Determinants of Chinese Cross-Border M&As*

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This paper focuses on two of the key determinants of Chinese cross-border M&A performance, industry preference and currency appreciation. Our results show that although resource-related bidders may be motivated to pursue national strategic goals, they do not sacrifice their shareholders' wealth. The substantial RMB appreciation following the exchange rate reform leads to higher bidder abnormal returns in the short-term, with no long-term reversal. We find that the insignificant long-term abnormal returns are mainly due to the enhanced empire building invectives and other agency costs of cash-rich firms in some of the currency-driven acquisitions.

Key Words: Cross-border mergers and acquisitions; China; Resource-related; Currency appreciation; Shareholder wealth effects

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1. INTRODUCTION

China has experienced a more than 30 years high rate of economic growth since 1978 and overtaken Japan as the second largest economy in the world since 2010. Among the many signs of China’s development is a surge in Chinese cross-border M&As (hereafter, CBMAs). Armed with more than US$3 trillion in foreign currency reserves, China is on a worldwide shopping spree. The total value of China’s CBMA transactions grew from US$1.7 billion in 2000 to US$43 billion in 2011. Despite this substantial increase in outbound activities and the emergence of the Chinese economy, much of the prior literature on CBMAs are focused in the western economies. Given that a significant proportion of CBMAs are undertaken by state-owned enterprises (hereafter, SOEs) in China, which are potentially incentivized and managed differently from typical firms in a market-oriented economy, it would be doubtful if the mainstream theories and empirical findings derived from the western economies are applicable in China; thus, China serves as unique testing ground and is particularly interesting for research purposes.

In this paper, we focus on examining two country-specific determinants of Chinese CBMAs, industry preference and currency appreciation. Industry preference refers to special political and financial treatments toward Chinese resource-related bidders. The “go global” policy, which was first spelled out in China’s tenth five year plan, specifically encourages resource-related firms to acquire abroad to secure energy and other natural resources for China’s growth over the middle- to long-term.

Internationally, this industry preference has raised major concerns from western countries regarding China’s intentions for natural resource-related sectors. In addition, these deals are usually high profile and proposed by SOEs, which causes foreigners to worry about whether resource-related deals affect national interests or confer unfair advantages on the acquired firms.

Domestically, acquisitions carried out by resource-related bidders are more likely to bear potential conflict of interests between the pursuit of national goals and maximization of shareholders’ wealth. At the same time, they are more likely to be supported politically and financially by the central government than those in any other industries. Hence, we attempt to examine and understand the value consequences of foreign acquisitions carried out by resource-related bidders.

The second determinant we aim to explore here is Renminbi (hereafter, RBM) appreciation. Over the last three decades, the spectacular growth of China’s export sector and massive inflows of foreign direct investment

\[^1\]Source: BBC News Business — China overtakes Japan as world’s second-biggest economy, 14 February 2011.
\[^2\]Source: Thomson One Banker.
DETERMINANTS OF CHINESE CROSS-BORDER M&As (hereafter, FDI) have resulted in an enormous store of foreign exchange reserves, which puts upward pressure on the RMB exchange rate. On July 21, 2005, China officially revalued its currency to RMB8.11: US$1 and modified the exchange rate system. Since then, the nominal exchange rate of RMB has strengthened by 24%. Even more strikingly, according to calculations by The Economist, the real exchange rate of RMB has strengthened by almost 50% since 2005.\(^3\) Despite that the appreciation of RMB over the past decade has spurred many Chinese firms to shop for acquisition targets overseas, little is known about the wealth effect of currency appreciation-driven acquisitions from earlier literature. To our knowledge, the only study that examines the relationship between the Chinese RMB exchange rate and bidder returns is that by Black et al. (2015). Those authors propose that RMB appreciation could benefit acquiring firms’ shareholders if the acquiring firms can make acquisitions more cheaply abroad, but fail to find any support for this proposition. The results of that study could be limited due to small sample size (43 CBMAs) because the authors only consider acquirers that are listed on the Shanghai and Shenzhen stock exchanges.

In this paper, we construct a more comprehensive dataset comprising 111 successfully completed CBMAs announced between 1 January 2002 and 31 January 2011 that were undertaken all Chinese acquirers listed on every stock exchange to assess first, how market reacts to CBMAs undertaken by strategic (resource-related) bidders over both the short and long terms; second, whether any wealth effect resulting from the substantial appreciation of the RMB can be transformed into significant wealth gains for acquiring firms’ shareholders in both the short and long terms.

We find that although resource-related bidders tend to induce conflicts of interests by engaging in foreign acquisitions to pursue national strategic goals, these deals are not detrimental to shareholders’ wealth. Indeed, they add value to bidding firms’ shareholder both around the deal announcement and in the long run. We suggest that this value-enhancement could arise due to several reasons, such as resource-related bidders often engage in acquisitions of targets with substantial tangible assets (i.e., deals that are easier to integrate); more likely to be supported by the government both politically and financially given their interests are aligned with that of the government to facilitate China’s development; or the high levels of media attention and unfavorable perceptions from western countries they face strive them to overcome such tensions by putting more efforts in pre-acquisition planning.

Furthermore, although RMB appreciation increases relative wealth and lower costs of capital for Chinese acquirers, we only find a significant out-

performance of abnormal returns for acquirers engaged in appreciation-driven CBMAs in the short term, with long-term outperformance being insignificant. By carrying out further analyses, we find that as acquirer’s free cash flows-to-equity increases, currency appreciation actually has a significantly negative impact on its long-term abnormal returns, indicating that currency appreciation aggravates empire building or their agency problems, and offsets its benefits.

