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What Drives Chinese Overseas M&A Investment? Evidence from Micro Data

Clemens Fuest, Felix Hugger, Samina Sultan, Jing Xing *

Abstract

In recent years Chinese foreign acquisitions have increased significantly. In Europe and the US, these investments are often criticized. Critics argue that Chinese investors outbid other investors with help from their government, that the acquisitions lead to undesirable technology transfer or that they may have negative consequences for the employees of the target firm. We use a large deal-level dataset on cross-border acquisitions to investigate whether Chinese foreign acquisitions differ from cross-border investment coming from other countries. We find that relative to non-Chinese investors, Chinese acquirers indeed appear to be different in some dimensions. They focus on targets with higher debt levels and lower profitability. At the same time, they don't seem to pay more for targets with given characteristics, questioning the view that they are subsidized to outbid other investors. Policy initiatives like the Belt and Road Initiative and Made in China 2025 influence state-owned but not private Chinese investors, suggesting that geopolitical or technology interests play a role. In the years after the takeover, target companies acquired by Chinese investors exhibit lower growth in capital productivity but a higher growth of employee compensation.

JEL codes: F21, F23, G34, G38

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1. Introduction

In recent years, Chinese investors have significantly increased their foreign investment activities especially in the form of cross-border mergers and acquisitions (M&As). In many countries, notably in the US and in Europe, Chinese M&As arouse suspicion. Critics claim that Chinese acquisitions lead to undesirable technology transfers to China, that Chinese acquirers enjoy unfair advantages because of government subsidies, or that their acquisitions are motivated strategically with the objective to gain market dominance or to increase China's political influence in the host countries. There are also concerns that Chinese takeovers may have adverse consequences for the employees of the target firms. According to a recent survey by the ifo Institute, for example, economists from 74% of the countries surveyed are more critical of foreign investment from China than of that from other countries (ifo Institute, 2019). At the same time, there are legitimate reasons for the surging Chinese investment abroad. China has invested its revenue from its trade surplus primarily in US government bonds for a long time. Thus, diversifying its foreign investment through cross-border M&As seems perfectly rational. For many Chinese firms, foreign acquisitions are also a way to ensure access to customers or key suppliers, in particular of raw materials. This debate, however, is mostly based on speculations and anecdotes. Despite a growing number of studies on Chinese overseas investment, there is surprisingly little systematic evidence on whether Chinese cross-border M&As differ from investment coming from other countries. As Buckley, Clegg, Cross, Liu, Voss and Zheng conclude, "the degree to which China is truly different from the advanced economies, or from other emerging economies, is worthy of debate" (2018, p. 18).

It is the objective of this paper to fill this gap by examining whether Chinese foreign acquisitions differ from foreign acquisitions of investors from other countries. Unlike previous quantitative studies that mostly use aggregate data, we use a large deal-level dataset, which allows us to analyze not only how host country-level factors but also how target-level characteristics affect cross-border M&As. Instead of focusing solely on Chinese cross-border M&As, we use a logit model to directly compare the drivers of Chinese foreign acquisitions with those of non-Chinese investments. To our best knowledge such an approach has not been carried out before on a comparable scale.

Pooling state-owned and private acquirers together, we find that Chinese overseas M&As are indeed distinct from non-Chinese cross-border investments in several aspects. For example, Chinese acquirers appear to be less concerned about market size, and conduct more deals in tax havens and offshore financial centers. Chinese companies also tend to acquire targets with lower profitability, larger size, higher levels of debt, and more patents. Interestingly, we do not find that host-countries' institutional qualities, such as political stability and the rule of law, play a different role in determining Chinese cross-border acquisitions than they do for non-Chinese investors.

At the same time, we uncover rich differences between private and state-owned Chinese acquirers (SOEs), which appear to be attracted to distinctive sets of host country-level and target-level characteristics. The only common features that apply to both types of Chinese acquirers are their preferences for targets in countries with lower income and smaller population, and for targets with lower profitability. Chinese SOEs and private investors are also differently affected by recent Chinese government policies like the *Belt and Road Initiative* (BRI) or *Made in China 2025*. While we find these government initiatives to have a significant impact on the location and industry choices of Chinese SOEs' overseas acquisitions, they do not appear to influence those of Chinese private investors.

Whether the prevailing critical attitude towards Chinese cross-border M&As is justifiable also requires a comparison of Chinese SOEs with government-led investors from elsewhere, which has not been conducted before. Based on a sample of government-led acquisitions, we find no significant difference between Chinese and non-Chinese SOEs in seeking natural resources or industry diversification. Chinese SOEs, however, do tend to purchase targets with larger sizes and worse financial performances.

