Short-term value creation through cross-border M&A transactions in Emerging Economies – Evidence from China

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Dissertation written under the supervision of Professor Pramuan Bunkanwanicha

Dissertation submitted in partial fulfilment of requirements for the MSc in Finance, at Universidade Católica Portuguesa and for the MSc in Management at ESCP Business School, 13/05/2022.

Abstract

Title: Short-term value creation through cross-border M&A transactions in Emerging Economies – Evidence from China

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This paper investigates whether Chinese companies can achieve significant abnormal returns through cross-border M&A (CBMA) transactions and the possible reasons. The final sample consists of 119 Chinese companies listed on the Shanghai Stock Exchange (SSE) or Shenzhen Stock Exchange (SZSE) that conducted a CBMA transaction from 2010 to 2021. I could observe significant abnormal returns through CBMA transactions of 1.9% for the event window [-2,2]. For event window [0,1], a significant majority of Chinese companies (58.9%) were found to be able to generate positive abnormal returns through CBMA transactions. Furthermore, I found a significant impact on the abnormal returns of the acquiring company for particular firm- and deal-specific characteristics such as the industry match of acquirer and target, the listing of the acquiring company, and the deal value in various event windows. This paper aims to contribute to the previous findings and extend the research in an updated time period. Acquiring companies can use the results of this paper to positively impact abnormal returns through specific company and transaction characteristics and minimize the risk of short-term value destruction through the CBMA transaction.

Keywords: Cross-border Mergers & Acquisitions, M&A, short-term value creation, abnormal returns, China, Emerging Markets

Abstrato

Título: Criação de valor a curto prazo através de transacções transfronteiriças de fusões e aquisições em economias emergentes - Provas da China

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Este documento investiga se as empresas chinesas podem obter retornos anormais significativos através de transacções transfronteiriças de fusões e aquisições (CBMA) e as possíveis razões. A amostra final é constituída por 119 empresas chinesas cotadas na Bolsa de Xangai (SSE) ou na Bolsa de Shenzhen (SZSE) que realizaram uma transacção CBMA de 2010 a 2021. Pude observar retornos anormais significativos através de transacções CBMA de 1,9% para a janela do evento [-2,2]. Para a janela de eventos [0,1], uma maioria significativa de empresas chinesas (58,9%) foi considerada capaz de gerar retornos anormais positivos através de transacções CBMA. Além disso, encontrei um impacto significativo nos retornos anormais da empresa adquirente para características específicas da empresa e do negócio, tais como a correspondência da indústria do adquirente e do alvo, a listagem da empresa adquirente, e o valor do negócio em várias janelas de eventos. Este documento visa contribuir para os resultados anteriores e alargar a investigação num período de tempo actualizado. As empresas adquirentes podem utilizar os resultados deste documento para ter um impacto positivo nos retornos anormais através de características específicas da empresa e da transacção e minimizar o risco de destruição do valor a curto prazo através da transacção CBMA.

Palavras-chave: Fusões e Aquisições transfronteiriças, M&A, criação de valor a curto prazo, retornos anormais, China, Mercados Emergentes

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Introduction

On 11th March 2021, the National People's Congress (NPC) announced the 14th five-year plan in the Era of China's reform(Aglietta et al., 2021), which only started in 2013. This plan "aims to initiate a structural shift from intensive accumulation to innovation-driven growth," meaning that China wants to be nothing less than the benchmark in manufacturing and the pioneer in innovation. Those goals should be reached through Infrastructure and trading projects like the belt & road initiative (BRI) or the Regional Comprehensive Economic Partnership (RCEP) trade agreement[1]. While the BRI further strengthens bilateral trade relations and supports Chinese infrastructure companies through an annual investment of $ 85bn (Bagchi, 2021), the RCEP mainly strengthens multilateral trade relations among Asia-Pacific allies with the world's largest trade agreement. Both initiatives support Chinese companies now and pave China's rise as an economic world power. China's dedicated and aggressive expansion policy seems to have worked in the past: One indicator showing their recent economic success story is the MSCI China Index, covering about 85% of China's equity universe (MSCI, 2022) and had an annual growth rate of 10.4% in the last five years. The World Bank described China's economic growth in recent years as "the fastest sustained growth of any major economy in history. "(Morrison, 2019). It is good to see that China's economic rise and their solidified trade relations go hand in hand with this, favoring the global operations of their companies. However, as already mentioned before, the country does not want to be the outsourcing cheap production partner for the Western world. China is already on its way to becoming the innovative powerhouse of the world, which is further proven by the fact that the general product development of China has a CAGR from 2010 to 2020 of 17.31% (Textor, 2021) . To establish itself further in the innovation field, China launched a "Go Global Policy" in 2014, which also aims to make global investments through outbound M&A transactions to secure local resources and strategic know-how . These are transactions where one company (A) acquires (or gets acquired) or merges with a foreign company B in a cross-border M&A transaction. According to Textor (2022), there have been 2543 CBMA transactions of Chinese companies from 2010 to 2020. The total volume of these transactions was $583.2bn (Textor, 2022b), proving that they are becoming increasingly important in the strategy of Chinese companies. While joint partnerships and trade agreements lead in the first place to higher economic activity and thus higher value

[1] The RCEP will be active from the 1st January 2022

creation opportunities for the companies, it is not as easy to analyze the success of M&A transactions. Furthermore, it is essential to evaluate whether the success of a country, for example, in an increase in global transactions or the GDP, also goes hand in hand with victory for the shareholders of the involved companies. While there are many valid reasons why a company should acquire foreign companies from a strategic aspect, the acquiring company's shareholders often do not appreciate such an announcement of the company. This is because they often feel that the target company was overvalued or that the potential synergies cannot be achieved due to cultural differences and other hurdles. On the other hand, the acquiring company has many different incentives for this strategic procurement of a foreign company: These can be (especially for companies of emerging economies) the acquisition of know-how and talent, locational advantages, or simply the achievement of synergies that exceed the target price, and other factors discussed later in detail.

To analyze how shareholders react on average to outbound M&A transactions of Chinese companies, this thesis will investigate if and to what extent Chinese companies achieve value creation when the acquisition of a foreign target is announced. The paper will discuss several possible theories in order to find possible reasons for a significant reaction of the shareholders towards an announcement. Furthermore, it will be analyzed if any other company-related explanatory reasons explain a potentially significant increase in the market value of a company, like the region of the target company, the acquisition stake in the target company, or the primary stock exchange of the acquiring company. The value creation of Chinese companies through M&A is a topic that has been increasingly discussed, especially in the recent past. While the previous studies mainly found significant positive effects of M&A announcements on the stock price in the short term, some studies found no significant or even a negative impact of M&A announcements on the companies' stock price. Furthermore, the previous studies deal exclusively with CBMA transactions from 1991 to 2012. Only Ding et al. (2021) analyze a more recent sample from 2009 to 2018. This paper aims to contribute to the previous findings and extend the research in terms of timeliness (scope of years) and some possible correlations, such as the proportion of ownership acquired by Chinese companies. Thus, the sample studied consists of 119 deals analyzed over the period from January 2010 to December 2021. All acquiring companies analyzed were listed on the Shanghai or Shenzhen Stock Exchange at least 70 trading days before and ten days after the deal announcement and had share price data available

Literature Review and Hypothesis Development

The analysis of short-term performance due to CBMA is generally a topic that has already been addressed many times in the past with different results for different countries and regions. For example, Uddin and Boateng, who have already done several studies about the short-term performance of Chinese companies, also analyzed companies from the United Kingdom from 1994 to 2003 and whether they gained value through CBMA (Uddin & Boateng, 2009). The authors hypothesized as possible reasons for abnormal returns through CBMA that the acquiring company benefits from several synergies, which have been discussed in previous papers (Trautwein, 1990; Yook, 2003). Financial synergies, operational synergies, and managerial synergies. Among other possible reasons, such as optimizing the tax structure, Boateng and Uddin cite the diversification of risk as a source of potential significant abnormal returns. This is supposed to increase the market value of the bidding company much more than the price it has to pay. However, in their paper, the authors concluded that the UK companies do not create significantly abnormal returns due to CBMA, and also, there was no statistical evidence that the size of the M&A deal has any significant influence on the firm performance.

Nevertheless, it makes sense to conduct different analyses of value creation through CBMA with different countries and time periods. On the one hand, the context and motives of CBMA change with the regions of the acquiring (and also the target) companies. On the other hand, some authors arrive at different results due to different databases, methodologies, and assumptions.

Value creation of Chinese Companies through CBMA

Companies from emerging economies do not only have the motives described by Boateng et al. in their sample study of British companies but several more that offer more room for potential value enhancement through CBMA: According to Ding et al., that studied the differences in returns of Chinese companies through CBMA from 2009 to 2018, there are four different explanations for market value creation in emerging economies (Ding et al., 2021). Firstly, the authors name the theory of ownership advantages that the acquiring company can now use in terms of ownership, location, and internationalization. For the second reason, the authors call the theory of institutional arbitrage, meaning that the domestic bidder of an emerging economy can invest in developed foreign markets to decrease their vulnerability to a weak domestic institutional environment. This makes especially sense for Chinese companies since the companies may seek higher property rights in foreign markets. A third reason, the authors name the expansion of knowledge through the acquisition and thus the overcoming of resource deficiencies(Mathews, 2017). As the last possible explanation, the authors recall the springboard theory (Luo & Tung, 2018). This theory explains as motives of firms from emerging countries to internationally expand the acquisition of strategic assets and the compensation of disadvantages in the home countries through location advantages.

Ding et al. find in their analysis evidence for positive cumulative abnormal returns in the short run within a 21-day event window through CBMA (Ding et al., 2021). Hence they conclude that the going out strategy of China works and should further be actively promoted. However, the authors argue that the effects are heterogeneous and can vary from firm to firm, and thus the companies should not take the positive abnormal return through CBMA for granted.

Other studies with older samples show similar results: Boateng et al. (2015) found significant abnormal returns in CBMA of Chinese companies in an analysis of a comparatively large selection of 445 deals in the period 1998-2008. They also conclude support for the institutional theory: government incentives such as loans at low-interest rates, China actively and apparently successfully shapes its economy. The authors also find that the country of origin of the target company plays an essential role: Asian targets have a significant negative impact on the returns of acquiring companies. Accordingly, an international expansion of Chinese companies in the Asian region is evaluated significantly negatively compared to North America or Europe (Boateng et al., 2015). This may be due to the fact that shareholders view the acquisition of targets from more developed countries positively, as the acquisition of strategic intangibles such as expertise seems more likely here.

Boateng confirms his own study in the same year, where together with another author, he extends the sample to 1998-2011 by three years and to 468 23 more deals. The authors also found a significant positive effect of CBMA by Chinese companies in the extended sample(Du & Boateng, 2015). Gu & Reed (2012) previously found in a study of 213 deals in the slightly different period 1994-2009 that China's Go Global Policy at least does not have a significant negative impact on shareholder wealth and that value creation has not changed negatively since China's Go Global Policy.

On the other hand, Aybar and Ficici (2009) find in their study of 433 CBMA transactions from 58 Emerging Markets that the cross border expansions do not create value but even lead to a significant value destruction for more than 50% of the acquiring companies. The authors find a significant average abnormal return of -1.38% for the acquiring company on the announcement day of the CBMA. As already mentioned, the authors do not only focus on China as the home country of the acquiring company, but also on other emerging economies such as India or Mexico. This extended study has advantages, such as greater significance for emerging economies in general, but also disadvantages, such as significance for specific regions or countries (China). Nevertheless, the authors also find significant correlations between firm characteristics (both acquiring firm and target company) and positive abnormal returns. Aybar & Ficici, for example, find significant evidence that private ownership (vs. public ownership) and an origin from a more developed country of the target companies are associated with higher (positive) abnormal returns. In contrast, higher cultural differences, for example, which are also related to the geography of the target company nations, have a significant negative effect on the abnormal returns of the acquiring company. Another reason why some firms fail to generate abnormal returns through CBMA, or even have negative abnormal returns, is also related to the principal-agent problem, according to the authors. The principal-agent problem, discovered by Stephen Ross and Barry Mitnick[2] (Mitnick, 2019) in 1973 revolves around the conflict of interest that arises when the interests of the principal (in our case the firm's manager) diverge from those of the agent (in our case the shareholder). In the case of Chinese companies, some of which are largely or at least partially state-owned, a conflict of interest as described can occur regularly. In particular, strategically relevant industries, such as resource development, high tech, or defense, are areas where the state has a higher interest in acquiring the foreign company than the minority shareholder

This principal-agent problem is also studied by Chen and Young, who hypothesize that investors are skeptical of CBMA when the government is the majority owner of the company (Chen & Young, 2010). In their paper, the authors test 38 Chinese firms in a sample from 2000 to 2008 and find evidence for their hypothesis of the negative relation between state ownership and CBMA. Hence, Chen and Young show that one of the factors that could adversely affect CBMA of Chinese firms is state ownership because minority shareholders might not feel their interests represented accordingly by the managers. There is no reason to believe that the principal agent problem has diminished in the last years as there were no reforms regarding state owned enterprises and their

[2] Both authors claim ownership

percentage of the overall market. Hence, there are still reasons that speak for, but also against the value creation of Chinese companies through CBMA. However, since in the majority of the studies on old samples significant abnormal returns by CBMA of Chinese companies could be found, I assume that this has not changed now, because China's economy can still benefit from the knowledge of the developed countries. Therefore, I hypothesize the following:

Hypothesis 1 (H1):

Acquiring companies from Mainland China create in short-term significant abnormal returns through Cross-border M&A.

Hypothesis 2 (H2):

A significant majority of the acquiring companies from Mainland China creates in short-term abnormal returns through Cross-border M&A.

The fact that a Chinese company can achieve abnormal returns through CBMA depends of course on the individual company characteristics. As already mentioned, in some studies on CBMA, the nation of the target company plays an important role. Whether it is the geographical location, the cultural background or the economic status of the nation from which the acquired company originates - depending on the region of the target company, the authors perceive significant differences in the reaction of the investors to the CBMA announcement.

Origin of the target company

In the study of Tao et al. (2017), the authors find significant positive abnormal returns for CBMA in their sample of 165 Chinese companies over the time frame of 2000-2012.

Among other matters, the authors have also the question of how the nation of the target company affects abnormal returns. The authors find that CBMA of companies with targets from more developed countries generates higher abnormal returns than those from less developed countries. This is in line with the above described hypothesis of Uddin and Boateng (2009) that companies from emerging economies can gain advantages by targeting strategic assets of companies from higher developed countries.

Another study that looks at the nation of the target companies in relation to CBMA of Chinese companies is by Li et al. (2016) in a sample of 367 deals in the period 2000-2011. The authors generally find significant abnormal returns of 2-4% for CBMA of Chinese companies. However, the origin of the target companies ("cultural distance") plays a significant role. A larger cultural distance of the target company nations compared to China has a negative effect on the abnormal returns. As a proxy for cultural distance, the authors use the six dimensions described by Hofstede (2011), which attempt to quantify the culture of countries based on certain characteristics (individualism, masculinity, power distance, etc.). Li et al. (2016) conclude from their results that CBMA of Chinese companies makes sense in because it leads to significant abnormal returns, especially with regard to the transfer of intangible assets such as knowledge. However, the acquiring company must not ignore where the target company comes from and what the cultural conditions are in the country. Lastly the authors found that the acquiring company's size plays a vital role in the value creation as well, since a more extensive size mitigates the adverse effects of cultural distance. This shows that generally larger acquirers might be better in handling cultural distance issues than smaller size acquirers.

This is also consistent with the findings of Boateng et al. (2019), who examined a smaller sample of 209 deals over the more extensive period 1998-2012. Again, the authors can identify a fundamentally significant value creation of Chinese companies through CBMA. Moreover, the authors find the relevance of the nation of the target company as well as the mitigating effect of company size on the adverse impact of cultural distance. In order to find out, if there are significant differences in the region of the target company, I divide the nation of the target company in their continent and test if there are any differences in the significant returns based on the target company coming from Asia, Europe or North America and also how (and if) the region of the target company significantly affects the abnormal returns. Thus my fourth hypothesis is:

Hypothesis 3 (H3):

There are differences in the significant abnormal returns through CBMA based on the region of the target company

In addition to explanations for significant abnormal returns related to the target, there are also many and varied explanations related to acquirer characteristics. here are various theories claiming to interpret individual features of acquirers in order to predict abnormal returns through CBMA:

Signaling theory

Another topic that Tao et al. (2017) have dealt with is the so-called signaling theory.

They say that „the announcement of cross-border M&As is perceived positively and has resulted in an increase in stock prices through a positive stock market reaction“ (Tao et al., 2017). The idea of the signaling theory is based on the fact that there is a certain information-asymmetry between the company's management and the outside party (investors) (Yook, 2003). The investor or company's shareholder[3] seeks for information about the company's (financial) future through signals. The company is aware of this signaling approach and can also try to influence the stockholder's behavior through signaling. In their paper, Tao et al. (2017) describe how especially investors of mainland china suffer from information asymmetry because of the underdeveloped capital market and hence are even more likely to interpret a CBMA announcement of a Chinese company as positive sign. The Shanghai Stock Exchange (SSE) has Shenzhen Stock Exchange (SZSE) are with a trading volume[4] of around $7,620bn (Shanghai Stock Exchange, 2022) and $4,500bn (Shenzhen Stock Exchange, 2022) respectively the two largest stock exchanges in mainland China. Both stock exchanges differ mainly in the industries and the size of the companies: While larger companies and more companies from real estate, energy and infrastructure industry are listed on the SSE, smaller companies and more companies (compared to the SSE) from the high tech industry are listed on the SZSE(Investor and Financial Education Council, 2016). In order to see if there might also be differences between the two major stock exchanges in terms of abnormal returns through CBMA, I chose to test for this in my fourth hypothesis:

Hypothesis 4 (H4):

There are significant differences in abnormal returns based on the stock exchange of the acquiring company

[3] If the is not the manager or majority shareholder of the company and/or has access to company's internal data in other ways.

[4] On the 06/05/2022

Finally, it is necessary to understand that there are several other individual characteristics, which could be decisive in the explanation of abnormal returns through CBMA. In the past literature regarding CBMA of Chinese companies, there is a relatively common understanding on which (control-) variables might also affect the value creation through CBMA.

Other essential variables in the explanation of abnormal returns through CBMA

Many authors as for example Li et al. (2016) or Boateng et al. (2015, 2019) observe a significant correlation of the company size or the deal value on the abnormal returns of the acquiring company. Furthermore could Aybar & Ficici (2009) and Uddin & Boateng (2009) observe a significant positive effect on the abnormal returns if the target company was privately held before the CBMA. Additionally, some authors also dealt with other company characteristics which showed (sometimes) significant explanatory power on the abnormal returns as for example the Profitability of the company or the acquisition of majority ownership (Chen & Young, 2010; Ding et al., 2021; Ning et al., 2014; Tao et al., 2017; X. Wu et al., 2016). This leads to my fifth and final hypothesis where I state that particular company and deal characteristics have a significant influence on the abnormal returns of a Chinese company.

Hypothesis 5 (H5):

At least one deal- or company characteristic regarding the deal size, the acquiring stake (majority vs. minority stake) the ownership of the target company (public vs. private), and the profitability (Return on Sales and Return on Assets) has significant explanatory power on the abnormal returns.

Methodology

The methodology was orientated on former successful event studies that analyzed abnormal returns of Chinese companies at a particular event. After taking those methodologies under careful consideration, the most logical and adaptable approaches in regards to the data availability were chosen and applied.

