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Domestic versus Cross-Border Mergers and Acquisitions: Gains for the Acquiring Companies

Evidence from Chinese Markets

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PREFACE AND ACKNOWLEDGEMENTS

This thesis was produced for the completion of my master's study in Erasmus School of Economics, Erasmus University Rotterdam. It is a product over months of preparation, research, and study efforts. During the process, I have learned how to overcome obstacles and persevere through hardships. It has taught me valuable lessons that will help me in the future.

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Rotterdam, October 2017

Aldila Riany Ananda

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ABSTRACT

A larger proportion of activities pertaining mergers and acquisitions (M&As) involves companies from developed countries rather than developing ones. However, China has garnered attention in recent years as a major participant in the global market. This paper explores the cross-border acquisition of Chinese firms and examines how it affects the shareholders' wealth creation. The results from conducting an event study and multiple linear regressions analysis show that cross-border deals have negative and significant coefficients. On the other hand, acquiring firms with a lower return on equity (ROE) leads to lower stock returns. However, if the bidders have good financial performance and engage in cross-border deals, it will create a better shareholders' wealth. When controlling the target status, there are no differences between investing in private and public target companies; the results exhibit negative coefficients. Overall, the findings provide evidence that cross-border M&As generate lower stock price performance.

Keywords: China, cross-border mergers and acquisitions, mergers and acquisitions

Classification: G14, G30, G34

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CHAPTER 1 Introduction

1.1 Background of Research

Mergers and acquisitions (M&As) are a common strategy that has been used by the U.S. and European companies for many years. They began in the last century and are already recognized as one of the economic tools for doing the business. M&As occur due to efficiency related reasons that often involve economies of scale or other “synergies” for building market power. In the past century, M&As were already in existence and creating a wave. The wave began between 1893 – 1904 (horizontal mergers), it then continued between 1919 – 1929 (manufacturing and transportation mergers), 1955 – 1969 (conglomerates), 1984 – 1989 (junk bonds and hostile takeovers), with the end of the wave being documented between 1993 – 2000 (mega deals).

The last wave marked as the starting point of cross-border M&As. Cross-border M&As by themselves have specific benefits, such as a tool to enter a new market and create new opportunities by gaining new knowledge and new capabilities (Shimizu et al. 2004). Since cross-border M&As function as one of the firm’s essential strategies for maintaining the business, they are expected to produce added benefits for both the acquirer and the target firms. The pre- and post-acquisition behaviours of both acquirers and target firms should be examined to evaluate the degree to M&As affects them.

Numerous studies have been conducted where the acquirers have largely been from developed countries while the targets from developing and emerging economies (Bhagat et al. 2011). This paper aims to examine the opposite orientation, where the acquirers are from one of the developing countries and target companies are from around the world. Thereupon, it investigates whether such cross-border M&As create value for the acquiring firms.

Even though a large proportion of M&As activity around the world involves companies from developed countries rather than developing countries, it is interesting to discuss the performance of cross-border M&As in emerging markets. The extensive existing literature pertaining to M&As has mainly focused on developed economies.

However, China has increasingly been receiving attention in the past years. The vast growth developing region that undertakes M&As activities comes from Asia, with China in specific. China is progressively turning into a more prominent participant in the global market, and cross-border M&As are one of the prominent methods of foreign direct investments (FDIs) used by Chinese companies for expansion. FDI is fundamentally viewed as an instrument to enhance the

economic growth of acquiring firms (Li & Liu, 2005). The impact is significant if the bidders possess substantial human capital. Buckley et al. (2007) mention the distinctive characteristics of Chinese firms with regard to the success of outward FDI, namely capital market imperfections, special ownership advantages, and institutional factors. Consistent with the above statement, Kolstad & Wiig (2012) find that Chinese outward FDI to be interestingly engaged in countries with insolvent institutions or for the purpose of capitalising upon the natural resources.

During the year 2016, China gained US \$140 billion in M&As business deals, which made it the second-largest international investor after the U.S.¹ The significant growth makes up about 14% of the total global cross-border M&As that are mainly invested in the technology, finance, and entertainment sectors. Chinese markets undertake the cross-border M&As to gain strategic competence and enhance their distinction in the ownership structure (Rui & Yip, 2008), ensure access to resources and seek technology enhancement (Athreye & Kapur, 2009). According to Anderlini (2015), China is expected to be the leader of overseas investors by 2020, with outbound FDI increasing from US \$744 billion to approximately US \$2 trillion.

Cross-border M&As have become more frequent in emerging markets. However, there are only a few studies on cross-border M&As by Chinese companies using sample limitations as a constraint. From the acquirers' perspective, the outcomes are favourable for the shareholders (Wong & Cheung, 2009; Boateng et al. 2008). For obtaining results that are contrary to this, ownership structure is the key driver (Chen & Young, 2010). Chen & Young (2010) further explain that principal-principal conflicts might occur due to the fact that the majority shareholders of the acquiring firm are the Chinese government, as the largest shareholder tends to not work in the interest of minority shareholders. Therefore, it does not create favourable returns. Taking this into consideration, this paper tries to empirically measure the extent to which cross-border M&As by Chinese firms generate value. Thus, the research question is as follows:

Research question: Do cross-border mergers and acquisitions by companies from Chinese markets create higher market value for the acquirers as compared to domestic mergers and acquisitions?

Several studies have examined the cross-border M&As by Chinese companies. However, in most cases, they focused on the strategic decisions and only a few discussed the performance of foreign Chinese investment (Chen & Lin, 2009). The objective of this study is to address this gap

¹ According to Rhodium Group Report on China's Rise in Global M&A.
(<http://rhg.com/wp-content/uploads/2017/03/chinas-rise-in-global-ma-here-to-stay.pdf>)

by comparing the announcement returns for Chinese acquirers engaged in cross-border acquisitions with domestic acquisitions and ascertain whether these are significantly different from each other using the event study method. The emphasis in this paper is on bidder returns, from the perspective of the shareholders of the firm that initiates the bid.

This master's thesis will contribute to the existing literature on finance by investigating the effects of cross-border M&As business deals in emerging markets, especially China. This literature is relevant to understand whether the announcement of cross-border M&As generates abnormal returns. Furthermore, the results of this thesis shall be applicable for practitioners, especially future acquirers, to foster a better understanding of what is optimal for creating value for shareholders and firms while engaging in cross-border M&As.

In order to discover the relationship between cross-border M&As and shareholders' wealth creation, this paper analyses M&A transactions between 1993 – 2016. With the total sample of 6,736 business deals, the empirical results reveal that cross-border acquisitions have an inverse association with the performance of M&As around the announcement date.

This paper is organized as follows. In the next chapter, the literature review regarding the general growth of M&As in the worldwide economy is presented and then the growth of cross-border M&As for emerging markets is discussed further, especially with regard to Chinese companies. This is followed by the Chapter 3 that reviews the event study method, presents the characteristics that affect the financial performance of acquiring firms, and describes the data and sample collection. Then, Chapter 4 presents the results section, which summarises and discusses the key findings. Finally, the last chapter gives the analysis of the conclusions and limitations.

CHAPTER 2 Theoretical and Literature Review

This chapter presents theoretical and literature review related to the mergers and acquisitions in general and in the Chinese market. The development of the hypotheses will be discussed within the literature review. Since this study focuses on the bidders return, this literature review examines past research that studied the motivations of executing the cross-border M&As, their performance, and determinants. This section is meant for the purpose of gaining a better understanding of the issues related to foreign M&As.

2.1 Mergers and Acquisitions

M&As are well-known as an economic tool for securing more profit by expanding businesses through combining or acquiring other companies. As an agent of change, M&As are expected to help businesses gain more value (DePamphilis, 2012). Andrade et al. (2001) explain why companies would chose to undertake M&As. The main logic is to create economies of scale or other “synergies” that will generate market power through monopolies or oligopolies.

In accordance with the above statement, DePamphilis (2012) separates the rationale behind M&As into two categories, namely operating and financial synergy. Operating synergy is affiliated with economies of scale and economies of scope. Economies of scale enhance efficiency through production improvement whereas economies of scope utilize well-defined skills or assets to yield the products efficiently. Financial strategy is related to the cost of capital of the acquirers or the combined companies. By executing M&As, the acquirers or combined companies are expected to have a lower cost of capital as compared to pre-M&As activity. In general, financial synergy is useful for diversification, strategic realignment, mismanagement, managerialism, tax benefits, and market power.

However, according to Ferraz & Hamaguchi (2002), M&As are perceived as a monopolistic action, a consequence of market power and industrial concentration. In addition to post-M&As period, production, technology as well as employment are experiencing cut backs.

2.2 Cross-Border Mergers and Acquisitions

In contrast with domestic M&As that connect two firms within the same country, cross-border M&As require the firms to be from two different countries. As the globalization increases and the markets develop rapidly, domestic and cross-border M&As reached their popularity. This development is marked by the growing number of M&A deals during the late 1990s and early 2000s (Shimizu et al. 2004). In the presence of a borderless market, Shimizu et al. (2004)

perceive cross-border M&As as an economic instrument to enter the new markets.

Borderless markets are one of the consequences of globalization. According to Samimi et al. (2011), economic, social, political, and environmental integration of countries is classified as globalization. Integration facilitates cross-border activities such as exchanging goods and services, transforming cultures, spreading technology and knowledge, and simplifying international capital flows.

Expanding the scale of businesses in different countries will benefit companies by captivating various ideas and capabilities. However, this opportunity comes with significant challenges and risks. According to Erel et al. (2012), different countries have different cultures, country-level governance, international tax, and therefore there is a potential for issues regarding integration.

Erel et al. (2012) explain each of these factors briefly. Geographical differences are one major issue that accounts for the increased the costs of combined firms. Assuming all other factors are constant, M&As are easier when one firm has a similar trading approach to the other, as they tend to have synergies and there is a likelihood of similarity in the cultural background. Regarding corporate governance, higher governance standards of acquirers will lead to improved protection of minority shareholders in target firms. Furthermore, the bidders usually hail from countries that have higher income tax rates as compared to the target-firms. Rossi & Volpin (2004) develop the above claim. Cross-border M&As act in favour of governance mechanisms when the accounting standards and shareholders' protection are exceptional. All these differences might influence the investment decisions.

Bris et al. (2008) show that enhancing corporate governance creates a positive impact on the market. They use two governance mechanisms, namely shareholder protection and accounting standards. The results indicate that acquisitions of companies with weaker shareholder protection by companies with stronger protection yield better Tobin's Q. Martynova & Renneboog (2008) also explain the positive spillover law hypothesis. It is a condition where the acquiring firms belong to a country with stronger shareholder protection, which will lead to higher returns.

In most cases, acquiring companies engaged in countries with better corporate governance deliver a more positive return (Bhagat et al. 2011; Chi et al. 2011; Martynova & Renneboog, 2008; Khanna & Palepu, 2004).

Additionally, Boateng et al. (2004) discuss the improvements that can be made to the success of cross-border M&As. Macroeconomic factors affect the cost of M&A deals in the target country. Their research advices that capital should flow to the countries that have good macroeconomic

conditions. Gross Domestic Product (GDP), inflation rate, exchange rate, and stock market index can be classified as macroeconomic elements. A favourable macroeconomic condition creates competitive advantages that influence the investment decision of investors. Kiyamaz (2004) further confirms that these macroeconomic elements have an impact on wealth creation of both the acquirers and targets.

2.2.1 Relation between Cross-Border Mergers and Acquisitions & Cultural Fit

Cultural background has been mentioned as one of the factors behind cross-border M&As being challenging. When integrating two businesses, organizational and national cultures are necessary for securing successful M&A deals (Bauer & Matzler, 2014). Organizational backgrounds such as the decision-making method, leadership style, willingness to adapt, teamwork, and the parameter of success might influence the effectiveness of the M&As process.²

Venema (2012) further analyses the importance of target firm's culture. The target companies might differ in corporate structure and management. Thus, the acquiring companies should pay attention to the integration process of business operations. While it may seem challenging, the acquirers can apply the 7S Framework proposed by McKinsey as seen in Table 1.