Another critique of Chinese acquirers is that they systematically outbid other investors, as government support gives them 'unfair' advantages. This in turn may distort the global M&A market, with potentially adverse economic effects on the host countries. However, such criticism is largely based on anecdotal evidence. To shed light on this debate, we use our detailed deal-level dataset to examine whether Chinese investors pay higher acquisition prices, while controlling for target-level characteristics, host-country and industry fixed effects, and business cycle effects. In contrast to the view that Chinese companies pay hefty premiums to win bids, we do not find that Chinese investors pay differently for similar target firms compared to non-Chinese investors.

Finally, a key issue is whether Chinese investors have a different impact on the development of target firms including their employees after the acquisition. We find that post-merger performance differs in two dimensions. First, capital productivity is lower in the short-run, mostly because Chinese acquirers seem to invest more after the takeover. Secondly, the growth of employee compensation is higher. Since most Chinese foreign acquisitions happened relatively recently, the number of cases where we can observe post-merger performance is limited, though.

The rest of the paper is structured as follows. In the next Section, we provide a brief review of related literature. In the third Section, we describe our data and sample construction. We provide descriptive statistics in the fourth Section and present our empirical analysis in the fifth and sixth Section. Section seven concludes.

2. Related Literature

A long list of factors have been suggested to influence cross-border M&As in economics, finance, and international business literature. This list includes access to resources and technology, entry to the foreign market, diversification, geographic proximity, bilateral trade, and relative valuation in currencies and stock markets (Erel, Liao & Weisbach, 2012); domestic financial market development (di Giovanni, 2005); accounting disclosure and accounting standards (Erel et al., 2012; Rossi & Volpin, 2004); shareholder protection and corporate governance (Kim & Lu, 2013); cultural differences (Ahern, Damineli & Fracassi, 2015); and social attitudes (Dinc & Erel, 2013); host and home countries' institutional qualities such as political stability and the rule of law (Brockman, Rui & Zou, 2013; Erel, Liao & Weisbach, 2012; Jandik & Kali, 2009); regulatory arbitrage (Alimov, 2015; Karolyi & Taboada, 2015); and taxes (Huizinga & Voget, 2009). Some argue that no new theoretical framework is needed to explain Chinese foreign investment (Alon, Chang, Fetscherin, Lattemann & McIntyre, 2009; Rugman, 2010). That is, the same list of economic and institutional factors should similarly affect both Chinese and non-Chinese cross-border M&As. Others believe Chinese multinational enterprises (MNEs) are distinctive (Boisot & Meyer, 2008; Buckley, Clegg, Cross, Liu, Voss & Zheng, 2007; Child & Rodrigues, 2005). Despite these contrasting views, there is a dearth of systematic quantitative analysis that compares the patterns of Chinese cross-border M&As with those of other investors.

Following the seminal work by Buckley et al. (2007), there has been an increasing number of studies on determinants of Chinese outward greenfield investment (for example, Kolstad & Wiig, 2012; Lu, Liu & Wang, 2011). However, there are much fewer quantitative studies on Chinese cross-border M&A activities, even though they have become the main form of outward foreign direct investment by Chinese firms and may be influenced by a different set of factors (Buckley, Yu, Munjal & Tao, 2016). Using aggregate-level data during 1985-2011, Buckley et al. (2016) examine country-level factors that affect the location and scale of Chinese overseas M&As. According to Buckley et al. (2016), institutional rather than economic factors make cross-border acquisitions of MNEs from emerging market distinct. Consistent with this view, they find that Chinese MNEs are attracted to countries with higher risks, proxied by a poorer record of law and order. Nonetheless, Buckley et al. (2016) do not compare Chinese acquirers with investors from other countries. Therefore, their study does not answer the question whether economic and institutional features affect Chinese investors differently.

One distinct feature of Chinese investors is that many have close ties to the government. Studies on Chinese foreign Greenfield investment have compared SOEs with private firms (Amighini, Rabellotti & Sanfiliippo, 2013; Duanmu, 2012; Ramasamy, Yeung & Laforet, 2012; Luo, Qi & Hubbard, 2017), and uncovered significant differences. For example, SOEs are less concerned about political risk in the host country, less market oriented and more resource-seeking in their investment decisions. Nevertheless, the contrast between government-led and private acquirers may not be China-specific. For example, comparing cross-border M&As by both private and

government-led acquirers around the globe, Karolyi and Liao (2017) find that pursuing targets in countries with rich natural resources and high potential to diversify industrial structures are common features for government-backed acquirers in general. Therefore, to answer the question whether Chinese cross-border M&As are different, it is important to compare Chinese state-owned acquirers with government-led acquirers from other countries. To our knowledge, we are the first to conduct such a comparison on a larger scale.