Construction of dataset

Firstly it was necessary to obtain data about relevant CBMA deals of Chinese companies in a given period of time. The time frame between January 1, 2010 and 31 December 2021 was chosen to obtain the deals. This time frame is large enough to provide enough deals for representative statistical tests and conclusion, but does also not redundantly repeat former studies that analyzed already former time frames. As database I used Refinitiv Reuters since it had the most extensive data availability for the analyzed deals and companies[5].

Deal requirements

To be taken into account, the deal had to fulfil specific requirements: First of all, the deal had to be available on Refinitiv Reuters and labelled as completed M&A transaction with an announcement date. This is necessary to sort out uncompleted transactions and also define an event window around the deal announcement to analyze potential abnormal returns. Secondly the acquiring company has to lie in Mainland China and is either listed on the Shanghai stock exchange (SSE) or the Shenzhen stock exchange (SZSE). Those are the two leading stock exchanges in Mainland China for the analyzed time frame[6] and have a market capitalization of around $7,620bn and $4,500bn, respectively. The target company must not lie in mainland China to fulfill the requirement of a cross-border transaction. Furthermore, were certain host countries of target companies excluded that are generally considered tax havens: Bermuda, Cayman Islands, and the British Virgin Islands. Moreover, the target companies were a trust or financial firm. These

[5] The CSMAR database was also often used by analyzing the companies but unfortunately I did not have access to it. As second best option, I chose Refinitiv Reuters.

[6] On 15th November 2021, 81 stocks began also trading on the new Bejing stock exchange and it will be interesting to also take this exchange into account in new studies, however it is not included in this study since it does not cover the analyzed time frame and does not provide enough data for the estimation window.

requirements should ensure that deals were excluded where companies might have had other motives (such as saving taxes) than the acquisition of a company for value creation through the company itself. In order to also exclude companies that might only have had portfolio diversification as a possible motive, only deals were included where the acquisition stake was higher than ten percent. These requirements led to an initial sample of 271 applicable deals in the time frame from January 2010 until December 2021. Lastly, if the same acquiring company purchased more than one target within 271 trading days (estimation period of 250 trading days + longest event window of 21 trading days), the deal with more critical informative parameters was chosen and if both had the same quality of information, the deal with higher deal value was chosen. After cleaning the sample according to the requirements presented above, the consisted of a total of 148 deals. In regards to the stock price data, there were only deals included where the acquiring company was listed on the SSE or SZSE 60 trading days prior to the event and had stock price information available on Refinitiv Reuters.

Finally, after excluding companies without or with not enough stock price data, the final sample bestand aus 119 deals that could be analyzed[7]. This sample size can be seen in line with previous studies regarding this topic – Du & Boateng (2015) worked with the largest sample of 465 deals from 1998 – 2011, while Chen & Young (2010) only worked with 39 samples for their study.

Descriptive statistics

For all deals, I computed the maximum, minimum, average value, as also the standard deviation, the kurtosis and the skewness of the following values:

- Total Assets of acquirer for the last twelve months before the deal announcement
- Total Assets of target for the last twelve months before the deal announcement[8]
- Net revenues of acquirer for the last twelve months before the deal announcement
- Net income of acquirer for the last twelve months before the deal announcement
- Return of Assets of acquirer for the last twelve months before the deal announcement

[7] Of which 75 had data available on the deal value, which will be one explanatory variable in the multivariate regressions

[8] This was the only financial value of the targets where enough information was provided on Refinitiv Reuters Deal screener. Since most the broad majority of targets was non-public (over 85%), there was not enough information to get valid numbers for the net income & revenues for the target companies.

- Return of sales of acquirer for the last twelve months before the deal announcement

Furthermore, for all deals and its different event windows, the number and proportion of significant (and non-significant) positive (and negative) abnormal returns was computed, as well as the maximum, minimum and average abnormal return values and the standard deviation, kurtosis and skewness. This was helpful in order to understand the variety of the sample, but also identify and doublecheck outliers or extreme values. Finally, I picked some deals that stood out due to extreme values or other interesting characteristics, which I will discuss in more detail later.

Computing returns

For all deals, the primary stock exchange prices (SSE or SZSE, depending on the company's listing) were matched with the acquiring companies and their stock prices. Since I am working with panel-data (not only cross-sectional, but also time series data), it had to be made sure that the variables are non-stationary so they are not spurious and might indicate a relationship of two variables that does not exist. In order to transform the data into mean reverting non-stationary data, I computed the log-returns of the stock- and index prices (*from t=-260 to t=+10*) as following:

(1) $$r_{it} = ln(price_{i,t}) - ln(price_{i,t-1})$$

In order to compute the expected returns $E(r_{i,t})$, I used an estimation window of preferably 250 trading days – from 260 until 10 days prior the announcement date of the M&A deal of a given acquiring company [-260, -10]. This estimation window is in line with McWiliams & Siegel (1997) and could be applied for 99 companies. For twenty other companies that did not have stock price information for the past 260 days, I allowed to reduce the estimation window until a minimum of 60 trading days [70, -10][9]. Hence, those twenty stocks must have at least available stock price information for 70 trading days before the announcement date and the returns of this estimation period must have seemed reasonable[10]. The adjustment of the estimation window is in line with Krivin et al. (2005) who stated that there is no large difference to expect in the relationship between

[9] This is again in line with McWiliams & Siegel (1997) but also previous studies in the field.
[10] Meaning there were no big outliers which would have let me conclude for potential significant events that could have distorted the expected return of the estimation period,

the returns of a stock and the returns of the selected market indexes when an estimation period is sixty days or one year ahead of the event. This step allowed me to increase my sample from initially 99 observations by about 20% to finally 119 observations.

I applied five estimation windows of 21 [-10,+10], 11 [-5,+5], 5 [-2,+2], 3 [-1,+1] and 2 [0,+1] days, which should include the possible short-term effect of the deal announcement and should enable me with enough information on significant differences between certain time frames. The different event windows are in line with previous studies (Ning et al., 2014) and also provide me with a certain robustness of the results. In order to compute the abnormal returns (AR_{it}) I first used a basic market model equation to express the rate of return of firm *i* on day *t:*

(2): $$R_{it} = \alpha_i + \beta_i R_{mt} + \varepsilon_{it}$$

- R_{it} is the return of acquiring stock *i* on day *t.*
- R_{mt} is the return of the market, either the SSE or the SZSE on day *t.*
- α_i is the intercept term of the two returns of company *i* and its corresponding index
- β_i is the systematic risk of the company *i* (computed as slope of the two returns of company i and its corresponding index)
- ε_{it} is the error term of the regression of company *i* on day.

Computing (cumulative average) abnormal returns

(3) $$AR_{it} = R_{it} - (a_i + b_i R_{mt})$$

- AR_{it} is the abnormal return of acquiring stock *i* on day *t*
- R_{it} is the return of acquiring stock *i* on day *t.*
- R_{mt} is the return of the market, either the SSE or the SZSE on day *t.*
- a_i and b_i are the ordinary least squares (OLS) parameters obtained from Equation (2) over the estimation period commencing from *t= -260*[11] *to t = -10.*

[11] or in 20 special cases as stated above from *t= -70*[11] *to t = -10.*

As presented in the equation 3, the abnormal return AR_{it} was computed when subtracting the expected return (estimated with the market model and a_i and b_i) from the actual return R_{it}. The abnormal return for every stock at given point t was computed for each day in the event window. After obtaining all abnormal returns ($AR_{i,-10}, \ldots, AR_{i,+10}$), a cumulative abnormal return (CAR) for every stock was computed as following:

(4) $$CAR_{i,T} = \sum_{t}^{k} AR_{it}$$

Where the CAR is computed for every of the 5 windows with k being the last day of the window. For example, for the event window [-5,+5], I computed 11 abnormal returns from $AR_{i,-5}$ until $AR_{i,+5}$ and then summed them up to obtain the CAR_i. T describes the length of the event window (e.g. [-10,+10]).

Furthermore, to test if on average, Chinese Firms create abnormal returns through CBMA (Hypothesis 1), I averaged the CAR_i of each company to obtain the cumulative average abnormal return (CAAR) for each window with following formula :

(5) $$CAAR_T = \frac{1}{n}\sum_{i=1}^{n} CAR_{i,T}$$

- $CAR_{i,T}$ is the cumulative abnormal return of firm i for a given window, computed in equation (4)
- T describes the give window (e.g. [-10,+10])
- n is the number of companies (120)

In order to test the CAAR for significance, I computed the standard error of the cumulative abnormal returns by taking the variance of the abnormal returns and standardizing it accordingly:

(6) $$s.e._T = \frac{\sigma_T}{\sqrt{n}}$$

- σ = the standard deviation (the square root of its variance) of the cumulative abnormal returns AR_{it}
- n= the number of observations (119 because there are 119 companies with different cumulative abnormal returns)

Testing for significance of the cumulative (average) abnormal returns

As described above, For all 5 event windows, I computed the *CAAR, which was based on the 119 different events and its* standard error. In order to test the five different CAAR for significance in a parametric t-test, I then computed the z-statistic of every CAAR. I applied following formula:

(7) $$\text{z-}stat_T = \frac{CAAR_T}{s.e._T}$$

To check if the t-stat is in a critical range and I get a significant CAAR, I compared the t-stat with the following critical values corresponding to different significance levels (alphas). Since all the tests we performed have degrees of freedom > 100 and we perform a two-tailed Student's t-test, we obtain the following critical values for the different alphas that imply the following significance levels:

(8)

- To test for a significance at 10% level ($\alpha = 10\%$), we obtain ±1.65 as critical values
- To test for a significance at 5% level ($\alpha = 5\%$), we obtain ±1.96 as critical values
- To test for a significance at 1% level ($\alpha = 1\%$), we obtain ±2.58 as critical values

Furthermore, in order to partly check my H4 and to see if there are any regional differences among the three main regions (Asia, Europe, and North America), I computed not only the overall CAAR with 119 observations, but also the CAAR for each of those three regions, based on the nation (and therefore region) of the target company. Only 6 (5.0%) and 3 (2.5%) of the target companies in my sample were from South America and Africa respectively, which is why I did not create a separate subsample for these regions. Additionally, in order to test my H2, I check if it's more likely for Chinese companies to achieve positive abnormal returns through CBMA than negative abnormal returns. My first step is to compute the proportion of companies that could achieve positive abnormal returns per window and call this number $\hat{p}$. Then I obtain my z-value with following formula:

(9)
$$z - stat_T = \frac{\hat{p}_T - p_0}{\sqrt{\frac{p_0(1-p_0)}{n}}}$$

- $\hat{p}$ = the percentage of Chinese companies in my sample that achieved positive abnormal returns through CBMA in a given window
- p_0 = the threshold percentage that we want to test against (in our case 50%)
- n = the number of observations (119)

After computing the z-value for each window, I compared those values once again with the critical values described in (8) to perform another two-sided student's t-test. All of those described values were additionally obtained for the three geographical subsamples of Asia, Europe and North America.

Explaining the variance of cumulative abnormal returns

Finally, in order to explain the variance of the abnormal returns (H3, H4 and H5), I performed several linear and multivariate regressions. I regressed the respective CAR on the explanatory variables with the different fixed effects stepwise and finally performed a regression with all variables. In order to exclude multicollinearity of the independent variables and to increase the explanatory power of the model, this regression was then refined by choosing a proxy for Profitability and by combining dummies for Geographic Area and Industries with a too low number. The initial regression (R1) to perform was as following a step-by-step approach. I decided to use this approach to avoid overloading the model, since there are many explanatory variables with a comparatively small sample size. For the fixed-effect control variables this is necessary, because they are dummies, which only make sense for a significant statement, if there are enough observations per dummy. The following regressions allowed me to test the explanatory variables for significance and still account for the different fixed effects and finally control for all fixed effects. In addition, I also performed a regression with each of the explanatory variables and the controls for industry effects to analyze any significance there and compare it to the respective significance when there are multiple independent variables in the model.

(R0): 21 explanatory variables

This regression is called R0 because geographic area is a fixed effect in the other variables, while in this regression we want to test its significance (to reject or not reject our H3 final). The regression only includes the dummies for geographic area and controls for industry and year fixed effects and does not follow the pattern of the other regressions.

$$CAR_{i,T} = \beta_0 + + \sum_{i=1}^{i=2} \beta_i DummyGeoArea_i + \beta_3 DummyOtherGeoArea + \sum_{i=1}^{i=6} \beta_{3+i} Dummyindustry_i + \beta_{10} DummyOtherIndustry + \sum_{i=1}^{i=11} \beta_{10+i} Dummyyear_i \; \varepsilon_i$$

(R1): 11 explanatory variables

I am regressing cumulative abnormal return on the eight explanatory variables and fixed effects of geographical area of the target. As proxy for profitability I use Return on Asset because it showed on average a higher correlation with the cumulative abnormal returns than return on sales.

$$CAR_{i,T} = \beta_0 + \beta_1 DealValue_i + \beta_2 Size_i + \beta_3 DealvaluetoSize_i + \beta_4 Profitability_i + \\ +\beta_5 DummyStockExchange_i + \beta_6 DummyAcquiredStake_i + \beta_7 DummyPublicTarget_i + \\ \beta_8 DummySameIndustry_i + \sum_{i=1}^{i=2} \beta_{8+i} DummyGeoArea_i + \beta_{11} DummyOtherGeoArea + \varepsilon_i$$

(R2): 15 explanatory variables

I am regressing cumulative abnormal return on the eight explanatory variables and fixed effects of industry of the target. As proxy for profitability I use Return on Asset because it showed on average a higher correlation with the cumulative abnormal returns than return on sales.

$$CAR_{i,T} = \beta_0 + \beta_1 DealValue_i + \beta_2 Size_i + \beta_3 DealvaluetoSize_i + \beta_4 Profitability_i + \\ +\beta_5 DummyStockExchange_i + \beta_6 DummyAcquiredStake_i + \beta_7 DummyPublicTarget_i + \\ \beta_8 DummySameIndustry_i \sum_{i=1}^{i=6} \beta_{8+i} Dummyindustry_i + \beta_{15} DummyOtherIndustry + \varepsilon_i$$

(R3): 19 explanatory variables

I am regressing cumulative abnormal return on the eight explanatory variables and fixed effects of year of the acquisition. As proxy for profitability I use Return on Asset because it showed on average a higher correlation with the cumulative abnormal returns than return on sales.

$$CAR_{i,T} = \beta_0 + \beta_1 DealValue_i + \beta_2 Size_i + \beta_3 DealvaluetoSize_i + \beta_4 Profitability_i + \\ +\beta_5 DummyStockExchange_i + \beta_6 DummyAcquiredStake_i + \beta_7 DummyPublicTarget_i + \\ \beta_8 DummySameIndustry_i + \sum_{i=1}^{i=11} \beta_{8+i} Dummyyear_i + \varepsilon_i$$

(R4): 33 explanatory variables

Regressing cumulative abnormal returns on the eight explanatory variables and all fixed effets (year of acquisition, geographical area of target and target industry). Instead of one proxy for profitability I use both, ROA and Return on Sales.

$$CAR_{i,T} = \beta_0 + \beta_1 DealValue_i + \beta_2 Size_i + \beta_3 DealvaluetoSize + \beta_4 ROA_i + \\ +\beta_5 ReturnonSales_i + \beta_6 DummyStockExchange_i + \beta_7 DummyAcquiredStake_i + \\ \beta_8 DummyPublicTarget_i + \beta_9 DummySameIndustry_i \sum_{i=1}^{i=9} \beta_{9+i} Dummyindustry_i + \\ \sum_{i=1}^{i=4} \beta_{18+i} DummyGeoArea_i + \sum_{i=1}^{i=11} \beta_{22+i} Dummyyear_i + \varepsilon_i$$

(R5): 29 explanatory variables

Regressing cumulative abnormal returns on the eight explanatory variables and all fixed effets (year of acquisition, geographical area of target and target industry). It was adjusted the dummies for geohraphical area and industry because there were not enough observations for some industries (Real Estate, Retail and Communications) and geograohical areas (South America and Africa). As proxy for profitability I use Return on Asset because it showed on average a higher correlation with the cumulative abnormal returns than return on sales.

$$CAR_{i,T} = \beta_0 + \beta_1 DealValue_i + \beta_2 Size_i + \beta_3 DealvaluetoSize_i + \beta_4 Profitability_i + \\ \beta_5 DummyStockExchange_i + \beta_6 DummyAcquiredStake_i + \beta_7 DummyPublicTarget_i + \\ \beta_8 DummySameIndustry_i \sum_{i=1}^{i=6} \beta_{8+i} Dummyindustry_i + \beta_{15} DummyOtherindustry_i + \\ \sum_{i=1}^{i=2} \beta_{15+i} DummyGeoArea_i + \beta_{18} DummyOtherGeoArea_i + \sum_{i=1}^{i=11} \beta_{18+i} Dummyyear_i + \varepsilon_i$$

This regression was (fully and in parts) applied in order to explain the variation in the abnormal returns of the five different event windows. All independent variables are included to test my hypothesis 5, except "DummyStockExchange", which is included to test hypothesis 3. The variables are based on previous literature and their aim to explain the variation in cumulative abnormal returns. The proxies are defined as following:

- $DealValue$

  As proxy for “Deal Value”, I applied the logarithm of the deal value to normalize extreme values. With this variable, I intend to find a significant correlation between the price of the target and the cumulative abnormal return (CAR). If the variable is positively correlated with the CAR, it means that the higher the price of the target, the more positive the reaction of the mark (higher cumulative abnormal returns). This variable has already been used by Boateng et al. (2019) and Du & Boateng (2015).

- $Size$

  As proxy for “Size”, I used the logarithm of the total assets of the bidding company in the last twelve month before the deal announcement. My intention is that larger companies are able to create more value in (cross-border) M&A transactions, because they might have a more professional approach or enough resources to realize potential synergies fully, I wanted to check if this might also be indicated in my sample. This variable was also quite often used in the previous literature (Aybar & Ficici, 2009; Boateng et al., 2019; Du & Boateng, 2015; Gu & Reed, 2012; Li et al., 2016; Ning et al., 2014).

- $DealvaluetoSize$

  As proxy for “Deal value to size”, I divided the size of the deal (price) by the total assets of the bidding company. This proxy is also implemented mainly to doublecheck if the bidding companies are able to handle relatively (to their size) smaller deal better than a relatively larger deal. This variable has been implemented byAybar & Ficici (2009) and Boateng et al., (2019).

- $Profitability$

  As Proxy for “Profitability” I applied two measures. Firstly, I divided the net income (of the bidding company) of the last twelve months before the announcement by the total assets (of the bidding company) of the last twelve months before the announcement ($\frac{Net\ income_i\ (LTM)}{Total\ Assets_i\ (LTM)}$). Furthermore I used the Return on sales ratio, by dividing the net income (of the bidding company) of the last twelve months before the announcement by the revenue (of the bidding company) of the last twelve months before the announcement ($\frac{Net\ income_i\ (LTM)}{Revenue_i\ (LTM)}$). With this dependent variable I want to find out if companies with a higher profitability are also perceived by the market as more able to generate higher synergies potentially. If this would be the case, then there is a significant positive correlation of profitability and the cumulative abnormal returns. In order to avoid multicollinearity, I only proceeded with Return on Assets as a proxy for profitability since it showed a higher correlation & significance than Return on Sales. This variable has been used by Boateng et al. (2019) and Ning et al. (2014).

- $DummyStockExchange$

  I applied the value 1 for "DummyStockExchange" when the bidding company was listed on the Shenzen stock exchange and 0 when the bidding company was listed on the shanghai stock exchange. This proxy allowed me to see if the investors might see differences in the stock markets related to information asymmetry and if there are differences in the interpretation of CBMA announcements based on the stock market that might be related to the signaling theory (described in the hypothesis development). Hence I used this proxy to test my hypothesis 3. If the dependent variable (CAR) is positively correlated with the dummy variable, it means that a company that is listed on the Shenzhen stock exchange is able to generate higher abnormal returns due to CBMA than on the Shanghai stock exchange. This variable has been also analyzed by Tao et al. (2017).