Table 1 displays the McKinsey 7S Framework that can be used to evaluate the extent to which the organization and culture of target firms are going to suit into the bidders. To pursue the strategic objectives of the firms, one should consider this framework to ensure the success of the integration plans

² According to Deloitte Article on Cultural Issues in Mergers and Acquisitions. (<https://www2.deloitte.com/content/dam/Deloitte/us/Documents/mergers-acquisitions/us-ma-consulting-cultural-issues-in-ma-010710.pdf>)

Table 1 - McKinsey 7S Framework

Internal Aspects	Description
Strategy	The way in which competitive advantage will be achieved
Structure	The way the organization is structured and who reports to whom
Systems	Processes and procedures used to manage the organization, including management control systems; performance measurement and reward systems; planning, budgeting, and resource-allocation systems; information systems; and distribution systems
Shared Values	Core set of values that are widely shared in the organization and serve as guiding principles of what is important
Style	Leadership style of top management and the overall operating style of the organization
Staff	Employees and their backgrounds and competencies
Skills	Distinctive competencies that reside in the organization

Tihanyi et al. (2005) study the impact of cultural distance on the mode of entry, international diversification, and cross-border acquisitions performance. The results show that entry mode choice and international diversification have a negative relationship. On the other hand, M&As activities yield positive results especially for investments made in developed nations. The possible explanation for this is related to the potential of knowledge transfer that will strengthen the companies' performance.

In addition, Stahl & Voigt (2008) examine the research using the event windows ending 1 to 30 days after the announcement date. The output exhibits that the acquiring firms gain positive results. The cultural differences may vary depending on the degree of relatedness and learning perspective that can create value. Other factors relevant for explaining the M&As performance while engaging in a cross-border deals is sociocultural integration and synergy realization.

Furthermore, the investors should carefully consider the geographic diversification as the success of cross-border M&As is affected by cultural differences (Datta & Puia, 1995). Other investigations by Chatterjee et al. (1992) and Conn et al. (2005) find that there is a negative relationship between shareholders' gain and cultural diversity.

In favour of the above-mentioned statement, Datta & Puia (1995) examine the M&A deals with U.S. companies as an example. The results prove that, in general, high cultural distance and

unrelated business generate a lower return for shareholders' value around the announcement period. This owing to the fact that the investors do not observe the cross-border M&As as a positive investment. The possible could be that the acquiring firms unconsciously overbid and overpaid the acquired firms. As such, managers run into an error while interpreting their capacity to value the target firms. Consequently, they overestimate the advantage reaped from such M&A deals.

As the effect of different cultural backgrounds influence the cross-border M&As process, Ahern et al. (2015) elaborate three main factors that support this argument. The national culture, including trust, hierarchy, and individualism, play a significant role in gaining synergy and merger volume. Regarding trust and individualism, the further the distance between two nations, the lower are the abnormal returns. As a result, this has an impact on the number of M&As. Conversely, shorter cultural distance produces higher announcement results. In a nutshell, cultural fit regarding the similarity of economies and fitness promote the value creation in cross-border M&As (Bauer & Matzler, 2014).

2.3 Gains for Acquiring Companies

Existing research studies on cross-border M&As paid attention on whether they created positive gains for shareholders in the acquisition of firms. The evidence on returns to the acquiring firm's shareholders is spread between studies that reported negative and positive returns. The sources of value creation in cross-border M&As might stem from asset sharing, reverse internalization of valuable intangible assets, and financial diversification (Seth et al. 2002). However, previous studies acknowledged that in most of the deals, the bidders obtain negative or smaller returns as compared to target firms when participating in the M&As activities (Andrade et al. 2001; Very & Schweiger, 2001; Moeller et al. 2005).

2.3.1 Shareholders' Wealth

Sudarsanam et al. (1996) find that both the acquiring and target firms generate positive value. The effect of synergies, such as operational, managerial, and financial synergy play a major role in determining the success of acquirers' gains. Furthermore, the ownership structure and method of payment also influence the shareholders' wealth significantly. The presence of large shareholders and equity payment generate smaller gains, and hence the cash payment method is preferred. As claimed by Myers and Majuf (1984) in their pecking order theory, issuing equity will send a wrong signal to the markets, which will destroy the firms' value.

Along similar line, Georgen & Renneboog (2004) observe the short-term wealth effects for domestic and cross-border M&As. They found that the bidders experienced a positive and significant effect of 0.7%. The evidence shows that the status of the bid, namely the friendly acquisition, and hostile acquisition determines the abnormal returns. Hostile acquisition sets a positive gain for target shareholders, whereas the acquirer gains negative returns. This condition arises because the shareholders of acquiring companies might think the investment motives are hubris or agency related. In general, domestic M&As outperform the cross-border operations.

In light of these theories, it would be interesting to see if the positive performance holds true for our dataset. Therefore, the following hypothesis is constructed:

Hypothesis 1: Cross-border M&As by Chinese firms generate higher abnormal returns for acquiring companies as compared to domestic M&As.

On the other hand, a review study by Datta & Puia (1995) shows evidence for the contrary. Cross-border M&As are perceived as a negative investment by investors. Therefore, it creates adverse wealth effects for shareholders of bidding firms around the announcement period. Supporting the above claim, Conn et al. (2005) assess both public and private M&As. As compared to national deals, cross-border M&As conducted by public companies yield zero announcement returns and negative returns in the post-acquisition period. The results for acquisitions undertaken by private firms is positive.

In regard to the target status, private targets yield more positive value than the public targets (Capron & Shen, 2007). This condition occurs because of private targets have lower bids value compared to public targets. The lower value of bids means the lower impact on the equity value of the bidders.

2.3.2 Financial Performance

As mentioned earlier, M&As portray an investment method designated to build economic value, mainly through the development of synergy. The synergy formed through the likeliness of business operations in the acquirer and target companies. As a result, it creates broader economies of scale (Harrison et al. 1991). The operating and corporate strategy likeliness to the bidders is hoped to enhance financial performance.

The implementation of profitability measure can be valued by combining an accounting-based and a market-based measure of profitability, such as return on assets (ROA), return on sales (ROS), return on equity (ROE), Tobin's Q and market return of the acquiring companies (Gentry

& Shen, 2010). Weber (1996) find that ROA creates a positive and significant result for both the sample and industry sample.

Following the above theories, the second and third hypotheses are formulated as follows:

Hypothesis 2: Chinese acquiring firms with better financial performance lead to higher abnormal returns.

Hypothesis 3: Acquirers with better firm performance engaging in cross-border M&As generate higher abnormal returns.

2.4 Evidence from Chinese Markets

M&A activities have spread to newer parts of the world, particularly Asia, although more modest as compared to the U.S. and European markets. Asia's M&As market, especially in China, is experiencing a newfound interest from the global and local investors. The cross-border M&As by Chinese companies have existed for over 30 years ago. Most of the target companies are large-scale, state-owned corporations that come from U.S., Canada, and Hong Kong (Changqi & Ningling, 2010).

Chinese markets keep expanding their business out of U.S., Canada, and Hong Kong. The current trend focuses on European markets. Chinese M&As aggressively invested US \$76.5 billion in European companies throughout the year 2016, with Germany being the primary market of interest (Shepard, 2016). The number of M&A deals have been drastically growing; Mergermarket Group³ recorded that China has exceeded its yearly target with 173 total deals worth US \$128.7 billion. This amounts account for 64.3% of Asia's deal value. Apart from U.S., China by far occupies the highest position in terms of acquirers in 2016.

Various factors trigger the development in Chinese cross-border M&As.⁴ First, China is enhancing its technological capabilities to fit the American and European markets. They want to create a high-value product that can be accepted worldwide. Second, through cross-border M&As, China tries to develop their economy by reducing organic growth. By expanding the business outside its border, China aims to gain competitive advantages in the international markets. Third, China has only a few of attractive domestic assets. This small number of the property encourages Chinese acquirers to look for overseas targets. Lastly, the governments and local banks support the financing requirements for investing both domestically and globally.

³ Formerly known as Mergermarket Group, now is Acuris.

(http://www.mergermarket.com/pdf/As-Pac_infographic.pdf)

⁴ According to JPMorgan report on China M&A activity in 2015 and 2016.

(<http://www.jpmorgan.ru/country/ru/ru/insights/chinas-key-drivers>)

Several studies have been conducted on the cross-border M&As undertaken by Chinese firms. A study by Wong & Cheung (2009) explains the effects of M&As on the security prices of bidding and target firms in Asia (Hong Kong, China, Taiwan, Singapore, South Korea, and Japan). The results show that M&As are favourable for shareholders of bidding firms rather than target companies. The abnormal returns around the announcement date, as measured by cumulative average abnormal returns (CAAR), exhibit a positive return. In contrast, the target firms yield –2.5% during pre-announcement, –2.4% at the time of announcement, and –5.2% after the announcement. This condition occurs because of insufficient target firms' performance during pre-announcement, inconsistent share prices as a consequence of information leakage, and over- or undervaluation of acquiring costs.

Boateng et al. (2008) examine the motivations behind cross-border M&As and their effect on acquiring firms. The fundamental motivation is related to market development and market power. This encouragement includes the ability to enter new markets, enhance market share, and reduce risks by diversification. Using the event study methodology, cross-border M&As show a significant and positive gain for acquiring companies with the average cumulative abnormal return (CAR) of 4.4274%.

A recent study by Nagano & Yuan (2013) concentrates on emerging countries, namely China and India. The outcomes suggest that foreign M&As engaging in high-growth emerging economies deliver higher investment returns. Further, shareholders receive more gain at the time foreign acquirer invests in public targets.

Apart from the evidence of the positive performance of acquiring firms, there are also studies that show the opposite. For example, Chen & Young (2010) relate the bidders' value with ownership structure. The Chinese government holds the majority of shareholders, which can create the tendency of the firms not operating in the minority shareholders' interest. The legal and financial systems, as well as the institutional regulation are all undeveloped Allen et al. (2005). As a result, the firm value of the bidders will be destroyed.

Zhang et al. (2011) provide three possible reasons why overseas acquisitions by Chinese markets are less likely to succeed. They explain the arguments at a country, industry, and firm-level. At the country-level, institutional characteristics in target countries are essential since a bad-quality institution will destroy the M&As process. At the industry-level, different industries have different institutional restrictions. Hence, it is more likely to lead to incomplete acquisitions. The firm-level reason concerns the ownership structure. If the targets are state-owned enterprises

(SOE), they tend to face difficulties owing to some institutional restrictions. The evidence shows that Chinese acquiring companies have a smaller possibility of succeeding in the Organization for Economic Cooperation and Development (OECD) countries.

The research conducted by Liu & Woywode (2013) focuses on China as the acquiring firms and Germany as the acquired companies. The paper scrutinizes the importance of a culture that may affect the post-acquisition integration mode. As opposed to the European background, the Chinese culture has several characteristics that influence the integration process, such as low individualism, high power distance, modest uncertainty avoidance, and high long-term orientation.

Hofstede (1984) explains each of the characteristics briefly. Individualism pays attention to the relationship between the individual and social framework. Low individualism means all the decisions made are in the best interest of the group. Power distance is an expression that describes the power in institutions is spread unequally. High power distance signifies that less powerful people will accept whatever the agreement, without requiring justification. This usually occurs in less developed markets. Uncertainty avoidance refers to how society reacts to the unknown future. An uncertain situation is a threat to the institution. China is on the modest level which portrays tolerance on riskiness. Long-term orientation deals with social changes. It takes the relationship in the past while compromising the present and the future. Those with a high level of long-term orientation believe that good results depend on the particular situation, context, and time. Also, they show the ability to adapt quickly to the changing environment.

CHAPTER 3 Data Selection and Methodology

This chapter presents the sample selection, data construction, variable definition, and measurement, as well as the methodology intended to use.

3.1 Data Selection

The analysis provided in this thesis relies on country-specific data, that is China. The annual data used ranged from the period between 1993 to 2016. Therefore, several steps are taken to construct the final dataset. The data for the M&A deal is identified using the Thomson One database, and the selection criteria are as follows:

1. The announcement date of M&A activities occurred between 1 January 1993 and 31 December 2016.
2. M&A deals must be completed as of 31 December 2016.
3. The acquirer location must be in China.
4. The acquirer company's status must be publicly listed.
5. The financial services and utility companies classified by Standard Industrial Classification (SIC code) 6000 – 6999 and 4900 – 4999 are excluded.