3. Data and Sample Construction

We combine data from a number of sources to construct our samples. To obtain deal-level information, we use Bureau van Dijk's (BvD) Zephyr database, which contains information on worldwide M&A transactions. Cross-border deals are those where the target and the acquirer are located in different countries. We use the target companies' locations to identify their host countries. To identify the origin of the acquirer, we rely on the location of the acquirer's global ultimate owner (GUO). Frequently, the location of the acquirer is the same as that of its GUO, but in some cases relying on the location of the acquirer would be misleading due to intricate ownership structures. We exclude deals with multiple acquirers. If a firm acquires several targets in one deal, we regard each acquirer-target pair as a single transaction. Our full sample contains 157,985 completed M&A deals during the period 2002-2017, of which 3,283 are conducted by Chinese investors.[1] We differentiate between three types of acquirers: Chinese private acquirers, Chinese state-owned acquirers, and non-Chinese acquirers. A Chinese acquirer is regarded as an SOE if its GUO is state-owned or state-controlled. Following this definition, 1,279 deals of our full sample are conducted by Chinese SOEs.

For analyses and estimations, we take a number of steps to further clean the full sample. First, we focus on deals where at least 50% of the target's shares are purchased, and exclude deals where the host country is unknown. We drop deals where the target reports non-positive total assets, turnover, or employees, and where the target's intangible fixed assets is greater than total assets. To ensure comparability, we require each target to be involved in only one deal during our sample period. This additional data cleaning leaves us with a total of 72,056 deals, of which 1,168 are conducted by Chinese private investors and 732 by Chinese SOEs.

We augment the deal-level data with target country-level variables from various sources. From the World Bank's World Development Indicators (WDI), we obtain general macroeconomic variables like GDP, exchange rate, population, and resource rents. We use CEPII data for a weighted distance measure from the target country to China. The UN Comtrade database provides us with trade volume between the target country and China. To identify tax havens, we

[1] We restrict the sample period to deals in or after 2002, as there are few Chinese deals before that year.

rely on an OECD definition.[2] To measure institutional quality, we use the World Bank's World Governance Indicators for the rule of law, control of corruption, political stability, and regulatory strength. Table A1 in Appendix A provides more details about the definitions and sources for these country-level variables.

As financial information about the targets and acquirers is limited in Zephyr, we use the Bureau van Dijk's (BvD) Orbis database to obtain financial and ownership information on both targets and acquirers. Each target or acquirer is assigned a unique identifier by BvD, which allows us to link Zephyr with Orbis. Table A2 in Appendix A provides the definitions of target-level variables in our analyses.

4. Descriptive Statistics

Figure 1 shows the number and volume of cross-border acquisitions by type of acquirer during 2002-2017.[3] There are different time trends for Chinese and non-Chinese investment. For non-Chinese acquisitions (Panel A), we observe a peak in both number of deals and transaction volume around 2006-2007 and a significant drop during the 2008-2009 financial crisis. There is a gradual recovery of global cross-border M&As since around 2012. These patterns are consistent with observations made elsewhere (European Commission, 2018). Panel B shows that the evolution of Chinese cross-border acquisitions is rather different from the global trend. In particular, there was a surge in the number of Chinese cross-border transactions in 2008, in contrast to the dip in global M&A activities. Over time, both the number and volume of Chinese overseas acquisitions increase substantially, and such increase is remarkable relative to the global trend.

In Panels C and D, we distinguish between Chinese private and state-owned acquirers. These figures reveal that while there are fewer acquisitions by Chinese state-owned acquirers, they tend to conduct larger deals. The large spike in 2008 in terms of the number of cross-border deals as shown in Panel B is largely driven by activities of Chinese private acquirers. For both private and state-owned acquirers, the total value of acquisitions rises sharply over time. Since 2011, however, the rise is more prominent for acquisitions by SOEs. Table 1 summarizes the number of deals, and the mean and median deal values by acquirer types. Deal value data is available for about half of the Chinese transactions and for about one third of non-Chinese acquisitions. Table 1 confirms that Chinese SOEs are involved in larger deals than other acquirers, which is reflected by substantially higher mean and median deal values. In contrast, Chinese private acquirers tend to conduct deals of similar sizes to non-Chinese acquirers.