Our work has several important contributions. First, by employing the most comprehensive dataset of Chinese CBMAs, we empirically examine the difference in bidder performance between resource-related and non-resource related industries to ascertain whether political interests in acquiring resources and shareholder value creation are mutually achievable. Second, this is the first study that documents potential costs and benefits of RMB appreciation on acquirer performance in China. Third, our results add to the empirical literature on behavioural finance by demonstrating that currency appreciation has a significantly negative effect on acquirers over the long-term for cash-rich firms given that the managers of these firms are more likely to build their empire or extract private benefits. Finally, our work suggests that in order for RMB appreciation to transform into real wealth gains for shareholders, China is advised to continue evolving its corporate governance system, so that shareholder protection can be better protected and corporate decisions can be better monitored.

The reminder of this paper is organized as follows. Section 2 reviews the literature and develops the hypotheses. Section 3 describes the data and methodology. Section 4 presents results and discussion. Finally, Section 5 concludes the paper.

2. LITERATURE REVIEW

2.1. The Emergence of China and Motivations behind Chinese CBMAs

The economic reforms introduced by China in 1978 were founded on openness to commerce with the rest of the world. Since that time, China’s export sectors have served as a remarkable engine for China’s spectacular growth. To ensure that China’s reformed and market-oriented economic system continues to flourish, the government started to encouraging companies to invest overseas and thus launched the “go global” policy in 1999. The “go global” policy has three main purposes: first, it aims to alleviate the pressure to appreciate the RMB; second, it aims to sustain the resources necessary for China’s growth over the medium to long term; and third, it aims to support local companies’ efforts to gain competitiveness through the appropriation of foreign technology and the assimilation of modern business practices (Gu and Reed, 2010).
In 2001, the Chinese government identified outward direct investment as one of the keystones of its 2001-2006 Tenth Five-Year Plan and set aside 500 billion US dollars for outbound investment within these five years. The urge to go global intensified when China joined the World Trade Organization (WTO) in 2001 because its participation in this group created not only opportunities for Chinese companies to expand their trade but also intensive competition between local and foreign companies within the domestic market. In 2006, the Chinese government reinforced the go global policy in its 2006-2010 Eleventh Five-Year Plan, aiming to bring the corporate sector in line with China’s globalization. The most recent five-year plan, the 2011-2015 Twelfth Five-Year Plan, has clear targets in place, including a 17% increase in overseas investment, which contemplates overseas investment of US$150 billion by 2015.4

2.2. Existing Literature on Chinese CBMA Performance

Despite the recent surge in CBMA activity, few academic studies empirically examine the performance of Chinese acquirers in CBMAs. Rather, existing studies of Chinese CBMAs are merely reviews of existing theories, descriptions of the current situation and case studies.

Boateng, Wang and Yang (2008) examine the strategic motivation and performance of 27 CBMAs conducted between 2000 and 2004 by Chinese acquirers listed on either the Shanghai or Shenzhen stock exchanges. They find that Chinese CBMAs are driven primarily by strategic motivations, for example, to facilitate international expansion and diversification, to increase market share and power and to acquire strategic assets, and to overcome government-mandated barriers. In terms of merger performance, they find that Chinese acquirers experience significantly positive announcement returns of 1.3% three days around the merger announcement, which supports the view that CBMAs enable international firms to create value for their shareholders by exploiting imperfections in product, factor and capital markets.

Chen and Young (2010) test the relationship between state ownership and acquirer performance by looking at 39 Chinese CBMAs conducted from 2000 to 2008. They proposed two hypotheses, the first being that increased state ownership in the acquiring firms will lead investors to view the deal in less favorable terms (the principal-principal conflict) and the second being that environmental complexity will moderate the negative effect of the principal-principal conflict (the moderating effect). They find support the principal-principal conflict by observing a negative relationship between government ownership in the acquiring firm and merger announcement returns but find no support for the moderating effect.

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Gu and Reed (2010) investigate whether stock markets view Chinese CBMAs as value enhancing for shareholders and whether there is a change in the market perception of CBMAs between before the go global period and after the “go global” period. Their results indicate that throughout the entire sample period, the market do not perceive CBMAs as value-destroying. In addition, they find that whatever the role national strategic interest plays in motivating Chinese CBMAs after the go global policy, it is unlikely that this motivation has come at the expense of shareholder wealth.

Black et al. (2015) compare the performance of Chinese domestic and cross-border mergers from 2000 to 2009 and find that CBMA acquirers enjoy significantly higher returns over the long term, although short term CBMA returns are more negative than those of domestic deals. They also find that acquirers’ returns vary substantially according to acquirer size and to target characteristics.

2.3. Hypotheses Development

Over the past decade, Chinese resource-related acquirers have secured a large number cross-border deals in various regions over the world and attracted intense media coverage. One key distinction of resource-related bidders from the others is that they are more closely controlled and nurtured by the central government. It means that these firms are more likely to sacrifice shareholders wealth to pursue national strategic goals, but at the same time, they are more likely to be supported politically and financially by the government than firms in any other industries.\footnote{For example, with respect to more flexible legislation, the National Development and Reform Commission (NDRC) in 2011 increased the scope of its provincial-level approval authority to US$300 million for the resource-related sector and to US$100 million for other sectors to accelerate the approval process. With respect to easier access to financing, the Chinese government created two special funds to support companies undertaking mine investment overseas in 2009; these companies are also able to obtain access to outward economic and technical cooperation funding from the Ministry of Finance.}

While a stream of literature has examined the effect of government involvement on the performance of Chinese firms overall (e.g., Qi et al., 2000; Sun et al., 2002; Chen and Young, 2010; and Zhou et al., 2012), less attention has been paid on whether the national and corporate interests can be achieved mutually in these strategic firms, albeit their importance and uniqueness.