By implementing these selection criteria, an initial dataset is produced which consists of 6,736 M&A transactions. Afterwards, the M&A transaction details such as deal value and deal characteristics are extracted from Thomson One database. Then, the accounting information is obtained from Compustat database.

Each of dataset of dependent, independent, and control variables is merged using SEDOL and the year of M&As occurrence year. When merging the dataset, some of the deal-observations have been dropped due to constraints on other variables.

3.2 Explanation of Variables

3.2.1 Dependent Variable

To test and verify the gains for the acquiring firms, this thesis applies acquisitions performance as a dependent variable. Bruner (2002) uses event studies analysis to measure the M&A profitability of a firm. The dependent variable is the cumulative abnormal stock return of acquiring firms around the M&A announcement date as a proxy for M&A performance. Mackinlay (1997) suggests that CAR captures the value of a company, which is reflected by security prices. Andrade et al. (2001) apply the abnormal stock market reaction at the

announcement date to test if mergers create gains for shareholders. Further, Bruner (2002) uses CAR as a direct tool for measuring the value for investors, as the stock price is the present value of expected future cash flows. The abnormal stock return is generated using an event study method and calculated using the market model following Mackinlay (1997). The CAR is computed using Datastream Event Study Tool and based on the Datastream code identifier of acquiring firms.

3.2.2 Independent Variable

As discussed in hypotheses development, this thesis uses target nationality, return on equity, and interaction term between return on equity and target nationality to determine the effect on stock return.

Target Nationality

While expanding the business, acquiring companies can decide between investing in their country, known as domestic M&As, or in another country, that is cross-border M&As. Amar et al. (2011) use target nationality as their variable to see the value creation. They show positive abnormal returns in cross-border M&A deals. Following Amar et al. (2011), this research applies a dummy variable of “1” if the target has different nationality with the acquirer, which is China, and “0” if otherwise. The target nationality data is retrieved from Thomson One Banker.

Return on Equity (ROE)

ROE is considered as a tool for measuring a firm’s profitability (Beccalli & Frantz, 2009). ROE is measured by dividing earnings before interest and tax (EBIT) with shareholders’ equity and ROE data is obtained from the Compustat database.

Interaction Term of ROE and Cross-border Deal

The interaction term is used to observe the relationship between the amount of ROE that the firm has on the shareholder’s wealth. Specifically, this thesis will observe the difference in abnormal stock return for cross-border deals. The measurement of interaction term is by multiplying ROE and target nationality.

3.2.3 Control Variable

The firm characteristics and deal characteristics influence the M&As’ performance. Thus, this paper includes both characteristics as control variables. Firm characteristics such as firm size, free cash flow, leverage, and firm’s risk are used. Deal features such as the method of payment,

business diversification, and status of target companies are also used to see if those variables would influence the cumulative abnormal return of cross-border M&As.

Firm Size of the Acquirer

Moeller et al. (2004) discover that there is a negative relationship between firm size and acquisition announcement returns. Small target businesses generate better M&As performance due to lower premium payment. In general, large corporations pay a higher premium and therefore create lower abnormal returns. The size of the firm is normalized by the natural logarithm of total assets. The data is obtained from Compustat database.

Free Cash Flow

Jensen's (1986) theory explains that the sufficient amount of free cash flow might drive managers to take unprofitable or value-destroying M&A deals. As a result, it affects the abnormal stock return of acquiring firms. Following Masulis et al. (2007), free cash flow is calculated by subtracting the firm's operating income before depreciation with interest expense minus income taxes and capital expenditures, then dividing it by the book value of total assets. Each of the data is obtained from Compustat database.

Leverage

Following the free cash flow theory, a significant amount of debt reduces the amount of free cash flow. Thus, it is expected to mitigate the probability of management not working in the interest of shareholders. As a consequence, leverage leads to a better short-term performance of M&A transactions (Masulis et al. 2007). Therefore, this thesis includes free cash flow as a control variable by dividing the total liabilities with the total assets. The data is retrieved from Compustat database.

Firm Risk

Volatility captures the degree of risk in a company. It can be defined as a ratio of retained earnings to total assets. The related data is extracted from Compustat database.

Method of Payment

The payment method can also influence the success of M&As. According to Myers and Majluf (1984), in their pecking order theory, issuing stock will present the wrong signal to markets. Alexandridis et al. (2010) claim that equity financing leads to negative returns around the announcement date. Moeller et al. (2004) document the funding method and found that abnormal returns are negative when companies prefer to choose equity to finance M&As. Following the

above statement, Andrade et al. (2001) and Amar et al. (2011) express that all-cash financing method yield better returns compared to M&As paid by stock. Therefore, this research proposes a dummy variable which is expressed as “1” if the transaction is fully paid by cash and “0” if otherwise. The data related to means of payment is collected from Thomson One Banker.

Business Diversification

The degree of relatedness affects the shareholders’ wealth creation. Relatedness can be defined based on the industries that the acquirer and target firms belong to. Previous research provides two-sided assertions. Singh & Montgomery (1987) present that related M&As constitute a higher result than the unrelated one. Adversely, Chatterjee (1986) captures the positive association between unrelated targets and wealth gains. With the desired sample, this thesis would like to see whether the industry diversification affects profitability. Standard Industrial Classification (SIC) code is used to measure the relatedness of the acquisitions. The dummy variable of “1” is used when the first three digits of SIC code of target provide a different number with the first three digits of SIC code of the bidders. The more identical the digits are, the more related the business is. Both acquirers and targets SIC code are recorded from Thomson One Banker.

Public Status of Target Firms

According to Draper & Paudyal (2006), shareholders’ wealth gain is dependent on target status, public or private companies. Investing in private companies is more likely maximize the shareholders’ wealth. Additionally, Fuller et al. (2002) state that the acquiring firms yield better result when they are dealing with private firms instead of public firms. Thus, this thesis distinguishes the target firms by taking dummy variable of “1” if the target firms are private and “0” for the otherwise. The data are gathered from Thomson One Banker.

Regarding acquisition attitudes, there are hostile, friendly and neutral takeovers. Prior research shows hostile and friendly acquisition attitudes do affect the acquiring firm’s shareholders return. Based on Cartwright & Schoenberg (2006), the announcement of hostile takeover creates higher abnormal stock return. This paper tries to include acquisition attitudes as control variable. Nevertheless, there are no hostile M&As available in the sample. Therefore, the results cannot compare between hostile and friendly attitudes. The average data represents 90% for friendly acquisitions and 10% for neutral acquisitions (see Appendix A).

As mentioned earlier, GDP is one of the factors that affect the shareholders’ wealth. Following Rossi & Volpin (2004), this thesis attempts to put GDP growth as a control variable which proxies the economic conditions of a country. However, when other GDP proxies namely GDP

per capita and current GDP are included in the regression, the result shows multicollinearity problems (see Appendix B).

Table 2 – Variable Description

Variable Description	Variable	Measurement
Target Nationality	CrossBorder	“1” if target firm is located outside China
Return on Equity	ROE	Proportion of earnings before interest and tax (EBIT) to total shareholders’ equity
Interaction term of ROE and Cross-border Deal	ROE*CrossBorder	Multiplication of ROE and CrossBorder
Firm Size	Ln(FirmSize)	Natural logarithm of total assets
Free Cash Flow	FCF	Operating income before depreciation minus interest expense minus income taxes minus capital expenditures divided by the book value of total assets
Leverage	Leverage	Proportion of total liabilities to total assets
Firm Risk	Volatility	Ratio of retained earnings to total assets
Method of Payment	Payment	“1” if paid by 100% cash
Business Diversification	Relatedness	“1” if first three digit of SIC acquirer is different with first three digit of SIC target
Status of Target Firms	TargetStatus	“1” if target firms are private

3.3 Research Method

This section reviews the methodology intended to use. The methodology includes the determination of event window, estimation period as well as the regression model.

3.3.1 Event Study

This thesis uses event study method to estimate the dependent variable, the cumulative abnormal return around the announcement date of M&A deals. When performing an event study, it is necessary to define the event window and estimation period. The event window captures the whole effect of the M&As’ announcement (Mackinlay, 1997).

This research exercises 61 days (–30, +30) event window, 21 days (–10, +10) event window, 11 days (–5, +5) event window, and 5 days (–2, +2) event window. For the estimation period, 250 trading days prior to the bid announcement was used to forecast the normal performance in the event window (Sudarsanam et al. 1996).

The most widely used technique to compute the normal return is the market model. In subsequent with Mackinlay (1997), the market model is used for calculating acquiring firm daily returns since it correlates the return of security with the market return. The formula of market model is as follows:

$$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it} \quad (1)$$

where R_{it} = return on security i during day t,
 α_i = intercept,
 β_i = parameter of the market model,
 R_{mt} = market return on day t and
 ε_{it} = zero mean disturbance term.

Following the market model, the acquiring companies' abnormal return can be calculated using the formula by Mackinlay (1997):

$$AR_{it} = R_{it} - \alpha_i - \beta_i R_{mt} \quad (2)$$

where AR_{it} is abnormal return to security i for day t.

The CAR is the aggregation of the abnormal returns in the event window (Mackinlay, 1997). Then, the acquiring firms' CAR is calculated using the following formula:

$$CAR_{i(t_1, t_2)} = \sum_{t=t_1}^{t_2} AR_{it} \quad (3)$$

where t_1 and t_2 are the days between the event window.

Next, the linear regression is conducted to examine the relationship between the dependent and independent variables. Before running the regression, the CAR distributions were checked to make sure the distribution is normal (see Appendix C). The regression models to test the hypotheses are as follows:

Model 1

$$CAR(-30, +30) = \alpha + \beta_1 CrossBorder_i + \beta_2 ROE_i + \beta_3 ROE * CrossBorder_i + \beta_4 LnFirmSize_i + \beta_5 FCF_i + \beta_6 Leverage_i + \beta_7 Volatility_i + \beta_8 Payment_i + \beta_9 Relatedness_i + YearFE + IndustryFE + \varepsilon_i \quad (4)$$

Model 2

$$CAR (-10, +10) = \alpha + \beta_1 CrossBorder_i + \beta_2 ROE_i + \beta_3 ROE * CrossBorder_i + \beta_4 LnFirmSize_i + \beta_5 FCF_i + \beta_6 Leverage_i + \beta_7 Volatility_i + \beta_8 Payment_i + \beta_9 Relatedness_i + YearFE + IndustryFE + \varepsilon_i \quad (5)$$

Model 3

$$CAR (-5, +5) = \alpha + \beta_1 CrossBorder_i + \beta_2 ROE_i + \beta_3 ROE * CrossBorder_i + \beta_4 LnFirmSize_i + \beta_5 FCF_i + \beta_6 Leverage_i + \beta_7 Volatility_i + \beta_8 Payment_i + \beta_9 Relatedness_i + YearFE + IndustryFE + \varepsilon_i \quad (6)$$

Model 4

$$CAR (-2, +2) = \alpha + \beta_1 CrossBorder_i + \beta_2 ROE_i + \beta_3 ROE * CrossBorder_i + \beta_4 LnFirmSize_i + \beta_5 FCF_i + \beta_6 Leverage_i + \beta_7 Volatility_i + \beta_8 Payment_i + \beta_9 Relatedness_i + YearFE + IndustryFE + \varepsilon_i \quad (7)$$

To see if the target's public status affects the stock return, this thesis includes additional models that put the target's status as a control variable. The regression models for comparing the abnormal stock return are as follows:

Model 5

$$CAR (-30, +30) = \alpha + \beta_1 CrossBorder_i + \beta_2 ROE_i + \beta_3 ROE * CrossBorder_i + \beta_4 LnFirmSize_i + \beta_5 FCF_i + \beta_6 Leverage_i + \beta_7 Volatility_i + \beta_8 Payment_i + \beta_9 Relatedness_i + \beta_{10} TargetStatus + YearFE + IndustryFE + \varepsilon_i \quad (8)$$