- $DummyAcquiredStake$

  For the dummy variable "DummyAcquiredStake", I put the value "1" if the bidding company acquired the majority of the target company, meaning if it acquired more than 50%. This allowed me to test if there are any significant differences in acquiring only a minority or a majority stake. The reasoning behind this variable is that the company might be able to generate higher synergies when they also acquire full control of the target company and not only a non-controlling stake. If the correlation is positive (and significant), it might indicate that investors believe that the bidding company can achieve more synergies with full control. The variable was also part of the studies of Chen & Young (2010) and Ning et al. (2014).

- *DummyPublicTarget*

  Furthermore, I included the dummy "DummyPublicTarget" that has the value of one if the target company is publicly listed and 0 if not. I aim to find out if there are any significant differences in the cumulative abnormal returns that depend on the status of the target company. As already stated in my hypothesis development, there are reasons why a private target generates more value in the short term for the bidding company, but also against it. If the correlation is significant and positive, it indicates that publicly listed targets acquire on average higher abnormal returns than private companies. Also other authors like Aybar & Ficici (2009) and Li et al. (2016) use this variable in their regressions.

- *DummySameIndustry*

  Lastly, I included the dummy "DummySameIndustry" to show if there are any significant differences when the industry of the target and the bidding company is similar. Hence, the variable has the value 1 when the industries of both companies are the same and zero if they differ. If this variable is significantly positively correlated with the CAR, it could indicate that investors appreciate it more if the bidding company acquires a company in their own field rather than if the company might build up a conglomerate. This variable is also included by Aybar & Ficici (2009),Gu & Reed (2012), and Li et al. (2016)

Furthermore, I applied the following fixed effects to control for them and, therefor to avoid falsely attributing a correlation to one of the above characteristics that is in fact related to a significant difference in years, industries or geographical characteristics. However, since I am also interested in the significance of the geographical area (H4), I will also run a regression with this (i.e. not only as a fixed effect).

- *Dummies for industry*

  Those dummies are implemented in reference to previous literature with the aim to control for industry-fixed effects. In my study I want to focus on the firm and deal characteristics which are not related to the industry. However, it is important to control for the industry in order to vermeiden wrong interpretations. The omitted industry is the high tech industry. Hence, we compare the other industries to the high tech industry. Since there are together only 10 deals from companies in Real Estate, Telecommunication and Retail. Also Boateng et al. (2015) and (Chen & Young (2010) are controlling for industry fixed effects in their papers.

- *Dummies for GeoArea,*

  In my hypothesis, I want to test if and how the geographical area can explain a variation in the cumulative abnormal returns of Chinese companies. Thus, in R0 I do not treat these dummies only as control for geographical related fixed effects. However, in my other regressions (R1-R5) I aim to control for this by referring to previous studies(Du & Boateng, 2015). The discarded dummy variable in this control variable is Asia/Pacific. Hence, the regression shows for every dummy related to the geographical area how it is correlated to the cumulative abnormal returns compared to when the target is based in Asia. Since there are only together nine deals from South America and Africa, I chose to include them both one dummy variable "GeoAreaOther". Controlling for the geographical Area is very common in the previous literature and adapted by many authors (Aybar & Ficici, 2009; Boateng et al., 2015, 2019; Du & Boateng, 2015; Ning et al., 2014).

- *Dummies for year*

  Lastly I control for year fixed effects that might have been related to certain yearly based anomalies. Since the sample is also including 2020, where the Covid-19 crisis strongly affected the stock market, it was important to control for that. As zero-dummy, I used the year 2021. Also author authors who analyzed this thematic previously have controlled for year fixed effects (Gu & Reed, 2012; Ning et al., 2014).

Robustness-Check

Cross sectional correlation & homoskedacity

To ensure that the individual cumulative abnormal returns were not affected by cross sectional correlation, I checked that the different event days did not occur on the same day. None of the 119 events occurred on exactly the same day, so this could be excluded. Furthermore, it had to be excluded that the residuals have issues with heteroskedasticity and are homoscedastic. This means that the residuals should have an equal variance that is not determined by the different groups or the sample size. Hence, I performed a Breusch-Pagan test to ensure that the residuals are homoscedastic.

Multicollinearity

As shown in Table 30, I ran a correlation matrix in order to understand the correlation of all independant variables[12] towards the cumuklative abnormal return, but also to avoid multicollinearity of the independent variaables among each other. After detecting a (expected) significant correlation of 69.91% between the profitability proxies, Return of Sales and Return of Assets, I decided to only proceed in regression (4) with both proxies and in the other regressions take only ROA as profitability proxy. To ensure that I now solved the issue of multicollinearity, I finally performed a variance inflation factor (VIF) test of the remaining explanatory variables (including also all dummies and the fixed control effects).

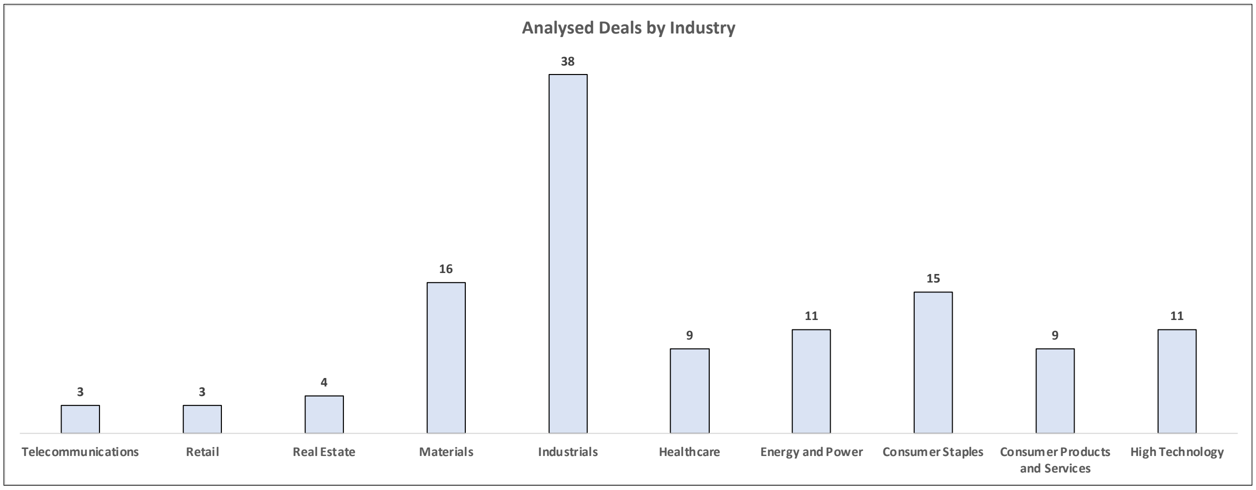
[12] The dummy variables are not shown in the correlation matrix because there is no computation of the covariance (and therefore correlation) possible. However, I included the dummy variables in the VIF test.

Analysis

Descriptive statistics of the sample

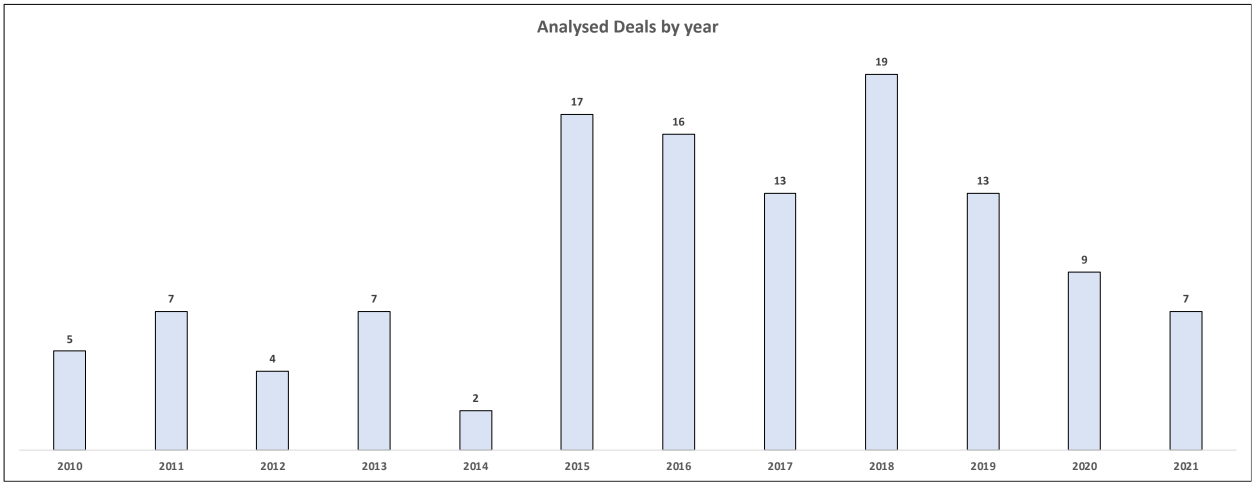
Involved companies of CBMA deals

In order to fully understand the sample, check for possible errors, and adjust variables if necessary, it is important to first look at the descriptive statistics of the 119 CBMA deals and the companies that were involved.



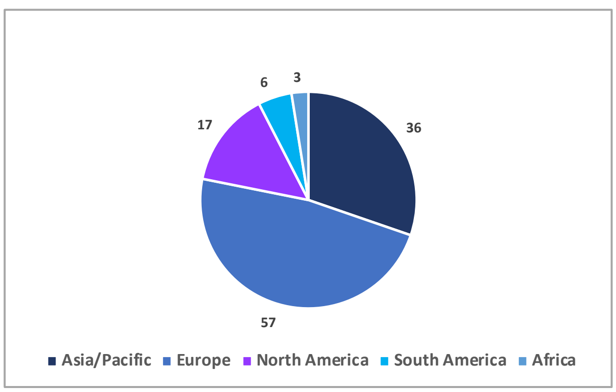
Graph 1: Analyzed Deals by industry, n = 119

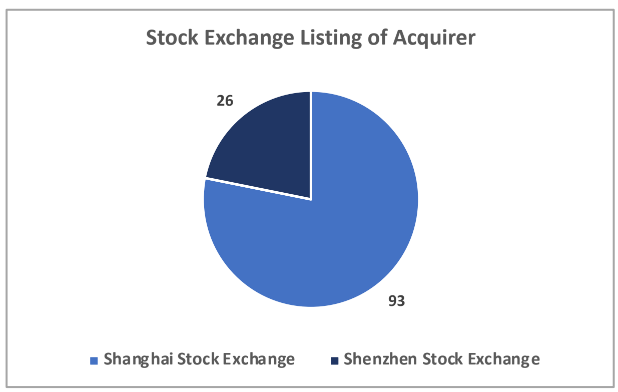
The investigated targets (and acquirers) can be divided into ten different industries. Most of the targets (38) come from the Industrials sector, which accounts for approximately 32% of the sample. The fewest targets operate in the Telecommunications, Retail and Real Estate sectors. In order to analyze even observations in most sectors, the three sectors with the fewest observations were therefore combined into the category "Others" and included as such in the regressions in R1, R2, R3 and R5.



Graph 2: Analyzed Deals by year, n = 119

Looking at the number of years in which the analyzed CBMA deals took place, it is clear that most deals took place in the years starting in 2015. This may be related to the database, since the CBMA transaction number was quite constant over the years (Textor, 2022) but the database might have just improved in recent years regarding M&A deals by Chinese companies. On the other hand, the decline in the number of deals in 2019 cannot be is in line with the overall development of Chinese CBMA. The stronger declines in CBMA deals in 2020 and 2021 may well be related to the Covid-19 crisis: Restricted Travel and Strong Volatility of the Chinese Economy. In 2018, the most deals (16%) of the sample took place, while in 2014 (2 deals), the fewest deals (1.7%) took place.

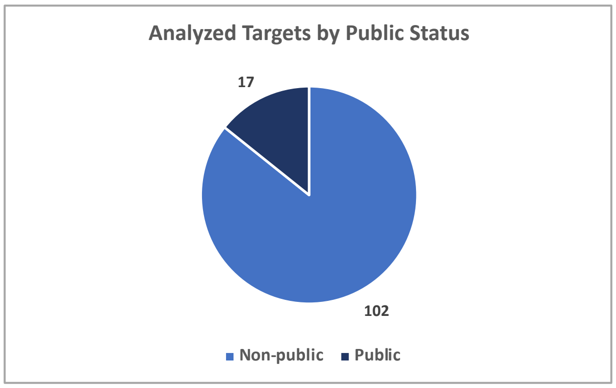




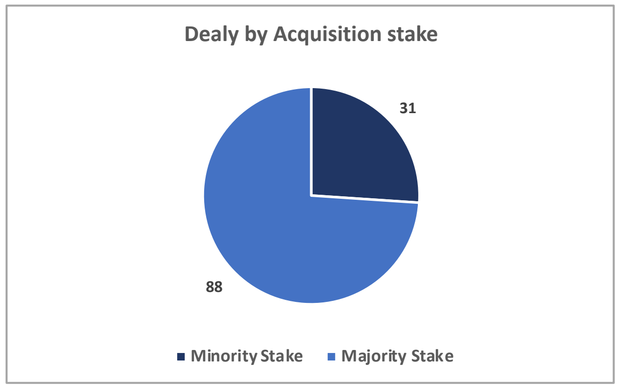
Graph 3: Analyzed Deals by region, n = 119

Graph 4: Analyzed Deals by listing, n = 119

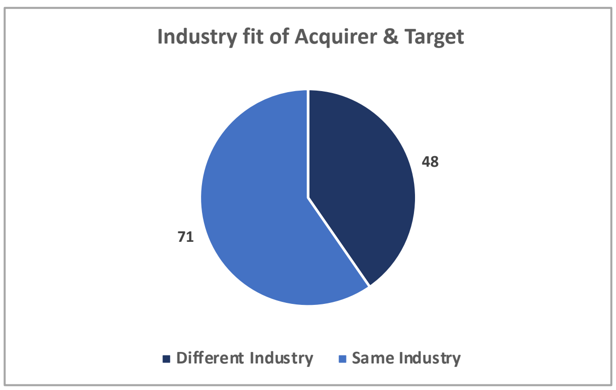
Given that in the following we will also analyze possible significant differences regarding the geographical origin of the target as well as the stock exchange listing of the acquirer, it is essential to take a look at the distribution within the sample. With 57 deals, almost half (48%) of the targets originate from Europe. This is followed by 36 CBMA targets that come from the Asia/Pacific region and 17 targets from North America. Overall, 74 targets (62%) come from Europe or North America, of which 73 are from economically developed countries. Only 1 of these targets comes from a developing country (Serbia). Also within the Asia-Pacific region, 75% of the targets come from developed countries, such as Australia, Singapore, or Israel. This suggests that the majority of Chinese companies in CBMA transactions are seeking targets from more developed countries. through CBMA transactions. The least popular regions are South America and Africa, with only five and two targets from this region, respectively. Therefore, in order to get enough observations in the dummies, both regions were combined into the main category "Other" in the regressions R1, R2, R3, and R5.



Graph 5: Analyzed targets by public status, n = 119



Graph 6: Analyzed Deals by acquisition stake, n = 119



Graph 7: Analyzed Deals by acquirer & target fit, n = 119 ,

Furthermore I tested also in all five regressions if there is a significant difference in the cumulative abnormal return when the target was publicly owned or in private ownership before the deal. Some of the targets were a subsidiary of a publicly owned company but when there were no stocks to trade available it was still considered non-public. The vast majority (86%) of the targets in my sample are non-public, while public targets account for only 14% of the sample. Moreover, in the 119 deals, 88 acquirers (74%) acquired a majority stake in the target, which means that the acquirer acquired control over more than 50% of the target. Finally, to see in which field the acquirer has expanded through the CBMA, it is important to illuminate whether the target is from the same industry. In my sample, with 71 deals, about 60% of the acquirers acquired a target from the same industry. In 48 cases, the sector of acquirer and target was different, which speaks more for the expansion of the business field or even the formation of a Conglomerate.

Variable	n	Average	Stdev	Min	Max	Excess Kurtosis	Skewness
Total Assets Acquirer	119	$6 910.91	$17 830.52	$120.37	$112 004.44	22.13	4.54
Net Sales Acquirer	119	$3 651.10	$8 558.11	$35.88	$62 170.33	24.00	4.54
Net Income Acquirer	119	$252.58	$535.45	-$159.31	$2 802.40	10.01	3.20
ROA Acquirer	119	5.3%	5.3%	-5.6%	30.7%	6.21	1.83
ROS Acquirer	119	9.9%	11.6%	-21.2%	56.4%	4.10	1.40
% Acquired in Target	119	74%	31%	10%	100%	-0.96	-0.72
Total Assets Target	44	$181.38	$651.42	$0.00	$4 960.23	48.50	6.68

Table 1: Descriptive statistics of relevant KPIs, Total Assets, Net Sales and Net Income is based on the last twelve months before the Deal, ROA = Return on Assets, ROS = Return on Sales, all $ values are in millions

Table 1 shows more descriptive statistics of the deals. The acquirer with the highest total assets ($112.0bn) , net sales ($62.2bn)and net income ($2.8bn) is "China Communications and Construction company"[13] , which claims to be the largest port design & construction company, highway & bridge design and building company and largest container crane manufacturing company. The Company is listed in the sample because in 2016 it acquired, among others, the Brazilian construction & engineering company "Concremat Engenharia e Tecnologia SA" for about 100 million. On the other side is "SEC Electric Machinery & Co.", which is the "smallest" acquirer in the sample with $120.37 million in asstes and $35.88 million in revenues.

Looking at the profitability of the companies, the Chinese beverage producer Kweichow Moutai is the most profitable acquirer in the sample with a ROA of 30.7% and a return on sales of 56.4% twelve months before the acquisition of the French wine producer „Chateau Loudenne Sasou“. In contrast, JCET Group is a circuit manufacturing and technology services provider. The company

[13] A more detailed view with all company and target names is presented in the attached full deal table (App. 5 & 6)

acquired the ADI Singapore test facility from Analog Devices Inc (ADI) in 2019 and generated the worst net income of the analyzed acquirers the year before at $-159.31 million. The most unprofitable acquirer with -5.6% ROA and -21.2% return on sales was the pharmaceutical high tech company Xinjiang Bai Hua Cun Pharma Tech Co. If we take a look at the target size, we see that the largest target (TPV Technology) with $4.96bn total assets twelve months before the 2020 acquisition is more than twenty times smaller than the largest acquirer. The smallest target is difficult to identify, as only about half of all targets (54) can be identified.

If we look at other descriptive statistics such as standard deviation, kurtosis and skewness, we see that the range of companies is very wide in almost all key figures. For example, in the case of the total assets of the targets, the standard deviation is more than three times as high as the actual average. The kurtosis is also many times higher than assumed for a normal distribution, especially for Target and Acquirer Size and Sales and Net Income. This means that the likelihood of extreme events is very high (compared to the normal distribution). Moreover, almost all KPIs are highly skewed (all of them positively skewed, except the percentage of shares acquired). This implies that in the positively skewed KPIs, there were more extreme values to the right part of the distribution (above the average). Following the observation (as already mentioned in the Methodology), the natural logarithm was taken from the corresponding values for the regressions in order to normalize the values.

Total Cumulative abnormal returns (CAR)

After the CAR were calculated as described in the Methodology, results came out, which are summarized in the statistics below.