A recent related study by Gu and Reed (2010), in which a sample of 157 Chinese outbound M&As (OMAs) from 1994 to 2009 are examined. They find that although OMAs exhibit conflicts of interests between the public sector in pursuing national interests and private sector in maximizing shareholder wealth, especially those carried out post the implementation of the “Go Global” policy, they do not have an adverse wealth effect on ac-
quiring firms’ shareholders, neither before nor under the go global periods. Moreover, Black et al. (2015) compare the abnormal returns of Chinese domestic to foreign acquisitions between 2000 and 2009. They show that the market reacts positively to deals targeted at energy, materials and technology sectors, in the short run but for domestic deals only, indicating that external political biases against China are unfounded. Inspired by the above studies, we suggest that if resource-related bidders respond primarily to top-down policies to initiate CBMAs, then the following hypothesis should be satisfied:

**H1:** Resource-related bidders earn lower abnormal returns than non-resource-related bidders in Chinese CBMAs.

On the contrary, if resource-related bidders advance national interests, while at the same time maintain or improve firm performances, then the following hypothesis should be satisfied:

**H2:** Resource-related bidders earn higher (or at least not worse) abnormal returns than non-resource-related bidders in Chinese CBMAs.

Much attention has been paid to the RMB exchange rate in recent years, and the U.S. has placed commercial pressure on China to appreciate its currency against dollar. After keeping the RMB fixed at RMB8.27: US$1 for more than ten years during a period of high growth and declining inflation rates, the People’s Bank of China announced on 21st of July 2005 that it would revalue RMB exchange rate to RMB8.11: US$1 and lift its de facto fixed peg of the RMB to the USD by implementing a managed float system. Since then, the nominal rate of the RMB against the USD has appreciated over 20% (McKinnon, 2005; Qin and He, 2011), and even more so, the real exchange rate of RBM has strengthened by almost 50%, according to The Economist.\(^6\) Most existing literature on the RMB exchange rate has focused on issues related to the risks and opportunities associated with future exchange rate movements,\(^7\) less attention has been given to the impact of RMB appreciation on the volume and performance of Chinese CBMAs after removal of the peg.

Erel, Liao and Weisbach (2012) discover that currency movement is a major factor in determining the pattern of CBMAs such that firms in countries whose currencies have appreciated (depreciated) are more likely to be acquirers (targets). Moreover, they suggest that the effect of currency movements on merger likelihood is likely to be indicative of a more general valuation effect such that higher-valued firms tend to purchase lower-valued

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\(^7\)For example, whether RMB appreciation will lead to a zero-interest liquidity trap in Chinese financial markets that will render the central bank helpless to combat future deflation, similar to the earlier experience of Japan (McKinon (2006), McKinnon (2005) and Qiao (2005)).
firms and that the wealth explanation is a more appropriate argument for this scenario than the mispricing explanation is.

Chen, Officer and Shen (2014) extend to examine the effect of currency appreciation (either temporary or permanent) on acquiring firms’ wealth creation in an international context and find that CBMAs led by acquiring firms with “large currency appreciation” generate higher short- and long-term abnormal returns. The short-term wealth enhancement is more pronounced when acquiring firm is from a country with better corporate governance and legal environments. The outperformance for post-acquisition returns is more pronounced for acquiring firms with stronger shareholder rights. 8

Another study by Black et al. (2015) specifically examine Chinese CB-MAs and suggest that RMB appreciation could benefit bidding firms’ wealth creation if they are able to acquire more cheaply abroad, but find no evidence to support this argument. Their results could be limited by the relatively small sample size (43 CBMAs) because they only consider the acquirers listed on the Shanghai and Shenzhen stock exchanges. In this paper, we use a more comprehensive dataset comprising 111 CBMAs undertaken by Chinese acquirers listed on all stock exchanges with available accounting information. Given that since the implementation of the exchange rate reform, RMB has undergone a long-term sustained unilateral appreciation (similarly to a permanent appreciation), we propose the following testable hypothesis:

**H3**: Chinese bidders earn higher abnormal returns in the period after currency appreciation than in the period before currency appreciation due to the lower cost of capital and increased relative wealth.

Moreover, Chen, Officer and Shen (2014) suggest that similar to overvalued stock market valuation, overvalued currency might also aggravate empire building, or other agency problems, and offsets the benefit of currency appreciation. Following this line of thought, we propose the following hypothesis:

**H4**: Chinese bidders earn lower (or at least not higher) abnormal returns in the period after currency appreciation than in the period before currency appreciation.

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8Chen, Officer and Shen (2014) find that acquiring firms from weak corporate and shareholder rights countries are more likely to overpay their targets following large currency appreciation, thus result in lower announcement returns for acquiring firms’ shareholders. Moreover, acquiring firms from countries with weak shareholder rights make poor choices of targets and thus, any synergies generated over the long term might be so negative as to offset any benefit from currency appreciation-driven CBMAs.

9We classify the Currency Appreciation period as the period after the RMB exchange rate reform on 21 July 2005.
3. DATA AND METHODOLOGY

3.1. Sample selection and data description

We collect a sample of Chinese CBMAs announced between 1 January 2002 and 31 January 2011 from Thomson One Banker. The original sample contains 1,205 deals. We require bidders to be listed firms and exclude from the sample leveraged buyouts, spin-offs, recapitalizations, self-tenders, exchange offers, repurchases and privatizations, leaving us with 394 transactions. Among those transactions, we include only successful deals, which results in a sample of 225 deals. Following Gu and Reed (2010), we exclude deals in which either the bidder or target operates within the financial sector because the financial reporting standards and requirements of the financial sector differ from those of other sectors, which yields a sample of 167 transactions. Finally, we exclude deals that are missing accounting information, which gives us a total number of 111 CBMAs.

