	2.11%	3.31%
N	206	58	37	22	14	10
HML (3-1)	0.30%	-0.25%	-1.51%	-2.66%	-1.93%	-2.85%

Table 5:8 - Announcement Period Excess Returns of Bidders by Size of both the Bidder and the Unlisted Target Firm and Payment Method

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the UK. The table is initially divided into two panels (panels A and B), based on the method of payment utilized, and the unlisted target firm's size. Further, this table contains another four panels that present gains to acquirers into two dimensions; by both the unlisted target and bidding firm's size (only through the panels C – F). Each panel (from A to F) is divided into six groups according to the proportion of either cash or stock used (i.e. all sample, either cash or stock is grater than zero, either cash or stock is greater than or equal to 25%, either cash or stock is greater than or equal to 50%, either cash or stock is greater than or equal to 75%, and finally either cash or stock is equal to 100%). The final row in each panel shows the difference in the gains from acquisitions of big unlisted targets firms versus acquisitions of small unlisted targets. The sample size, *N*, for each group is reported bellow each estimate. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Bidder Returns by Target Firm's Size (Total Assets)						
	All	**Cash > 0%**	**Cash ≥ 25%**	**Cash ≥ 50%**	**Cash ≥ 75%**	**Cash = 100%**
All	2.20%***	2.09%***	2.00%***	1.98%***	1.94%***	1.76%***
N	1859	1662	1443	1228	982	789
Low (1)	2.10%***	1.99%***	1.87%***	1.79%***	1.65%***	1.50%**
N	619	533	433	363	287	241
Medium (2)	2.32%***	2.33%***	2.25%***	2.05%***	1.94%***	2.02%***
N	620	568	502	422	328	255
High (3)	2.20%***	1.94%***	1.97%***	2.07%***	2.17%***	1.76%***
N	620	561	508	443	367	293
HML (3-1)	0.10%	-0.05%	0.10%	0.30%	0.50%	0.30%
Panel B - Bidder Returns by Target Firm's Size (Total Assets)						
	All	**Stock > 0%**	**Stock ≥ 25%**	**Stock ≥ 50%**	**Stock ≥ 75%**	**Stock = 100%**
All	2.20%***	3.03%***	2.96%***	3.21%***	3.22%***	3.78%***
N	1859	707	433	248	143	95
Low (1)	2.10%***	2.63%***	2.67%***	2.61%**	1.38%	0.92%
N	619	272	177	91	54	31
Medium (2)	2.32%***	3.14%***	3.34%***	3.12%**	3.57%*	4.38%
N	620	237	126	78	42	26
High (3)	2.20%***	3.44%***	2.99%***	4.01***	5.01%***	5.71%***
N	620	198	130	79	47	38
HML (3-1)	0.10%	0.80%	0.30%	1.40%	3.60%*	4.80%*

Continued

Table 5:8 – Continued

Panel C - Bidder Returns by Target Firm's Size (Total Assets) - Small Bidders Only						
	All	Cash > 0%	Cash ≥ 25%	Cash ≥ 50%	Cash ≥ 75%	Cash = 100%
All	3.52%***	3.26%***	3.27%***	3.07%***	3.10%***	3.06%***
N	619	521	423	349	271	215
Low (1)	3.26%***	2.97%***	2.86%***	2.41%**	2.99%**	2.88%**
N	206	167	119	100	78	66
Medium (2)	2.66%***	3.00%***	2.98%***	2.80%***	2.56%***	2.98%***
N	207	187	159	128	95	68
High (3)	4.63%***	3.83%***	3.93%***	3.91%***	3.70%***	3.28%***
N	206	167	145	121	98	81
HML (3-1)	1.40%	0.90%	1.10%	1.50%	0.70%	0.40%
Panel D - Bidder Returns by Target Firm's Size (Total Assets) - Small Bidders Only						
	All	Stock > 0%	Stock ≥ 25%	Stock ≥ 50%	Stock ≥ 75%	Stock = 100%
All	3.52%***	3.84%***	4.03%***	4.22%***	4.93%***	6.41%***
N	619	302	200	123	81	51
Low (1)	3.26%***	3.08%***	3.01%***	3.07%*	3.23%*	4.34%*
N	206	112	79	41	30	15
Medium (2)	2.66%***	2.44%**	3.56%**	0.71%	0.22%	-1.67%
N	207	96	52	28	16	12
High (3)	4.63%***	6.19%***	5.54%***	6.91%***	8.54%***	11.74%***
N	206	94	69	54	35	24
HML (3-1)	1.40%	3.10%*	2.50%*	3.80%*	5.30%*	7.40%*
Panel E - Bidder Returns by Target Firm's Size (Total Assets) - Big Bidders Only						
	All	Cash > 0%	Cash ≥ 25%	Cash ≥ 50%	Cash ≥ 75%	Cash = 100%
All	1.04%***	1.03%***	1.03%***	1.01%***	0.95%***	0.78%***
N	620	576	532	472	400	334
Low (1)	1.02%**	0.90%**	0.98%**	0.74%*	0.19%	-0.10%
N	206	183	165	145	121	101
Medium (2)	0.24%	0.34%	0.30%	0.30%	0.41%	0.30%
N	207	197	179	159	131	109
High (3)	1.85%***	1.85%***	1.77%***	1.90%***	2.04%***	1.93%***
N	207	196	188	168	148	124
HML (3-1)	0.80%	0.90%*	0.80%	1.20%*	1.80%***	2.00%***
Panel F - Bidder Returns by Target Firm's Size (Total Assets) - Big Bidders Only						
	All	Stock > 0%	Stock ≥ 25%	Stock ≥ 50%	Stock ≥ 75%	Stock = 100%
All	1.04%***	1.47%***	1.21%	0.58%	-0.09%	-0.78%
N	620	156	92	54	31	18
Low (1)	1.02%**	2.22%***	2.34%*	2.01%	-1.26%	-3.42%
N	206	66	36	22	11	6
Medium (2)	0.24%	0.11%	-0.51%	-1.20%	-0.33%	-4.36%
N	207	52	34	19	9	3
High (3)	1.85%***	2.04%**	2.02%*	0.77%	1.27%	2.18%
N	207	38	22	13	11	9
HML (3-1)	0.80%	-0.17%	-0.32%	-1.24%	2.50%	5.60%

Table 5:9 - Announcement Period Excess Returns of Bidders by Intangible Assets of Unlisted Target Firm and Payment Method