Descriptive Statistics of cumulative abnormal returns (CAR)						
Window	**average**	**stdev**	**min**	**max**	**kurt**	**skew**
[-10,+10]	0.11%	11.53%	-45.88%	31.33%	1.73	-0.37
[-5,+5]	0.70%	9.87%	-40.59%	36.63%	3.59	-0.04
[-2,+2]	1.22%	7.08%	-19.58%	28.00%	2.57	0.60
[-1,+1]	0.52%	5.93%	-21.38%	18.73%	2.17	-0.33
[0,+1]	0.53%	5.52%	-23.05%	19.10%	4.78	-0.77

Table 2, n = 119

The highest abnormal return was achieved in the 11-day window [-5.5] by "Universal Scientific Industrial" (USI), which acquired the French "AsteelFlaash Group" in December 2019 for a purchase price of $450 million. The company reported in a statement that they expect the CBMA transaction to expand their customer segment and create synergy in terms of supply chain and technology (Asteelflash, 2020). The strategic acquisition was apparently viewed positively by investors and also makes sense in terms of USI's stated "modularization, diversification, & globalization' strategy" (Asteelflash, 2020). Another prime example of a (short-term) value-creating CBMA is the acquisition of a 39% stake in the Indonesian ferronickel producer "Zhongpin Shengde International Development" by the machine manufacturer "China First Heavy Industries" at the end of June 2021. The transaction gives the company direct access to valuable ferronickel, which is needed in the production of stainless steel, batteries and other electronic devices. The CBMA deal for $371.5 million is expected to increase China First's net income by 40%, an equivalent of $51 million, in one year (Kim Taylor, 2021). The CBMA transaction was rated very positively by investors and achieved the highest CAR of the sample in the 5 [-2,2], 3 [-1,1] and 2 [0,1] windows with 28.0%, 18.7% and 19.1% respectively. On the other hand, there are also some (short-term) value-destroying examples to be observed: The highest negative CAR (-45.9% in the 11-day window) was recorded by the healthcare company "Guangzhou Kingmed Diagnostics Group" in a purchase of 50% of the genetic testing company "DRA" for $23.4 million in January 2018 (Medical Device Network, 2018). However, it is important to note that the company had a slight abnormal return in the 2-day window [0.1] of 2.1% when the deal was actually announced and the day after. If there were no rumors of an acquisition beforehand, this could imply that the negative CAR was actually not related to CBMA, but to something else[14]. Another example of a company that has had a bad experience with value creation through CBMA is "Sichuan Hebang Biotechnology", which acquired a 51% stake in the Israeli company Stockton Group for $90 million at the end of June 2015 (Stockton bio-ag technologies, 2015). The chemical manufacturer's first CBMA was not appreciated by investors and generated the highest negative CAR of the sample, -40.6% and -21.4%, in both the 11-day and 3-day windows respectively. The company also had a very high negative CAR of -21.06 in the 2-day window (from the announcement date onwards), topped only by Zhejiang Jinhua Laser Technology's CBMA of Fresnel Plate Technology in December 2018, which yielded a CAR of -23.1% in the 2-day window. Looking at the CAR across all event windows, it is worth noting that the average CAR is positive in all windows. However, the standard deviation of the CAR is up to a hundred times higher than the average and the moderate negative skewness in almost all event windows suggests that there is more extreme negative CAR than vice versa. The Excess Kurtosis implied that the likelihood of those extreme results are above that of a normal distribution. Kurtosis and (negative) skewness are highest in the 2-day window, the window on the day of the announcement of the cross border transaction.

Cumulative abnormal returns (CAR) by sign					
Window	**Sample Size**	**positive CAR**	**in %**	**negative CAR**	**in %**
[-10,+10]	119	62	*52.10%*	57	*47.90%*
[-5,+5]	119	63	*52.94%*	56	*47.06%*
[-2,+2]	119	67	*56.30%*	52	*43.70%*
[-1,+1]	119	64	*53.78%*	55	*46.22%*
[0,+1]	119	70	*58.82%*	49	*41.18%*

Table 3: Cumulative abnormal returns (CAR) by sign

In addition to an average positive CAR for all event windows, it is also the case that in all event windows the majority of the analyzed companies also achieved a positive CAR. The highest number is in the 2-day window with 70 companies that recorded a positive CAR, which represents about 58.9% of the sample.

[14] However, when checking the news around the company in the time frame of the huge stock price return drop, there are no indications. The only available news is regarding to the CBMA (https://emea1-apps.platform.refinitiv.com/web/Apps/Corp?s=603882.SS&st=RIC&app=true#/Explorer/EVzCORPxRESNEWSzSIGDEV)

Regional Differences in the cumulative abnormal returns (CAR)

Since the following chapter also analyzes the CAR with regard to regional differences of the targets, the descriptive statistics of the CAR for the targets from the regions Europe, Asia/Pacific, North America and Others (South America and Africa) are shown here. The order is chronologically descending according to the size of the observations.

Europe - Descriptive Statistics of cumulative abnormal returns (CAR)						
Window	**average**	**stdev**	**min**	**max**	**kurt**	**skew**
[-10,+10]	-0.11%	10.06%	-23.56%	19.95%	-0.22	-0.07
[-5,+5]	1.20%	9.57%	-21.41%	36.63%	2.83	0.85
[-2,+2]	0.22%	6.64%	-19.58%	22.34%	2.40	0.44
[-1,+1]	0.38%	5.12%	-11.67%	11.81%	0.16	0.13
[0,+1]	0.51%	4.29%	-12.45%	10.25%	0.95	-0.03

Table 4: Europe - Descriptive Statistics of cumulative abnormal returns (CAR), n = 57

Asia - Descriptive Statistics of cumulative abnormal returns (CAR)						
Window	**average**	**stdev**	**min**	**max**	**kurt**	**skew**
[-10,+10]	1.29%	13.98%	-45.88%	27.92%	2.58	-0.95
[-5,+5]	0.99%	11.38%	-40.59%	26.64%	4.68	-0.79
[-2,+2]	11.87%	53.56%	-11.87%	320.85%	34.29	5.79
[-1,+1]	14.50%	80.41%	-21.38%	481.41%	35.28	5.91
[0,+1]	18.47%	107.02%	-23.05%	641.23%	35.62	5.95

Table 5: Asia/Pacific - Descriptive Statistics of cumulative abnormal returns (CAR), n = 36

North America - Descriptive Statistics of cumulative abnormal returns (CAR)						
Window	**average**	**stdev**	**min**	**max**	**kurt**	**skew**
[-10,+10]	-0.67%	10.59%	-13.73%	31.33%	4.57	1.65
[-5,+5]	-2.31%	6.70%	-22.70%	6.46%	4.82	-1.81
[-2,+2]	-0.01%	6.12%	-16.46%	7.74%	2.74	-1.52
[-1,+1]	-0.25%	5.12%	-16.31%	7.61%	5.85	-1.84
[0,+1]	-0.40%	4.27%	-11.60%	5.87%	1.93	-1.10

Table 6: North America - Descriptive Statistics of cumulative abnormal returns (CAR), n = 17

Other - Descriptive Statistics of cumulative abnormal returns (CAR)						
Window	**average**	**stdev**	**min**	**max**	**kurt**	**skew**
[-10,+10]	-1.79%	12.64%	-28.46%	11.91%	1.44	-1.14
[-5,+5]	2.05%	10.68%	-19.57%	15.24%	1.14	-0.85
[-2,+2]	1.41%	5.92%	-8.95%	8.33%	-0.51	-0.60
[-1,+1]	-0.54%	3.29%	-7.88%	3.34%	2.84	-1.43
[0,+1]	0.41%	4.36%	-10.05%	5.12%	4.77	-1.95

Table 7: Other Regions (South America & Africa) - Descriptive Statistics of cumulative abnormal returns (CAR), n = 9

In the 21-day window, the target region North America shows the highest CAR (31.3%) and the lowest maximum value comes from the Other Regions with 11.9%. However, North America has the lowest maximum CAR in the 11 and 5-day windows with 6.46% and 7.74% respectively. In the 3 (3.34%) and 2(5.12%) day windows, the Other region again has the lowest maximum values for the cumulative abnormal returns. In contrast, the CBMA deals with the targets from Europe and Asia achieved the highest CAR for the event windows: the 11-day window achieved the highest CAR with 36.63% (which was also the highest achieved CAR for all windows, see Descriptive statistics Total CAR), while Asia achieved the highest CAR in the 5-day, 3-day and 2-day windows (28.0%, 18.7, 19.1%), the acquisition described above represents 31.8% from the Indonesian target "Zhongpin Shengde International Development" by the machine manufacturer "China First Heavy Industries". However, Asia and Europe also have the highest negative CAR, as can be seen in the upper tables. Looking at the average CAR of the regions, it is noticeable that CBMA transactions with targets from Asia generated positive CAR in all event windows on average, while the opposite was the case for targets from North America. The highest average CAR was generated by CBMA transactions with targets from Asia in the 5-day window (2.8%), while the highest average negative CAR was generated with targets from North America in the 11-day window (-2.31%). The highest standard deviation was in the 21-day window with targets from Asia with 13.7%, whereas the highest likelihood of extreme CAR was generated in the 3-day window in North America with an excess kurtosis of 5.9. The same region and window also recorded the highest (negative) skewness with -1.84, implying that also the standard deviation of 5.12% underestimates the risk of CAR in this window.

Europe - Descriptive Statistics of cumulative abnormal returns (CAR)					
Window	Sample Size	positive CAR	in %	negative CAR	in %
[-10,+10]	57	29	50.88%	28	49.12%
[-5,+5]	57	32	56.14%	25	43.86%
[-2,+2]	57	26	45.61%	31	54.39%
[-1,+1]	57	30	52.63%	27	47.37%
[0,+1]	57	30	52.63%	27	47.37%

Table 8: Europe - Cumulative abnormal returns (CAR) by sign

Asia - Cumulative abnormal returns (CAR) by sign					
Window	Sample Size	positive CAR	in %	negative CAR	in %
[-10,+10]	36	21	58.33%	15	41.67%
[-5,+5]	36	19	52.78%	17	47.22%
[-2,+2]	36	23	63.89%	13	36.11%
[-1,+1]	36	19	52.78%	17	47.22%
[0,+1]	36	23	63.89%	13	36.11%

Table 9: Asia/Pacific - Cumulative abnormal returns (CAR) by sign

North America - Cumulative abnormal returns (CAR) by sign					
Window	Sample Size	positive CAR	in %	negative CAR	in %
[-10,+10]	17	8	47.06%	9	52.94%
[-5,+5]	17	6	35.29%	11	64.71%
[-2,+2]	17	12	70.59%	5	29.41%
[-1,+1]	17	10	58.82%	7	41.18%
[0,+1]	17	10	58.82%	7	41.18%

Table 10: North America - Cumulative abnormal returns (CAR) by sign

Other - Cumulative abnormal returns (CAR) by sign					
Window	Sample Size	positive CAR	in %	negative CAR	in %
[-10,+10]	9	4	44.44%	5	55.56%
[-5,+5]	9	6	66.67%	3	33.33%
[-2,+2]	9	6	66.67%	3	33.33%
[-1,+1]	9	5	55.56%	4	44.44%
[0,+1]	9	7	77.78%	2	22.22%

Table 11: Other Regions (South America & Africa) - Cumulative abnormal returns (CAR) by sign

Regarding the proportion of CAR results, it's important to note that only CBMA transactions with targets from Europe and Asia for all windows in the majority of the deals positive CAR. However, the highest proportion of CAR was achieved in CBMA transactions with targets from Other Regions in the 2-day window (77.8%). The highest proportion of negative CAR was generated in the 11-day window with targets from North America, where 11 of 17 Deals (64.7%) yielded a negative CAR. The nominal highest number of deals that generated positive CAR was in the 11-day window with targets from Europe with 32 of 57 positive outcomes (56.1%). This is logical because Europe also has the highest number of observations with 57 deals, making up almost half (48%) of the whole sample. The least number of observations has the region Other with nine deals, making only 7.5% of the whole sample even though it is already a combined value with targets from South America (6) and Africa (3).

Significance of the cumulative (average) abnormal returns

In the following table are the results of tests for the significance of the CAAR for the given event windows presented, as well as the significance of the proportion of the CAR. Both results are necessary in order to justify (or falsify) H1 ("Acquiring companies from Mainland China create in short-term significant abnormal returns through Cross-border M&A.") and H2 ("*A significant majority of the acquiring companies from Mainland China creates in short-term abnormal returns through Cross-border M&A").*

Total cumulative abnormal returns (CAR)

Testing H1

Significance of cumulative average abnormal returns (CAAR)			
Window	**CAAR**	**s.e.**	**t- stat**
[-10,+10]	0.11%	0.01	0.10
[-5,+5]	0.70%	0.01	0.77
[-2,+2]	1.22%	0.01	1.88*
[-1,+1]	0.52%	0.01	0.95
[0,+1]	0.53%	0.01	1.04

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

n=119

Table 12: Significance of cumulative average abnormal returns (CAAR)

As shown in the table above, only the CAAR of the 5-day window is significant at a confidence level of 10%. With a t-stat of 1.88 the value exceeds the critical value of 1.65. In this event window also the highest CAAR with 1.22% was generated. Thus, at least for the window [-2,2] it can be stated that on average positive abnormal returns (of 1.22%) are generated by CBMA transactions. However, this statement is not true for the other event windows. The CAAR is lowest for the 21-day window (0.11%). On the other hand, as already described in the descriptive statistics, all CAARs are positive and therefore also no negative (significant) CAAR is generated. From the results it can be concluded that hypothesis 1 is only partially accepted: For four out of five event windows no significant positive CAAR could be observed. However, for the 5-day window it can be concluded that Chinese Firms could achieve a significant abnormal return of 1.22% on average through CBMA. Furthermore, there is no evidence that CBMA transactions lead to significant negative abnormal returns.

Testing H2

Proportion test for cumulative abnormal returns (CAR)				
Window	**Sample Size**	$\hat{p}$	p_0	**t-stat**
[-10,+10]	119	52.10%	50.00%	0.46
[-5,+5]	119	52.94%	50.00%	0.64
[-2,+2]	119	56.30%	50.00%	1.38
[-1,+1]	119	53.78%	50.00%	0.83
[0,+1]	119	58.82%	50.00%	1.93*

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

Table 13: Proportion test for CAR

When analyzing how many of the deals led to positive results, we can see that this is true for the majority in all event windows. The highest percentage of positive CAR was in the 2-day event window, where 58.8% (70 out of 119[15]) of the deals achieved abnormal returns higher than zero. This value is also significant at an alpha of 10%. For the other windows, no significant abnormal returns were found. It is clear that the CAR results in the sample are relatively balanced in terms of sign. Therefore, I must conclude that hypothesis 2 is only partially accepted. While for all windows the majority of CBMA transactions could achieve positive CAR, this value is however only significant for the 2-day window. Accordingly, I can only say for this window that on average the majority of CBMA transactions achieve positive returns.

Regional Differences in the cumulative abnormal returns (CAR)

Testing H3

To observe if there are any regional differences in the achievements of CAR regarding the target, two approaches were chosen. In the following, the test-results of the different regional samples are listed. To finally verify (or falsify) the hypothesis, the CARs were also regressed on the regional differences and the result interpreted accordingly.

[15] For all nominal numbers please check the Tables 8-11 in the descriptive statistics.

Europe - Significance of cumulative average abnormal returns (CAAR)			
Window	**CAAR**	**s.e.**	**t- stat**
[-10,+10]	-0.11%	0.01	-0.08
[-5,+5]	1.20%	0.01	0.95
[-2,+2]	0.22%	0.01	0.26
[-1,+1]	0.38%	0.01	0.56
[0,+1]	0.51%	0.01	0.90

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

n=57

Table 14: Europe - Significance of cumulative average abnormal returns (CAAR)

Asia - Significance of cumulative average abnormal returns (CAAR)			
Window	**CAAR**	**s.e.**	**t- stat**
[-10,+10]	1.29%	0.02	0.55
[-5,+5]	0.99%	0.02	0.52
[-2,+2]	11.87%	0.09	1.33
[-1,+1]	14.50%	0.13	1.08
[0,+1]	18.47%	0.18	1.04

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

n=36

Table 15: Asia/Pacific - Significance of cumulative average abnormal returns (CAAR)

North America - Significance of cumulative average abnormal returns (CAAR)			
Window	**CAAR**	**s.e.**	**t- stat**
[-10,+10]	-0.67%	0.03	-0.26
[-5,+5]	-2.31%	0.02	-1.42
[-2,+2]	-0.01%	0.01	-0.01
[-1,+1]	-0.25%	0.01	-0.20
[0,+1]	-0.40%	0.01	-0.38

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

n=17

Table 16: North America - Significance of cumulative average abnormal returns (CAAR)

Other - Significance of cumulative average abnormal returns (CAAR)			
Window	**CAAR**	**s.e.**	**t- stat**
[-10,+10]	-1.79%	0.04	-0.43
[-5,+5]	2.05%	0.04	0.58
[-2,+2]	1.41%	0.02	0.72
[-1,+1]	-0.54%	0.01	-0.49
[0,+1]	0.41%	0.01	0.28

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

n=9

Table 17: Other Regions (South America & Africa) - Significance of cumulative average abnormal returns (CAAR)

As already discussed in the descriptive statistics, the different regions show significant differences in the cumulative abnormal returns. This can also be seen in parts of the upper tables, where the average cumulative abnormal returns for different regions have different values and signs. However, in all regions only one of these values is significant: For CBMA transactions with targets from the Asia/Pacific region the CAR for the 5-day window are significant. This is in line with the results for the entire sample and suggests that the decisive deals for an overall significance of the window with targets come from Asia/Pacific. The results are nevertheless unimpressive and do not really allow for interpretation as there is no significant CAR for the other regions where one could have seen if the origin of the target really matters.

Europe - Proportion test for cumulative abnormal returns (CAR)				
Window	**Sample Size**	$\hat{p}$	p_0	**t-stat**
[-10,+10]	57	50.88%	50.00%	0.13
[-5,+5]	57	56.14%	50.00%	0.93
[-2,+2]	57	45.61%	50.00%	-0.66
[-1,+1]	57	52.63%	50.00%	0.40
[0,+1]	57	52.63%	50.00%	0.40

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

Table 18: Europe - Proportion test for CAR

Asia - Proportion test for cumulative abnormal returns (CAR)				
Window	Sample Size	$\hat{p}$	p_0	t-stat
[-10,+10]	36	58.33%	50.00%	1.00
[-5,+5]	36	52.78%	50.00%	0.33
[-2,+2]	36	63.89%	50.00%	1.67
[-1,+1]	36	52.78%	50.00%	0.33
[0,+1]	36	63.89%	50.00%	1.67*

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

Table 19: Asia/Pacific - Proportion test for CAR

North America - Proportion test for cumulative abnormal returns (CAR)				
Window	Sample Size	$\hat{p}$	p_0	t-stat
[-10,+10]	17	47.06%	50.00%	-0.24
[-5,+5]	17	35.29%	50.00%	-1.21
[-2,+2]	17	70.59%	50.00%	1.70*
[-1,+1]	17	58.82%	50.00%	0.73
[0,+1]	17	58.82%	50.00%	0.73

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

Table 20: North America - Proportion test for CAR

Other - Proportion test for cumulative abnormal returns (CAR)				
Window	Sample Size	$\hat{p}$	p_0	t-stat
[-10,+10]	9	44.44%	50.00%	-0.33
[-5,+5]	9	66.67%	50.00%	1.00
[-2,+2]	9	66.67%	50.00%	1.00
[-1,+1]	9	55.56%	50.00%	0.33
[0,+1]	9	77.78%	50.00%	1.67*

*=significant to a 10% level, **=significant to a 5% level, ***=significant to a 1% level

Table 21: Other regions(South America & Africa) - Proportion test for CAR

Regarding the proportion test, we can observe that the significance for the total sample at the 2-day event window comes mainly from the significance in Asia/Pacific and in Other regions. Both regions show a significance at a 10% level. In Europe and North America, there is no significant evidence that the majority of the CBMA transactions will be positive.