We collect a number of informational items from Thomson One Banker, including the name, nationality, public status, DataStream code, primary industry as measured by the four-digit Standard Industrial Classification (SIC) code of each acquirer and target; and the announcement, effective, and withdrawn dates, method of payment of each deal. In addition, the following data are obtained from Thomson DataStream: each acquirer’s share price, market value, market-to-book value, leverage, funds from operations and common equity; and market indexes for Standard and Poor’s / Toronto Stock Exchange Composite, Standard and Poor’s / Australian Stock Exchange 300, FTSE Bursa Malaysia Klc, FTSE Bursa Malaysia ACE, Standard and Poor’s / Hkex GEM, Hang Sheng, FTSE AIM All-Share, TSE Mothers, NASDAQ Composite, New York Stock Exchange Composite, Shanghai Stock Exchange Composite, Shenzhen Stock Exchange Composite, Shenzhen Stock Exchange SME Composite, Shenzhen Chindex Composite, MDAX Frankfurt and MSCI Singapore.

3.2. Measurement of short-term cumulative abnormal returns

To capture the stock market’s initial reaction to a merger announcement, we employ the market-adjusted approach developed by Fuller et al. (2002) to measure abnormal returns (ARs) as

\[
AR_{i,t} = r_{i,t} - r_{m(i),t}
\]

where \( AR_{i,t} \) is the abnormal return for firm \( i \) on day \( t \), \( r_{i,t} \) and \( r_{m(i),t} \) are the daily return of firm \( i \) and the value-weighted stock exchange index daily return (market) at which firm \( i \) is listed on at day \( t \), respectively. They are calculated as the difference between the natural logarithms of the stock price index on days \( t \) and \( t - 1 \) for firm \( i \) and the market, respectively. We then sum the 3-day abnormal returns to obtain the cumulative abnormal
returns (CARs) in the event window \((-1, +1)\), where 0 is the announcement day for each deal:

\[
CAR_i = \sum_{i=-1}^{1} AR_i
\]  

(2)

In addition, to ensure the reliability of our results, we extend the short-run event window to 5 days as a robustness check.\(^{10}\)

3.3. Measurement of long-term buy-and-hold abnormal returns

To examine the stock price effects in the long term, we follow the buy-and-hold abnormal returns (BHARs) approach employed by Buchheim et al. (2001), which measures the difference between the compounded actual return and the compound predicted return as follows:

\[
BHAR_{i,t} = \prod_{t=1}^{T}[1 + R_{i,t}] - \prod_{t=1}^{T}[1 + R_{m(i),t}]
\]  

(3)

where \(R_{i,t}\) and \(R_{m(i),t}\) refer to the monthly return of firm \(i\) and value-weighted stock exchange index monthly return (market) at which firm \(i\) is listed on in month \(t\), respectively.

The BHARs are calculated over a 24-month period beginning one month after the deal announcement and then over a 12-months period beginning one month after the deal announcement as a robustness check.\(^{11}\) While BHARs are frequently used in modern event studies, we note that they can suffer from the effects of compounding expected returns, thereby producing statistically significant results even when none are due to short-term influences (Fama, 1998), and have a potential positive skewness problem (Kothari and Warner, 1997). Thus, to address these problems, we follow Sutton (1993) and report bootstrapped, skewness-adjusted t-statistics in our portfolio analysis. Lyon et al. (1999) find that this method of calculating the significance of abnormal returns improves the test statistic specifications.

3.4. Empirical Model

Our empirical model aims to test how market reacts to CBMAs undertaken by strategic (resource-related) bidders and during currency appreciation period over both the short and long terms. We control for various acquirer- and deal-specific characteristics known to affect acquirer returns

\(^{10}\)The results in the 5-day CAR robustness test are consistent with our main findings.

\(^{11}\)The results in the 12-month BHARs robustness test are consistent with our main findings.
and the primary multivariate frame work is shown as below:

\[
\text{CAR or BHAR} = \alpha + \beta_1 \times \text{Resource - Related BidderDummy} \\
+ \beta_2 \times \text{Currency Appreciation Dummy} \\
+ \beta_3 \times \text{Cash Flows-to-Equity} \\
+ \beta_4 \times \text{Run - Up} + \beta_5 \times \ln(\text{Size}) \\
+ \beta_6 \times \text{Book - to - Market} + \beta_7 \times \text{Leverage} \\
+ \beta_8 \times \text{Payment incl. Stock Dummy} \\
+ \beta_9 \times \text{Public Deal Dummy} \\
+ \beta_{10} \times \text{Diversifying Deal Dummy}
\]

The dependent variable in our model is either CAR or BHAR, which are the market reactions to a merger announcement in the short and long terms, respectively. Our main results are the three-day CAR around the merger announcement date and the BHAR over the twenty-four months beginning one month after the deal announcement. The main variables of interest are Resource-Related Bidder and Currency Appreciation dummies. The Resource-Related Bidder dummy equals to one if the bidder operates in the energy and materials industry sectors, and zero otherwise. The Currency Appreciation dummy equals to one if the merger is conducted after the RMB exchange rate reform on 21 July 2005, and zero otherwise. The rest of the variables are defined and described as below:

Cash Flows-to-Equity is the funds from operations divided by the common equity at one year before the deal announcement.\(^{12}\) In contrast to the debt-monitoring theory, the free cash flow theory suggests that cash flow increases the agency costs of firms and results in poor investment opportunities because managers with more free cash flow tend to invest in negative net present value projects when positive net present value projects are no longer available rather than paying cash out to shareholders (Stulz (1990) and Jensen (1986)). Lang, Stulz and Walkling (1991) extend on the free cash flow theory and find that acquirer announcement returns and cash flow are negatively correlated but that the negative correlation is more pronounced for firms with poor investment opportunities. Moreover, Harford (1999) examines the acquisition behaviour of cash-rich firms and finds that they have more agency conflicts and are more likely to make acquisitions. Consistent with the free cash hypothesis, the acquisitions of cash-rich firms are value-destroying, as evidenced by negative acquirer announcement re-

\(^{12}\)Funds from operations represent the sum of net income and all non-cash charges or credits. It is the cash flow of the company.
turns and poor post-acquisition operating performance of the combined firm.