Model 6

$$CAR (-10, +10) = \alpha + \beta_1 CrossBorder_i + \beta_2 ROE_i + \beta_3 ROE * CrossBorder_i + \beta_4 LnFirmSize_i + \beta_5 FCF_i + \beta_6 Leverage_i + \beta_7 Volatility_i + \beta_8 Payment_i + \beta_9 Relatedness_i + \beta_{10} TargetStatus + YearFE + IndustryFE + \varepsilon_i \quad (9)$$

Model 7

$$CAR (-5, +5) = \alpha + \beta_1 CrossBorder_i + \beta_2 ROE_i + \beta_3 ROE * CrossBorder_i + \beta_4 LnFirmSize_i + \beta_5 FCF_i + \beta_6 Leverage_i + \beta_7 Volatility_i + \beta_8 Payment_i + \beta_9 Relatedness_i + \beta_{10} TargetStatus + YearFE + IndustryFE + \varepsilon_i \quad (10)$$

Model 8

$$CAR (-2, +2) = \alpha + \beta_1 CrossBorder_i + \beta_2 ROE_i + \beta_3 ROE * CrossBorder_i + \beta_4 LnFirmSize_i + \beta_5 FCF_i + \beta_6 Leverage_i + \beta_7 Volatility_i + \beta_8 Payment_i + \beta_9 Relatedness_i + \beta_{10} TargetStatus + YearFE + IndustryFE + \varepsilon_i \quad (11)$$

CHAPTER 4 Results

This chapter will discuss the empirical results of the hypotheses. First, in section 4.1 this thesis attempts to explain the descriptive statistics which includes M&A transactions, CARs over different event windows, and all independent and control variables. Section 4.2 describes the correlation analysis of all independent and control variables. Section 4.3 discusses the regression results to prove the hypotheses. Lastly, section 4.4 re-estimates hypotheses using robustness tests.

4.1 Descriptive Statistics

The descriptive statistics begins with the trend of M&As which happened between 1993 and 2016. Table 3 provides the sum of M&A transactions which consist of 6,736 completed deals. In more details, 492 transactions are done with the target from non-China countries and 6,244 deals are domestic.

Based on Table 3, it can be seen that cross-border M&As only contribute 7.30% of total sample transactions. In general, the deal numbers keep increasing and reach its peak in 2015 with a total of 93 business deals. The highest amount of deal value happened in 2016 which amounted nearly US \$20.8 billion. There are several periods which mark the lowest number of deals. During 1993, 1995, 1996, 1999, and 2000 there is only single transaction.

On the other hand, national acquisitions play a significant role for Chinese outbound investment. Considering Hong Kong as a part of China, it is classified as domestic deals. Out of 6,736 sample, 6,244 account for domestic M&As. The highest number of deals and value of transactions took place in 2015. On the contrary, the lowest number of business deals occurred in 1993 with only single transaction. In addition, the smallest deal value appears in 1994 with total amount of US \$10.25 million.

During the financial turmoil of 2007 – 2008, cross-border and domestic acquisitions in Chinese experienced a stable condition. Both number of transactions and value of transactions are increasing. However, China experienced a great financial downturn in 2015 due to the crashed of Shenzhen and Shanghai stock market. As a result, it creates a significant decline in 2016. The total number of transactions fell by 11.03%. Moreover, the total value of transactions also dropped by US \$94 billion. According to Riley & Yan (2015), investors keep on flowing their money on Chinese stocks even though the economic and company conditions were not

favourable. Thus, it creates an enormous volatility to China’s stock market. It was the biggest fall, even compared to financial crash in 2007.⁵

Overall, the most significant number of M&A deals in aggregate occurred in the year 2015. Conversely, the lowest number of transaction took place in 1993 with only 2 transactions. Meanwhile, if the deals are measured using deal value, the highest value of the transaction occurred in the year 2015 which amounted US \$237 billion, whilst the smallest was in 1994 with total amount of US \$10.25 million. The deal value of M&A transactions is not always having a linear association with the number of transactions. As a result, the higher number of M&As does not lead to the higher value of the transactions. One of the possible reasons why this issue appears is the fact that M&As do not always disclose their deal value.

Figure 1 – Total Deal Value and Number of Transactions for all M&A Deals from 1993 – 2016

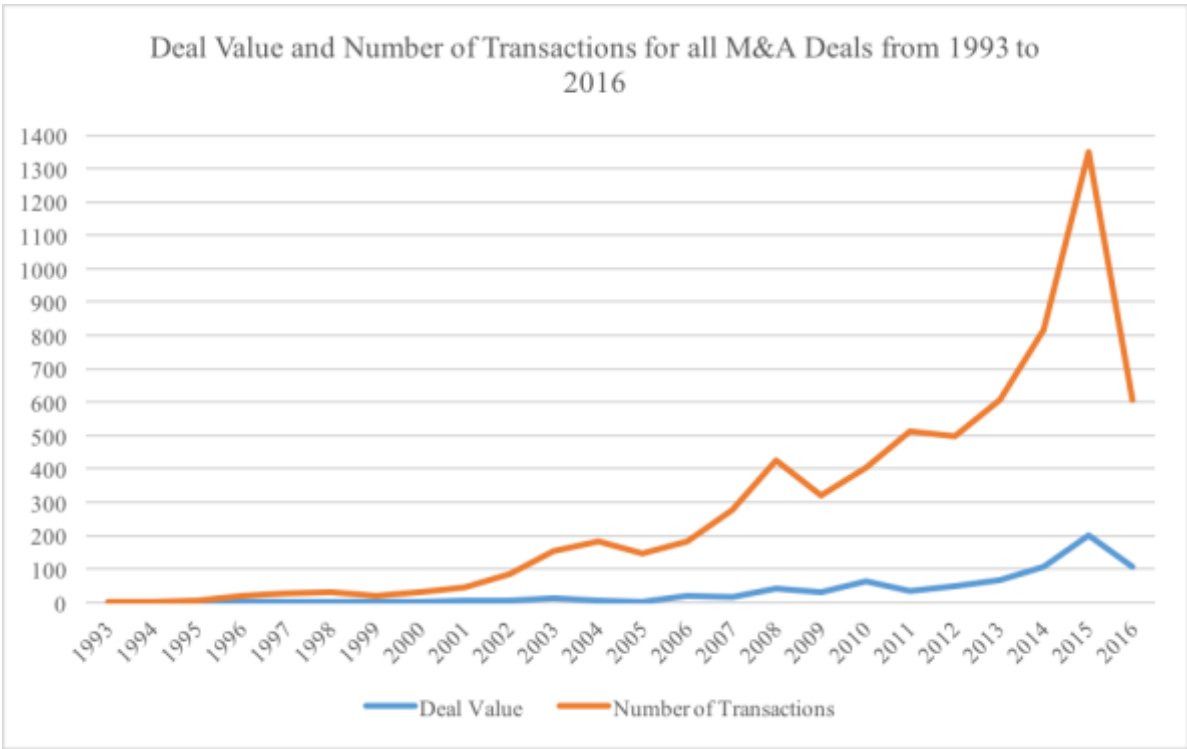


Figure 1 draws the number of deals and total value of transaction during the period of 1993 to 2016. As seen in the figure, there is a sharp increase in number of transactions during 2002 to 2004 and during 2005 to 2008. However, the total value does not seem to have a significant rise.

⁵ According to The Guardian on China stock market hit by biggest one-day fall since 2007 (<https://www.theguardian.com/business/2015/jul/27/china-stock-market-biggest-fall-2007>)

This condition implies that number of M&A deals do not always have a linear association with the deal value. The positive relationship between the sum of deal value and the number of deals can be seen from the year 2012 to 2015.

Table 3 – Descriptive Statistics of M&A Transactions, 1993 – 2016

The sample comprises of 6,736 completed M&A transactions during the period of January 1, 1993 to December 31, 2016. The transactions consist of 492 cross-border and 6,244 domestic M&A deals. Hong Kong is a part of China. Therefore, such deals in Hong Kong are classified as domestic deals. The deal value is measured in million US dollars. Transaction value is defined as the price that the acquiring firm paid to acquire the target. The data pertaining to the M&A transaction value is generated through Thomson One Banker.

Year	Cross-border			Domestic			All M&A Deals		
	Number of Transactions	Percentage of Transaction	Deal Value	Number of Transactions	Percentage of Transaction	Deal Value	Number of Transactions	Percentage of Transaction	Deal Value
1993	1	0.20%	4.80	1	0.02%	16.31	2	0.03%	21.11
1994	-	0.00%	-	3	0.05%	10.25	3	0.04%	10.25
1995	1	0.20%	1.00	4	0.06%	146.87	5	0.07%	147.87
1996	1	0.20%	0.64	18	0.29%	81.07	19	0.28%	81.71
1997	3	0.61%	13.85	24	0.38%	161.84	27	0.40%	175.69
1998	-	0.00%	-	30	0.48%	1,086.85	30	0.45%	1,086.85
1999	1	0.20%	0.11	19	0.30%	349.65	20	0.30%	349.76
2000	1	0.20%	-	29	0.46%	762.98	30	0.45%	762.98
2001	-	0.00%	-	43	0.69%	4,143.97	43	0.64%	4,143.97
2002	10	2.03%	2,080.80	74	1.19%	2,227.95	84	1.25%	4,308.75
2003	2	0.41%	44.00	153	2.45%	11,556.42	155	2.30%	11,600.42
2004	12	2.44%	206.81	170	2.72%	4,047.26	182	2.70%	4,254.07
2005	8	1.63%	18.90	137	2.19%	2,391.90	145	2.15%	2,410.80
2006	12	2.44%	6,529.30	169	2.71%	11,595.07	181	2.69%	18,124.37
2007	17	3.46%	1,215.20	259	4.15%	14,879.07	276	4.10%	16,094.27
2008	34	6.91%	3,186.80	392	6.28%	37,487.06	426	6.32%	40,673.86
2009	29	5.89%	4,857.24	291	4.66%	25,031.95	320	4.75%	29,889.19
2010	36	7.32%	16,090.68	367	5.88%	47,223.71	403	5.98%	63,314.39
2011	38	7.72%	4,206.55	474	7.59%	30,291.43	512	7.60%	34,497.98
2012	37	7.52%	1,321.64	461	7.38%	46,868.76	498	7.39%	48,190.39
2013	36	7.32%	6,974.02	571	9.14%	59,437.65	607	9.01%	66,411.67

2014	51	10.37%	4,456.66	764	12.24%	103,104.41	815	12.10%	107,561.07
2015	93	18.90%	9,291.81	1,255	20.10%	191,165.84	1,348	20.01%	200,457.65
2016	69	14.02%	20,730.98	536	8.58%	85,537.80	605	8.98%	106,268.78
Total	492	100.00%	81,231.78	6,244	100.00%	679,606.05	6,736	100.00%	760,837.83

Table 4 – Descriptive Statistics of the Target Countries, 1993 – 2016

The table depicts the total number of cross-border and domestic M&A transactions. In total, there are 6,736 M&A deals in China of which 492 deals are cross-border, and 6,244 deals are domestic M&As during the period 1993 – 2016. Hong Kong is a part of China. Therefore, such deals in Hong Kong are classified as domestic deals. Hong Kong alone has 93 transactions. “Others” refer to countries with only a single transaction. These countries include American Samoa, Azerbaijan, Belgium, Chile, Czech Republic, Democratic Republic of Congo, Dominican Republic, Egypt, Iraq, Lithuania, Mexico, Mongolia, Mozambique, Nigeria, Pakistan, Peru, Philippines, Poland, Portugal, Serbia, Slovak Republic, Tajikistan, and Thailand.