R0 - Checking for significance of Geographical Origin of the Target					
Window	**[-10,+10]**	**[-5,+5]**	**[-2,+2]**	**[-1,+1]**	**[0,+1]**
R-squared	23.22%	24.45%	25.13%	26.24%	25.56%
	Coefficient	**Coefficient**	**Coefficient**	**Coefficient**	**Coefficient**
DummyGeoArea1	-0.02	-0.001	-0.039**	-0.016	-0.012
DummyGeoArea2	-0.02	-0.029	-0.034	-0.017	-0.016
DummyGeoAreaOther	-0.02	0.032	-0.003	-0.006	-0.001
Industry fixed effects	yes	yes	yes	yes	yes
Year fixed effects	yes	yes	yes	yes	yes

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

GeoArea1 = Europe, GeoArea2 = North America, GeoAreaOther = South America & Africa

Table 22: R0 - Checking for significance of Geographical Origin of the Target

To finally assess whether there are significant differences in the origin of the target, regression (R0) was applied in advance. Here, the CAR was regressed on the geographical area(s), and fixed effects were controlled for industry and year. The discarded variable for GeoArea is "Asia/Pacific". This means that all coefficients refer to how the CAR changes compared to the target region Asia/Pacific when the targets come from the respective other regions instead. The constant comparison of the other dummy variables to the target origin Asia/Pacific is due to the fact that in 3 out of 5 windows, the region could achieve the highest CAR (Table 5) and because in this region, the only significant CAAR could be achieved (Table 15). Therefore, it is not surprising that almost all (except DummyGeoAreaOther in the 11-day window) coefficients are negative. This means that the CAR in almost all regions and event windows deteriorates relative to the region/Pacific Asia. However, one should not put too much weight on the non-significant coefficients. Exclusively in the 5-day window, this is the case - if all factors included in the model remain the same, the CAR will deteriorate to a significant level of 5% by 3.9 percentage points if the target comes from Europe instead of Asia/Pacific.

To summarize: We can observe marginal differences in significant returns depending on the target region. However, we could only observe a significant CAAR for one region for one event window

(5-day window) (Table 15 - Asia-Pacific). And only for this window can we observe a significant difference between regions (Table 22 - Europe and Asia). This suggests that this event window might be biased by some outliers that are responsible for the significant difference between the target regions. Since the regional differences are only true for one event window and there only for one region, I conclude that this is not sufficient to confirm my hypothesis 3 that there are significant regional differences. Therefore, in order to still find a possible explanation for the variance in CAR, I will focus on other variables in H4 and H5. Nevertheless, I include Regional Area as a fixed-effects control variable.

Explaining the variance of the cumulative abnormal returns (CAR)

As already described in detail in Methodology, the various explanatory variables and their explanatory power were tested in five different models. R1, R2, and R3 contain the eight[16] explanatory variables shown in Table 23 and additionally control for one fixed effect each (industry, geographical area, years). The following tables, 23 - 27, are subdivided according to the respective event windows and chronologically ordered from the largest (21-day-) to the smallest (2-day-) window. In the respective tables, the coefficients are shown with their significance (if any), which were calculated by the five different models. Furthermore, for each regression model, the R^2, as well as the adjusted R^2, is shown. This is helpful to compare the models on the basis of their explanatory power. Since the simple R^2 becomes larger just by including more explanatory variables, the adjusted R^2 helps us to understand the adjusted (true) explanatory power of the model.

Testing H4& 5H5

CAR Window[10,10]					
Model	**R1**	**R2**	**R3**	**R4**	**R5**
R-squared	13.16%	19.60%	29.39%	43.57%	41.17%
Adj R-squared	0.76%	3.08%	9.94%	9.71%	12.25%
	Coefficient	**Coefficient**	**Coefficient**	**Coefficient**	**Coefficient**
LogDealValue	0.000	0.000	-0.002	-0.002*	-0.002
LogTotalAssetsAcquirer	0.016*	0.007	0.011	0.007	0.009
RelDealsize	-0.098	-0.089	-0.031	-0.066	-0.034
ROA	-0.006	0.075	0.077	0.384	0.256
ReturnonSales	no	no	no	-0.068	no
DummyStockExchangeShenzen	-0.071**	-0.071*	-0.050*	-0.042	-0.046
DummyAcqMajown	0.036	0.033	0.005	0.051	0.038
DummyPublic	0.050	0.070*	0.031	0.026	0.028
DummySameindustries	0.003	-0.003	0.012	-0.016	-0.005
Geographical fixed effects	yes	no	no	yes	yes
Industry fixed effects	no	yes	no	yes	yes
Year fixed effects	no	no	yes	yes	yes

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

Table 23

Looking at the results for the 21-day window, the following things become obvious regarding the explanatory power of the models: Firstly, while R1 and R2 do not provide very high explanatory

[16] Actually, there are nine proxies, but both ROA and Return on Sales apply to profitability and only ROA is included in the models R1, R2, R3, R5 to avoid multicollinearity. Return on Sales is only included in R4, where all proxies/variables are included.

power, the model can be significantly improved by controlling for yearly fixed effects R3. The increase of the other effects R4 even leads to a slight deterioration of the model. The highest explanatory power is provided by R5, which is an improvement of R4 by excluding Return on Sales due to multicollinearity and adjusting[17] the geographical- and industry-fixed effects. Nevertheless, R1 - R3 provide interesting results since my H4 refers to possible differences due to stock exchange listings ("There are significant differences in abnormal returns based on the stock exchange of the acquiring company"). Thus, a significance of the stock exchange listing is observed in models R1 - R3. All coefficients are negative and indicate that (ceteris paribus (c.p.) of the other variables in the model[18]) a listing on the SZSE relative to the SSE has a negative effect on the CAR. However, this effect is not observed in R5, which suggests that the correlation with the stock exchange does not necessarily represent causality.

CAR Window[5,5]					
Model	**R1**	**R2**	**R3**	**R4**	**R5**
R-squared	11.82%	23.61%	25.10%	46.01%	44.09%
Adj R-squared	-0.77%	7.92%	4.47%	13.62%	16.62%
	Coefficient	**Coefficient**	**Coefficient**	**Coefficient**	**Coefficient**
LogDealValue	0.001	0.001*	0.001	0.001	0.002
LogTotalAssetsAcquirer	0.012*	0.004	0.009	-0.001	0.000
RelDealsize	-0.107	-0.120	-0.107	-0.123	-0.107
ROA	-0.173	-0.145	-0.102	0.264	0.212
ReturnonSales	no	no	no	-0.185	no
DummyStockExchangeShenzen	-0.067***	-0.068**	-0.061**	-0.058**	-0.058**
DummyAcqMajown	0.005	0.012	-0.017	0.004	0.000
DummyPublic	-0.020	-0.012	-0.050**	-0.052	-0.052
DummySameindustries	-0.025	*-0.037	-0.028	-0.065***	-0.061***
Geographical fixed effects	yes	no	no	yes	yes
Industry fixed effects	no	yes	no	yes	yes
year fixed effects	no	no	yes	yes	yes

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

Table 24

In the 11-day event window, the significant effect (at a 5% level) of the listing is then observed in all models and ranges from -0.058 in R4 & R5 to - 0.68 in R2. Furthermore, we can surprisingly observe a negative correlation between "Sameindustries" and the CAR in models R2, R4 & R5. This indicates that (c.p.) a CBMA generates less CAR when the acquirer and the target are from the same industry. Furthermore, in model R3 there is a significant negative correlation (-0.061) at

[17] As in the methodology described.
[18] In the following I will only write c.p. if I mean that the other variables in the model remain the same

an alpha of 5%, indicating that acquirers generate less returns through CBMA when the target is (c.p.) publicly listed as opposed to when it is privately listed. However, in the other regressions there is no significant evidence for that correlation. Again, in this Window, R5 is the model with the highest explanatory power, and while we should consider all models, we should place the most emphasis on this one.

CAR Window[-2,2]					
Model	**R1**	**R2**	**R3**	**R4**	**R5**
R-squared	13.75%	27.15%	22.86%	47.41%	46.11%
Adj R-squared	1.43%	12.18%	1.62%	15.86%	19.62%
	Coefficient	**Coefficient**	**Coefficient**	**Coefficient**	**Coefficient**
LogDealValue	0.002**	0.003***	0.002**	0.002**	0.002**
LogTotalAssetsAcquirer	0.008	0.005	0.006	0.003	0.003
RelDealsize	-0.010	-0.024	-0.017	-0.002	0.001
ROA	-0.178	-0.191	-0.147	-0.223	-0.237
ReturnonSales	no	no	no	0.097	no
DummyStockExchangeShenzen	-0.023	-0.026	-0.021	-0.018	-0.020
DummyAcqMajown	-0.001	-0.007	-0.026	0.000	-0.004
DummyPublic	-0.019	-0.008	-0.034*	-0.028	-0.025
DummySameindustries	-0.020	-0.031	-0.018	-0.034*	-0.032*
Geographical fixed effects	yes	no	no	yes	yes
Industry fixed effects	no	yes	no	yes	yes
year fixed effects	no	no	yes	yes	yes

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

Table 25

Let us now turn to the 5-day window, the only event window in which we obtained a significant CAAR (see Table 12). Here we can see a positive significant correlation (5% level) between the transaction value and the CAR in each model. That is, the higher the transaction value (c.p.), the higher the generated CAR in CBMA. However, in the two models with the highest adjusted R^2 (R5 and R5), the variable "Sameindustries" again plays a significant (10% level) role: Again, the correlation to CAR is slightly negative. Finally, in R3, there is again a significant (10%) negative correlation between listed targets and CAR.

-

CAR Window[1,1]					
Model	**R1**	**R2**	**R3**	**R4**	**R5**
R-squared	10.36%	30.45%	17.31%	42.61%	41.74%
Adj R-squared	-2.45%	16.16%	-5.46%	8.18%	13.10%
	Coefficient	**Coefficient**	**Coefficient**	**Coefficient**	**Coefficient**
LogDealValue	0.001	0.001	0.001	0.001	0.001
LogTotalAssetsAcquirer	0.009	0.005	0.008	0.009	0.009
RelDealsize	0.077	0.060	0.083	0.085	0.092
ROA	-0.121	-0.121	-0.066	-0.021	-0.051
ReturnonSales	no	no	no	0.007	no
DummyStockExchangeShenzen	-0.008	-0.009	-0.004	0.000	-0.002
DummyAcqMajown	-0.004	-0.006	-0.017	0.003	-0.003
DummyPublic	-0.020	-0.012	-0.028*	-0.021	-0.017
DummySameindustries	-0.021	-0.027*	-0.015	-0.026	-0.023
Geographical fixed effects	yes	no	no	yes	yes
Industry fixed effects	no	yes	no	yes	yes
year fixed effects	no	no	yes	yes	yes

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

Table 26

This and the 2-day window are the only event windows where R5 does not have the highest explanatory power. Here R2 has the highest explanatory power of the variance with 16.2%, and in the model, we can again observe a significant (10%) negative correlation between "Sameindustries" and CAR. In R2 (which, according to the negative adjusted $R^{2,}$ seems to include too many variables when controlling for year fixed effects), we can again observe a significant (10%) negative correlation between public targets and CAR.

CAR Window[0,1]					
Model	R1	R2	R3	R4	R5
R-squared	7.46%	21.60%	15.36%	36.95%	35.09%
Adj R-squared	-5.76%	5.49%	-7.95%	-0.87%	3.18%
	Coefficient	Coefficient	Coefficient	Coefficient	Coefficient
LogDealValue	0.001	0.000	0.000	0.000	0.000
LogTotalAssetsAcquirer	0.007	0.005	0.004	0.008	0.006
RelDealsize	0.074	0.061	0.054	0.075	0.066
ROA	-0.099	-0.063	-0.071	0.146	-0.006
ReturnonSales	no	no	no	-0.082	no
DummyStockExchangeShenzen	0.008	0.010	0.013	0.023	0.018
DummyAcqMajown	-0.001	0.000	-0.007	0.006	0.005
DummyPublic	-0.001	0.004	-0.012	-0.012	-0.003
DummySameindustries	-0.008	-0.008	-0.004	-0.010	-0.009
Geographical fixed effects	yes	no	no	yes	yes
Industry fixed effects	no	yes	no	yes	yes
year fixed effects	no	no	yes	yes	yes

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*

Table 27

In this Table, R2 again has the highest explanatory power, but no variable is significant in any of the models. We can observe the same signs in the coefficients. However, since none of the factors are significant and even the best model only has an adjusted R^2 of 5.5%, we should not draw any conclusions from this event window.

In summary, a recurrent significant correlation of several variables could be observed across certain (multiple) event windows. Thus, in the 21-days and 11-days event windows (Table 23 and Table 24, respectively), especially the listing of the acquirer plays a significant role in many regressions. From this, I conclude that my H4 can verify for these two Event Windows, while I find no evidence for in the other three Event windows. Therefore, my H4 is partially accepted. The negative coefficient, which ranges from -0.050 – 0.071, can be interpreted that if the acquirer is listed on the SZSE, it generates c.p. a lower CAR by 5.0 – 7.1 percentage points through a CBMA transaction than if it is listed on the SSE. This may be due to a variety of reasons: The signaling theory explained above may play a role here: Companies on the Shanghai Stock Exchange may manage to gain more trust from investors than companies on the Shenzhen Stock Exchange. In the SSE, nominally more industrial companies are represented, while in the SZSE more companies come from the High tech sector, which in principle leads more intangible assets (and R&D investments). Therefore, investors in the SSE may be able to explain potential synergies more plausibly. It is also the case that the SSE has larger companies than the SZSE. For example, with a market capitalization of 7,620bn (Shanghai Stock Exchange, 2022), the SSE has almost twice the volume of the SZSE ($4,500bn according to Shenzhen Stock Exchange, 2022). The larger companies can more credibly represent achieving potential synergies and overcoming any cultural or other hurdles that may arise. This is contradicted by the fact that both Industry and Acquirer or Deal Size were controlled. This means that the reason for the partly significant differences due to the listing is either an anomaly of the sample, or it has to do with some form of signaling, investor activity and trust or some other reason.

Furthermore, in my H5 I look for other relevant factors that show a significant correlation with the CAR ("At least one deal- or company characteristic [...] has significant explanatory power on the abnormal returns."). Here I can observe two variables which had a significant correlation with the CAR across multiple models and/or event windows. First, in the 11- and 5-day window (Tables 24, 25 & 26) one can observe a significant negative correlation of "Same Industries" and the CAR. In the 11-day window, the coefficient ranges from -0.037 (R1) to -0.065 (R4). Moreover, in R4 and R5 it is significant at an alpha of 1%. In the 5-day window the coefficient is between -0.034 (R4) and -0.032 (R5) and is significant at 10% and in the 3-day window it is also significant at -0.027. This means that investors seem to be more pessimistic towards CBMA transactions when c.p. the target is from the same sector as the acquirer. This result is somewhat surprising, since synergy effects can also be achieved in directly strategic acquisitions. However, it could be that investors in CBMA transactions see even more potential strategic assets and opportunities to expand the acquirer's business field profitably. Or deals like the acquisition of Zhongpin Shengde International Development by Heavy Industries, when a company "buys" a strategic advantage by acquiring its own raw material producer (different industries). Also the dummy "public", which stands for the public status of the listing before the acquisition, shows a significant correlation with the CAR in four out of five event windows (21-, 11-, 5-, & 3-day window Tables 23 - 26) in at least regression. It is interesting that in the 21-day window there is a positive correlation to an alpha of 10% whereas in all other significant regressions there is a negative correlation between the variables. At this point, however, it should be noted that the regressions with significant correlations between the variables all have relatively low explanatory power according to the low adjusted R2). Nevertheless, we find that there is a predominantly negative correlation between a publicly listed target and CAR in contrast to when the target is private. These findings are in line with Uddin & Boateng, 2009 , which also finds this and justifies that private companies are often held by a small group of individuals, that have more control and oversight and thus reduce the agency problem. The absence of the agency problem gives the owners of the private company power to control the timing of the sale and the selection of the appropriate buyer that can create value. Finally, in the 5-day event window a positive correlation of the deal value and the CAR is observed. Although no significant evidence for this can be found in the other models, the 5-day window is the only window with a significant positive abnormal CAAR and therefore one should attribute the highest importance to this window. Deal value correlates with CAR in models R1, R3, R4, and R5 (Table 25) with a coefficient of 0.02 at an alpha of 5%. In R2 there is even a correlation with a coefficient of 0.03 and an alpha of 1%. Thus, we can conclude that in the event window [-2,2], where a significant average abnormal return by CBMA transactions was observed, the deal value is significantly positively correlated with the CAR. That is, when the deal value increases by $10 millions[19], the CAR c.p. on average increases by 2.0 – 3.0 percentage points. This result may also be related to the signaling theory: High deal sums generate more attention and possibly more hype than lower deal sums. On the other hand, a high deal size indicates that the acquirer may have paid a high premium and now has to prove that it can achieve the potential synergies. In any case, we can observe that investors seem to find on average deals with high deal sums c.p. more attractive than deals with low deal sums, which might be more unpopular. Finally, we can consider our H5 as confirmed, since we observed the industry-fit of acquirer and target, the public status of the target and the deal value as significant variables across all event windows and regressions.

[19] Because of the applied logarithm on the deal value → log(x) = 1 → x = 10

Robustness Check

Part of the robustness check already involved the use of five different event windows and the creation of specific subsamples (in geographic areas). In particular, the different event windows allowed us to confirm or qualify certain effects in the regressions or in the significance of the CAAR. In addition to cross-sectional dependence protection, where the transaction data were again checked for possible overlap and bias, a number of other tests were performed to declare the tests and results robust in the context of their sample. For example, the Breusch-Pagan test for heteroskedasticity was performed for all event windows with the result that the error terms are homoscedastic. This means that the variance is constant and not affected by the sample size. Table 29 shows the test for the significant 5-day window where the H0 was not rejected (constant variance). The same test was performed for the other windows (see Appendix 4) with the result that the variance of the error terms in each event window is constant (homoscedastic) and does not require correction.

In addition, a correlation matrix as in Table 30 was created for each window[20] to avoid multicollinearity. It shows a high (69.0%) and significant (at 1% level) correlation of ROA and return on sales. This was to be expected since both depend on the net income of the company. Therefore, we adjusted this and ran the regression using only ROA, as it has a higher correlation with CAR. In addition, we find a significant correlation (1% level) between the transaction size and the listing dummy. This also makes sense since we know that the larger companies are listed on the SSE. Therefore, it is logical that a company listed on the SZSE will also have a smaller transaction size on average. However, since the correlation is below (-)30%, I chose to leave both variables in the model. Nevertheless, I performed a VIF test (Table 28) to check for possible multicollinearity since many explanatory variables were included in the model. The mean VIF coefficient of 2.24 indicates, according to Senthilnathan (2019), that there is no multicollinearity problem within the variables. Individually, the VIF coefficients of the variables are also not striking, with the highest value of 4.7 (DummyIndustry5) for all variables and 2.84 (LogTotalAssets) for the explanatory variables without fixed effects (marked in bold).

[20] Naturally for all windows the correlation between the explanatory variables stays constant and only slightly changes among the explanatory variables towards the dependent variable (column 1). Please find attached the other correlation matrixes in the Appendix 3.

Hence I can conclude that the results I obtained during my regressions and significance tests were robust relative to the sample size.