Run-Up is the market-adjusted BHAR over a three-month period ending one week before the deal announcement. Morck, Shleifer and Vishny (1990) examine the incentives for managerial decisions by analysing the relationship between acquirers’ past performance and acquirer returns on acquisitions and find that bad managers make bad acquisitions simply because they are bad managers, which is consistent with the notion that poor performance drives managers to try something new. Alternatively, Rosen (2006) finds that idiosyncratic acquirer returns are weakly negatively related to acquirer announcement returns. His results support a particular version of Roll’s hubris hypothesis, which predicts that the worst acquisitions are made by well performing firms because their managers are most likely to be infected by hubris.

\( \ln(\text{Size}) \) is the natural logarithm of the bidder’s market value of equity one month prior to the deal announcement and listed in millions of US dollars at the exchange rate as of December 2010. Moeller, Schlingemann and Stulz (2004) document a significant negative effect of firm size on announcement returns, which might be due either to the lack of analyst coverage of small firms, which results in profitable opportunities for investors when a firm’s stock price deviates temporarily from its real value, or to the higher risk is associated with smaller firms, which yields higher returns for investors. Although Black et al. (2012) do not find a negative correlation between firm size and Chinese acquirer performance in the short term, they discover a significantly positive correlation over the long term, whereby increases in firm size lead to higher acquirer returns.

Book-to-Market is the book value of equity divided by the market value of equity one month prior to the deal announcement. Jensen (2005) suggests that high valuations increase managerial discretion; consequently, managers tend to undertake less favourable acquisitions when good acquisitions are no longer available. Dong et al. (2006) find that acquirers with higher valuation are likely to experience lower announcement period returns. However, Zhou et al. (2015) evaluate the performance of Chinese acquirers that engage in domestic M&As and find a positive relationship between market-to-book ratio and acquirer returns in the short-run, whereas the opposite trend is observed in the long-run.

Leverage is used as a proxy for its financial risk and is calculated as:

\[
\frac{(\text{long-term debt} + \text{short-term debt & current portion of long-term debt})}{(\text{total capital} + \text{short-term debt & current portion of long-term debt})}
\]

at one year prior to the acquisition announcement. Jensen and Meckling (1976), Harris and Raviv (1990), and Stulz (1990) suggest that debt can alleviate agency conflicts between stockholders and managers, which is commonly known as the debt-monitoring theory. Maloney, Macormick and Mitchell
(1993) find evidence to support this theory in context of the M&A market; specifically, they show that leverage is positively correlated with acquirer announcement returns because it helps to reduce agency costs and forces managers to work harder to maximize the cash flow of existing capital and to search for new positive net present value investments. However, they also note that the benefit of debt can be limited by its high cost, which can lead to underinvestment, asset substitution and bankruptcy costs in the normal corporate setting.

Payment incl. Stock is a dummy variable equal to one if the deal is financed with at least some stock. Travlos (1987) suggests that in a world characterised by asymmetric information, an all-cash offer indicates potential undervaluation of the acquiring firm and will result in non-negative announcement returns for the acquirer, whereas an all-stock payment signals potential overvaluation of the acquiring firm and will cause significant losses for the acquirer at the announcement. His results are consistent with the signaling hypothesis. Moreover, Chang (1998) compares the announcement returns for privately held and publicly listed targets when stock and cash offers are used and find that in contrast to the negative abnormal returns typically found for publicly traded targets, acquirers experience positive announcement returns on stock offers when the target is privately held. Black et al. (2015) find Chinese bidders benefit from using stock as payment and suggest it can be attributed to their shrewd ability to buy when the market is low and benefit as the market recovers.

Public Deals is a dummy variable which equals which equal one for deals targeting publicly listed firms, and zero otherwise. Recent literature shows that acquirers obtain positive announcement returns when they purchase privately held targets but experience zero to negative returns when they purchase publicly held targets. This difference in performance is commonly known as the private target discount and is explained generally by the following hypotheses: acquisitions of private firms result in more effective monitoring through the creation of blockholders; there are fewer agency problems associated with private acquisitions (for example, bidding firms’ managers are more likely to suffer from empire-building incentives when acquiring large listed targets); and there is a lack of market liquidity for and more information asymmetry with private targets (Chang, 1998; Koeplin, Sarin, and Shapiro, 2000; Moeller, Schlingemann, and Stulz, 2004; Faccio, McConnell, and Stolin, 2006; Officer, 2007).

Diversifying Deals is a dummy variable equal to one for deals in which the bidder’s industry differs from the target’s as defined by the two-digit SIC code, and zero otherwise. There is a considerable literature on the impact of industry relatedness on acquirer value creation. On the one hand, many studies find that diversification is value-destroying for acquirers, whereas the opposite is true for focused acquisitions. This diversifi-
cation discount is usually justified by agency theory, overinvestment and cross-subsidization arguments and by the inefficient allocation of resources between firms in different industries (Megginson, Morgan and Nail, 2004; Dos Santos, Errunza and Miller, 2008). On the other hand, Black et al. (2012) compare the merger performance of Chinese and U.S. bidders and find that the diversifying effect exists in U.S. market but does not play a significant role in China. Other studies reveal that diversifying acquisitions are value-enhancing for acquiring firms’ shareholders and suggest that this diversification premium might emanate from enhanced economies of scope and market power, the coinsurance effect, and internal capital market efficiencies (Matsusaka, 1993; Hubbard, Kuttner and Palia, 1999).