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the UK. The table presents gains to acquirers into one dimension; by the unlisted target firm's intangible assets only (panels A and B), by the unlisted target firm's intangible divided by the unlisted target firm's total assets (panels C and D), by the unlisted target firm's intangible divided by the unlisted target firm's fixed assets (panels E and F), and by the unlisted target firm's intangible divided by the deal value of the transaction (panels G and H). Further, each panel is divided into six groups according to the proportion of either cash or stock used (i.e. cash or stock is grater than zero, cash or stock is greater than or equal to 25%, cash or stock is greater than or equal to 50%, cash or stock is greater than or equal to 75%, and cash or stock is equal to 100%). The final row in each panel shows the difference in the gains from acquisitions of unlisted targets firms subject to high versus acquisitions of unlisted targets subject to low proportion of either intangible assets or the alternative proxies calculated. The sample size, *N*, for each group is reported bellow each estimate. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Intangible Assets						
	All	**Cash > 0%**	**Cash ≥ 25%**	**Cash ≥ 50%**	**Cash ≥ 75%**	**Cash = 100%**
All	2.02%***	1.78%***	1.66%***	1.97%***	1.97%***	1.94%***
N	461	416	374	320	249	199
Low (1)	3.03%***	2.53%***	2.14%***	2.41%***	2.62%***	3.01%***
N	153	134	118	102	80	59
Medium (2)	0.79%	0.73%	0.88%	1.39%**	1.08%	0.86%
N	154	137	123	105	79	66
High (3)	2.24%***	2.08%***	1.95%***	2.13%***	2.16%***	2.04%***
N	154	145	133	113	90	74
HML (3-1)	-0.79%	-0.45%	-0.19%	-0.28%	-0.45%	-0.97%
Panel B - Intangible Assets						
	All	**Stock > 0%**	**Stock ≥ 25%**	**Stock ≥ 50%**	**Stock ≥ 75%**	**Stock = 100%**
All	2.02%***	2.50%***	3.54%***	4.42%***	3.80%***	5.06%
N	461	170	103	55	35	21
Low (1)	3.03%***	4.10%***	6.86%***	8.51%***	10.28%***	12.57%**
N	153	62	35	20	14	8
Medium (2)	0.79%	0.57%	1.28%	0.63%	-1.36%	-0.87%
N	154	57	37	19	12	8
High (3)	2.24%***	2.71%*	2.50%	3.81%	0.50%	2.55%
N	154	51	31	16	9	5
HML (3-1)	-0.79%	-1.38%	-4.36%*	-4.69%	-9.69%*	-10.01%*

Continued

Table 5:9 – Continued

Panel C - Intangible Assets/Total Assets						
	All	Cash > 0%	Cash ≥ 25%	Cash ≥ 50%	Cash ≥ 75%	Cash = 100%
All	2.02%***	1.78%***	1.66%***	1.97%***	1.97%***	1.94%***
N	461	416	374	320	249	199
Low (1)	2.89%***	2.44%***	1.97%***	2.46%***	2.46%***	2.62%***
N	153	134	123	105	88	69
Medium (2)	1.38%**	1.14%**	1.22%**	1.74%**	1.60%**	1.10%
N	154	138	121	102	77	61
High (3)	1.79%***	1.78%***	1.78%***	1.74%***	1.79%***	1.99%**
N	154	144	130	113	84	69
HML (3-1)	-1.11%	-0.66%	-0.19%	-0.73%	-0.67%	-0.63%
Panel D - Intangible Assets/Total Assets						
	All	Stock > 0%	Stock ≥ 25%	Stock ≥ 50%	Stock ≥ 75%	Stock = 100%
All	2.02%***	2.50%***	3.54%***	4.42%***	3.80%*	5.06%
N	461	170	103	55	35	21
Low (1)	2.89%***	4.81%***	7.27%***	8.23%***	10.08%***	12.39%**
N	153	46	30	20	16	10
Medium (2)	1.38%**	1.62%	1.85%	2.46%	1.38%	2.71%
N	154	62	33	15	10	6
High (3)	1.79%***	1.66%*	2.14%*	2.07%	-4.69%*	-6.77%*
N	154	62	40	20	9	5
HML (3-1)	-1.11%	-3.16%*	-5.13%**	-6.16%**	-14.77%***	-19.16%***
Panel E - Intangible Assets/Fixed Assets						
	All	Cash > 0%	Cash ≥ 25%	Cash ≥ 50%	Cash ≥ 75%	Cash = 100%
All	2.02%***	1.78%***	1.66%***	1.97%***	1.97%***	1.94%***
N	461	416	374	320	249	199
Low (1)	2.73%***	2.21%***	1.69%***	1.99%***	1.83%***	1.94%**
N	153	137	125	109	88	72
Medium (2)	1.15%**	1.02%*	1.14%*	1.81%***	2.16%***	1.62%**
N	154	140	124	104	86	64
High (3)	2.18%***	2.13%***	2.14%***	2.12%***	1.90%***	2.26%***
N	154	139	125	107	75	63
HML (3-1)	-0.55%	-0.08%	0.50%	0.10%	0.07%	0.30%
Panel F - Intangible Assets/Fixed Assets						
	All	Stock > 0%	Stock ≥ 25%	Stock ≥ 50%	Stock ≥ 75%	Stock = 100%
All	2.02%***	2.50%***	3.54%***	4.42%***	3.80%**	5.06%
N	461	170	103	55	35	21
Low (1)	2.73%***	5.02%***	6.96%***	8.57%**	10.56%*	13.80%**
N	153	45	30	17	14	8
Medium (2)	1.15%**	1.12%	2.12%*	3.08%*	0.94%	2.71%
N	154	60	30	16	7	3
High (3)	2.18%***	2.03%*	2.15%	2.19%	-1.53%	-1.22%
N	154	65	43	22	14	10
HML (3-1)	-0.55%	-3.00%	-4.81%*	-6.38%	-12.09%**	-15.02%*
Panel G - Intangible Assets/Deal Value						
	All	Cash > 0%	Cash ≥ 25%	Cash ≥ 50%	Cash ≥ 75%	Cash = 100%
All	2.02%***	1.78%***	1.66%***	1.97%***	1.97%***	1.94%***
N	461	416	374	320	249	199
Low (1)	2.91%***	2.34%***	1.74%***	2.33%***	2.49%***	2.52%***
N	152	133	117	100	79	58
Medium (2)	1.61%***	1.40%***	1.53%***	1.68%***	1.33%**	1.28%*
N	153	138	125	102	74	57
High (3)	1.54%***	1.61%***	1.69%***	1.88%***	2.03%***	1.98%***
N	153	142	129	117	96	84
HML (3-1)	-1.37%*	-0.73%	-0.05%	-0.45%	-0.46%	-0.55%
Panel H - Intangible Assets/Deal Value						
	All	Stock > 0%	Stock ≥ 25%	Stock ≥ 50%	Stock ≥ 75%	Stock = 100%
All	2.02%***	2.50%***	3.54%***	4.42%***	3.80%*	5.06%
N	461	170	103	55	35	21
Low (1)	2.91%***	4.50%***	7.42%***	8.49%***	11.31%***	14.31%**
N	152	56	32	20	13	7
Medium (2)	1.61%***	1.54%	2.41%	3.39%	2.23%	6.18%
N	153	66	42	20	11	7
High (3)	1.54%***	1.55%	0.90%	0.37%	-3.51%*	-5.31%*
N	153	46	29	15	11	7
HML (3-1)	-1.37%*	-2.95%*	-6.52%**	-8.12%**	-14.82%***	-19.62%***

Table 5:10 - Announcement Period Excess Returns of Bidders by Investments of the Unlisted Target Firm and Payment Method

This table presents 5-day [t-2, t+2] announcement period cumulative abnormal returns (CAR), in percentage, of sample acquirers are presented. Abnormal returns (AR) are calculated using a modified market-adjusted model:

$$AR_{i,t} = R_{i,t} - R_{m,t}$$

Where $R_{i,t}$ is the return of bidder i at time t and $R_{m,t}$ is the market index (FT-All Share) at time t. Acquirers are publicly traded firms listed in the London Stock Exchange and targets are unlisted firms operating in the UK. The table presents gains to acquirers into one dimension; by the unlisted target firm's investments only (panels A and B), by the unlisted target firm's investments divided by the unlisted target firm's fixed assets (panels C and D), and by the unlisted target firm's investments divided by the deal value of the transaction (panels E and F). Further, each panel is divided into six groups according to the proportion of either cash or stock used (i.e. cash or stock is grater than zero, cash or stock is greater than or equal to 25%, cash or stock is greater than or equal to 50%, cash or stock is greater than or equal to 75%, and cash or stock is equal to 100%). The final row in each panel shows the difference in the gains from acquisitions of unlisted targets firms subject to high versus acquisitions of unlisted targets subject to low proportion of either investments or the alternative proxies calculated. The sample size, *N*, for each group is reported bellow each estimate. ***, **, and * denote significance level at 1%, 5%, 10% respectively.