VIF Test		
Variable	VIF	1/VIF
DummyIndustry5	4.7	0.212641
DummyIndustry2	3.92	0.255176
DummyIndustry6	3.35	0.298407
DummyIndustryOther	2.96	0.338232
DummyYear2018	2.89	0.345792
LogTotalAssets	**2.84**	**0.351844**
DummyYear2016	2.71	0.36852
DummyYear2015	2.63	0.379592
DummyIndustry1	2.63	0.380642
DummyIndustry4	2.31	0.432004
DummyYear2017	2.24	0.445975
DummyGeoArea1	2.16	0.463823
DummyIndustry3	2.12	0.472051
DummyYear2011	1.92	0.521964
DummyAcqMajority	**1.9**	**0.524935**
DummyYear2019	1.89	0.529192
DummyYear2020	1.89	0.529951
DummyYear2012	1.86	0.536558
DummyGeoAr~r	1.84	0.543521
DummyGeoArea2	1.83	0.54506
DummyYear2010	1.82	0.548883
DummySameIndustry	**1.81**	**0.553611**
RelDealsize	**1.78**	**0.562264**
LogDealValue	**1.61**	**0.62182**
DummyStockExchange	**1.57**	**0.636759**
DummyYear2013	1.55	0.645347
DummyPublic	**1.51**	**0.660285**
DummyYear2014	1.43	0.699281
ROA	**1.35**	**0.73945**
Mean VIF	**2.24**	

Table 28: VIF Test for multicollinearity

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity
Assumption: Normal error terms
Variable: Fitted values of CAR Window[-2,2]

H0: Constant variance

chi2(1) = 1.40
Prob > chi2 = 0.2376
--> No rejection of H0

Table 29: Breusch-Pagan test for heteroskedasticity

Correlation Matrix	CAR Window[-2,2]	*LogDealValue*	*LogTotalAssets*	*RelDealsize*	*ROA*	*ReturnonSales*	*DummyStockExchange*
CAR Window[-2,2]	1						
LogDealValue p-value	0.16 *0.14*	1.00					
LogTotalAssets p-value	0.11 *0.26*	-0.07 *0.51*	1.00				
RelDealsize p-value	-0.08 *0.44*	0.04 *0.68*	-0.2681** *0.01*	1.00			
ROA p-value	-0.06 *0.48*	0.11 *0.29*	-0.08 *0.41*	0.05 *0.64*	1.00		
ReturnonSales p-value	0.08 *0.40*	0.08 *0.44*	0.05 *0.61*	-0.02 *0.83*	0.6991*** *0.00*	1.00	
DummyStockExchange p-value	0.06 *0.48*	0.36 *0.00*	0.2146** *0.02*	-0.2171** *0.04*	-0.06 *0.53*	0.02 *0.82*	1.00

=significant to a 10% level, **=significant to a 5% level, *=significant to a 1% level*
Table 30: Correlation Matrix of Event Window [-2,2]

Limitations and ideas for further research

Regarding the limitations, it is important to acknowledge that only the very broad H5 could be confirmed, while for all other hypotheses, I have found only partial evidence. This is due to some factors and hurdles that have to be considered in the full analysis. First of all, the results are based on some assumptions.

Assumptions of the model(s)

First of all, the analysis basically assumes that the conditions of the markets are semi-strong efficient market hypothesis hold. Thus, all public information is available to the investor, and he also acts fully rationally according to them. This assumption is common in my topic and is also used by other authors, for example Du & Boateng (2015) & Uddin & Boateng (2009). In reality, however, it can be, as also Ning et al. (2014) describe, that the investors suffer from Information asymmetry or are also subject to heuristic biases and therefore do not (can) act completely rationally. Furthermore, although some variables have been normalized, it is possible that we underestimate or do not correctly estimate the standard error in the regression models. Lastly, we use certain proxies to name a variable. However, these proxies may not always be logical or fully represent what we define them to be. For example, there may be different ways to define Profitability (Return on Sales, Return on Assets,...) or Size (Market Value, Total Assets,...) of a company. In my analysis, I assume that the proxies are accurate but must acknowledge that this may not always be the case. Also, especially in the Chinese market, free trading of shares is not always possible The liquidity of shares traded on the SSE and SZSE is constrained in comparison to free markets (e.g. Hong Kong stock exchange), as the trading of government shares and shares of legal entities is severely limited (J. Wu et al., 2014). This can lead to delays in market reaction compared to freer markets with more agents.

Data limitations

The biggest challenge of this analysis was by far the creation of the data sample.

The sample size varies greatly with consideration of specific requirements (e.g., length of estimation window) as well as access to data. I followed the previous literature as closely as possible in creating the dataset. However, I could only access the deals provided by Refinitiv Reuters and its data screener. Especially for the included requirements a tradeoff with the size of the data samples was often necessary. With Chinese companies, state ownership also plays an important role. Initially, I also wanted to analyze this effect. Unfortunately, I had to acknowledge that I could not find enough information to include this variable in my model since many companies are indirectly state-owned, and this can only be found out by detailed research of each individual company. In addition, many non-officially state-owned enterprises are (most likely) under the influence of the government if board members are also high-ranking party members. Lastly, I could not access an event study tool, as is possible for western companies via the WRDS tool, for example. Therefore, I had to do my event study manually using Excel and VBA, which, unlike an event study tool, limited me in the flexibility of adding variables later.

Further studies should look deeper into a possible effect, and the possible reasons for the variables deal size, public ownership of target, differences in the stock exchange of acquirer, and similarity of the industries. Especially the two latter ones imply an exciting analysis and research for plausible theories. Furthermore, an increased sample size could provide more robust results. This would also allow better analysis of variables such as differences in the origin of the target, as some outliers would not bias the results. If access to data allows, the variable of state ownership should be included in any case, even if only in a rudimentary form, in order to analyze potential significant correlations

Conclusion

This paper deals with analyzing Chinese publicly listed companies' cross-border transactions and a potential creation of short-term value. A total of 119 deals were analyzed from January 2010 to December 2021. In five different event windows (21-days, 11-days, 5-days, 3-days, and 2-days), it was evaluated whether a CBMA transaction of a Chinese company could generate significant abnormal returns or whether a significant majority of the companies could achieve positive abnormal returns. Furthermore, the abnormal returns were evaluated and tried to be explained by eight different variables (deal size, assets of the acquirer, deal size relative to acquirer size, the profitability of acquirer, stock exchange listing of the acquirer, similarity of industries, acquisition stake and public status of target). Moreover, I also looked for regional differences in the targets and controlled for possible fixed effects of geographical area, industry, and transaction year to not falsely attribute some of these effects to the other explanatory variables. To test the robustness, five different models were applied and compared with respect to their explanatory power. For the 5-day event window [-2,2], I found a significant cumulative average abnormal return for Chinese companies through CBMA transactions of 1.88%. This return is mainly attributable to the 36 transactions with targets from the Asia/Pacific region, the only subsample to achieve a significant CAAR for the same window.

Additionally, for the 2-day window [0,1], I found that a significant majority (at an alpha of 10%) could generate positive abnormal returns through CBMA transactions. It should also be noted that in each event window analyzed, most transactions always generated a positive abnormal return. On the other hand, since in four of the five-event windows, no significant CAAR was generated and no significant majority could achieve positive abnormal returns, I conclude that my H1 and H2 are only partially confirmed. I could observe regional differences in the generation of abnormal returns. Nevertheless, only in the 5-day event window [-2,2], a single (at 10% level) significant difference in abnormal returns in the target's home country (from Asia to Europe) could be found in the regression models. Hence I conclude that I found too little evidence to confirm my H3.

Furthermore, I find a high (5.0 to 7.1 percentage points) a significant correlation between the acquirer's stock exchange and the CAR in two windows [-10.10] and [-5.5],

Further studies should look more deeply into the possible reasons for this or provide new findings. I, therefore, consider my H4 to be confirmed in the 21- and 11-day windows. Finally, in the context of my last hypothesis (H5), I searched the broader spectrum for other correlations to CAR and found them: In several windows [-5.5], [-2.2], and [-1,2], the industry fit of target and acquirer and the public status of the target play a significant role. The acquisition of targets that do not come from the same industry as the acquirer is valued better by investors at 2.8 – 7.1% points (and up to a 1% significance level) than targets from the same industry. Finally, in the 5-day event window where significant CAAR could be obtained, deal value has a positive (to a 1% to 5% alpha) significant correlation with CAR. A $10 million increase in the deal value leads to a rise of 2.0 – 3.0 percentage points in the CAR c.p. Thus, I can consider my broad H5 as confirmed and add the public status of the target, industry similarity, and deal value as (partially) significant variables. Finally, even if most Chinese acquirers could achieve positive abnormal returns in the period around CBMA transactions, buyers should not or could not rely on them. The distribution of positive abnormal returns is predominant but still relatively balanced and never exceeds 60%. Some negative examples also had to register a negative abnormal return of nearly -50% in some windows. Of course, it is not so easy to analyze a non-transparent market like the Chinese one.

On the other hand, especially in this field, further clarification is needed to grasp the topic entirely. Hence, this study's results contribute to the general studies of possible abnormal returns of Chinese companies through CBMA transactions. Especially with regard to the selected time, the paper provides insight into the fact that companies cannot rely on short-term value creation through a CBMA at present. The study shows that only a slight majority of companies could achieve positive abnormal returns in the period around the transaction. Finally, the paper shows that some company- and deal-specific characteristics, such as the industry match of acquirer and target, the listing of the acquiring company, and the deal value, can significantly influence abnormal returns. Chinese companies that want to minimize the risk of short-term value destruction can use the findings of this paper as a guide to making the best rational decision.

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Appendix

Acquiror Full Name	Acquiror Primary Stock Exchange	Acquiror Macro Industry	Acquiror Mid Industry	Acquiror Total Assets Last 12 Months	Acquiror Net Sales Last 12 Months	Acquiror Net Income Last 12 Months	ROA	Return on Sales	Date Announced
Zijin Mining Group Co Ltd	Shanghai	Materials	Metals & Mining	$ 4 407.26	$ 13 995.18	$ 519.22	11.78%	3.71%	28/12/2018
Sichuan Hebang Biotechnology Co Ltd	Shanghai	Materials	Chemicals	$ 1 471.84	$ 354.76	$ 109.03	7.41%	30.73%	29/06/2015
Hainan Airlines Co Ltd	Shanghai	Industrials	Transportation & Infrastructure	$ 10 857.78	$ 3 207.01	$ 445.29	4.10%	13.88%	02/12/2011
China First Heavy Industries	Shanghai	Industrials	Machinery	$ 5 037.95	$ 2 884.56	$ 18.91	0.38%	0.66%	29/06/2021

Announcement Year	Deal Value	Percentage of Shares Acquired in Transaction	Target Full Name	Target Nation	Geographic Area	Target Stock Exchange Name	Target Public Status	Target Macro Industry	Target Mid Industry	Target Total Assets Last 12 Months
2018	$ 1 660.92	100%	Nevsun Resources Ltd	Canada	North America	NYSE Amex|	Public	Materials	Metals & Mining	$ 1 074.01
2015	$ 89.99	51%	Stockton Israel Ltd	Israel	Asia/Pacific	Nasdaq	Private	Materials	Chemicals	
2011	$ -	48%	Aigle Azur Transports Aeriens SAS	France	Europe		Subsidiary	Industrials	Transportation & Infrastructure	$ 199.48
2021	$ 371.47	39%	Zhongpin Shengde International D	Indonesia	Asia/Pacific		Subsidiary	Materials	Machinery	

Appendix 1: Other interesting deals within the sample

Dummy Legend

Dummy Industry(i)	i =		in %
High Technology	0	11	9.2%
Consumer Products and Services	1	9	7.6%
Consumer Staples	2	15	12.6%
Energy and Power	3	11	9.2%
Healthcare	4	9	7.6%
Industrials	5	38	31.9%
Materials	6	16	13.4%
Real Estate	7	4	3.4%
Retail	8	3	2.5%
Telecommunications	9	3	2.5%
Other	Other	10	8.40%

Dummy Year (i)	i =	nr	in %
2021	0	7	6.7%
2020	1	9	7.6%
2019	2	13	10.1%
2018	3	19	16.0%
2017	4	13	10.9%
2016	5	16	13.4%
2015	6	17	14.3%
2014	7	2	1.7%
2013	8	7	5.9%
2012	9	4	3.4%
2011	10	7	5.9%
2010	11	5	4.2%

Dummy Stock Exchange(i)	i =		in %
Shanghai	0	93	78.2%
Shenzhen	1	26	21.8%

DummySame industry(i)	i =		in %
no	0	48	40.3%
yes	1	71	59.7%

Dummy Acq. Maj own (i)	i =		in %
no	0	31	26.1%
yes	1	88	73.9%

Dummy Geo Area (i)	i =		in %
Asia/Pacific	0	36	30.3%
Europe	1	57	47.9%
North America	2	17	14.3%
South America	3	6	5.0%
Africa	4	3	2.5%
Other	Other	9	7.56%

Dummy public			in %
Non-public	0	102	85.7%
Public	1	17	14.3%

Appendix 2: Dummy Legend

Correlation Matrix	CAR Window[10,10]	LogDealValue	LogTotalAssets	RelDealsize	ROA	ReturnonSales	DummyStockExchange
CAR Window[10,10]	1						
LogDealValue	-0.10	1.00					
p-value	0.36						
LogTotalAssets	0.15	-0.07	1.00				
p-value	0.10	0.51					
RelDealsize	-0.07	0.04	-0.2681**	1.00			
p-value	0.51	0.68	0.01				
ROA	0.02	0.11	-0.08	0.05	1.00		
p-value	0.81	0.29	0.41	0.64			
ReturnonSales	0.00	0.08	0.05	-0.02	0.6991***	1.00	
p-value	0.98	0.44	0.61	0.83	0.00		
DummyStockExchange	-0.11	0.36	0.2146**	-0.2171**	-0.06	0.02	1.00
p-value	0.23	0.00	0.02	0.04	0.53	0.82	

Correlation Matrix	CAR Window[5,5]	LogDealValue	LogTotalAssets	RelDealsize	ROA	ReturnonSales	DummyStockExchange
CAR Window[5,5]	1						
LogDealValue	-0.05	1.00					
p-value	0.65						
LogTotalAssets	0.13	-0.07	1.00				
p-value	0.16	0.51					
RelDealsize	-0.15	0.04	-0.2681**	1.00			
p-value	0.16	0.68	0.01				
ROA	-0.06	0.11	-0.08	0.05	1.00		
p-value	0.53	0.29	0.41	0.64			
ReturnonSales	-0.08	0.08	0.05	-0.02	0.6991***	1.00	
p-value	0.38	0.44	0.61	0.83	0.00		
DummyStockExchange	-0.10	0.3593*	0.2146**	-0.2171**	-0.06	0.02	1.00
p-value	0.26	0.00	0.02	0.04	0.53	0.82	

Correlation Matrix	CAR Window[2,2]	LogDealValue	LogTotalAssets	RelDealsize	ROA	ReturnonSales	DummyStockExchange
CAR Window[2,2]	1						
LogDealValue	0.16	1.00					
p-value	0.14						
LogTotalAssets	0.11	-0.07	1.00				
p-value	0.26	0.51					
RelDealsize	-0.08	0.04	-0.2681**	1.00			
p-value	0.44	0.68	0.01				
ROA	-0.06	0.11	-0.08	0.05	1.00		
p-value	0.48	0.29	0.41	0.64			
ReturnonSales	0.08	0.08	0.05	-0.02	0.6991***	1.00	
p-value	0.40	0.44	0.61	0.83	0.00		
DummyStockExchange	0.06	0.36	0.2146**	-0.2171**	-0.06	0.02	1.00
p-value	0.48	0.00	0.02	0.04	0.53	0.82	

Correlation Matrix	CAR Window[1,1]	LogDealValue	LogTotalAssets	RelDealsize	ROA	ReturnonSales	DummyStockExchange
CAR Window[1,1]	1						
LogDealValue	0.07	1.00					
p-value	0.54						
LogTotalAssets	0.12	-0.07	1.00				
p-value	0.20	0.51					
RelDealsize	0.10	0.04	-0.2681**	1.00			
p-value	0.37	0.68	0.01				
ROA	-0.04	0.11	-0.08	0.05	1.00		
p-value	0.68	0.29	0.41	0.64			
ReturnonSales	0.04	0.08	0.05	-0.02	0.6991***	1.00	
p-value	0.67	0.44	0.61	0.83	0.00		
DummyStockExchange	0.06	0.36	0.2146**	-0.2171**	-0.06	0.02	1.00
p-value	0.48	0.00	0.02	0.04	0.53	0.82	

Correlation Matrix	CAR Window[0,1]	LogDealValue	LogTotalAssets	RelDealsize	ROA	ReturnonSales	DummyStockExchange
CAR Window[0,1]	1						
LogDealValue	0.07	1.00					
p-value	0.51						
LogTotalAssets	0.11	-0.07	1.00				
p-value	0.23	0.51					
RelDealsize	0.10	0.04	-0.2681**	1.00			
p-value	0.36	0.68	0.01				
ROA	-0.06	0.11	-0.08	0.05	1.00		
p-value	0.50	0.29	0.41	0.64			
ReturnonSales	-0.08	0.08	0.05	-0.02	0.6991***	1.00	
p-value	0.41	0.44	0.61	0.83	0.00		
DummyStockExchange	0.11	0.36	0.2146**	-0.2171**	-0.06	0.02	1.00
p-value	0.24	0.00	0.02	0.04	0.53	0.82	

Appendix 3: Correlation Matrices of all Windows (only the first column changes)

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity
Assumption: Normal error terms
Variable: Fitted values of CAR Window[10,10]

H0: Constant variance

chi2(1) = 1.53
Prob > chi2 = 0.2168
--> No rejection of H0

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity
Assumption: Normal error terms
Variable: Fitted values of CAR Window[5,5]

H0: Constant variance

chi2(1) = 0.11
Prob > chi2 = 0.7366
--> No rejection of H0

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity
Assumption: Normal error terms
Variable: Fitted values of CAR Window[2,2]

H0: Constant variance

chi2(1) = 1.40
Prob > chi2 = 0.2376
--> No rejection of H0

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity
Assumption: Normal error terms
Variable: Fitted values of CAR Window[1,1]

H0: Constant variance

chi2(1) = 0.58
Prob > chi2 = 0.4459
--> No rejection of H0

Breusch–Pagan/Cook–Weisberg test for heteroskedasticity
Assumption: Normal error terms
Variable: Fitted values of CAR Window[0,1]