Country of Target Nation	Number of Transactions	Total Value of Transactions	Country of Target Nation	Number of Transactions	Total Value of Transactions
China	6,151	672,586.56	Denmark	4	93.80
United States	126	17,106.07	Gabon	4	38.19
Hong Kong	93	7,019.49	Hungary	4	1,890.94
Germany	40	3,696.65	India	4	1.92
Australia	39	8,866.11	Malaysia	4	173.84
Singapore	31	3,207.45	Russian Fed	4	3,601.00
Japan	22	578.12	Argentina	3	5,550.00
Canada	21	3,547.63	New Zealand	3	87.61
United Kingdom	20	3,567.01	Sweden	3	155.97
British Virgin	19	1,061.59	Austria	2	147.05
France	19	1,205.86	Bolivia	2	14.28
Italy	17	848.51	Cayman Islands	2	23.75
Brazil	10	7,651.08	Colombia	2	12.78
Spain	10	218.57	Ireland-Rep	2	2,571.95
Indonesia	9	1,917.23	Israel	2	110.00
South Korea	9	632.99	Kazakhstan	2	349.49
Taiwan	9	94.84	Sri Lanka	2	83.00
Luxembourg	5	365.89	Utd Arab Emirates	2	119.97
Netherlands	5	601.07	Vietnam	2	4.72
Switzerland	5	24.56	Others	23	11,010.33

Table 4 presents the number and total value of the M&As target per country in the sample. From 1993 through 2016, domestic deals have had a majority place with 93% of the total transactions. It can be observed that the larger part of the deals is domestic with a total of 6,244 transactions, including Hong Kong. With respect to foreign investment, the most remarkable country as an investment target is the U.S. with a total 126 of transactions. After the U.S., Germany sits on the second position. According to Shepard (2016), the European market has become the primary market interest especially Germany. It can be seen that among the European countries, Germany accounts for the largest number of deals, i.e. 41 transactions. Australia takes place as the third largest investment target with a total of 39 deals. The strategic location makes Chinese companies invest more money in Australia, especially in mining and mineral projects (Deng,

2003). Next, the most favoured nation is Singapore (31 deals), followed by Japan (22 deals), Canada (21 deals), and United Kingdom (20 deals). In the near future, the United Kingdom is expected to surpass the U.S. in the list of target countries.⁶

Table 5 summarizes the descriptive statistics of the independent and control variables of the research. The number of observations, mean, median, standard deviation, minimum value, and the maximum value of each variable have been reviewed. Starting with the independent variable, 7.3% of the total sample consists of cross-border M&As in which the targets were located outside China.

Subsequently, acquiring firms in the sample have a positive and negative value of ROE, ranging from -0.314 to 0.503. The mean value of 0.084 implies that the bidders have a positive ROE. Additionally, when the interaction term between ROE and CrossBorder is formed, 0.7% of the sample has positive ROE and engages in cross-border acquisitions.

With regard to control variables, firm characteristics of the acquirer are divided into four components namely firm size, firm's risk, free cash flow, and leverage. Moreover, deal features are separated into three parts, such as the method of payment, business diversification, and public status of target companies.

According to the Table 5, the size of the firm is normalized by the natural logarithm of total assets. The value of total assets range from 5.315 to 12.331, with the average of 8.05. This number indicates that on an average, acquiring firms have a positive value of the assets. Then, volatility which represents the firm's risk of the bidders has an average positive value of 0.099. However, the volatility ratio lies between -1.489 to 0.479.

The average of free cash flow is about -0.007 points. The amount of free cash flow reflects the excess of cash that can be used by the executive to fund the M&A activities. Nevertheless, several companies have negative cash flow as indicated by the minimum value. Such a negative value implies that the company does not have adequate cash to finance the business. Furthermore, the average of leverage is around 43% which implies that in general, acquiring firms use debt that is less than the equity to finance their business deals.

The control variables for deal features are dummy variables. According to Table 5, in M&A activities, the means of payment is 22% paid entirely cash. Andrade et al. (2001) and Amar et al. (2011) claim that an all-cash financing method yields better returns compared to M&As that are

⁶ According to ATKearney Report on Creating More Value for China's M&A. (<https://www.atkearney.nl/documents/10192/5677643/Creating+More+Value+for+Chinas+M%26A.pdf/f2d8e2ca-9a4e-4135-8ebe-696e5074f8b3>)

paid by stock. Moreover, variable relatedness describes the business diversification between the acquirer and target companies. It can be observed that around 68% of the acquirer firms took over the target companies from a different industry, characterized by the SIC code. As stated by Chatterjee (1986), there is a positive association between unrelated targets and wealth gains. Employing Fama & French's 12 industries classification, the majority of the industry deals with consumer non-durables which include food, tobacco, textiles, apparel, leather, and toys. Lastly, over 50% of M&As target is a private firm. Based on Fuller et al. (2002), acquirers generate better outcome when they takeover private companies rather than if they engage in public companies.

Table 5 – Descriptive Statistics of Independent and Control Variables

The table presents the summary statistics such as number of observations, mean, median, standard deviation, minimum value, and maximum value for the following measures: (1) CrossBorder: Dummy variable with value of “1” if target firm is located outside China and “0” otherwise. (2) ROE: EBIT divided by the shareholders' equity of the acquiring firms. (3) ROE*CrossBorder: Multiplication of ROE and CrossBorder as interaction term. (4) Ln(FirmSize): Natural logarithm of total assets. (5) Volatility: Retained earnings divided by total assets. (6) FCF: Operating income before depreciation minus interest expense minus income taxes minus capital expenditures divided by the book value of total assets in acquiring firms. (7) Leverage: Total liabilities divided by total assets. (8) Payment: Dummy variable with value of “1” if the transaction is entirely paid in cash and “0” otherwise. (9) Relatedness: Dummy variable with the value of “1” if the target and acquirer do not share the same 3-digit SIC code and “0” otherwise. (10) TargetStatus: Dummy variable with the value of “1” if the target status is private and “0” otherwise.

Variables	Observations	Mean	Median	Standard Deviation	Minimum	Maximum
CrossBorder	6,736	0.073	0.000	0.260	0.000	1.000
ROE	4,447	0.084	0.079	0.101	-0.314	0.503
ROE*CrossBorder	4,447	0.007	0.000	0.040	-0.314	0.503
Ln(FirmSize)	5,945	8.050	7.905	1.221	5.315	12.331
Volatility	5,945	0.099	0.123	0.236	-1.489	0.479
FCF	5,945	-0.007	0.002	0.067	-0.248	0.148
Leverage	5,945	0.432	0.426	0.205	0.052	1.018
Payment	6,736	0.216	0.000	0.412	0.000	1.000
Relatedness	6,736	0.683	1.000	0.465	0.000	1.000
TargetStatus	6,736	0.504	1.000	0.500	0.000	1.000

Furthermore, Table 6 portrays the descriptive statistics of the CAR of acquiring firms during different event windows. The average CAR of the acquiring firms during the event windows such as 61 days (-30, +30), 21 days (-10, +10), 11 days (-5, +5), and 5 days (-2, +2) are positive during the period of 1993 – 2016. The positive value of the average CARs is consistent with previous research (Chen & Lin, 2009; Boateng et al. 2008; Nagano & Yuan, 2013).

Table 6 – Descriptive Statistics of Cumulative Abnormal Return (CAR) of Acquiring Firms for all Samples

The Cumulative Abnormal Return (CAR) of acquiring companies over the 250-days estimation period is calculated using the market model following Mackinlay (1997). This table presents the descriptive statistics such as number of observations, mean, median, standard deviation, minimum value, and maximum value of CARs for all the samples. Several event windows have been used: 61 days (-30, +30), 21 days (-10, +10), 11 days (-5, +5), and 5 days (-2, +2). The data of the acquiring companies' CARs are extracted from the Datastream database.

Event Window	Observations	Mean	Median	Standard Deviation	Minimum	Maximum
CAR (-30, +30)	5,882	0.007	0.000	0.355	-1.050	1.128
CAR (-10, +10)	5,883	0.028	0.005	0.225	-0.615	0.845
CAR (-5, +5)	5,883	0.028	0.003	0.172	-0.441	0.590
CAR (-2, +2)	5,883	0.024	0.005	0.113	-0.306	0.310

Table 7 and Table 8 present the descriptive statistics of the acquiring firms' CARs that are bidding for private and public target firms, respectively. As seen on the Table 7, the average CAR of acquiring firms in 21 days (-10, +10), 11 days (-5, +5), and 5 days (-2, +2) are positive during the period of 1993 – 2016. However, the median of CAR (-30, +30) with a value -0.009, indicates that on an average, acquiring firms incur a negative return in 61 days around the M&As announcement period. Such a negative result corresponds with the research conducted by Datta & Puia (1995), Very & Schweiger (2001), Chen & Young (2010).

Based on Tables 7 and 8, the average of public target firms' CARs is slightly higher than private target firms. The possible explanation is provided by the bargaining power hypothesis.

“The closely held nature of the private target leads to greater bargaining power of the target’s management, which ends up with the acquiring firm having to pay more than when acquiring a similar public target” (Isa & Lee, 2011).

This outcome is contradictory to many previous findings. Shareholders gain negative abnormal returns when investing in public targets (Chang, 1998; Fuller et al. 2002; Capron & Shen, 2007; Amar et al. 2011).

Table 7 – Descriptive Statistics of Cumulative Abnormal Return (CAR) of Acquiring Firms for Private Target Firms

The Cumulative Abnormal Return (CAR) of acquiring companies over the 250-days estimation is calculated using the market model following Mackinlay (1997). The table presents the descriptive statistics such as number of observations, mean, median, standard deviation, minimum value, and maximum value of CARs for private target firms. Several event windows have been used: 61 days (-30, +30), 21 days (-10, +10), 11 days (-5, +5), and 5 days (-2, +2). The data of the acquiring companies’ CAR are extracted from the Datastream database.

Event Window	Observations	Mean	Median	Standard Deviation	Minimum	Maximum
CAR (-30, +30)	2,913	-0.009	-0.008	0.383	-1.050	1.128
CAR (-10, +10)	2,913	0.025	-0.001	0.238	-0.615	0.845
CAR (-5, +5)	2,913	0.030	0.002	0.190	-0.441	0.590
CAR (-2, +2)	2,913	0.025	0.003	0.121	-0.306	0.310

Table 8 – Descriptive Statistics of Cumulative Abnormal Return (CAR) of Acquiring Firms for Public Target Firms

The Cumulative Abnormal Return (CAR) of acquiring companies over the 250-days estimation is calculated using the market model following Mackinlay (1997). The table presents the descriptive statistics such as number of observations, mean, median, standard deviation, minimum value, and maximum value of CARs for public target firms. Several event windows have been used: 61 days (-30, +30), 21 days (-10, +10), 11 days (-5, +5), and 5 days (-2, +2). The data of acquiring companies' CAR are extracted from the Datastream database.

Event Window	Observations	Mean	Median	Standard Deviation	Minimum	Maximum
CAR (-30, +30)	269	0.008	0.008	0.308	-1.050	0.909
CAR (-10, +10)	269	0.030	0.028	0.168	-0.615	0.579
CAR (-5, +5)	269	0.032	0.018	0.138	-0.441	0.484
CAR (-2, +2)	269	0.030	0.021	0.098	-0.306	0.310

4.2 Correlation Analysis

This section examines the relationship between all the dependent and control variables. Table 9 depicts the correlation matrix in which the star (*) indicates a significant sign at 5% level of confidence. Although the correlation shows a significant indication, the value of the correlation lies between -1 and 1. As a result, there is no multicollinearity problem between the independent and control variables. For most of the variables, the coefficient is not more than 0.5 except for the interaction term ROE*CrossBorder. It has a relatively high correlation to CrossBorder with the percentage of 0.64. The rationale in this regard is the fact that the variable ROE*CrossBorder is derived from the interaction between ROE and CrossBorder.