Panel A - Investments						
	All	**Cash > 0%**	**Cash ≥ 25%**	**Cash ≥ 50%**	**Cash ≥ 75%**	**Cash = 100%**
All	2.32%***	2.19%***	1.97%***	1.95%***	1.88%***	1.73%***
N	725	649	559	464	352	273
Low (1)	1.05%**	1.04%**	0.87%*	0.76%	0.46%	0.69%
N	242	221	187	162	115	89
Medium (2)	3.06%***	3.02%***	2.71%***	2.68%***	2.75%***	2.08%***
N	241	217	186	144	105	81
High (3)	2.85%***	2.54%***	2.33%***	2.50%***	2.43%***	2.35%***
N	242	211	186	158	132	103
HML (3-1)	1.80%***	1.50%**	1.50%**	1.70%**	2.00%**	1.70%*
Panel B - Investments						
	All	**Stock > 0%**	**Stock ≥ 25%**	**Stock ≥ 50%**	**Stock ≥ 75%**	**Stock = 100%**
All	2.32%***	3.43%***	3.23%***	3.11%***	4.25%***	4.33%**
N	725	293	186	109	59	44
Low (1)	1.05%**	1.70%*	1.48%	0.41%	-1.31%	-1.09%
N	242	96	59	28	17	13
Medium (2)	3.06%***	4.51%***	4.48%***	3.03%**	5.46%***	4.87%**
N	241	104	67	37	16	10
High (3)	2.85%***	4.01%***	3.54%*	4.90%***	7.15%**	7.43%**
N	242	93	60	44	26	21
HML (3-1)	1.80%***	2.30%*	2.10%	4.50%*	8.50%**	8.50%*

Continued

Continued – Table 5:10

Panel C - Investments/Fixed Assets						
	All	**Cash > 0%**	**Cash ≥ 25%**	**Cash ≥ 50%**	**Cash ≥ 75%**	**Cash = 100%**
All	2.32%***	2.19%***	1.97%***	1.95%***	2.01%***	1.73%***
N	725	649	559	464	369	273
Low (1)	1.22%***	1.32%***	1.18%**	1.08%**	0.99%	0.79%
N	241	225	199	173	133	96
Medium (2)	2.67%***	2.48%***	2.25%***	2.34%***	2.56%***	2.20%***
N	242	217	188	155	128	98
High (3)	3.07%***	2.83%***	2.56%***	2.61%***	2.61%***	2.29%***
N	242	207	172	136	108	79
HML (3-1)	1.90%***	1.50%**	1.40%*	1.50%**	1.60%*	1.50%[15%]
Panel D - Investments/Fixed Assets						
	All	**Stock > 0%**	**Stock ≥ 25%**	**Stock ≥ 50%**	**Stock ≥ 75%**	**Stock = 100%**
All	2.32%***	3.43%***	3.23%***	3.11%***	4.33%***	4.49%*
N	725	293	186	109	65	39
Low (1)	1.22%***	2.34%***	1.82%**	-0.95%	-2.08%	-2.17%
N	241	87	52	21	12	7
Medium (2)	2.67%***	3.70%***	3.26%**	3.75%*	8.13%**	9.92%*
N	242	100	62	38	19	11
High (3)	3.07%***	4.07%***	4.21%***	4.33%***	4.46%**	3.87%
N	242	106	72	50	34	21
HML (3-1)	1.90%***	1.70%	2.40%*	5.30%**	6.50%**	6.00%
Panel E - Investments/Deal Value						
	All	**Cash > 0%**	**Cash ≥ 25%**	**Cash ≥ 50%**	**Cash ≥ 75%**	**Cash = 100%**
All	2.32%***	2.19%***	1.97%***	1.95%***	1.88%***	1.73%***
N	725	649	559	464	352	273
Low (1)	1.05%**	1.01%**	0.80%**	0.68%	0.26%	0.25%
N	240	218	185	158	108	78
Medium (2)	2.97%***	2.99%***	2.63%***	2.70%***	2.97%***	2.27%***
N	241	219	184	140	105	84
High (3)	2.99%***	2.64%***	2.53%***	2.52%***	2.34%***	2.39%***
N	240	208	186	164	138	110
HML (3-1)	1.90%***	1.60%**	1.70%**	1.80%***	2.10%**	2.10%**
Panel F - Investments/Deal Value						
	All	**Stock > 0%**	**Stock ≥ 25%**	**Stock ≥ 50%**	**Stock ≥ 75%**	**Stock = 100%**
All	2.32%***	3.43%***	3.23%***	3.11%***	4.25%***	4.49%*
N	725	293	186	109	59	39
Low (1)	1.05%***	1.77%**	1.48%	0.84%	-1.05%	-0.94%
N	240	100	63	28	16	10
Medium (2)	2.97%***	4.15%***	3.79%***	2.58%*	6.15%***	6.08%*
N	241	105	66	38	17	7
High (3)	2.99%***	4.67%***	4.51%***	5.06%***	6.28%**	6.45%**
N	240	86	57	43	26	22
HML (3-1)	1.90%***	2.90%**	3.00%*	4.20%[15%]	7.30%*	7.40%

Table 5:11 - Determinants of Announcement Period Gains of Bidders: A Cross Sectional Analysis