3.5. Sample statistics

3.5.1. Time Series Distribution of Chinese CBMAs Stratified by Target Nationality

Table 1 reports the time-series distribution of Chinese CBMAs stratified by target nationality. We find that the number of completed M&As has tripled between 2002 and 2010. Indeed, after a dramatic increase between 2007 and 2008, more than 20 deals are conducted during each year. In particular, we observe that in 2009, when most developed countries remain mired in the aftermath of the global financial crisis, the number of successfully completed CBMAs reached a record high, accounting for 25 deals in our sample. Almost half of these deals are targeted at firms in cash-strapped economies, such as the United States, Canada and Australia. This boost in merger activity can be attributed to many factors, such as China’s increasing economic power; the implementation of a series of government programs designed to encourage outward FDI projects to alleviate China’s resource bottleneck, facilitate industrial upgrades, improve innovation capabilities, and increase the competence of Chinese firms on the global market (Morck, Yeung and Zhao, 2008); and the global financial crisis, which altered foreign countries’ attitudes towards Chinese acquirers and created myriad opportunities for them to buy assets more cheaply abroad.

Table 1 also shows that in terms of the deal volume time distribution of targets based on nationality, there are three top destinations for Chinese CBMAs: Hong Kong, the United States, and Australia. Hong Kong targets account for more than 17% of total deal volume. We note that there is a major shift in target country preference over time. Prior to 2007, Hong Kong, Indonesia and Germany were the most targeted destinations, whereas since 2007, firms in Hong Kong, the United States, Australia, Singapore, Canada and Japan have become the preferred targets of Chi-
TABLE 1.

Time Distribution of Targets by Nations

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This table shows the time-series distribution of Chinese cross-border M&As and of targets stratified by their nation. The figures shown represent the number of deals conducted within each target nation by year.

This evolution of target country preference from primarily emerging markets to developed markets not only signals the level of market development but also indicates the radical expansion of Chinese acquirers into overseas assets.
3.5.2. Acquirer CAR and BHAR Stratified by Acquirer Industry

Table 2 Panel A shows that CBMAs enjoy insignificant 3-day CAR of 0.86% overall. There is a strong preference for Chinese firms within the materials, high-technology, industrials and energy sectors to acquire abroad. The resource-related bidders (those within either the energy or materials sectors) generate significant abnormal returns of 2.73% in the short term.

| Panel A. Acquirer Short-Term Performance 3-day CAR by Acquirer Industry |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Overall         | CPS             | Energy          | Health          | HT              | IND             | Materials       | Media           | Real estate      | Retail Staples   |
| Mean            | 0.0086          | 0.0310          | 0.0227**        | −0.0488         | −0.0112         | −0.01160.0297***| −0.0084         | 0.0531          | 0.0276          | −0.0259         | 0.0273***       |
| P-Value         | (0.129)         | (0.332)         | (0.022)         | (0.284)         | (0.348)         | (0.410)         | (0.009)         | (0.830)         | (−)             | (−)             | (0.281)         | (0.268)         | (0.001)         |

Panel A (B) of this table reports the short-term 3-day CAR(−1,+1) around the date of deal announcement (the long-term 24-month BHAR(0,+24) after the date of deal announcement) stratified by the acquirer industry. The industry sector is classified by acquirer TF Macro Industry obtained from Thomson One Banker. The equation CAR_i = Σ_n=0 AR_i is used to calculate CAR, and the equation BHAR_{i,t} = \prod_{t=0}^{T}[1 + R_{i,t}] − \prod_{t=0}^{T}[1 + R_{m,t}] is used to calculate BAHR. For the abbreviated industries: Overall stands for all industry sectors in the full sample; CPS stands for Consumer Products and Services; Energy stands for Energy and Power; Health stands for Healthcare; HT stands for High Technology; IND stands for Industrials; Real estate stands for Real Estate; Telecom stands for Telecommunication; Energy & Materials are classified as Resource-Related sector in our sample. The mean CAR is reported with p-value in parentheses. Significance at the 1% level, 5% level and 10% level is denoted ***, ** and * respectively. N donates the number of deals conducted within each industry sector.

Table 2 Panel B indicates that CBMAs are significantly value destroying for acquirers in the long term, with a negative 24-month BHAR of −12.86%. Media bidders experience the most significant loss, −49.88%, whereas resource-related bidders are associated with an insignificant loss of −0.27% two years after the deal announcement.

4. RESULTS AND DISCUSSION

4.1. Short-term multivariate analysis

In this section, we employ multivariate regressions to estimate how the market reacts to CBMAs undertaken by resource-related bidders and during currency appreciation period 3 days around announcement date while controlling for common bidder- and deal-specific characteristics known to affect bidder returns. The results are reported in Table 3 and standard errors are adjusted for heteroskedasticity.
This table presents the results for the multivariate regression analysis of the Chinese cross-border M&As. In these models, we regress 3-day CAR\((-1, +1)\) around the date of deal announcement. We include a dummy which takes the value of one — if the bidder is within energy or materials sector ("Resource-Related Bidder"); if the deal is conducted after RMB exchange rate reform from 21st July, 2005 ("Currency Appreciation"); if the deal is financed with at least some stock ("Payment incl. Stock"); if the target is publicly listed ("Public Deal"); and finally, if the target is in a different industry to the bidder as measured using the first two digits of the four digit Primary SIC code of the two firms ("Diversifying Deal"). We also include the acquirer's cash flows-to-equity ("Cash Flows-to-Equity") calculated as the funds from operations divided by the common equity at one year before the deal announcement. The acquirer’s run-up ("Run-Up") calculated as the market-adjusted buy-and-hold return of the acquirer’s stock over