Table 9 – Pearson Correlation Matrix

The table exposes the Pearson correlation coefficients of all independent and control variables in the regression models. The star (*) in the coefficient indicates significance at 5% level. The variables are: (1) CrossBorder: Dummy variable with value of “1” if target firm is located outside China and “0” otherwise. (2) ROE: EBIT divided by the shareholders’ equity of the acquiring firms. (3) ROE*CrossBorder: Multiplication of ROE and CrossBorder as interaction term. (4) Ln(FirmSize): Natural logarithm of total assets. (5) Volatility: Retained earnings divided by total assets. (6) FCF: Operating income before depreciation minus interest expense minus income taxes minus capital expenditures divided by the book value of total assets in acquiring firms. (7) Leverage: Total liabilities divided by total assets. (8) Payment: Dummy variable with value of “1” if the transaction is entirely paid in cash and “0” otherwise. (9) Relatedness: Dummy variable with the value of “1” if the target and acquirer do not share the same 3-digit SIC code and “0” otherwise. (10) TargetStatus: Dummy variable with the value of “1” if the target status is private and “0” otherwise

Variables	CrossBorder	ROE	ROE*CrossBorder	Ln(FirmSize)	Volatility	FCF	Leverage	Payment	Relatedness	TargetStatus
CrossBorder	1									
ROE	0.0687*	1								
ROE*CrossBorder	0.6773*	0.2610*	1							
Ln(FirmSize)	0.1421*	0.2395*	0.1704*	1						
Volatility	0.0490*	0.2668*	0.0884*	0.2565*	1					
FCF	0.0240	0.4732*	0.0965*	0.0772*	0.3588*	1				
Leverage	0.0178	0.1366*	0.0725*	0.3383*	-0.4015*	-0.2422*	1			
Payment	0.0147	0.0150	0.0102	0.0132	0.0638*	-0.0184	-0.0461*	1		
Relatedness	-0.0403*	-0.0856*	-0.0377*	-0.0669*	-0.1027*	-0.0570*	0.0654*	-0.0283*	1	
TargetStatus	-0.0159	-0.0233	-0.0177	-0.1180*	0.1067*	0.0440*	-0.2098*	-0.0304*	0.0314*	1

4.3 Regression Result and Analysis

This section presents the analysis of the primary regression results in testing the previously formulated hypotheses. Several regression models have been constructed to examine the shareholders' wealth creation. Moreover, this section also provides the results' table of multiple linear regressions.

Table 10 provides the result of testing the first, second, and third hypothesis using different CARs. The 61 days (-30, +30), 21 days (-10, +10), 11 days (-5, +5), and 5 days (-2, +2) event windows have been used as dependent variables in order to observe the relation during different windows. To study the different market responses, this thesis distinguishes between the private and public target companies. Model 1, 2, 3, and 4 are the models without target status as a control variable. When the target status is included, it performs in model 5, 6, 7, and 8. Target status is a dummy variable with the value of "1" if the target is privately held companies and "0" if otherwise.

As illustrated, the coefficients of CrossBorder in model 1, 2, 3, 4, 5, 6, 7, and 8 are negative and significant. As such, this suggests that cross-border M&As yield lower stock price performance than domestic M&As. The negative association supports the result of Datta & Puia (1995), Andrade et al. (2001), and Chen & Young (2010), who also state that foreign acquisitions will destroy the firms' value. Foreign acquisitions conducted by Chinese markets are more likely to failed due to certain institutional restrictions and the poor quality of the institutions in target countries. Moreover, China itself does not have a good legal system to protect the shareholders (Allen et al. 2005). Hence, the results do not support the first hypothesis.

For the second hypothesis, it is found that the coefficient of the ROE is negative in all models. However, the result is only statistically significant in the 61 days (-30, +30) event window. This result has invalidated the second hypothesis. Chinese acquiring firms that have lower accounting performance will generate lower abnormal returns. Beccalli & Frantz (2009) state that M&A transactions will deteriorate the value of the ROE. To acquire a good M&As performance, one has to pay significant attention to geographical relatedness.

The positive coefficient of the interaction term between the ROE and CrossBorder approves the preposition made by the third hypothesis. It states that an acquirer that has better ROE and engages in foreign acquisitions will generate better CAR. The first and fifth models exhibit a 1% level of confidence that is statistically significant. The result means that every increment of 1% of the total $ROE * CrossBorder$ leads to an increment in the CAR during the announcement

period, with an average of 0.572 and 0.580 unit, respectively. On the contrary, the ROE*CrossBorder is negative and statistically insignificant in model 4 and 8. Therefore, the result cannot illustrate the effect of the ROE*CrossBorder on stock return during the 5 days (-2, +2) CAR and no conclusion can be made in this case. However, the positive abnormal return does not always guarantee that the bidders have a higher ROE (Ahsan, 2012).

Furthermore, the firm size shows a negative and statistically significant level at 1% (model 1 and 5), at 5% (model 3 and 7), and 10% (model 2, 4, 6, and 8). The results display that the firm size influences the market reaction to M&A activities within a short-term and long-term period of performance (Datta et al. 2001). The lower gain of shareholders' wealth could indicate that large firms pay a higher premium (Moeller et al. 2004).

Regarding the leverage, it shows a positive and significant results when using CAR (-30, +30) and (-5, +5). Leverage is expected to discipline managers, so they work in the best interest of shareholders. As a result, leverage leads to a better performance of the M&A transactions (Masulis et al. 2007).

Based on Andrade et al. (2001) and Amar et al. (2011), an all-cash financing method yields better returns compared to M&As paid by stock. However, such a form of payment shows a contradictive result obtained from the prior research. The negative and significant coefficient indicates that an all-cash financing method yields lower CAR. When the acquiring companies decided to use cash financing, they might overvalue the target (Wong & Cheung, 2009). The shareholders take all the risks which create a possibility that the expected synergy will not be created (Rappaport & Sirower, 1999). As mentioned earlier, international tax issues affect the cross-border M&As. All-cash deals compel the shareholders to pay taxes that are probably higher than their current levels (Egan, 2012). Thus, cash transactions might bring additional risk, the expenses of which the acquiring firms would not able to bear.

With regard to business diversification, the variable relatedness exposes a 10% significance in model 1, 4, 5, and 8. This output is consistent with the observations done by Chatterjee (1986) who records the positive relationship between the unrelated targets and wealth creation. Since the business is more diversified, companies are more likely to survive during the economic disruption (Hendricks et al. 2009). They further explain that the management has the ability to manage internal resources effectively, so the business will not be influenced by the disruptions.

To see the different results between private and public target firms, this thesis demonstrates additional control variable that can be seen in model 5, 6, 7, and 8. When target status is included in the regressions, it does not give diverse results among the same period of the event windows.

The R-squared is quite small for all the analysis which means that the explanation of the model is not representative enough. Nonetheless, model 5 has the highest R-squared of 4.9% among all models. It suggests that model 5 could explain the data better compared to the other models.

**Table 10 – Regression Result of M&A Performance over the period 1993 – 2016;
CARs (-30, +30), (-10, +10), (-5, +5), and (-2, +2).**

The table exhibits the regression result of eight regression models with different CARs. In model 1, 2, 3, 4, 5, 6, 7, and 8, the dependent variables are 61 days, 31 days, 21 days, 11 days, 5 days, and 3 days CAR of the acquiring firms around the M&A announcement date, respectively. The independent variables are: (1) CrossBorder: Dummy variable with value of “1” if target firm is located outside China and “0” otherwise. (2) ROE: EBIT divided by the shareholders’ equity of the acquiring firms. (3) ROE*CrossBorder: Multiplication of ROE and CrossBorder as interaction term. (4) Ln(FirmSize): Natural logarithm of total assets. (5) Volatility: Retained earnings divided by total assets. (6) FCF: Operating income before depreciation minus interest expense minus income taxes minus capital expenditures divided by the book value of total assets in acquiring firms. (7) Leverage: Total liabilities divided by total assets. (8) Payment: Dummy variable with value of “1” if the transaction is entirely paid in cash and “0” otherwise. (9) Relatedness: Dummy variable with the value of “1” if the target and acquirer do not share the same 3-digit SIC code and “0” otherwise. (10) TargetStatus: Dummy variable with the value of “1” if the target status is private and “0” otherwise.

VARIABLES	CAR (-30, +30)		CAR (-10, +10)		CAR (-5, +5)		CAR (-2, +2)	
	(1)	(5)	(2)	(6)	(3)	(7)	(4)	(8)
CrossBorder	-0.117*** (-0.0302)	-0.119*** (-0.0302)	-0.0651*** (-0.0202)	-0.0659*** (-0.0202)	-0.0552*** (-0.0155)	-0.0553*** (-0.0155)	-0.0276*** (-0.0102)	-0.0281*** (-0.0102)
ROE	-0.127* (-0.0676)	-0.123* (-0.0676)	-0.0587 (-0.0452)	-0.0566 (-0.0452)	-0.0488 (-0.0347)	-0.0486 (-0.0348)	-0.00531 (-0.0228)	-0.00415 (-0.0228)
ROE*CrossBorder	0.571*** (-0.188)	0.580*** (-0.189)	0.14 (-0.126)	0.145 (-0.126)	0.0949 (-0.0969)	0.0953 (-0.0969)	-0.0411 (-0.0636)	-0.0388 (-0.0636)
Ln(FirmSize)	-0.0163*** (-0.00584)	-0.0174*** (-0.00588)	-0.00661* (-0.0039)	-0.00716* (-0.00393)	-0.00729** (-0.003)	-0.00735** (-0.00302)	-0.00335* (-0.00197)	-0.00365* (-0.00198)
Volatility	0.00895 (-0.0307)	0.0102 (-0.0307)	-0.0136 (-0.0205)	-0.0129 (-0.0205)	-0.0075 (-0.0158)	-0.00744 (-0.0158)	-0.00973 (-0.0104)	-0.0094 (-0.0104)
FCF	0.0396 (-0.106)	0.0363 (-0.106)	0.00343 (-0.0709)	0.00182 (-0.0709)	-0.0243 (-0.0545)	-0.0245 (-0.0545)	-0.00808 (-0.0358)	-0.00894 (-0.0358)
Leverage	0.0720** (-0.0366)	0.0662* (-0.0367)	0.0322 (-0.0245)	0.0294 (-0.0246)	0.0346* (-0.0188)	0.0343* (-0.0189)	0.0164 (-0.0123)	0.0149 (-0.0124)
Payment	0.00393	0.00353	-0.0232***	-0.0234***	-0.0313***	-0.0313***	-0.0263***	-0.0264***

	(-0.0134)	(-0.0134)	(-0.00896)	(-0.00896)	(-0.00689)	(-0.00689)	(-0.00452)	(-0.00452)
Relatedness	0.0210*	0.0218*	0.0131	0.0135	0.00749	0.00753	0.00766*	0.00787*
	(-0.0123)	(-0.0123)	(-0.00822)	(-0.00823)	(-0.00632)	(-0.00633)	(-0.00415)	(-0.00415)
TargetStatus		-0.0198*		-0.00949		-0.00089		-0.00511
		(-0.0114)		(-0.00765)		(-0.00588)		(-0.00386)
Constant	0.109**	0.127***	0.0897***	0.0983***	0.0982***	0.0990***	0.0600***	0.0646***
	(-0.0468)	(-0.0479)	(-0.0313)	(-0.032)	(-0.024)	(-0.0246)	(-0.0158)	(-0.0162)
Observations	4,037	4,037	4,037	4,037	4,037	4,037	4,037	4,037
R-squared	0.048	0.049	0.03	0.03	0.04	0.04	0.044	0.044
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2011	-0.0501*	-0.0487*	-0.0523***	-0.0516***	-0.0353**	-0.0352**	-0.0208**	-0.0205**
	(-0.0281)	(-0.0281)	(-0.0188)	(-0.0188)	(-0.0144)	(-0.0145)	(-0.00948)	(-0.00948)
2012	0.0676**	0.0687**	-0.0034	-0.00285	-0.00595	-0.0059	-0.0139	-0.0136
	(-0.0276)	(-0.0276)	(-0.0185)	(-0.0185)	(-0.0142)	(-0.0142)	(-0.00931)	(-0.00932)
2013	0.0750***	0.0776***	0.0238	0.025	0.0222*	0.0224*	0.0187**	0.0194**
	(-0.0261)	(-0.0261)	(-0.0174)	(-0.0175)	(-0.0134)	(-0.0134)	(-0.0088)	(-0.00881)
2014	0.0700***	0.0752***	0.0263	0.0288*	0.0222*	0.0224*	0.0196**	0.0209**
	(-0.0251)	(-0.0253)	(-0.0168)	(-0.0169)	(-0.0129)	(-0.013)	(-0.00847)	(-0.00853)
2015	-0.0629***	-0.0566**	-0.0119	-0.00894	-0.0111	-0.0108	-0.00957	-0.00796
	(-0.024)	(-0.0243)	(-0.016)	(-0.0162)	(-0.0123)	(-0.0125)	(-0.00809)	(-0.00818)
2016	-0.0795***	-0.0753***	-0.0700***	-0.0680***	-0.0627***	-0.0625***	-0.0397***	-0.0386***
	(-0.0264)	(-0.0265)	(-0.0177)	(-0.0177)	(-0.0136)	(-0.0136)	(-0.00891)	(-0.00895)
Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Significance levels *** p<0.01, ** p<0.05, *p<0.1

4.4 Robustness Test

This thesis attempts to re-estimate the main hypotheses by employing a sample comprising independent and control variables for the robustness check. This additional test has been conducted to check the robustness of the abnormal return as mentioned in the previous section and report the results over different measures of profitability.