Dep. Variable (CAR)	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)	Model(7)	Model (8)	Model (9)	Model (10)	Model (11)	Model (12)
Intercept	**0.0307**[b]	**0.0278**[c]	0.0146	0.0134	-0.0633	-0.0156	-0.0123	0.0167	0.0156	-0.018	0.0135	0.0125
	(2.03)	**(1.83)**	(0.95)	(0.87)	(-1.03)	(-0.41)	(-0.33)	(0.33)	(0.31)	(-0.35)	(0.27)	(0.25)
Log (BAGE)	0.0019	0.0022	0.0003	0.0003								
	(0.98)	(1.14)	(0.18)	(0.14)								
Log (MV)	**-0.0083**[a]	**-0.0082**[a]			**-0.0137**[a]							
	(-6.66)	**(-6.71)**			**(-3.07)**							
Log (DV)	**0.0077**[a]	**0.0077**[a]			**0.0107**[b]							
	(5.89)	**(6.01)**			**(2.13)**							
MTBV	-0.0001	-0.0001	-0.0001	-0.0001	0.0008							
	(-1.08)	(-1.08)	(-1.22)	(-1.18)	(0.55)							
PE	**0.0002**[c]	**0.0002**[c]	**0.0001**[c]	0.0002	**0.0003**[b]							
	(1.74)	**(1.67)**	**(1.68)**	(1.24)	**(2.44)**							
RS			**0.0190**[a]	**0.0190**[a]								
			(5.07)	**(5.11)**								
Log (TAGE)					**0.0131**[b]	0.0033	0.0031	0.0039	0.0040	0.0067	0.0041	0.0042
					(2.05)	(0.88)	(0.83)	(0.71)	(0.73)	(1.20)	(0.75)	(0.76)
Log (Total Assets)						0.0019	0.0007					
						(0.42)	(0.15)					
Log (Fixed Assets)					0.0039			**0.0128**[b]	**0.0128**[b]	**0.0118**[b]	**0.0121**[b]	**0.0121**[b]
					(0.83)			**(2.42)**	**(2.42)**	**(2.31)**	**(2.27)**	**(2.27)**
Log (Investments)					-0.0006	**0.0034**[a]	**0.0034**[a]	**0.0034**[b]	**0.0034**[b]	**0.0033**[b]	**0.0034**[b]	**0.0034**[b]
					(-0.31)	**(3.32)**	**(3.28)**	**(2.12)**	**(2.12)**	**(2.08)**	**(2.10)**	**(2.11)**
Log (Intangible Assets)					-0.0015			**-0.0056**[b]	**-0.0057**[b]	**-0.0054**[c]	**-0.0053**[c]	**-0.0053**[c]
					(-0.51)			**(-2.03)**	**(-2.04)**	**(-1.91)**	**(-1.88)**	**(-1.85)**
Log (Tangible Assets)						0.0025	0.0023					
						(0.77)	(0.68)					
Log (No of Employees)						**-0.0058**[c]	-0.0049	**-0.0209**[a]	**-0.0207**[a]	**-0.0170**[a]	**-0.0202**[a]	**-0.0200**[a]
						(-1.65)	(-1.33)	**(-4.05)**	**(-4.03)**	**(-3.35)**	**(-3.86)**	**(-3.84)**
Liquidity Ratio						0.0069	0.0060	**-0.0035**[a]			**-0.0034**[c]	
						(0.81)	(0.70)	**(-1.91)**			**(-1.87)**	
Current Ratio						-0.0076	-0.0067		**-0.0035**[c]			**-0.0034**[c]
						(-0.88)	(-0.78)		**(-1.89)**			**(-1.79)**
Gearing Ratio						-0.0001	-0.0001			-0.0001		
						(-0.90)	(-0.81)			(-0.93)		
Dummy (Cash=1)	0.0017		-0.0030			**-0.0129**[c]		-0.0024	-0.0024	**-0.0173**[c]		
	(0.45)		(-0.83)			**(-1.69)**		(-0.19)	(-0.20)	**(-1.62)**		
Dummy (Stock=1)		**0.0152**[c]		0.0104			**0.0291**[c]				0.0206	0.0203
		(1.68)		(1.08)			**(1.66)**				(0.72)	(0.71)
F-Statistics	**9.94**[a]	**10.35**[a]	**6.33**[a]	**6.43**[a]	**2.44**[b]	**2.39**[b]	**2.34**[b]	**3.72**[a]	**3.71**[a]	**3.53**[a]	**3.80**[a]	**3.78**[a]
R-Squared (in %)	3.93%	4.09%	2.12%	2.16%	13.43%	4.61%	4.52%	12.40%	12.36%	12.83%	12.63%	12.58%
N	1,465	1,465	1,465	1,465	192	455	455	192	192	176	192	192

Continued

Table 5:11 - Continued

Estimates of cross-sectional determinants of announcement period gains of acquirers are reported. Announcement period (5-days) excess returns of bidders are regressed against a set of explanatory variables. The following equation is estimated using ordinary least square and standard errors are corrected for heteroscedasticity.

$$CAR_i = \alpha + \sum_{i=1}^{N} X_i + \varepsilon_i$$

The intercept (α) measures the excess return to bidders after accounting for the effects of all explanatory variables. The vector of explanatory variables 'X' includes acquirer's age on the day of bid announcement (log), acquirer's market value one month prior to the announcement of deal (log), deal value of the acquisitions (log), bidder's growth opportunity (ratio of market to book value of equity and price to earning ratio of acquirer one month prior to the acquisition announcement), relative size of the deal measured as the deal value divided by acquirer's market value, target firm's age on the day of bid announcement (log), target firm's total assets (log), target firm's fixed assets (log), target firm's investment (log), target firm's intangible assets (log), target firm's tangible assets (log), target firm's number of employees (log), target firm's liquidity ratio, target firm's current ratio, target firm's gearing ratio. Dummy variables that take the value of one and zero otherwise, are included to represent cash only and stock only deals. a, b, or c indicate significance at the 1, 5, 10 percent level respectively.