H0: Constant variance

chi2(1) = 2.93
Prob > chi2 = 0.0868
--> No rejection of H0

Appendix 4: Homoscedasticity test for all Windows

Acquiror Full Name	Acquiror Primary Stock Exchange	Acquiror Macro Industry	Acquiror Mid Industry	Acquiror Total Assets Last 12 Months (USD, Millions)	Acquiror Net Sales Last 12 Months (USD, Millions)	Acquiror Net Income Last 12 Months (USD, Millions)	ROA	Return on Sales	Date Announced	Announcement Year	Deal Value (USD, Millions)	Percentage of Shares Acquired in Transaction
Baoshan Iron & Steel Co Ltd	Shanghai	Materials	Metals & Mining	$ 51 694.87	$ 45 566.53	$ 2 259.98	4.37%	4.96%	02/01/2018	2018		100%
Hisense Electric Co Ltd	Shanghai	Telecommunications	Telecommunications E	$ 3 440.25	$ 5 024.56	$ 183.17	5.32%	3.65%	14/11/2017	2017	$ 52.68	95%
Shanghai Kaichuang Marine International Co Ltd	Shanghai	Consumer Staples	Agriculture & Livestock	$ 205.38	$ 97.90	$ 7.33	3.57%	7.49%	26/11/2015	2015	$ 68.48	100%
Kingfa Sci & Tech Co Ltd	Shanghai	Materials	Chemicals	$ 2 042.30	$ 2 016.04	$ 132.84	6.50%	6.59%	21/05/2013	2013	$ 1.92	66%
Shangying Global Co Ltd	Shanghai	Consumer Staples	Textiles & Apparel	$ 433.10	$ 44.45	$ -8.57	-1.98%	-19.28%	11/10/2016	2016	$ 280.00	100%
Fosun Pharma	Shanghai	Healthcare	Pharmaceuticals	$ 14 109.27	$ 5 989.78	$ 1 598.76	11.33%	26.69%	27/07/2016	2016	$ 1 260.00	74%
YTO Express Group Co Ltd	Shanghai	Industrials	Transportation & Infras	$ 1 553.46	$ 2 916.02	$ 238.04	15.32%	8.16%	24/10/2016	2016	$ 133.75	62%
Sinotrans Air Transportation Development Co Ltd	Shanghai	Industrials	Transportation & Infras	$ 1 227.29	$ 672.08	$ 99.51	8.11%	14.81%	25/03/2015	2015	$ 0.80	100%
Bluestar Adisseo Co Ltd	Shanghai	Consumer Products and Serv	Other Consumer Produ	$ 2 783.42	$ 1 645.52	$ 166.72	5.99%	10.13%	07/09/2020	2020		100%
Yantai Wanhua Polyurethanes Co Ltd	Shanghai	Materials	Chemicals	$ 1 988.98	$ 1 430.59	$ 232.20	11.67%	16.23%	30/06/2010	2010	$ 1 700.43	58%
Guangxi Guidong Electric Power Co Ltd	Shanghai	Energy and Power	Power	$ 1 637.01	$ 647.54	$ 11.45	0.70%	1.77%	15/12/2016	2016		100%
Shanghai Jahwa United Co Ltd	Shanghai	Consumer Staples	Household & Personal I	$ 1 289.24	$ 897.49	$ 333.06	25.83%	37.11%	28/04/2016	2016	$ 196.26	100%
Dalian Rubber & Plastics Machinery Co Ltd	Shanghai	Industrials	Machinery	$ 374.24	$ 140.51	$ -3.12	-0.83%	-2.22%	28/10/2011	2011	$ 17.96	90%
Ji lin Ji En Nickel Industry Co Ltd	Shanghai	Materials	Chemicals	$ 2 115.97	$ 443.71	$ 5.16	0.24%	1.16%	30/11/2011	2011	$ 85.59	100%
Hunan Corun New Energy Co Ltd	Shanghai	Energy and Power	Other Energy & Power	$ 324.24	$ 236.00	$ 2.96	0.91%	1.25%	31/01/2011	2011	$ 6.16	100%
Lingyun Industrial Corp Ltd	Shanghai	Industrials	Automobiles & Compo	$ 1 273.43	$ 1 101.86	$ 22.81	1.79%	2.07%	28/04/2015	2015		100%
Yunnan Chihong Zinc & Germanium Co Ltd	Shanghai	Materials	Metals & Mining	$ 3 452.81	$ 1 769.24	$ 50.43	1.46%	2.85%	09/11/2012	2012	$ 10.20	51%
Keda Clean Energy Co Ltd	Shanghai	Industrials	Machinery	$ 1 751.28	$ 882.97	$ -85.61	-4.89%	-9.70%	01/03/2019	2019	$ 19.10	60%
Sinochem International Corp	Shanghai	Materials	Chemicals	$ 9 143.36	$ 10 528.96	$ 150.80	1.65%	1.43%	15/10/2018	2018	$ 225.46	100%
Kweichow Moutai Co Ltd	Shanghai	Consumer Staples	Food and Beverage	$ 7 299.59	$ 4 190.60	$ 2 243.26	30.73%	53.53%	26/04/2013	2013		100%
Jiangsu Zhongtian Technology Co Ltd	Shanghai	High Technology	Other High Technology	$ 4 392.32	$ 4 610.17	$ 286.96	6.53%	6.22%	16/07/2018	2018	$ 66.67	100%
ChangYuan Group Ltd	Shanghai	High Technology	Electronics	$ 2 386.09	$ 961.04	$ 93.63	3.92%	9.74%	31/08/2017	2017		100%
Wolong Electric Group Co Ltd	Shanghai	Energy and Power	Other Energy & Power	$ 2 562.17	$ 1 501.92	$ 118.31	4.62%	7.88%	26/12/2017	2017	$ 142.02	100%
JCET Group Co Ltd	Shanghai	High Technology	Semiconductors	$ 4 719.91	$ 3 074.13	$ -159.31	-3.38%	-5.18%	24/12/2019	2019		100%
Bright Dairy & Food Co Ltd	Shanghai	Consumer Staples	Food and Beverage	$ 633.74	$ 1 240.49	$ 20.38	3.22%	1.64%	19/07/2010	2010	$ 58.23	51%
Shanghai Shenda Co Ltd	Shanghai	Consumer Staples	Textiles & Apparel	$ 771.29	$ 1 298.25	$ 35.31	4.58%	2.72%	12/01/2017	2017	$ 316.26	70%
Shanghai Wanye Enterprises Co Ltd	Shanghai	Real Estate	Other Real Estate	$ 1 076.08	$ 98.52	$ 31.98	2.97%	32.46%	21/12/2020	2020	$ 398.00	100%
Shanghai Yuyuan Tourist Mart (Group) Co Ltd	Shanghai	Retail	Other Retailing	$ 14 044.81	$ 5 886.12	$ 460.83	3.28%	7.83%	20/03/2020	2020	$ 29.55	55%
Harbin Pharmaceutical Group Co Ltd	Shanghai	Healthcare	Pharmaceuticals	$ 1 448.28	$ 1 573.64	$ -33.28	-2.30%	-2.11%	18/09/2020	2020	$ 770.00	100%
Xinjiang Bai Hua Cun Co Ltd	Shanghai	High Technology	Software	$ 669.55	$ 177.99	$ -37.65	-5.62%	-21.16%	21/01/2015	2015		100%
CMST Development Co Ltd	Shanghai	Industrials	Other Industrials	$ 2 032.00	$ 2 908.53	$ 85.19	4.19%	2.93%	15/09/2015	2015	$ 60.00	51%
Huaxin Cement Co Ltd	Shanghai	Materials	Construction Materials	$ 7 324.46	$ 4 825.91	$ 802.07	10.95%	16.62%	01/12/2021	2021	$ 150.00	100%
Shanghai Mechanical & Electrical Industry Co Ltd	Shanghai	Industrials	Machinery	$ 4 585.79	$ 3 129.97	$ 273.04	5.95%	8.72%	20/10/2015	2015	$ 3.88	100%
Shang Gong Group Co Ltd	Shanghai	Consumer Staples	Household & Personal I	$ 287.36	$ 260.57	$ 7.10	2.47%	2.73%	08/07/2013	2013	$ 23.81	100%
SDIC Power Holdings Co Ltd	Shanghai	Energy and Power	Petrochemicals	$ 28 248.45	$ 4 815.75	$ 836.02	2.96%	17.36%	25/02/2016	2016	$ 258.19	100%
SDIC Zhonglu Fruit Juice Co Ltd	Shanghai	Consumer Staples	Food and Beverage	$ 232.35	$ 140.83	$ -0.35	-0.15%	-0.25%	15/12/2017	2017	$ 19.10	100%
Guangdong Yihua Timber Industry Co Ltd	Shanghai	Consumer Products and Serv	Home Furnishings	$ 1 151.73	$ 432.01	$ 40.09	3.48%	9.28%	06/06/2012	2012	$ 38.15	83%
Chifeng Jilong Gold Mining Co Ltd	Shanghai	Materials	Metals & Mining	$ 1 267.07	$ 579.64	$ 128.51	10.14%	22.17%	01/11/2021	2021	$ 452.45	100%
Jiangsu Hengli Highpressure Oil Cylinder Co Ltd	Shanghai	Industrials	Machinery	$ 710.16	$ 166.71	$ 12.98	1.83%	7.79%	12/11/2015	2015	$ 14.72	100%
Universal Scientific Industrial (Shanghai) Co Ltd	Shanghai	High Technology	Electronics	$ 3 009.22	$ 5 228.64	$ 176.75	5.87%	3.38%	13/12/2019	2019	$ 450.00	100%
Liqun Commercial Group Co Ltd	Shanghai	Retail	Discount and Departme	$ 1 283.43	$ 1 705.44	$ 69.76	5.44%	4.09%	11/05/2018	2018		100%
Ningbo Sanxing Medical Electric Co Ltd	Shanghai	Energy and Power	Other Energy & Power	$ 1 269.07	$ 682.35	$ 91.51	7.21%	13.41%	05/04/2016	2016		51%
Shanghai Pharmaceuticals Holding Co Ltd	Shanghai	Healthcare	Pharmaceuticals	$ 24 316.39	$ 32 522.00	$ 870.60	3.58%	2.68%	06/07/2021	2021		100%
China Communications Construction Co Ltd	Shanghai	Industrials	Transportation & Infras	$ 112 004.44	$ 62 170.33	$ 2 391.83	2.14%	3.85%	25/11/2016	2016	$ 103.23	80%
Zijin Mining Group Co Ltd	Shanghai	Materials	Metals & Mining	$ 4 407.26	$ 13 995.18	$ 519.22	11.78%	3.71%	28/12/2018	2018	$ 1 660.92	100%
Jiangsu Phoenix Publishing & Media Corp Ltd	Shanghai	Telecommunications	Publishing	$ 2 570.20	$ 1 194.72	$ 151.38	5.89%	12.67%	14/05/2014	2014	$ 80.00	100%
China Wafer Level CSP Co Ltd	Shanghai	Consumer Products and Serv	Professional Services	$ 330.06	$ 82.36	$ 10.34	3.13%	12.56%	23/01/2019	2019	$ 36.63	73%
Sichuan Hebang Biotechnology Co Ltd	Shanghai	Materials	Chemicals	$ 1 471.84	$ 354.76	$ 109.03	7.41%	30.73%	29/06/2015	2015	$ 89.99	51%
CIG Shanghai Co Ltd	Shanghai	High Technology	IT Consulting & Service	$ 362.80	$ 432.12	$ 5.09	1.40%	1.18%	02/05/2018	2018	$ 54.50	100%
Zhejiang Tiancheng Controls Co Ltd	Shanghai	Industrials	Automobiles & Compo	$ 251.77	$ 137.18	$ 11.83	4.70%	8.63%	23/05/2018	2018	$ 75.40	100%
JOINN Laboratories (China) Co Ltd	Shanghai	Consumer Products and Serv	Professional Services	$ 175.34	$ 64.33	$ 16.63	9.48%	25.85%	20/05/2019	2019	$ 27.28	100%
Shenzhen Goodix Technology Co Ltd	Shanghai	High Technology	Semiconductors	$ 856.05	$ 650.58	$ 169.47	19.80%	26.05%	19/08/2019	2019	$ 165.00	100%
Zhejiang Chimin Pharmaceutical Co Ltd	Shanghai	Healthcare	Pharmaceuticals	$ 132.67	$ 67.82	$ 7.37	5.55%	10.86%	23/05/2016	2016		100%
Wuxi AppTec Co Ltd	Shanghai	Healthcare	Biotechnology	$ 3 505.28	$ 1 527.54	$ 351.11	10.02%	22.99%	15/05/2019	2019		100%
Dalian Energas Gas-System Co Ltd	Shanghai	Energy and Power	Oil & Gas	$ 150.10	$ 58.88	$ 1.24	0.83%	2.10%	01/09/2016	2016		100%
Jack Sewing Machine Co Ltd	Shanghai	Industrials	Machinery	$ 437.90	$ 297.99	$ 36.14	8.25%	12.13%	16/08/2017	2017	$ 7.75	100%
Fujian Anjoy Foods Co Ltd	Shanghai	Consumer Staples	Food and Beverage	$ 1 061.16	$ 1 067.45	$ 92.54	8.72%	8.67%	30/03/2021	2021	$ 7.20	70%
Guangdong Wencan Die Casting Co Ltd	Shanghai	Industrials	Machinery	$ 518.74	$ 211.66	$ 9.43	1.82%	4.46%	09/12/2019	2019	$ 171.25	62%
Jiangsu Sunrain Solar Energy Co Ltd	Shanghai	Industrials	Other Industrials	$ 722.50	$ 323.86	$ 31.40	4.35%	9.69%	12/06/2017	2017		100%
Zhejiang Jinghua Laser Technology Co Ltd	Shanghai	Consumer Products and Serv	Professional Services	$ 128.48	$ 78.18	$ 12.20	9.49%	15.60%	26/12/2018	2018	$ 2.18	100%

Target Full Name	Target Nation	Geographic Area	Target Stock Exchange Name ('|')	Target Public Status	Target Macro Industry	Target Mid Industry	Target Total Assets Last 12 Months (USD, Millions)
WISCO International Tailored Blar	Germany	Europe		non-public	Materials	Metals & Mi	
Toshiba Visual Solutions Corp	Japan	Asia/Pacific		non-public	High Technol	IT Consulting	
Hijos de Carlos Albo SL	Spain	Europe		non-public	Consumer St	Food and Be	$ 46.66
Hydro S&S Industries Ltd	India	Asia/Pacific	Bombay	Public	Materials	Chemicals	$ 15.61
Oneworld Star International	United State	North America		non-public	Consumer St	Textiles & Ap	
Gland Pharma Ltd	India	Asia/Pacific		non-public	Healthcare	Pharmaceuti	
On Time Logistics Holdings Ltd	Hong Kong	Asia/Pacific	Hong Kong	Public	Industrials	Transportatio	$ 121.23
China Interocean Transport Inc	United State	North America		non-public	Industrials	Transportatio	
FRAmelco BV	Netherlands	Europe		non-public	Consumer Pr	Other Consur	
BorsodChem Zrt	Hungary	Europe		non-public	Materials	Chemicals	
Fire Power Plant	India	Asia/Pacific		non-public	Energy and P	Power	
Mayborn Group PLC	United Kingd	Europe		non-public	Consumer Pr	Other Consur	
BUZULUK as	Czech Repub	Europe		non-public	Industrials	Building/Con	
Goldbrook Ventures Inc	Canada	North Ameri	Frankfurt|TS	Public	Materials	Metals & Mi	$ 41.95
Shonan Energy Co Ltd	Japan	Asia/Pacific		non-public	Energy and P	Other Energy	
Waldaschaff Automotive GmbH	Germany	Europe		non-public	Industrials	Automobiles	$ 43.46
Empresa Minera Yang Fan SA	Bolivia	South America		non-public	Materials	Metals & Mi	
Icf & Welko SpA	Italy	Europe		non-public	Industrials	Machinery	
ELIX Polymers SL	Spain	Europe		non-public	Materials	Chemicals	$ 106.86
Chateau Loudenne SASU	France	Europe		non-public	Consumer St	Food and Be	
Demirer Kablo Tesisleri Sanayi Ve	Turkey	Asia/Pacific		non-public	Industrials	Building/Con	
OptoFidelity Oy	Finland	Europe		non-public	Consumer Pr	Professional	$ 10.98
General Electrical Co-Assets	Mexico	South America		non-public	Energy and P	Other Energy	
Analog Devices Inc-Test Facility	Singapore	Asia/Pacific		non-public	High Technol	Semiconduct	
Synlait Milk Ltd	New Zealand	Asia/Pacific		non-public	Consumer St	Food and Be	
International Automotive Compon	Luxembourg	Europe		non-public	Industrials	Automobiles	
Compart Systems Pte Ltd	Singapore	Asia/Pacific		non-public	Industrials	Other Indust	
Djula SAS	France	Europe		non-public	Retail	Other Retaili	$ 17.49
GNC Holdings Inc	United State	North Ameri	New York Sto	Public	Retail	Food & Beve	$ 1 216.52
Chateau De La Bastide SARL	France	Europe		non-public	Consumer St	Food and Be	
Henry Bath & Son Ltd	United Kingd	Europe		non-public	Industrials	Other Indust	$ 198.85
Holcim Ag-Zambian Cement Busir	Zambia	Africa		non-public	Materials	Construction	
CTU Clean Technology Universe A	Switzerland	Europe		non-public	Energy and P	Power	
KSL Keilmann Sondermaschinenba	Germany	Europe		non-public	Industrials	Machinery	$ 9.66
Repsol Nuevas Energias UK Ltd	United Kingd	Europe		non-public	Energy and P	Alternative E	$ 105.71
Appol Sp z o o	Poland	Europe		non-public	Consumer St	Food and Be	
Societe Anonyme Hua-Jia de l'Indu	Gabon	Africa		non-public	Industrials	Other Indust	
Golden Star Resources Ltd	Canada	North Ameri	TSXVenture	Public	Materials	Metals & Mi	$ 352.02
HAWE InLine Hydraulik GmbH	Germany	Europe		non-public	Industrials	Machinery	$ 11.21
AsteelFlash Group SA	France	Europe		non-public	High Technol	Semiconduct	
Hong Fung Ltd	Hong Kong	Asia/Pacific		non-public	Real Estate	Residential	
Nansen SA Instrumentos de Precis	Brazil	South America		non-public	High Technol	Electronics	$ 12.19
Fimet Oy	Finland	Europe		non-public	Healthcare	Healthcare E	
Concremat Engenharia e Tecnolog	Brazil	South America		non-public	Industrials	Building/Con	$ 111.92
Nevsun Resources Ltd	Canada	North Ameri	NYSE Amex|	Public	Materials	Metals & Mi	$ 1 074.01
Publications International Ltd-Ass	United State	North America		non-public	Media and E	Publishing	
Anteryon International BV	Netherlands	Europe		non-public	Healthcare	Healthcare E	$ 10.59
Stockton Israel Ltd	Israel	Asia/Pacific	Nasdaq	non-public	Materials	Chemicals	
MACOM Japan Ltd-LR4 100G Long	Japan	Asia/Pacific		non-public	High Technol	Semiconduct	
Acro Holdings Ltd	United Kingd	Europe		non-public	Industrials	Automobiles	
Biomedical Research Mdels Inc	United State	North America		non-public	Healthcare	Healthcare P	
NXP BV-VOA Solution Assets	Netherlands	Europe		non-public	High Technol	Computers &	
Linear Chemicals SL	Spain	Europe		non-public	Healthcare	Healthcare E	$ 3.99
Pharmapace Inc	United State	North America		non-public	Consumer Pr	Professional	
RMG Messtechnik GmbH	Germany	Europe		non-public	Industrials	Other Indust	$ 23.51
Macchine Automatismi Industriali	Italy	Europe		non-public	Industrials	Machinery	$ 3.28
Oriental Food Express Ltd	United Kingd	Europe		non-public	Consumer St	Food and Be	
Le Belier SA	France	Europe	Euro Paris	Public	Industrials	Automobiles	$ 448.23
Conserval Engineering Inc - Assets	Canada	North America		non-public	High Technol	Semiconduct	
Fresnel Plate Technology Co Ltd	Hong Kong	Asia/Pacific		non-public	High Technol	IT Consulting	