The event study is compared by using an accounting study measurement, namely return on assets (ROA). According to Bruner (2002), investors use ROA due to its excellent credibility. Furthermore, it is utilized as an indirect tool to capture the economic value.

By substituting the dependent variable, the robustness check brings about a major change in the coefficient. As shown in Table 11, cross-border M&As have a positive and significant association with ROA in both models. Such positive results support the finding by Weber (1996). The positive ROA implies that when engaging in the foreign acquisitions, the bidders make use of their assets effectively to meet the economic interest of the shareholders.

Afterwards, the coefficient of the ROE is positive and noteworthy at 1% significance level. The coefficient shows that, on an average, an increase in ROE by 1% is associated with an increase of 0.308% of acquirer's ROA. The variables CrossBorder and ROE correspond to the first and second hypothesis, respectively.

In contrast to previous results, the interaction term of ROE and CrossBorder entails lower profitability. The negative result implies that firms with a high ROE which engage in cross-border deals do not always create favourable company's performance. The possible explanation in this regard is that ROE and ROA might be considerably correlated that they deliver similar findings (Sher & Yang, 2005).

Considering the control variables, the firm size indicates a better profitability. In comparison to the previous outcome, the coefficient demonstrates the opposite result. Such a positive result is against the ideas by Moeller et al. (2004) who document that smaller firms achieve better M&As performance. The firms' volatility denotes that as the firm's risk gets higher, it yields better profitability. With an increase in firm's risk by 1%, it corresponds to an increase of 0.054% of the ROA. The next variable, FCF, exhibits a positive and significant sign which implies that if there is a possibility of free cash flow being available, it will create a better ROA. This result disclaims the statements made by Jensen (1986). Leverage shows the negative and significant coefficient which does not approve the theory. A negative leverage demonstrates that the use of

debt by the company is higher than the investment return. Thus, it does not achieve a favourable outcome. Further, the result of the variable relatedness is in alignment with the observations made by with Datta & Puia (1995), who state that unrelated M&As generate a lower return. The investors do not perceive that cross-border M&As will create positive investments.

To observe different market reactions, this thesis considers target status as a control variable. From Table 11, a comparison between model 1 and 2 can help to deduce that that the status of the target companies does not give any impact on the company's performance.

Table 11 – Robustness Test

The table presents the robustness check with ROA as the dependent variable. The independent variables are: (1) CrossBorder: Dummy variable with value of “1” if target firm is located outside China and “0” otherwise. (2) ROE: EBIT divided by the shareholders' equity of the acquiring firms. (3) ROE*CrossBorder: Multiplication of ROE and CrossBorder as interaction term. (4) Ln(FirmSize): Natural logarithm of total assets. (5) Volatility: Retained earnings divided by total assets. (6) FCF: Operating income before depreciation minus interest expense minus income taxes minus capital expenditures divided by the book value of total assets in acquiring firms. (7) Leverage: Total liabilities divided by total assets. (8) Payment: Dummy variable with value of “1” if the transaction is entirely paid in cash and “0” otherwise. (9) Relatedness: Dummy variable with the value of “1” if the target and acquirer do not share the same 3-digit SIC code and “0” otherwise. (10) TargetStatus: Dummy variable with the value of “1” if the target status is private and “0” otherwise

VARIABLES	ROA	
	(1)	(2)
CrossBorder	0.00567*** (-0.0021)	0.00575*** (-0.0021)
ROE	0.308*** (-0.00472)	0.308*** (-0.00472)
ROEE*CrossBorder	-0.0491*** (-0.0132)	-0.0495*** (-0.0132)
Ln(FirmSize)	0.000885** (-0.0004)	0.000933** (-0.000403)
Volatility	0.0540*** (-0.00216)	0.0539*** (-0.00216)
FCF	0.241*** (-0.00719)	0.241*** (-0.00719)
Leverage	-0.0500*** (-0.0025)	-0.0497*** (-0.00251)
Payment	0.00137 (-0.000909)	0.00139 (-0.000909)
Relatedness	-0.00281*** (-0.000833)	-0.00283*** (-0.000833)

TargetStatus		0.000817 (-0.000784)
Constant	0.0357*** (-0.00315)	0.0349*** (-0.00324)
Observations	4,444	4,444
R-squared	0.79	0.79
Year Fixed Effect	Yes	Yes
2011	0.00126 (-0.00179)	0.00123 (-0.00179)
2012	-0.00223 (-0.00179)	-0.00225 (-0.00179)
2013	-0.00571*** (-0.00173)	-0.00578*** (-0.00173)
2014	-0.00904*** (-0.00165)	-0.00922*** (-0.00166)
2015	-0.00935*** (-0.00157)	-0.00959*** (-0.00158)
2016	-0.0112*** (-0.00175)	-0.0114*** (-0.00175)
Industry Fixed Effect	Yes	Yes

Significance levels *** p<0.01, ** p<0.05, *p<0.1

CHAPTER 5 Conclusions and Limitations

In the past years, cross-border acquisitions undertaken by Chinese companies have gained popularity worldwide. It is perceived as one of the techniques to gain more profit by expanding the market. However, several prior studies have found a two-sided result pertaining to foreign acquisitions. The shareholders' wealth creation is supported by Georger & Renneboog (2004), Stahl & Voigt (2008), and Wong & Cheung (2009). On the other hand, Datta & Puia (1995), Andrade et al. (2001), Very & Schweiger (2001), Moeller et al. (2005), and Chen & Young (2010) state that cross-border M&A will diminish the firms' value. Build upon this background, this thesis aims to measure whether publicly-listed Chinese acquiring firms generate higher returns in cross-border deals rather than from domestic transactions.

The final sample consists of 6,736 M&A transactions that include 492 cross-border deals and 6,244 domestic deals during the period 1993 – 2016. To calculate the abnormal returns, this thesis employs an event study method. Further, this paper makes use of multiple linear regressions to observe the effect of independent and control variables on abnormal stock return. In more details, a 250-trading days estimation period is used to evaluate the market model to predict the normal returns. Moreover, several event windows are employed to determine the abnormal stock return of acquiring firms around the M&A announcement date. There are four different event windows, including 61 days (-30, +30), 21 days (-10, +10), 11 days (-5, +5), and 5 days (-2, +2). In order to test the hypotheses, this study analyses several regression models using Stata.

The following hypotheses have been examined:

Hypothesis 1: Cross-border M&As by Chinese firms generate higher abnormal returns for acquiring companies as compared to domestic M&As.

The result depicts that cross-border acquisitions have a negative and statically significant effect on the acquiring firms' CAR around the M&A announcement period. It implies that foreign acquisitions yield lower abnormal stock return. Such an outcome is in accordance with the preceding studies conducted by Datta & Puia (1995), Andrade et al. (2001), and Chen & Young (2010). Since the majority shareholders are the Chinese government, they are more likely to not work in the interest of minority shareholders (Chen & Young, 2010). In addition, China does not have a good shareholders' protection which diminishes the firms' value (Allen et al. 2005). Hence, the first hypothesis is rejected.

Hypothesis 2: Chinese acquiring firms with better financial performance lead to higher abnormal returns.

Regarding financial performance, this study reveals that ROE was negatively correlated with the shareholders' return. This result agrees with the finding by Beccalli & Frantz (2009). The coefficient of ROE implies that CAR has decreased as the acquiring firms do not have good accounting measures. This result is strengthened by Allen et al. (2005), who state that China has poor financial mechanisms. Therefore, the second hypothesis is rejected.

Hypothesis 3: Acquirers with better firm performance engaging in cross-border M&As generate higher abnormal returns.

The interaction term between ROE and cross-border M&As has a positive and significant association with the M&As performance. It demonstrates that when the bidders have better ROE and engage in cross-border deals, they generate a higher CAR. Thus, the third hypothesis is accepted.

In conclusion, by using the sample of M&A transactions during the period between 1993 and 2016, cross-border M&As create less value for acquiring firms than the domestic deals. Moreover, there was not much difference in value creation between investing in cross-border private and public target companies. The result of this master's thesis contributes to the academic insight related to M&As performance in emerging markets, especially China. Furthermore, this paper makes use of a recent period of data that considers the last decade and the current globalization period. Furthermore, the results of this thesis research can be useful for practitioners, especially future acquirers, to take a better corporate decision when engaging in foreign acquisitions. While doing so, they should take into consideration several factors such as cultural differences and country-level governance.

This thesis discusses certain presumptions that might entail several limitations. First, the event study methodology requires significant assumptions about stock markets and is vulnerable to other events besides M&As when a long event-window is chosen. Another proxy could be used to measure the M&As performance, such as acquisition premium. Second, the data constraint makes the chosen variables became limited. For instance, the proxy for firm size can be substituted by the relative firm size or market capitalization. Due to the data availability, the measurement that is most practicable is either the total assets or the total sales. Lastly, this thesis draws attention to M&As initiated by publicly-listed acquiring firms. As such, the outcome

cannot be easily implemented in the case of non-publicly listed firms nor other emerging countries.

For the next research, it might be better to include corporate governance mechanisms such as shareholders' protection and ownership structure since they are essential for enhancing the value creation of cross-border M&As.

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APPENDIX A

Sample of Acquisition Attitudes

Variables	Observations	Mean	Median	Standard Deviation	Minimum	Maximum
Attitude	6,736	0.904	1.000	0.294	0.000	1.000