Table 5:12 - Long-term Performance of Acquirers

DEPVAR	α_p	β_p	s_p	h_p	RSQ	F-value	No of Deals	No of Observ.
Panel A - Entire Sample (1 Year)								
ENTIRE	0.0081***	1.2000***	0.3052***	-0.5643***	70.00%	98.7759***	1,912	143
Cash>=75	0.0087***	1.1048***	0.2709***	-0.4276***	68.44%	91.7997***	1,021	143
Cash=100	0.0074**	1.1055***	0.2510***	-0.4208***	67.89%	89.5087***	828	143
Stock>=75	0.0085	1.3120***	0.5457**	-0.4111	22.08%	11.9947***	161	138
Stock=100	0.0187*	1.4935***	0.6539**	-0.5794	22.94%	12.5987***	100	137
Bidder MV (Small)	0.0188***	0.9591***	0.8308***	-0.3106	40.41%	28.7030***	636	142
Bidder MV (Big)	0.0078**	1.2064***	0.2577***	-0.5887***	69.00%	94.2410***	631	143
Bidder MTBV (Low)	0.0160***	0.9157***	0.4672***	-0.0661	41.13%	29.5778***	644	143
Bidder MTBV (High)	0.0047	1.3280***	0.2430*	-0.8319***	59.07%	61.0860***	632	143
Bidder PE (Low)	0.0094**	1.0805***	0.2497**	-0.0651	45.04%	34.6917***	451	143
Bidder PE (High)	0.0054	1.4843***	0.5788***	-0.5834**	56.00%	53.8770***	460	143
Deal RS (Low)	0.0065*	1.2464***	0.2229**	-0.5811***	69.64%	97.1024***	637	143
Deal RS (High)	0.0144***	0.9093***	0.6049***	-0.2762	32.80%	20.6631***	625	143
Bidder Age (Young)	0.0041	1.4362***	0.6367***	-0.6293**	45.82%	35.7980***	657	142
Bidder Age (Mature)	0.0009	1.1716***	0.2692***	-0.2207*	70.64%	101.835***	634	143
Target Age (Young)	0.0118**	1.0406***	0.3937***	-0.6107***	45.94%	35.9743***	649	143
Target Age(Mature)	0.0080**	1.1993***	0.3519***	-0.5226***	58.76%	60.3094***	633	142
Target Total Assets (Small)	0.0071*	1.3396***	0.4498***	-0.5435***	61.10%	66.5048***	581	143
Target Total Assets (Big)	0.0084**	1.2583***	0.2822**	-0.5910***	61.40%	67.3426***	581	143
Target Fixed Assets (Small)	0.0069	1.3486***	0.5226***	-0.7977***	52.13%	46.1062***	532	142
Target Fixed Assets (Big)	0.0060*	1.1941***	0.3365***	-0.4947***	63.31%	73.0339***	543	143
Target Tan. Assets (Small)	0.0078	1.4010***	0.5657***	-0.8100***	53.69%	49.0769***	490	142
Target Tan. Assets (Big)	0.0084**	1.0573***	0.3181***	-0.4209**	53.96%	49.6125***	500	143
Target No of Employ (Low)	0.0070*	1.3125***	0.6138***	-0.7447***	59.31%	61.7173***	409	143
Target No of Employ (High)	0.0040	1.3509***	0.3573***	-0.5601**	55.36%	52.5036***	396	142
Target Int Assets (Low)	-0.0015	0.8120***	0.5521***	-0.1545	26.72%	15.4384***	141	142
Target Int Assets (High)	0.0054	1.5357***	0.4051**	-0.4949*	50.79%	43.6847***	146	137
Target Investment (Low)	-0.0045	1.4022***	0.4069***	-0.9946***	57.20%	56.5654***	223	137
Target Investment (High)	0.0087*	1.2206***	0.4171***	-0.5352**	48.18%	39.3631***	237	141
Target Liq. Ratio (Low)	0.0055	1.1377***	0.3659***	-0.4846***	56.33%	54.6065***	544	143
Target Liq. Ratio (High)	0.0118**	1.3031***	0.3332**	-0.7689***	53.39%	48.4962***	536	143
Target Cur. Ratio (Low)	0.0061*	1.0920***	0.3806***	-0.4789***	55.29%	52.3469***	545	143
Target Cur. Ratio (High)	0.0116**	1.3461***	0.3621**	-0.7198***	55.05%	51.8485***	534	143
Target Gear. Ratio (Low)	0.0027	1.2943***	0.3373***	-0.5579***	58.75%	60.3017***	425	143
Target Gear. Ratio (High)	0.0150***	1.0762***	0.3960***	-0.8339***	46.15%	36.2816***	439	142
Panel B - Entire Sample (3 Years)								
ENTIRE	0.0075***	1.1743***	0.2825***	-0.2862**	76.63%	141.026***	1,619	143
Cash>=75	0.0077***	1.1285***	0.2441***	-0.2284**	76.16%	137.377***	858	143
Cash=100	0.0072**	1.1153***	0.2260***	-0.1914*	75.69%	133.890***	700	143
Stock>=75	0.0084	1.1563***	0.4119***	-0.3908	38.63%	27.0633***	134	141
Stock=100	0.0103	1.1997***	0.4624**	-0.6706*	27.24%	16.0948***	82	140
Bidder MV (Small)	0.0141***	0.9170***	0.7939***	-0.3819**	53.39%	49.2465***	530	142
Bidder MV (Big)	0.0073***	1.1877***	0.2319***	-0.2888**	76.13%	137.145***	540	143
Bidder MTBV (Low)	0.0103***	1.0186***	0.4220***	-0.0178	64.12%	76.8292***	537	143
Bidder MTBV (High)	0.0062*	1.2607***	0.2188**	-0.5078***	66.42%	85.0388***	562	143
Bidder PE (Low)	0.0073***	1.0803***	0.2710***	0.1890	62.69%	72.2598***	386	143
Bidder PE (High)	0.0052	1.2927***	0.3620***	-0.5278***	66.20%	84.2181***	401	143
Deal RS (Low)	0.0072***	1.1904***	0.1958***	-0.2983**	75.68%	133.844***	562	143
Deal RS (High)	0.0069*	1.2482***	0.5813***	-0.0922	57.94%	59.2401***	508	143
Bidder Age (Young)	0.0050	1.2651***	0.4498***	-0.4319**	54.00%	50.4765***	578	143
Bidder Age (Mature)	0.0047**	1.1507***	0.2712***	-0.1115	76.86%	142.860***	512	143
Target Age (Young)	0.0097***	1.0739***	0.2652***	-0.2947*	58.81%	61.3895***	565	143
Target Age(Mature)	0.0064**	1.1670***	0.3345***	-0.2997**	69.62%	98.5613***	532	143
Target Total Assets (Small)	0.0068**	1.2825***	0.3335***	-0.3817***	69.46%	97.8162***	504	143
Target Total Assets (Big)	0.0062**	1.2125***	0.2987***	-0.1919*	73.98%	122.276***	488	143
Target Fixed Assets (Small)	0.0081**	1.2007***	0.3097***	-0.5678***	61.29%	68.0695***	436	142
Target Fixed Assets (Big)	0.0060**	1.2106***	0.2757***	-0.2469**	73.69%	120.458***	470	143
Target Tan. Assets (Small)	0.0103**	1.3768***	0.2511**	-0.4947***	63.13%	73.6120***	399	142
Target Tan. Assets (Big)	0.0067**	1.1158***	0.2765***	-0.2298*	68.16%	92.0370***	441	143
Target No of Employ (Low)	0.0071**	1.0670***	0.3353***	-0.5314***	58.71%	61.1526***	353	143
Target No of Employ (High)	0.0050*	1.1610***	0.2974***	-0.1349	65.65%	82.1766***	341	143
Target Int Assets (Low)	0.0060	0.9409***	0.4620***	-0.1420	37.84%	26.1768***	120	140
Target Int Assets (High)	0.0046	1.2241***	0.4834***	-0.3788*	45.61%	36.0555***	117	137
Target Investment (Low)	-0.0014	1.3387***	0.3731***	-0.6131***	61.38%	68.3354***	181	139
Target Investment (High)	0.0082***	1.1739***	0.2619***	-0.2499*	69.64%	98.6207***	208	142
Target Liq. Ratio (Low)	0.0078***	1.1224***	0.2119***	-0.2024*	70.91%	104.803***	480	143
Target Liq. Ratio (High)	0.0078*	1.2649***	0.3610***	-0.4358**	58.73%	61.1851***	436	143
Target Cur. Ratio (Low)	0.0081***	1.0960***	0.2059***	-0.2575**	70.70%	103.771***	478	143
Target Cur. Ratio (High)	0.0044	1.2833***	0.4166***	-0.4635**	60.53%	65.9505***	431	143
Target Gear. Ratio (Low)	0.0081***	1.0960***	0.2059***	-0.2575**	70.70%	103.771***	478	143
Target Gear. Ratio (High)	0.0044	1.2833***	0.4166***	-0.4635***	60.53%	65.9505***	431	143