Appendix 5: Final Deal sample1/2

Acquiror Full Name	Acquiror Primary Stock Exchange	Acquiror Macro Industry	Acquiror Mid Industry	Acquiror Total Assets Last 12 Months (USD, Millions)	Acquiror Net Sales Last 12 Months (USD, Millions)	Acquiror Net Income Last 12 Months (USD, Millions)	ROA	Return on Sales	Date Announced	Announcement Year	Deal Value (USD, Millions)	Percentage of Shares Acquired in Transaction
Noblelift Intelligent Equipment Co Ltd	Shanghai	Industrials	Machinery	$ 480.65	$ 350.76	$ 29.08	6.05%	8.29%	05/07/2018	2018	$ 50.54	100%
Zhejiang Henglin Chair Industry Co Ltd	Shanghai	Consumer Products and Serv	Home Furnishings	$ 422.87	$ 366.16	$ 29.42	6.96%	8.03%	04/06/2019	2019		100%
Zhejiang XCC Group Co Ltd	Shanghai	Industrials	Other Industrials	$ 584.02	$ 336.19	$ 18.01	3.08%	5.36%	27/07/2021	2021	$ 25.72	100%
Shanghai Moons' Electric Co Ltd	Shanghai	Energy and Power	Other Energy & Power	$ 343.03	$ 265.65	$ 25.57	7.45%	9.62%	27/12/2018	2018	$ 31.72	100%
Loncin Motor Co Ltd	Shanghai	Industrials	Automobiles & Compo	$ 1 370.75	$ 1 224.71	$ 118.55	8.65%	9.68%	17/11/2016	2016	$ 43.68	67%
Shenzhen Ellassay Fashion Co Ltd	Shanghai	Consumer Staples	Textiles & Apparel	$ 273.10	$ 122.88	$ 22.07	8.08%	17.96%	16/10/2015	2015	$ 12.61	100%
Zhejiang Xinao Textiles Inc	Shanghai	Consumer Staples	Textiles & Apparel	$ 465.16	$ 350.47	$ 22.45	4.83%	6.41%	22/06/2020	2020	$ 5.94	100%
Zhejiang Tieliu Clutch Co Ltd	Shanghai	Industrials	Automobiles & Compo	$ 221.31	$ 134.84	$ 16.64	7.52%	12.34%	24/05/2018	2018	$ 44.76	100%
Eurocrane (China) Co Ltd	Shanghai	Industrials	Machinery	$ 199.35	$ 105.14	$ 9.97	5.00%	9.48%	13/09/2018	2018	$ 56.96	100%
SEC Electric Machinery Co Ltd	Shanghai	Energy and Power	Other Energy & Power	$ 120.37	$ 35.88	$ 3.15	2.62%	8.79%	13/04/2017	2017		100%
China Vanke Co Ltd	Shenzhen	Real Estate	Other Real Estate	$ 106 279.27	$ 31 213.26	$ 2 802.40	2.64%	8.98%	07/09/2016	2016	$ 154.53	100%
Fawer Automotive Parts Ltd Co	Shenzhen	Industrials	Automobiles & Compo	$ 1 838.65	$ 1 519.70	$ 127.81	6.95%	8.41%	14/08/2020	2020	$ 15.01	100%
China International Marine Containers (Group) Co Lt	Shenzhen	Materials	Containers & Packaging	$ 11 424.89	$ 8 934.85	$ 217.58	1.90%	2.44%	02/12/2013	2013		90%
Shenzhen Zhongjin Lingnan Nonfemet Co Ltd	Shenzhen	Materials	Metals & Mining	$ 2 195.70	$ 2 329.98	$ 56.09	2.55%	2.41%	03/09/2013	2013	$ 113.69	47%
ZTE Corp	Shenzhen	Telecommunications	Telecommunications E	$ 17 562.79	$ 13 130.79	$ 424.45	2.42%	3.23%	21/10/2015	2015	$ 3.24	100%
Norinco International Cooperation Ltd	Shenzhen	Industrials	Building/Construction &	$ 1 792.32	$ 1 827.71	$ 97.67	5.45%	5.34%	29/11/2017	2017	$ 37.90	76%
Zoomlion Heavy Industry Science & Technology Co L	Shenzhen	Industrials	Machinery	$ 14 201.70	$ 7 715.93	$ 1 176.55	8.28%	15.25%	20/12/2013	2013		100%
Midea Group Co Ltd	Shenzhen	Consumer Staples	Household & Personal I	$ 22 509.63	$ 21 002.72	$ 2 058.29	9.14%	9.80%	21/06/2016	2016		80%
Huayi Compressor Co Ltd	Shenzhen	Industrials	Machinery	$ 707.46	$ 842.45	$ 6.54	0.92%	0.78%	18/04/2012	2012		100%
Nanjing Red Sun Co Ltd	Shenzhen	Materials	Chemicals	$ 1 866.54	$ 764.52	$ 107.21	5.74%	14.02%	30/01/2018	2018	$ 23.00	60%
GD Midea Holding Co Ltd	Shenzhen	Consumer Staples	Household & Personal	$ 5 506.43	$ 7 906.82	$ 342.24	6.22%	4.33%	30/04/2010	2010	$ 57.00	33%
Guangxi Liugong Machinery Co Ltd	Shenzhen	Industrials	Machinery	$ 4 157.59	$ 2 754.05	$ 119.93	2.88%	4.35%	08/04/2019	2019		100%
Hainan Haiyao Co Ltd	Shenzhen	Healthcare	Pharmaceuticals	$ 440.79	$ 152.56	$ 12.40	2.81%	8.13%	07/11/2012	2012	$ 9.90	40%
Weifu High-Technology Group Co Ltd	Shenzhen	Industrials	Automobiles & Compc	$ 3 078.25	$ 1 385.93	$ 395.21	12.84%	28.52%	28/03/2018	2018	$ 40.00	12%
Guangdong Fenghua Advanced Technology (Holding	Shenzhen	Industrials	Machinery	$ 871.86	$ 330.04	$ 15.48	1.78%	4.69%	22/09/2015	2015	$ 42.83	40%
Hebei Iron & Steel Co Ltd	Shenzhen	Materials	Metals & Mining	$ 26 732.82	$ 10 696.20	$ 77.63	0.29%	0.73%	18/04/2016	2016	$ 28.71	100%
BOE Technology Group Co Ltd	Shenzhen	High Technology	Electronics	$ 23 486.36	$ 7 484.61	$ 252.04	1.07%	3.37%	03/02/2016	2016	$ 179.53	55%
Nanjing Huadong Electronics Information & Technol	Shenzhen	Industrials	Other Industrials	$ 41 393.67	$ 942.97	$ 532.19	1.29%	56.44%	16/09/2020	2020	$ 1 144.45	51%
Sichuan Haowu Electromechanical Co Ltd	Shenzhen	Industrials	Automobiles & Compc	$ 140.16	$ 77.70	$ 4.65	3.32%	5.98%	21/06/2017	2017	$ -	50%
China Nonferrous Metal Industry's Foreign Enginee	Shenzhen	Industrials	Building/Construction	$ 3 477.25	$ 2 334.23	$ 32.20	0.93%	1.38%	25/04/2018	2018	$ 69.64	19%
Yantai Moon Co Ltd	Shenzhen	Industrials	Machinery	$ 467.55	$ 271.48	$ 33.50	7.17%	12.34%	07/01/2015	2015	$ 61.41	100%
Sound Environmental Resources Co Ltd	Shenzhen	Energy and Power	Water and Waste Man	$ 961.24	$ 374.63	$ 78.64	8.18%	20.99%	02/07/2013	2013	$ 0.04	100%
Kingdream PLC	Shenzhen	Energy and Power	Oil & Gas	$ 294.06	$ 235.89	$ 18.13	6.17%	7.69%	19/09/2011	2011	$ -	40%
Yantai Changyu Pioneer Wine Co Ltd	Shenzhen	Consumer Staples	Food and Beverage	$ 1 477.07	$ 725.95	$ 175.12	11.86%	24.12%	31/08/2015	2015	$ 39.13	75%
Yinyi Real Estate Co Ltd	Shenzhen	Real Estate	Other Real Estate	$ 3 859.35	$ 1 386.40	$ 105.44	2.73%	7.61%	30/09/2016	2016		100%
Yantai China Pet Foods Co Ltd	Shenzhen	Consumer Products and Serv	Other Consumer Produ	$ 377.76	$ 342.01	$ 20.67	5.47%	6.04%	01/02/2021	2021	$ 24.04	70%
Shanghai International Port (Group) Co Ltd	Shanghai	Industrials	Transportation & Infra	$ 9 414.40	$ 2 471.59	$ 593.27	6.30%	24.00%	21/04/2010	2010	$ 33.32	25%
Poly Real Estate Group Co Ltd	Shanghai	Real Estate	Other Real Estate	$ 94 833.94	$ 19 747.02	$ 2 041.22	2.15%	10.34%	30/11/2017	2017	$ 779.66	50%
China Gezhouba Group Co Ltd	Shanghai	Industrials	Building/Construction	$ 31 630.70	$ 14 576.52	$ 593.79	1.88%	4.07%	22/02/2019	2019	$ -	16%
Wuhan Humanwell Healthcare (Group) Co Ltd	Shanghai	Healthcare	Biotechnology	$ 884.88	$ 440.34	$ 38.99	4.41%	8.85%	15/07/2011	2011	$ 15.46	32%
Jiangsu Hongtu High Technology Co Ltd	Shanghai	Retail	Computers & Electron	$ 2 872.37	$ 2 785.17	$ 59.12	2.06%	2.12%	18/03/2015	2015	$ 32.18	45%
Hainan Airlines Co Ltd	Shanghai	Industrials	Transportation & Infra	$ 10 857.78	$ 3 207.01	$ 445.29	4.10%	13.88%	02/12/2011	2011	$ -	48%
Zhejiang Hisun Pharmaceutical Co Ltd	Shanghai	Healthcare	Pharmaceuticals	$ 2 804.20	$ 1 636.61	$ 38.29	1.37%	2.34%	31/03/2015	2015	$ 4.29	21%
Henan Yuguang Gold & Lead Co Ltd	Shanghai	Materials	Metals & Mining	$ 536.53	$ 963.68	$ 18.46	3.44%	1.92%	19/04/2010	2010	$ 4.79	15%
Atlantic China Welding Consumables Inc	Shanghai	Industrials	Machinery	$ 428.17	$ 351.09	$ 9.56	2.23%	2.72%	26/03/2015	2015	$ 0.71	50%
Hundsun Technologies Inc	Shanghai	High Technology	IT Consulting & Servic	$ 825.32	$ 433.46	$ 78.92	9.56%	18.21%	23/10/2018	2018	$ 65.53	42%
San'an Optoelectronics Co Ltd	Shanghai	High Technology	Semiconductors	$ 912.37	$ 130.90	$ 63.62	6.97%	48.60%	24/01/2011	2011	$ 3.00	13%
Ningbo Shanshan Co Ltd	Shanghai	Consumer Staples	Textiles & Apparel	$ 3 692.01	$ 1 351.42	$ 149.14	4.04%	11.04%	20/06/2019	2019	$ 17.30	12%
Jiangsu Lianyungang Port Co Ltd	Shanghai	Industrials	Transportation & Infra	$ 1 356.49	$ 204.64	$ 0.98	0.07%	0.48%	27/03/2020	2020	$ 0.18	25%
Tibet Huayu Mining Co Ltd	Shanghai	Materials	Metals & Mining	$ 422.77	$ 121.99	$ 43.25	10.23%	35.46%	19/12/2017	2017	$ 90.00	50%
China First Heavy Industries	Shanghai	Industrials	Machinery	$ 5 037.95	$ 2 884.56	$ 18.91	0.38%	0.66%	29/06/2021	2021	$ 371.47	39%
Jiangsu Linyang Energy	Shanghai	High Technology	Electronics	$ 585.18	$ 343.98	$ 67.48	11.53%	19.62%	23/12/2014	2014	$ -	15%
Camel Group Co Ltd	Shanghai	Energy and Power	Other Energy & Power	$ 1 186.01	$ 908.27	$ 74.65	6.29%	8.22%	11/04/2017	2017	$ 28.61	19%
Jangho Group Co Ltd	Shanghai	Industrials	Building/Construction	$ 3 147.01	$ 2 562.95	$ 48.44	1.54%	1.89%	31/07/2015	2015	$ 24.79	20%
Changshu Automotive Trim Co Ltd	Shanghai	Industrials	Automobiles & Compc	$ 946.07	$ 281.53	$ 35.16	3.72%	12.49%	16/07/2020	2020	$ -	30%
Autobio Diagnostics Co Ltd	Shanghai	Healthcare	Healthcare Equipment	$ 347.61	$ 258.00	$ 77.75	22.37%	30.13%	17/12/2018	2018	$ 11.30	10%
Jason Furniture (Hangzhou) Co Ltd	Shanghai	Consumer Products and Ser	Home Furnishings	$ 999.41	$ 1 024.46	$ 126.41	12.65%	12.34%	27/03/2018	2018	$ 59.86	14%
Guangzhou Kingmed Diagnostics Group Co Ltd	Shanghai	Consumer Products and Ser	Professional Services	$ 509.08	$ 582.78	$ 28.97	5.69%	4.97%	23/01/2018	2018	$ 23.42	50%
Jchx Mining Management Co Ltd	Shanghai	Industrials	Building/Construction	$ 939.04	$ 459.45	$ 41.96	4.47%	9.13%	18/11/2019	2019	$ 8.29	20%

Target Full Name	Target Nation	Geographic Area	Target Stock Exchange Name ('|')	Target Public Status	Target Macro Industry	Target Mid Industry	Target Total Assets Last 12 Months (USD, Millions)
Savoye SA	France	Europe		non-public	Industrials	Building/Con	$ 58.75
Lista Office AG	Switzerland	Europe		non-public	Consumer Pr	Home Furnis	
FLT Polska Sp z o o	Poland	Europe		non-public	Industrials	Other Indust	
Technosoft Motion AG	Switzerland	Europe		non-public	High Technol	Semiconduct	
CMD Costruzioni Motori Diesel Sp	Italy	Europe		non-public	Industrials	Automobiles	$ 83.50
East Light International Investme	Hong Kong	Asia/Pacific		non-public	Consumer St	Textiles & Ap	
Todd & Duncan Ltd	United Kingd	Europe		non-public	Consumer St	Textiles & Ap	
Geiger Fertigungstechnologie Gm	Germany	Europe		non-public	Industrials	Automobiles	
Voith - Werke Ing. A. Fritz Voith G	Austria	Europe		non-public	Industrials	Building/Con	$ 31.14
VEM Motors GmbH	Germany	Europe		non-public	Energy and P	Other Energy	$ 32.35
Ryder Court,London	United Kingd	Europe		non-public	Real Estate	Non Residen	
ABC Umformtechnik GmbH & Co	Germany	Europe		non-public	Industrials	Building/Con	
Bassoe Technology AB	Sweden	Europe		non-public	Industrials	Building/Con	$ 9.96
Perilya Ltd	Australia	Asia/Pacific	Australia	Public	Materials	Perilya Ltd	$ 638.62
Tekmart International Inc	Canada	North America		non-public	Energy and P	Power	
Energija Projekt dd	Croatia	Europe		non-public	Energy and P	Power	
m-tec mathis technik gmbh	Germany	Europe		non-public	Industrials	Machinery	$ 32.97
Clivet SpA	Italy	Europe		non-public	Industrials	Machinery	$ 75.62
Cubigel Compressors SA	Spain	Europe		non-public	Industrials	Machinery	$ 0.06
Ruralco Soluciones SA	Argentina	South America		Joint Venture	Consumer St	Agriculture 8	
Misr Refrigeration & Air Conditic	Egypt	Africa	Egypt	Public	Industrials	Misr Refrige	
Construction Plant & Machinery S	United Kingd	Europe		non-public	Industrials	Machinery	
SinoMab BioScience Ltd	Hong Kong	Asia/Pacific	Hong Kong	non-public	Healthcare	SinoMab Bi	
Protean Holdings Corp	United Stat	North Ameri	€ -	non-public	Energy and	Protean Hol	
Viking Tech Corp	Taiwan	Asia/Pacific	Taiwan OTC	Public	High Technc	Viking Tech	$ 113.27
Smederevo dp	Serbia	Europe		non-public	Materials	Metals & Mi	
Varitronix International Ltd	Hong Kong	Asia/Pacific	Hong Kong	Public	High Technol	Electronics	$ 314.55
TPV Technology Ltd	Hong Kong	Asia/Pacific		non-public	High Technol	Computers &	$ 4 960.23
FEUER powertrain GmbH & Co K	Germany	Europe	€ -	non-public	Industrials	FEUER pow	$ 257.14
KAZ Minerals PLC-Koksay Deposit	Kazakhstan	Asia/Pacific	€ -	non-public	Materials	KAZ Minera	
Yantai Moon Group (Hong Kong) L	Malaysia	Asia/Pacific		non-public	Industrials	Machinery	
Sound Environmental(Hong Kong)	Hong Kong	Asia/Pacific		non-public	Consumer Pr	Other Consu	
PDC Logic LLC	United Stat	North Ameri	€ -	non-public	Industrials	PDC Logic LL	
Hacienda y Vinedos Marques del	Spain	Europe		non-public	Consumer St	Food and Be	
AI Technology	Japan	Asia/Pacific		non-public	High Technol	Electronics	
PetfoodNZ International Ltd	New Zealand	Asia/Pacific		non-public	Consumer Pr	Other Consu	
APM Terminals Zeebrugge NV	Belgium	Europe	€ -	non-public	Industrials	APM Termir	$ 33.81
Poly (Hong Kong) Holdings Ltd	Hong Kong	Asia/Pacific	€ -	non-public	Real Estate	Poly (Hong K	
Undisclosed Santa Cruz Dams JV	Argentina	South Ameri	€ -	Joint Ventur	Energy and	Undisclosed	
PuraCap Pharmaceutical LLC	United Stat	North Ameri	€ -	non-public	Consumer P	PuraCap Pha	
IDT International Ltd	Hong Kong	Asia/Pacific	Hong Kong	Public	Industrials	IDT Internat	$ 105.70
Aigle Azur Transports Aeriens SA	France	Europe	€ -	non-public	Industrials	Aigle Azur T	$ 199.48
IMD Natural Solutions GmbH	Germany	Europe	€ -	non-public	Consumer P	IMD Natura	
Kimberley Metals Ltd	Australia	Asia/Pacific	Australia	Public	Materials	Kimberley M	$ 21.04
Vietnam Atlantic Welding Manuf	Vietnam	Asia/Pacific	€ -	non-public	Materials	Vietnam Atl	
DZH (HK) Investment Holding Co	Hong Kong	Asia/Pacific	€ -	non-public	High Technc	DZH (HK) In	
Crystal IS Inc	United Stat	North Ameri	€ -	non-public	High Technc	Crystal IS In	
Altura Mining Ltd	Australia	Asia/Pacific	Australia	Public	Materials	Altura Minir	$ 199.02
Lianyungang Ferry Co Ltd	South Korea	Asia/Pacific	€ -	Joint Ventur	Industrials	Lianyungang	
Talco Gold Closed Joint-Stock Co	Tajikistan	Asia/Pacific	€ -	non-public	Materials	Talco Gold C	
Zhongpin Shengde International	Indonesia	Asia/Pacific	€ -	non-public	Materials	Zhongpin Sh	
Elgama-Elektronika UAB	Lithuania	Europe	€ -	non-public	Industrials	Elgama-Elel	
Rimac Automobili doo	Croatia	Europe	Unknown	non-public	Industrials	Rimac Auto	
Vision Eye Institute Ltd	Australia	Asia/Pacific	Australia	Public	Healthcare	Vision Eye I	$ 114.41
Way Group	Germany	Europe	€ -	non-public	Consumer P	Way Group	
Mobidiag Oy	Finland	Europe	€ -	non-public	Healthcare	Mobidiag O	$ 37.19
Nick Scali Ltd	Australia	Asia/Pacific	Australia	Public	Retail	Nick Scali Lt	$ 106.84
Dra Co Ltd	Hong Kong	Asia/Pacific	€ -	non-public	Healthcare	Dra Co Ltd	
Cordoba Minerals Corp	Canada	North Ameri	TSXVenture	Public	Materials	Cordoba Mi	$ 15.63

Appendix 6: Final Deal sample 2/2