APPENDIX B

Multicollinearity Problem when using GDP as a Control Variable

VARIABLES	CAR (-30, +30)		CAR (-10, +10)		CAR (-5, +5)		CAR (-2, +2)		CAR (-1, +1)	
	(1)	(6)	(2)	(7)	(3)	(8)	(4)	(9)	(5)	(10)
CrossBorder	-0.117*** (-0.0302)	-0.119*** (-0.0302)	-0.0651*** (-0.0202)	-0.0659*** (-0.0202)	-0.0552*** (-0.0155)	-0.0553*** (-0.0155)	-0.0276*** (-0.0102)	-0.0281*** (-0.0102)	-0.0224*** (-0.00777)	-0.0225*** (-0.00777)
ROE	-0.127* (-0.0676)	-0.123* (-0.0676)	-0.0587 (-0.0452)	-0.0566 (-0.0452)	-0.0488 (-0.0347)	-0.0486 (-0.0348)	-0.00531 (-0.0228)	-0.00415 (-0.0228)	-0.021 (-0.0174)	-0.0209 (-0.0174)
ROE*CrossBorder	0.571*** (-0.188)	0.580*** (-0.189)	0.14 (-0.126)	0.145 (-0.126)	0.0949 (-0.0969)	0.0953 (-0.0969)	-0.0411 (-0.0636)	-0.0388 (-0.0636)	0.0136 (-0.0485)	0.0137 (-0.0486)
Ln(FirmSize)	-0.0163*** (-0.00584)	-0.0174*** (-0.00588)	-0.00661* (-0.0039)	-0.00716* (-0.00393)	-0.00729** (-0.003)	-0.00735** (-0.00302)	-0.00335* (-0.00197)	-0.00365* (-0.00198)	-0.00183 (-0.0015)	-0.00184 (-0.00151)
Volatility	0.00895 (-0.0307)	0.0102 (-0.0307)	-0.0136 (-0.0205)	-0.0129 (-0.0205)	-0.0075 (-0.0158)	-0.00744 (-0.0158)	-0.00973 (-0.0104)	-0.0094 (-0.0104)	-0.00514 (-0.00791)	-0.00513 (-0.00791)
FCF	0.0396 (-0.106)	0.0363 (-0.106)	0.00343 (-0.0709)	0.00182 (-0.0709)	-0.0243 (-0.0545)	-0.0245 (-0.0545)	-0.00808 (-0.0358)	-0.00894 (-0.0358)	0.0104 (-0.0273)	0.0103 (-0.0273)
Leverage	0.0720** (-0.0366)	0.0662* (-0.0367)	0.0322 (-0.0245)	0.0294 (-0.0246)	0.0346* (-0.0188)	0.0343* (-0.0189)	0.0164 (-0.0123)	0.0149 (-0.0124)	0.014 (-0.00943)	0.014 (-0.00947)
Payment	0.00393 (-0.0134)	0.00353 (-0.0134)	-0.0232*** (-0.00896)	-0.0234*** (-0.00896)	-0.0313*** (-0.00689)	-0.0313*** (-0.00689)	-0.0263*** (-0.00452)	-0.0264*** (-0.00452)	-0.0211*** (-0.00345)	-0.0211*** (-0.00345)
Relatedness	0.0210* (-0.0123)	0.0218* (-0.0123)	0.0131 (-0.00822)	0.0135 (-0.00823)	0.00749 (-0.00632)	0.00753 (-0.00633)	0.00766* (-0.00415)	0.00787* (-0.00415)	0.00507 (-0.00317)	0.00508 (-0.00317)
TargetStatus		-0.0198* (-0.0114)		-0.00949 (-0.00765)		-0.00089 (-0.00588)		-0.00511 (-0.00386)		-0.000132 (-0.00295)
GDPgrowth	0.0202*** (-0.00671)	0.0191*** (-0.00674)	0.0178*** (-0.00449)	0.0173*** (-0.00451)	0.0159*** (-0.00345)	0.0159*** (-0.00346)	0.0101*** (-0.00226)	0.00982*** (-0.00227)	0.00845*** (-0.00173)	0.00844*** (-0.00174)
Constant	-0.106 (-0.0715)	-0.0766 (-0.0735)	-0.0995** (-0.0478)	-0.0855* (-0.0491)	-0.0712* (-0.0368)	-0.0699* (-0.0378)	-0.0473** (-0.0241)	-0.0398 (-0.0248)	-0.0459** (-0.0184)	-0.0457** (-0.0189)

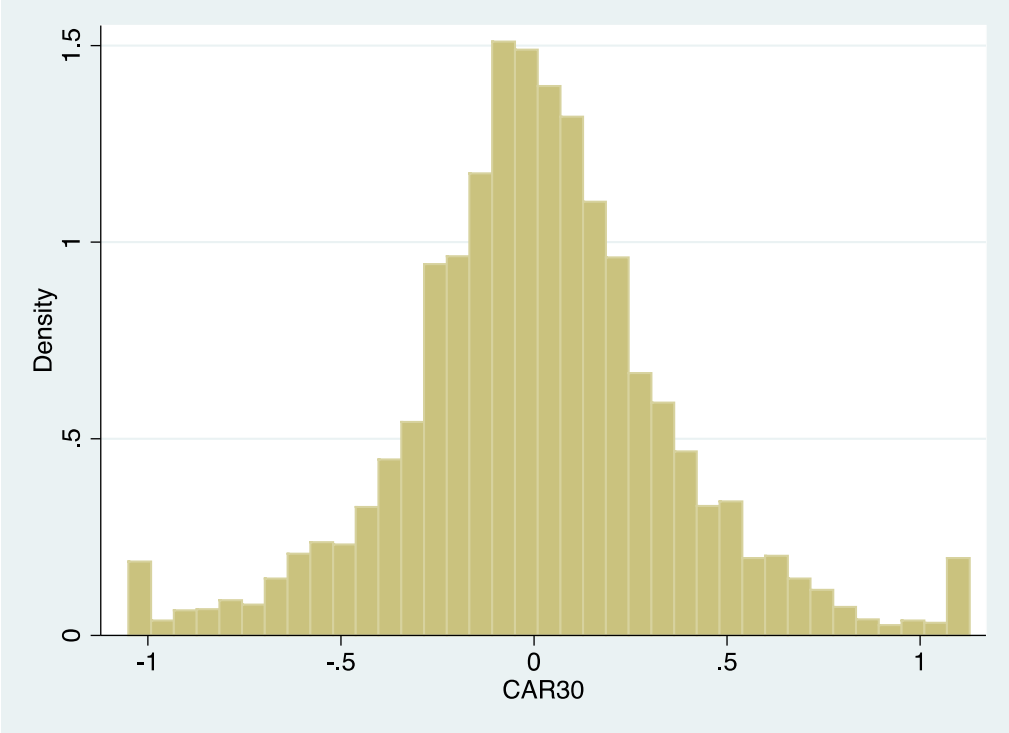
Observations	4,037	4,037	4,037	4,037	4,037	4,037	4,037	4,037	4,037	4,037
R-squared	0.048	0.049	0.03	0.03	0.04	0.04	0.044	0.044	0.042	0.042
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
2011	-0.0279 (-0.0243)	-0.0276 (-0.0243)	-0.0328** (-0.0162)	-0.0327** (-0.0162)	-0.0178 (-0.0125)	-0.0178 (-0.0125)	-0.00974 (-0.00819)	-0.00967 (-0.00819)	-0.00214 (-0.00626)	-0.00213 (-0.00626)
2012	0.124*** (-0.0215)	0.122*** (-0.0215)	0.0460*** (-0.0144)	0.0452*** (-0.0144)	0.0383*** (-0.011)	0.0382*** (-0.0111)	0.0142* (-0.00725)	0.0137* (-0.00725)	0.0139** (-0.00553)	0.0139** (-0.00554)
2013	0.133*** (-0.0193)	0.133*** (-0.0193)	0.0749*** (-0.0129)	0.0748*** (-0.0129)	0.0681*** (-0.0099)	0.0681*** (-0.0099)	0.0478*** (-0.0065)	0.0477*** (-0.0065)	0.0398*** (-0.00496)	0.0398*** (-0.00496)
2014	0.137*** (-0.0184)	0.139*** (-0.0185)	0.0856*** (-0.0123)	0.0865*** (-0.0123)	0.0753*** (-0.00947)	0.0754*** (-0.00949)	0.0532*** (-0.00622)	0.0537*** (-0.00622)	0.0399*** (-0.00475)	0.0399*** (-0.00475)
2015	0.0126 (-0.0173)	0.0149 (-0.0173)	0.0545*** (-0.0116)	0.0556*** (-0.0116)	0.0484*** (-0.00889)	0.0485*** (-0.00891)	0.0281*** (-0.00583)	0.0287*** (-0.00585)	0.0222*** (-0.00445)	0.0222*** (-0.00447)
2016 omitted	-	-	-	-	-	-	-	-	-	-
Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Significance levels *** p<0.01, ** p<0.05, *p<0.1

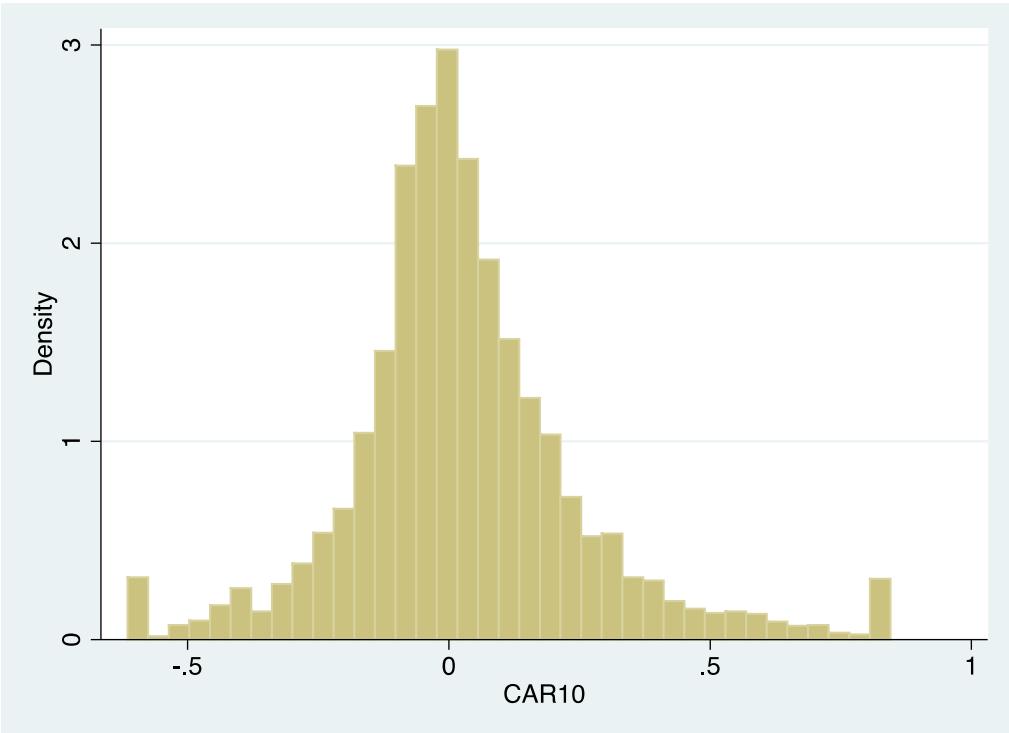
APPENDIX C

Normal Distribution of CAR

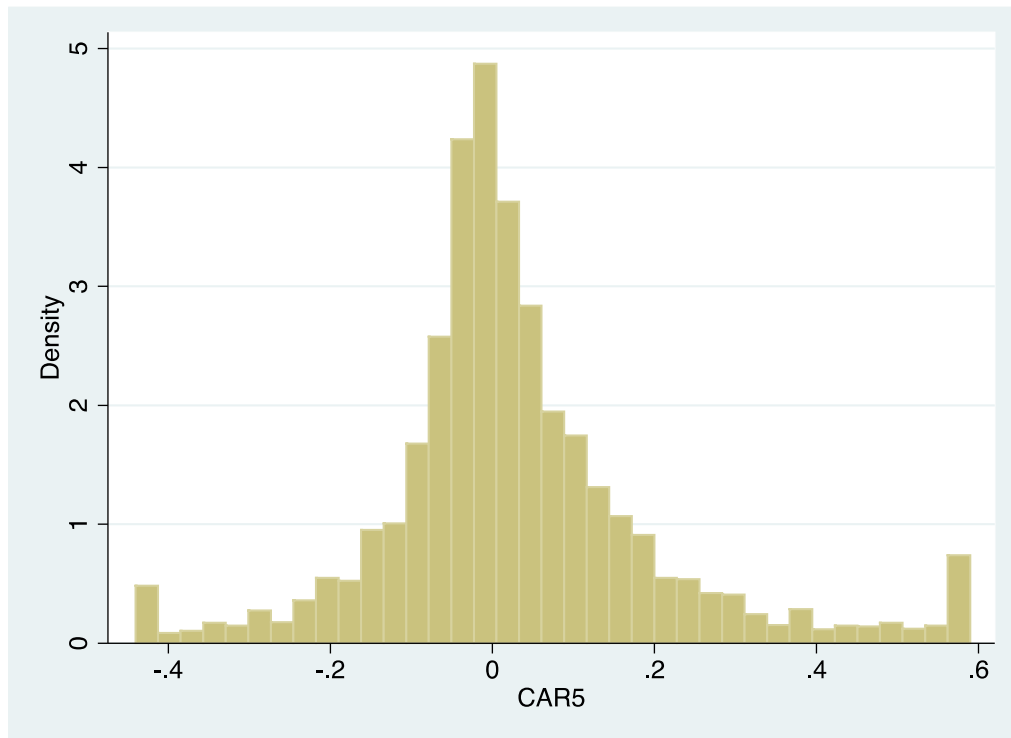
1. CAR (-30, +30)



2. CAR (-10, +10)



3. CAR (-5, +5)



4. CAR (-2, +2)