Continued

Table 5:12 – Continued

DEPVAR	α_p	β_p	s_p	h_p	RSQ	F-value	No of Deals	No of Observ.
Panel C - Entire Sample (5 Years)								
ENTIRE	0.0068***	1.1019***	0.2766***	-0.2602***	78.67%	157.3268***	1,200	143
Cash>=75	0.0061***	1.0810***	0.2459***	-0.2109**	77.52%	147.0958***	614	143
Cash=100	0.0058***	1.0578***	0.2245***	-0.1802*	77.53%	147.1961***	512	143
Stock>=75	0.0102**	0.9541***	0.3269***	-0.3403*	43.39%	32.7036***	100	141
Stock=100	0.0132**	1.1559***	0.3812**	-0.7785**	35.99%	23.9923***	59	140
Bidder MV (Small)	0.0144***	0.9655***	0.7343***	-0.3090**	55.63%	53.4935***	364	141
Bidder MV (Big)	0.0066***	1.1170***	0.2299***	-0.2594**	78.28%	153.7328***	422	143
Bidder MTBV (Low)	0.0085***	0.9177***	0.2538***	-0.0814	60.17%	64.4468***	362	143
Bidder MTBV (High)	0.0058*	1.2098***	0.2576***	-0.4758***	69.51%	97.2628***	462	143
Bidder PE (Low)	0.0075***	1.0289***	0.2042**	0.1454	61.66%	68.6286***	273	143
Bidder PE (High)	0.0065**	1.2375***	0.3576***	-0.3353**	67.78%	89.7598***	333	143
Deal RS (Low)	0.0064***	1.1154***	0.2004***	-0.2569**	78.34%	154.3027***	447	143
Deal RS (High)	0.0099***	1.1048***	0.4253***	-0.2475	57.33%	57.3214***	348	142
Bidder Age (Young)	0.0063*	1.0969***	0.3944***	-0.4021**	52.63%	47.3968***	416	143
Bidder Age (Mature)	0.0037*	1.0717***	0.2662***	-0.0213	75.52%	131.6091***	376	143
Target Age (Young)	0.0089***	1.0304***	0.2368***	-0.2736*	61.45%	68.0147***	411	143
Target Age(Mature)	0.0061**	1.0397***	0.3457***	-0.3482***	70.37%	101.3132***	405	143
Target Total Assets (Small)	0.0066**	1.2268***	0.3460***	-0.3091**	68.01%	90.7007***	376	142
Target Total Assets (Big)	0.0064***	1.1330***	0.2896***	-0.2065**	78.49%	155.6865***	354	143
Target Fixed Assets (Small)	0.0085**	1.2094***	0.3554***	-0.5141***	58.85%	61.0255***	310	142
Target Fixed Assets (Big)	0.0063***	1.1355***	0.2493***	-0.2652**	76.48%	138.7247***	355	143
Target Tan. Assets (Small)	0.0116***	1.3297***	0.2266**	-0.3473**	66.06%	83.0279***	275	142
Target Tan. Assets (Big)	0.0064**	1.0571***	0.2747***	-0.2728**	70.21%	100.5591***	352	143
Target No of Employ (Low)	0.0067**	1.0321***	0.4271***	-0.4388***	58.55%	60.2758***	253	143
Target No of Employ (High)	0.0052*	1.0601***	0.3076***	-0.2610*	66.40%	84.3359***	247	143
Target Int Assets (Low)	0.0045	0.9337***	0.6055***	-0.4814**	43.42%	32.7485***	83	141
Target Int Assets (High)	0.0062	1.2351***	0.4074***	-0.3447	45.61%	35.7843***	72	134
Target Investment (Low)	-0.0011	1.2538***	0.3442***	-0.5140***	60.85%	66.3174***	133	139
Target Investment (High)	0.0078***	1.0955***	0.2194***	-0.1750	73.35%	117.4045***	154	142
Target Liq. Ratio (Low)	0.0066***	1.0725***	0.1949***	-0.1106	73.93%	120.9648***	372	143
Target Liq. Ratio (High)	0.0073*	1.2481***	0.3360***	-0.3771**	59.05%	61.5376***	308	143
Target Cur. Ratio (Low)	0.0067***	1.0338***	0.1928***	-0.1267	71.80%	108.6357***	370	142
Target Cur. Ratio (High)	0.0053	1.2798***	0.4300***	-0.4115**	62.50%	71.1075***	300	143
Target Gear. Ratio (Low)	0.0044	1.1125***	0.3503***	-0.3775**	58.52%	60.1899***	237	143
Target Gear. Ratio (High)	0.0092***	1.0515***	0.2895***	-0.4219***	59.74%	63.3233***	277	143

This table reports OLS estimates of monthly abnormal returns, measured by alpha of the following equation, from portfolios comprising of all acquisitions for 1- 3- 5- year post-event holding periods. Excess returns are estimated using calendar time regressions for each portfolio. Acquirers enter the portfolio on the month following the announcement and remain for 12-36-60 months. This table contains three panels. Specifically, Panel A represents all acquisitions of unlisted target firms (private and subsidiary of other unlisted firms) remaining for 1 year (12 months) in the portfolio, starting from the next month from the month of the acquisition's announcement. Panel B represents all acquisitions of unlisted target firms (private and subsidiary of other unlisted firms) remaining for 3 years (36 months) in the portfolio, starting from the next month from the month of the acquisition's announcement. Panel C represents all acquisitions of unlisted target firms (private and subsidiary of other unlisted firms) remaining for 5 years (60 months) in the portfolio, starting from the next month from the month of the acquisition's announcement. From all panels, the dependent variable ENTIRE represents for the entire sample of acquisitions (without any restriction applied), cash >=75 represents acquisitions financed with equal to, or more that, 75% with cash, cash=100 represents acquisitions financed with equal to 100% with cash, stock >=75 represents acquisitions financed with equal to, or more that, 75% with stock, stock=100 represents acquisitions financed with equal to 100% with stock, MV for the bidding firm's size (the sample is sorted according to bidding firm's size), MTBV for the bidder's market to book value ratio (the sample is sorted according to bidding firm's growth opportunities), P/E for the bidding firm's price to earnings ratio (the sample is sorted according to bidding firm's PE ratio), RS for the bidding firm's relative size (the sample is sorted according to bidding firm's relative size), Target Total Assets (the sample is sorted according to target firm's size), Target Age (the sample is sorted according to target firm's age), Target Intangible Assets (the sample is sorted according to target firm's intangible assets), Target Investment (the sample is sorted according to target firm's investment), Target Liquidity Ratio (the sample is sorted according to target firm's Liquidity Ratio), Target Current Ration (the sample is sorted according to target firm's Current Ratio), and Target Gearing ration (the sample is sorted according to target firm's gearing ratio). In parentheses next to each of the proxies, the level of the assets held by either the bidding of the target firm presented (i.e. small and big), the growth opportunities of the bidding firm (i.e. low and high), and the age of the target firm (i.e. young and mature). Portfolios are rebalanced each month to include firms that just announced a deal. The monthly abnormal returns are measured by intercepts in the following equation:

$$\left(R_{p,t} - R_{f,t}\right) = a_p + \beta_p (R_{m,t} - R_{f,t}) + s_p SMB_t + h_p HML_t + \varepsilon_{p,t}$$

where $R_{p,t}$ is the calendar time portfolio return, $R_{f,t}$ is the return on a one month T-bill during month t, SMB is the difference in returns of value weighted portfolios of small firms and big firms during month t, HML is the return differential of value weighted portfolios of high and low book-to-market firms in month t, β_p, s_p and h_p are regression parameters specific to the portfolio and $\varepsilon_{p,t}$ is the error term. Standard errors are corrected for heteroscedasticity. ***, **, or * indicate significance at the 1, 5, 10 percent level respectively.

Chapter 6: Conclusion

The primary objective of this thesis is to investigate the effects of takeover bid announcements on the share price of bidders that engage in domestic and or cross-border takeovers. Similarly, the identification of determinants of abnormal returns from domestic and foreign acquisitions provides another motivation for this thesis. In the process, I have reviewed a large number of studies that not only prompted a series of research questions but also served as the motivation behind the empirical framework adopted in the chapters 3 to 5 of this thesis. Accordingly, the sole aim of this concluding chapter is to provide a summary of the main findings of my empirical investigations and discuss the main implications of findings to (a) all stakeholders of firms involved in takeover deals, and (b) to policy makers.

The findings of empirical investigations are reported and discussed in great detail within each empirical chapter. They form the central core of this thesis. There is sufficient evidence across the empirical chapters that not only add new evidence but also extends the literature to another stage. More specifically, the thesis fills several voids in finance literature related to gains of domestic and cross-border acquisitions (CBA) as separate divisions, whereas it provides new explanations of any differential detected in performance between domestic and CBA. The main focus of the discussion on the gains of bidders from domestic versus CBA is contained in two issues: (a) the impact of the legal system of the target firm's country of residence on the short and long-run gains of acquirers engaged in domestic versus CBA, and (b) the impact of market valuations and economic conditions in the source country, as well as the impact of the source country's currency Effective Exchange Rate (EER) changes, on the short and long-run gains of acquirers engaged in domestic versus CBA. The thesis contributes in the relevant literature by suggesting a series of determinants behind any observed differential on the gains of bidders acquiring domestic versus foreign targets. The thesis provides also additional explanations for any gains or losses displayed to bidders of explicitly domestic acquisitions of unlisted target firms. On this very issue, the main focus of the discussion is narrowed on the valuation effects of value-ambiguities concerning unlisted target firms on the short and long-run gains of acquirers targeting for unlisted targets in the domestic market. Overall, the main conclusions derived from this thesis enhance our understanding of

the corporate takeovers process and their implications to various stakeholders of merger partners. The rest of this chapter serves an analytical description of the research outcomes of this thesis while it confers on the main implication to all merger partners.