[2] See Table A3 in the Appendix for the list of countries.

[3] Deals are assigned to years depending on their date of completion.

There are also notable differences across the three types of investors in terms of how they conduct cross-border M&As. Figure 2 shows that Chinese SOEs predominantly engage in full or majority acquisitions. In contrast, a larger percentage of acquisitions by Chinese private or non-Chinese investors takes the form of gradual increases in stakes. This reflects that Chinese SOEs may follow a less cautious investment strategy, or be less financially constrained, relative to the other two types of investors.

Figure 3 looks at the distribution of cross-border deals in different geographical regions for the three acquirer types. A major share of global cross-border M&As takes place in Europe, which amounts to 66.6% of transactions by non-Chinese acquirers, 47.5% by Chinese SOEs, and 38.2% by Chinese private acquirers. Around 15-20% of global cross-border acquisition targets are located in North America. Significant differences emerge in other regions between Chinese and non-Chinese acquirers. There are more transactions by Chinese acquirers in the East Asia and Pacific region, as well as in Latin America and the Caribbean.

Table 2 offers a more detailed look at the distribution of deals by target countries and acquirer types. We rank host countries based on the number of Chinese private acquisitions. For each host country, we provide the number of deals, the total deal value and the corresponding sample percentages. One outstanding result is that a large percentage of Chinese private acquisitions occurs in tax havens and offshore financial centers. In fact, in terms of the number of deals, the British Virgin Islands is on top of the list for Chinese private acquirers. Chinese SOEs also have substantial activities in places like Virgin Islands, Cayman Islands, and Bermuda. In contrast, tax havens and offshore financial centers are less popular with non-Chinese acquirers. Table 2 again shows the geographic preference of Chinese acquirers for Asia and Pacific countries. Based on the total value of deals, a much higher share of Chinese acquisitions happen in Australia, Japan, Malaysia, and Singapore, relative to non-Chinese acquisitions. Nonetheless, there is no indication that Chinese acquirers have a tendency to invest more in BRIC countries (excluding China), as their investment pattern in Brazil, Russia, and India is not widely different from that of non-Chinese acquirers.

5. Are Chinese Overseas Acquisitions Different?

The central question we attempt to address in this study is whether Chinese overseas acquisitions have different rationales and patterns, compared with non-Chinese acquisitions. To shed light on this issue, we employ the deal-level data and estimate the following logit regression model:

$$(1) \quad \Pr\left(CN_{i,j,t} = 1\right) = F(\beta_0 + \beta_1 X^{T}_{i,j,t} + \beta_2 Z^{TC}_{i,j,t} + \gamma' Year\ dummies + \varepsilon_{i,j,t}),$$

where the dependent variable is a dummy indicating whether target i in country j in year t is purchased by a Chinese acquirer. In some estimations, we also differentiate between private Chinese firms and SOEs.[4] $X_{i,j,t}^{T}$ is a set of target-level characteristics, and $Z_{i,j,t}^{TC}$ is a set of target country-level characteristics. The coefficients of interest are β_1 and β_2, which indicate how various host country-level and target-level characteristics influence the probability of a target being acquired by a Chinese firm relative to being acquired by non-Chinese investors. If a coefficient is not statistically significant, the corresponding characteristic is either not important for all investors or equally important for Chinese and non-Chinese investors. We include year fixed effects in all specifications to control for general trends over time that affect all investors. In some specifications, we also control for industry and target country fixed effects as robustness checks. Standard errors are robust and clustered at the target firm level.

5.1 Effects of Host Country Characteristics

We first examine how host country characteristics affect the probability of a target being acquired by a Chinese firm as opposed to a non-Chinese investor. We consider a set of country-level economic indicators that are frequently employed in the literature. We use three variables to proxy for market size: GDPPC is real GDP per capita in the host country; GDP growth is the host country's annual real GDP growth rate; Population is the population of the host country. Cross-border M&As can be influenced by geographic proximity and trade relationship. Thus, we use Distance to measure the geographical distance between China and the target country, and Trade to measure the bilateral trade volume between China and the target country. We construct a dummy variable Tax Haven that equals 1 if a target country is regarded as a tax haven. To investigate whether Chinese cross-border M&As are more attracted to countries abundant in natural resources, we construct the variable Resource that is total resource rent as ratio to the host country's GDP. We further consider two variables associated with economic risks in the host country: Inflation is the annual inflation rate in the target country; and ΔExchange rate is the rate of appreciation or depreciation of the host country's currency against the Chinese renminbi (RMB), and a positive value stands for an appreciation of the RMB. Institutional qualities in host countries are often thought to be an important factor influencing cross-border M&As. Using the World Bank's World Governance Indicators, we control for four institutional quality indicators: Rule of Law, Control of Corruption, Political Stability, and Regulatory Strength. A larger value in these variables indicates better institutional quality of the host country.