\[
\begin{array}{l|ccc}
\text{TABLE 3.} \\
\text{Multivariate Regression Analysis for Acquirer 3-day CAR} \\
\hline
\text{3-day CAR} & \text{3-day CAR} & \text{3-day CAR} \\
\text{(1)} & \text{(2)} & \text{(3)} \\
\hline
\text{Resource-Related Bidder} & 0.0321^{***} & 0.0338^{***} \\
& (0.003) & (0.002) \\
\text{Currency Appreciation} & 0.0258^{*} & 0.0283^{**} \\
& (0.058) & (0.029) \\
\text{Cash Flows-to-Equity} & -0.0929^{*} & -0.1018^{**} & -0.0981^{**} \\
& (0.052) & (0.038) & (0.038) \\
\text{Run-Up} & 0.0340 & 0.0422^{**} & 0.0388^{*} \\
& (0.117) & (0.050) & (0.068) \\
\text{ln(Size)} & 0.0015 & 0.0045 & 0.0007 \\
& (0.664) & (0.130) & (0.832) \\
\text{Book-to-Market} & 0.0170 & 0.0166 & 0.0144 \\
& (0.312) & (0.305) & (0.386) \\
\text{Leverage} & 0.0004 & 0.0003 & 0.0004 \\
& (0.174) & (0.229) & (0.178) \\
\text{Payment incl. Stock} & 0.0468^{**} & 0.0508^{**} & 0.0400^{*} \\
& (0.031) & (0.034) & (0.056) \\
\text{Public Deal} & -0.0037 & 0.0004 & -0.0051 \\
& (0.760) & (0.975) & (0.668) \\
\text{Diversifying Deal} & -0.0071 & -0.0097 & -0.0088 \\
& (0.601) & (0.480) & (0.511) \\
\text{Constant} & -0.0107 & -0.0388 & -0.0243 \\
& (0.690) & (0.189) & (0.405) \\
N & 111 & 111 & 111 \\
\text{Adjusted-}R^{2} & 0.131 & 0.101 & 0.162 \\
\hline
\end{array}
\]
the period beginning 105 days and ending 6 days prior to the announcement date. The book-to-market value ("Book-to-Market") of the acquirer as well as the acquirer’s size ("ln(Size)") measured one month prior to the announcement of the deal. The acquirer’s leverage ("Leverage") calculated as (Long Term Debt + Short Term Debt & Current Portion of Long Term Debt) / (Total Capital + Short Term Debt & Current Portion of Long Term Debt) at one year prior to the acquisition announcement. All continuous variables are winsorised at the 1% and 99% levels. The p-values shown in parentheses are adjusted for heteroskedasticity. Significance at the 1% level, 5% level and 10% levels is denoted \(*\), \(\ast\) and \(\ast\) respectively.

Regression (3) shows that resource-related bidders are associated with higher announcement period abnormal returns of 3.38% at a 1% significance level, suggesting that although resource-related bidders may carry out acquisitions to promote national interests, the market do not respond unfavorably toward them. Indeed, such deals create significant wealth for bidding firms’ shareholders in the short-term, support our second hypothesis. At the same time, our first hypothesis stating that political influences divert firms from maximizing shareholders’ wealth is rejected.

The coefficient on currency appreciation is positive and statistically significant at a 5% level in our sample. The magnitude of the coefficient suggests that CBMAs conducted after RMB exchange rate reform are associated with a 2.83% CAR improvement, ceteris paribus. Our results indicate that firms can create short-term value for their shareholders by purchasing foreign assets using their appreciated domestic currency, supporting hypothesis 3. This value enhancement is in line with Chen, Officer and Shen’s (2014) results, in which they find that CBMAs led by acquirers with “large currency appreciation” generate higher short- and long-term abnormal returns either through higher expected earnings or lower cost of capital. Erel, Liao and Weibach (2012) also suggest that the effect of currency appreciation on bidder returns is likely to be indicative of a general valuation effect and is attributed to the wealth explanation (Rhodes-Kropf and Viswanathan, 2004).

Among the control variables, we find that cash flows-to-equity has a significantly negative impact on bidder share-term performance. This correlation is supported by the free cash flow theory such that cash flow increases the agency costs of acquiring firms and results in poor investment opportunities, and it is also consistent with the findings in prior literature (Lang, Stulz and Walkling, 1991; Harford, 1999). Moreover, we find that CARs are significantly higher for acquirers with higher stock price run-ups, suggesting that the market welcomes bidding firms’ managers who have had recent success to undertake foreign acquisitions.
Another interesting result we find is the positive market reaction afforded to acquisitions with payment involving at least some stock. The same market reaction is found by Black et al. (2015), in which the authors explain such reaction as due to the shrewd ability of Chinese bidders to buy when the market is low and benefit as the market turns upward. This market reaction may also due to that Chinese investors face more information asymmetry than those in developed economies, they tend to discount private targets and view cash financing as value destroying or overpaying. If this is the case, payment incl. stock deals are more likely to be viewed as discounted for information asymmetry or more justified for the target’s value, especially when the target is a privately listed foreign firm. Another possible explanation, suggested by Wang et al. (2014), is that investors tend to speculate on and in favour of payment incl. stock deals, as it is a less frequently used way of financing due to the split-share structure, so they might look at it as a positive signal.

4.2. Long-term multivariate analysis

To gain additional insights into whether acquisitions carried out by resource-related bidders and during currency appreciation period serve the interests of long-term shareholders, we extend our multivariate analysis to the long term and control for various bidder- and deal-specific characteristics found to affect BHARs. The results are presented in Table 4.

Regressions (1) and (3) show that resource-related acquirers outperform other acquirers over the long term, but the outperformance is only marginally significant. Our long-term results are in line with that of the short-term and suggest that resource-related CBMAs promote national interests at the expense of shareholder wealth is unfounded.