To begin with, evidence reported in chapter 3 of the thesis suggests that once the possible effects of firm and transaction-specific features are accounted for, acquisitions of foreign targets generate higher announcement returns than the acquisitions of domestic targets. Evidence also suggests that the gains of acquirers are highly sensitive to the legal system of the nation in which the targets operate. On average, there is a tendency for markets to react more favourably to the announcement of acquisitions of targets operating in civil-law countries than to acquisitions of targets based either in the domestic market or in common-law countries. This is possible because the acquirers are likely to face less competition when bidding for targets in civil-law countries. The less severe completion, in turn, limits the need for payment of higher premiums and hence more gains from the merger are accrued to the shareholders of acquirer. However, more detailed analysis conveys that this is more likely to occur only around bids of listed and subsidiary target firms. This finding stands of major importance given the insufficient availability of evidence in the literature that focuses on the gains from foreign acquisitions of subsidiary targets (only a small number of studies has discussed the wealth effects that generated to bidders' shareholders when they acquire foreign subsidiary target firms).

Along similar lines, one of the most important observations that derived from chapter 3 suggests that share deals of foreign targets outperform share deals of domestic targets. Further analysis to identify the source of the additional gains to foreign bidders confirms the better performance of foreign bidders that acquire targets in common-law countries. This market behaviour reflects the investors' view for this type of transactions (in common-law countries and stock financing) who consider these deals as positive NPV projects. This is possible because the traditions of managers, corporate governance system and legal environment in common-law

countries are similar with the ones in the UK. Therefore, this is very likely to minimize or clear any cultural gap that may exist between the bidding and the target firms' countries, as well as differences in corporate governance traditions and legal systems, thereby help in the incorporation of the target firm in the bidding firm's existing business environment at a minimum cost. For example, share bids of US private targets are likely to be positive NPV projects given the high likelihood of creating outside blockholders with managers under similar traditions with the UK ones.

Although the impact of the legal system of the target firm's country of residence found to play a significant role on the determination of short-run gains of foreign bidders, in chapter 3 I also investigate how it affects the foreign bidders' post-merger performance. Evidence suggests that acquirers engaged in domestic acquisitions outperform the bidders of foreign targets in the long-run. In addition, when the sample is further restricted according to the target firm's status and the method of payment, domestic bidders of private, public, and cash payments found to significantly outperform the foreign ones. In addition, the main conclusions derived from the long-run analysis suggest that bidding firms acquiring targets in common-law countries outperform the ones that opting for targets based in countries with civil-law traditions. The better performance of bidders acquired targets in common-law countries is attributed to similar considerations with the ones discussed earlier. Indeed, the managerial traditions, the corporate governance system and the legal environment of countries belonging to common-law legal group are similar with the ones in the UK. These similarities are very likely to minimize the costs of integration between the merger partners and also to further help for the incorporation of the target firm into the bidder's existing business environment.

Overall, the results discussed above have clearly confirmed the influential impact of legal system along with other firm and transaction-specific characterises, such as the target status and the method of payment, on the determination of short and long-run gains of bidders engaged in domestic versus CBA. Whereas these findings extend our current knowledge on the gains of acquirers that engaged in domestic versus

CBA, they also support evidence from recent literature in the same field of research. In short, my findings support the main conclusions derived by Rossi and Volpin (2004) in terms of the direction of cross-border deals and the methods of payment utilized to finance them. In addition, the cross-section analysis in chapter 3 confirms that the relative size of the deal plays a very important role in the determination of the short-run gains of foreign bidders, as suggested by the majority of studies in finance literature (i.e. Asquith et al. 1983; Fuller et al. 2002). However, this finding is against the one estimated by Cakici et al. (1996) who claimed that the announcement gains of bidders that acquire foreign listed targets are inversely related to the relative size of the deal. Lastly, the major conclusions derived from this chapter propose some future research questions. In fact, on the basis of the findings discussed above, it would be important for future research to further explore the valuation effects of the legal systems by including a larger number of countries from the bidding firm's edge. The examinations of the gains generated to both bidding and target firms' shareholders should therefore be examined in order to identify the roles of the legal systems worldwide. Several policy implications should be also considered, given the (possibly) different legal system of the target and bidding firms' countries, in the event of cross-border acquisitions.

The empirical findings reported and discussed in chapter 4 firmly suggest that when bidders made acquisitions during low market valuations periods in the source country, they earn higher short-run returns from domestic rather than foreign target bids. On the contrary, if the deals are announced during periods of high market valuations in the source country, announcement gains of shareholders of foreign bidders are higher than the ones generated to shareholders of domestic bidders. These findings clearly confirm that the investors' view on the perceived gains from domestic versus CBA is affected by the source country's level of market valuations at the time of the takeover bid announcement. This is possible because periods of high (low) market valuations are very likely to correlate with high (low) levels of investor's sentiment, which is therefore expected to be crucial in affecting the bidders' announcement share price performance (Rosen, 2006). Indeed, during low (high) market valuation periods bidders should show a strong preference for domestic

(foreign) targets firms. To some extent, this will help the bidder to avoid additional risks by investing in the home market rather internationally during periods of low market valuations, whereas it will allow bidders to anticipate more risks by investing abroad, rather than in the home market, during periods of high market valuations (such risks may include political risks, exchange rate ones, economic ones, government policy ones, central bank policy ones, etc).

Several further important findings are also observed. The results suggest that the gains of bidders in the short-run are affected by the stage of the UK economy and the value of Pound Sterling at the time of bid announcement. Bidders enjoy higher announcement gains from domestic deals, *only* when these deals are announced during periods of high economic growth and during the peak of business cycles. This is possible because periods of high economic growth are in general highly correlated with technological innovations and advancements which are therefore increase the PV of the synergy for bids announced during those times. The evidence also confirms that bidders of domestic (foreign) targets outperform bidders of foreign (domestic) targets when the Pound Sterling is weak (strong) at the time of the bid announcement. In this respect, one may expect that foreign bids during periods of weak EER of the home currency are more likely to offset any value creation that directed to shareholders of bidding firms.

Several more explanations are offered after the cross-border sample is divided into two groups according to the likelihood of the co-movement of the UK market valuations and UK economic conditions with the ones from all the other countries worldwide. In short, the cross-border sample is divided into the following groups: the G6 (G6=G7-UK) and the rest-of-the-world one (RoW=Wold-G6). This is to further identify the source of any gains or losses detected to shareholders of bidders engaged in domestic versus CBA. Evidently, during high market valuations (the case where foreign bidders outperform domestic ones), there is a tendency for markets to react more favourably to the announcement of acquisitions of targets operating in the RoW group countries than to acquisitions of targets based either in the domestic market or in the G6 countries. This is possible because the acquirers are likely to face

less competition when bidding for targets in the RoW countries. Indeed, during periods of high market valuations in the UK, the market valuations in the G6 (RoW) group of countries is likely to be high (low) – the UK and the G6 group of countries are more likely to integrate whereas the G7 countries (G7=G6+UK) are less likely to integrate with the RoW ones. Therefore, given that market valuations spike with M&A activities, the M&A activities are expected to be lower in the RoW group of countries than in both the UK market and in the G6 group of countries (during periods of high market valuations in the UK). The less severe completion in RoW countries limits the need for payment of higher premiums, hence more gains from the merger are accrued to the shareholders of acquirer.