Table 3 reports the estimated marginal effects based on the logit model, without controlling for target-level characteristics. Column 1 of Table 3 shows that relative to non-Chinese acquirers, Chinese acquirers tend to conduct acquisitions in countries with lower GDP per capita and GDP growth, and a smaller population. This suggests that Chinese cross-border M&As do not seem to be motivated by market size. As expected, being closer to China and having a larger trade volume

[4] In the regression for Chinese private companies, acquisitions by Chinese SOEs are excluded from the sample and vice versa.

with China both increase the probability of Chinese cross-border M&As. Chinese investors also show a strong preference for targets in tax havens, consistent with the previous descriptive analysis. A potential explanation is the existence of capital controls in China. Successfully bidding for firms requires the ability to make international payments at short notice. This may require Chinese companies to set up holding companies abroad, and tax havens and offshore financial centers may offer the best way to do so. Surprisingly, we do not find that resource-seeking is a more important determinant for Chinese acquisitions than for others, as the estimated marginal effect on Resource is statistically insignificant. Relative to other investors, Chinese acquirers tend to avoid inflation risks, as the estimated marginal effect on Inflation is negative and significant. However, they do not seem to be particularly concerned about currency risks. We control for Political Stability in Column 2, Regulatory Quality in Column 3, Rule of Law in Column 4, and Control of Corruption in Column 5 of Table 3. Throughout these columns, however, we find no evidence that these institutional qualities of host countries affect decisions on Chinese overseas acquisitions differently, as the estimated marginal effects on all four indicators are insignificant.

In Columns 6 and 7, we distinguish between Chinese private and state-owned acquirers. While the two types of Chinese acquirers are roughly similar in most dimensions, they are substantially different in several ways. First, the strong preference for tax havens is unique to Chinese private acquirers, while the difference between Chinese SOEs and non-Chinese acquirers is not significant in this dimension. Second, while Chinese private acquirers are less likely to purchase targets in resource-rich countries, the opposite is true for Chinese SOEs. Thus, seeking natural resources is a unique pattern for Chinese state-owned acquirers. Third, while Chinese private investors tend to invest in countries whose currency depreciates against the RMB, the reverse holds for Chinese SOEs. This suggests that Chinese SOEs may be less concerned about costs due to exchange rate risks. In unreported exercises, we include the four indicators of institutional qualities and compare the two types of Chinese acquirers with international acquirers. We continue to find that institutional qualities of host countries do not affect Chinese acquirers in a distinct way, regardless of their ownership types.

5.2 Industry Differences

Using deal-level information, we are able to investigate whether Chinese acquisitions are drawn to targets in specific industries. In Table 4, we include a set of target industry dummies based on the NACE industry classification[5], in addition to a basic set of macroeconomic control variables.[6] Column 1 in Table 4 reveals that Chinese acquisitions are more likely to occur in certain industries. For example, Chinese investors are keen on targets in certain manufacturing industries, such as manufacturing of electronics, machinery, and vehicles. Consistent with

[5] We use NACE industries 77 to 99 as the reference group. This includes administrative and support service activities, public administration and defence, compulsory social security, education, human health and social work activities, arts, entertainment and recreation, and other service activities.

[6] This includes GDP per capita, GDP growth, population, distance and bilateral trade.

resource seeking, Chinese acquirers are also more likely to conduct deals in the mining sector. In contrast, firms in the information and communication industry are less likely to be targeted by Chinese acquirers.

In Columns 2 and 3 of Table 4, we differentiate between private and state-owned Chinese companies. Agricultural firms, for example, are more likely to be acquired by Chinese SOEs, but the opposite is true for private Chinese firms. The same pattern holds for targets in the utility, construction, and the mining sector. These results are consistent with the previous finding that Chinese SOEs are particularly attracted to natural resources abroad. Additionally, a comparison of Columns 2 and 3 reveals that even within the manufacturing sector, the two types of Chinese acquirers display different preferences for specific industries.