However, we find that currency appreciation has an insignificant positive effect on bidder abnormal returns in the long term. This insignificant outperformance over the longer time span naturally raises our concerns on what factors could potentially erode the gains that would otherwise accrue to acquiring firms’ shareholders in appreciation-driven deals.

Inspired by Chen, Officer and Shen’s (2014) work, in which they find poor governance (mainly proxied by shareholder protection) drives firms from countries with appreciated currencies to undertake acquisitions with lower or even negative synergies, or overpay for target firms, hence offsetting any benefits from large currency appreciation deals. China, known to have high ownership concentration (typically state ownership), high information asymmetry, and weak institutional environments, the minority investor protection is weak, thereby empire building incentives and other
agency costs can play a critical role in currency appreciation-induced acquisitions.

TABLE 4. Multivariate Regression Analysis for Acquirer 24-month BHAR

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</tbody>
</table>

This table presents the results for the multivariate regression analysis of the Chinese cross-border M&As. In these models, we regress 24-month BHAR(0, +24) after the month of deal announcement. We include a dummy which takes the value of one — if the bidder is within energy or materials sector (“Resource-Related Bidder”); if the deal is conducted after RMB exchange rate reform from 21st July, 2005 (“Currency Appreciation”); if the deal is financed with at least some stock (“Payment incl. Stock”); if the target is publicly listed (“Public Deal”); and finally, if the target is in a different
industry to the bidder as measured using the first two digits of the four digit Primary SIC code of the two firms (“Diversifying Deal”). We also include the acquirer’s cash flows-to-equity (“Cash Flows-to-Equity”) calculated as the funds from operations divided by the common equity at one year before the deal announcement. The acquirer’s run-up (“Run-Up”) calculated as the market-adjusted buy-and-hold return of the acquirer’s stock over the period beginning 105 days and ending 6 days prior to the announcement date. The book-to-market value (“Book-to-Market”) of the acquirer as well as the acquirer’s size (“ln(Size)”) measured one month prior to the announcement of the deal. The acquirer’s leverage (“Leverage”) calculated as (Long Term Debt + Short Term Debt & Current Portion of Long Term Debt) / (Total Capital + Short Term Debt & Current Portion of Long Term Debt) at one year prior to the acquisition announcement. Currency Appreciation × Cash Flows-to-Equity is the interaction term. All continuous variables are winsorised at the 1% and 5% levels. The p-values shown in parentheses are adjusted for heteroskedasticity. Significance at the 1% level, 5% level and 10% levels is denoted ***, ** and * respectively.

Under this line of thinking and given that the free cash flow theory suggests as cash flow increases, the agency costs of firms increases; we choose to use cash flow-to-equity as a proxy for agency costs.\(^{13}\) We interact our cash flows-to-equity variable with the currency appreciation variable and the results are presented in regression (4). We find that as acquirer’s free cash flows-to-equity increases, currency appreciation has a significantly negative impact on acquirer’s long-term abnormal performance. Even more interestingly, the effect of cash flows-to-equity is positive and significant on acquirer’s long-term abnormal returns before the RMB exchange rate reform. Our results potentially indicate that currency appreciation, or overvalued currency, can induce agency conflicts between managers and shareholders, such that managers become tempted to engage in foreign acquisitions to build their empire or extract private benefits. Similarly, Chen, Officer and Shen (2014) suggest that “taking advantage of exchange rate mispricing is not a sufficient condition to benefit shareholders of acquiring firms. The lack of effective shareholder protection seems to offset (via higher premiums and lower synergies) any benefit from appreciation-driven cross-border deals, which is exactly what agency theory predicts.”

In terms of other control variables, we find that bidder’s run-up persistently exerts a significantly positive effect on bidder returns over the long term, whereas the sign on the coefficient of payment incl. stock dummy is reversed from positive in the short term to negative in the long term. This

\(^{13}\)In DataStream, Free Cash Flow is also named as Funds from Operations (Worldscope item: WC04860).
negative impact of stock payment supports the negative signalling effect of stock offers and suggests that the market will punish overvalued acquirers that engage in CBMAs over time.

5. CONCLUSION

This paper examines the wealth effects of acquisitions undertaken by resource-related bidders and during currency appreciation period in both the short and long terms. By employing a comprehensive sample of 111 CBMAs conducted by Chinese acquirers listed on all stock exchanges from 1 January 2002 to 31 January 2011, we find that although resource-related bidders tend to induce conflicts of interests by engaging in foreign acquisitions to pursue national strategic goals, these deals are not detrimental to shareholders’ wealth. Indeed, they add value to bidding firms’ shareholder both around the deal announcement and in the long run. We suggest that this value-enhancement could arise due to several reasons, such as resource-related bidders often engage in acquisitions of targets with substantial tangible assets (i.e., deals that are easier to integrate); more likely to be supported by the government both politically and financially given their interests are aligned with that of the government to facilitate China’s development; or the high levels of media attention and unfavorable perceptions from western countries they face strive them to overcome such tensions by putting more efforts in pre-acquisition planning.

Furthermore, after China officially revalued its currency and modified its exchange rate system on July 21, 2005, the RMB exchange rate has strengthened substantially, which has led to increased relative wealth and lower costs of capital for Chinese acquirers engaged in CBMAs. However, we only find a significant outperformance of abnormal returns for acquirers engaged in appreciation-driven CBMAs in the short term, with long-term outperformance being insignificant. By carrying out further analyses, we find that as acquirer’s free cash flows-to-equity increases, currency appreciation actually has a significantly negative impact on it long-term abnormal returns, indicating that agency conflicts are exacerbated following currency appreciation. Consequently, we suggest that for RMB appreciation to transform into real wealth gains for acquiring firms’ shareholders, China is advised to continue evolve its corporate governance system, so that shareholder protection can be better protected and corporate decisions can be better monitored.
REFERENCES