The results also show that bidders' long-run performance is affected by the level of market valuations in the source country at the time of the M&A announcement. On average, bidders enjoy positive and significant post-merger returns after deals that announced during periods of high market valuation, irrespective of the country of origin. The findings also suggest that the post-merger performance of UK bidders is significantly influenced by the source country's economic conditions at the time of the deal's announcement. In short, bidders enjoy the highest post-merger gains from takeovers made at the time of high economic growth and when the business cycle is at its peak stage. As in the short run analysis, this is not surprising given that periods of high economic growth are highly correlated with technological innovations and advancements. Accordingly, bidders that engage in M&A during those times increase the likelihood of receiving higher net gains in the post-merger period. The analysis depicts also the deterministic power of the EER which suggests that domestic bidders enjoy the highest gains in the long-run, *only* if the M&A is announced during periods of weak EER. On the other hand, post-merger gains of bidders of foreign targets appear relatively higher from CBA in the RoW group of countries, *only* if the deals are announce during periods of strong EER.

Overall, a detailed analysis on the gains of bidders that engage in domestic versus CBA across periods of different levels of market valuations, economic conditions and the EER, depicts also the influential impact of target status and method of payment.

Other determinants that found to influence gains of domestic versus CBA include the size and growth opportunities of the bidder, the relative size of the deal, as well as the age of the bidder. Overall, the findings discussed above extend our current knowledge on the gains of acquirers engaged in domestic versus CBA during period of different levels of market valuations and economic conditions, as well as during periods of different levels of EER. Lastly, on the basis of the findings discussed above, it would be important for future research to further explore the impact of market valuations and economic conditions in the bidding and target firms' countries simultaneously on the domestic and foreign M&A activities. It would be also important for one to examine the effects of market valuations and economic conditions on both the gains of bidding and target firms' shareholders in the context of domestic versus cross-border acquisitions. Several policy implications should be also considered, given the (possibly) different levels of market valuations and economic conditions across different times in the target and bidding firms' countries.

The chapter 5 develops and empirically examines the proposition that the gains to acquirers of unlisted targets depends upon the level of value ambiguity of targets (or the difficulty that bidders face in correctly estimating the value of the unlisted target). The main focus of the discussion concentrates on whether target firms' characteristics that cause difficulty in valuation (such as age, size, intangibility of assets, and investments) can explain the variation of short and long-run bidding firms' abnormal returns. On average, acquisitions of unlisted target firms subject to low value ambiguity yield higher announcement gains compared to acquisitions involving high value ambiguous unlisted target firms. The findings also show that the method of payment interacts with the value ambiguity of targets, transaction features and bidders' specific-characteristics in shaping the gains of acquirers. More specifically, differentials of bidders' gains between portfolios subject to high versus low value ambiguity are more prominent when the payment is made in shares, and the unlisted target is young, small, and have a significant amount of intangible assets in its balance sheet.

Evidently, acquirers of large (mature) unlisted targets outperform acquirers of small (young) ones in share deals during the announcement period, suggesting that less value ambiguity is reflected in the final outcome of the M&A. Indeed, takeovers of large unlisted targets are relatively easier to value, given the more information available for these firms due to the pressure of UK disclosure requirements to release more information about their business in the market. In addition, takeovers of large unlisted target firms engineer higher announcement abnormal returns to bidding firms' shareholders possibly due to the higher likelihood of creating outside blockholders. Along similar lines, mature firms are easier to value given their long history which enables market participants and analysts to know more about the business. Share deals of unlisted targets with balance sheets laden with intangible assets yield also low short-run abnormal returns to their shareholders, compared to bidders acquired unlisted targets with balance sheets free of intangible asset. This announcement period stock market reaction could be due to the fact that bidding firms and market participants faces difficulties in assessing the potential gains from takeovers of firms with balance sheets laden with intangible assets. On the contrary, the examination of the bidding firm's gains in the post-merger period conveys that bids of small (young) unlisted targets generate higher gains than bids of large (mature) targets. In addition, bidders acquiring targets with laden balance sheets of intangible assets generate higher post-merger gains, compared to the ones that acquire unlisted targets with intangible assets free of balance sheets.

On average, the above discussion conveys that while bidders gain the most from acquisitions of less value-ambiguous unlisted target firms, bidders enjoy higher gains in the post-merger periods when the unlisted target is subject to higher levels of value-ambiguities at the time of the bid announcement. The announcement period lower return is possibly due to market's presumption that bidding firms face difficulty to value the targets, and that they are exposed to high levels of risks when the transaction involves firms overpopulated of risky targets. However, such overreaction is corrected in the long-run as the firm's value moves towards to its equilibrium level.

Overall, the main conclusions derived from this chapter contributes to the M&A literature by providing important additional explanations with regards to the valuation effects of the unlisted target firm's value-ambiguities on the bidder announcement and post-acquisition share price. Lastly, on the basis of the findings discussed above and the unique nature of the analysis in the present chapter, it would be important for future research to further explore the effects of unlisted target firms' value-ambiguities on the announcement and post-merger gains of bidders, in a theoretical framework. In similar respects, following resent theoretical studies in asset pricing literature on the impact of value ambiguities on asset prices (Epstein and Schneider, 2008), the analysis of the present chapter could be recognized as an empirical extension of Epstein and Schneider work.

The findings discussed in earlier chapters and the paragraphs above have several implications to the stakeholders involved in domestic and cross-border takeover deals. Indeed, the main conclusions suggest that while making a takeover bid, managers should consider the potential impact of (a) the level of investor protection in the host country, (b) the level of market valuation in the home country, (c) the economic condition in the home country, (d) the level of the effective exchange rate of the home currency, and (e) the level of investor's sentiment in the home country. All these factors seem to affect the wealth of bidding firms' shareholders in the framework of domestic versus CBA. In addition, bidders' shareholders should be careful in evaluating the potential risk and returns from the acquisitions of unlisted targets, and the interaction between the method of payment and the level of value ambiguity of the target. Further, the managers of both the acquiring and the unlisted target firm should be more cautious when engaged in M&A, especially when the unlisted target is subject to high levels of value-ambiguities. More specifically, the managers of the unlisted target firm should be careful in valuing their own business and when identifying the nature of their fundamentals, thereby being able to secure the best exchange ratio as the method of payment in this deal. On the contrary, the bidding firm manager should be able to identify the nature of the target firm's fundamentals thereby be able to set up the right payment method whilst to foresee

the expected risk tolerance that the combined entity will bear during the post-merger period.

The findings discussed in the preceding chapters may also have several policy implications. Policy makers should always be careful when adjusting or setting up new expectations in the economy by employing the monetary and fiscal policy tools. Possible changes, for example, in the interest rates, may alter significantly the level and direction of domestic M&A activity whereas the foreign M&A activity, both the ingoing and the outgoing, may change dramatically. Policy makers should also be careful when decide what policy to apply, when to apply it, and how to apply it. More specifically, policy makers should take into account seriously the timing of attempting to apply a significant change in the economy, thereby avoid any level of disequilibria across the economy (including any level of disequilibria in the domestic and foreign M&A activities).

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