Generally speaking, we find that Chinese cross-border acquisitions exhibit some notable differences compared to non-Chinese investors in terms of their industry preferences. However, the distinction is even greater between Chinese SOEs and non-Chinese investors.

5.3 Effects of Target Characteristics

Next, we consider target-level characteristics that may affect the probability of cross-border acquisitions. These include: Industry Diversity, a dummy that equals 1 if the target and the acquirer belong to different industries; Size is the natural logarithm of total assets of the target firm; ROA is profit before taxes over total assets; Leverage is the ratio of total debt, the sum of short-term loans and long-term debt, to total assets; Asset Growth is the annual growth rate of total assets; Intangibles is the percentage of intangible assets in total assets; and Patents is the number of patents the target company holds. All variables except Patents are measured one year before the acquisition and are winsorized at the 1% level.

In Table 5, we report the sample means of these target-level characteristics for targets acquired by different types of investors. We also conduct a t-test to formally examine whether the sample means of target-level factors are equal between different types of acquirers. The descriptive statistics immediately show some interesting heterogeneities. Relative to non-Chinese investors, Chinese investors purchase larger targets (measured by total assets). Moreover, relative to non-Chinese investors, Chinese private firms tend to purchase targets with a significantly lower ROA but with more patents. In unreported exercises, we compare Chinese and non-Chinese acquirers in terms of their sizes and profitability at the time of the acquisition. We do not find any significant differences between the two types of acquirers and hence, the observed differences in target features are unlikely to be driven by acquirers' size and profitability.[7]

[7] We do not report these statistics for a succinct presentation but they are available upon request.

We formally analyze whether Chinese acquisitions are different from other investments by including these target-level characteristics in addition to host-country level variables in the logit model, as specified by Equation 1.[8] Table 6 reports the corresponding results. Pooling SOEs and private acquirers together, Columns 1-3 suggest that Chinese acquirers prefer targets in industries different from their own, with lower profitability, larger sizes, higher levels of debt, and more patents. Based on our preferred specification in Column 3 where we control for both host-country and target-industry fixed effects, the probability of this target being acquired by a Chinese investor increases by 0.7 percentage points if the target is from a different industry than the acquirer. A 10 percentage point reduction in ROA would increase the probability of a Chinese acquisition by around 0.2 percentage points. A 10 percentage point increase in target leverage leads to a 0.13 percentage point increase in the probability of a Chinese acquisition. Consistent with the view that Chinese cross-border M&As are particularly driven by technology transfer and know-how, we find a positive marginal effect associated with the number of patents the target holds. If the number of patents held by the target firm increases by one standard deviation, this increases the probability of acquisition by Chinese investors by around 0.2 percentage points.[9] Considering that only 2.6% of cross-border acquisitions are made by Chinese investors in our sample, these estimated marginal effects from ROA, leverage, and patents are rather large.[10] There is also a positive and significant marginal effect of target size, but the magnitude of the effect is smaller. Based on the estimation result in Column 3, a 100 log points increase in Size raises the probability of a Chinese acquisition by 0.6 percentage points. Neither Asset Growth nor Intangibles matter differently for Chinese acquirers relative to non-Chinese acquirers.

We focus on Chinese private acquirers in Columns 4-6, and Chinese state-owned acquirers in Columns 7-9. There, we uncover several differences between SOEs and private firms. The preference for industry diversification, as found in Columns 1-3, is mainly driven by Chinese SOEs. Chinese state-owned acquirers favor larger targets. While the estimated marginal effect on Size is also positive for Chinese private acquirers, the effect becomes insignificant when we control for target-industry fixed effects. These results are consistent with the view that Chinese firms, especially SOEs, have financial supports from the state-owned banking system which allows them to engage in large-scale cross-border M&As. On the contrary, the tendency to buy highly leveraged targets and those with patents is mainly driven by Chinese private acquirers. These results imply that Chinese private acquirers are more likely to purchase targets in financial distress, and that access to technology and knowledge may be a particularly important consideration for them. Relative to non-Chinese investors, both Chinese private and state-owned acquirers tend to purchase targets with a lower ROA, and this result is rather robust to different specifications. This indicates that Chinese acquirers are not motivated by short-run profits, that

[8] Results are similar when we use a matched sample where Chinese and non-Chinese acquisitions are more comparable in terms of target size and profitability.

[9] The distribution of patents held by target firms is highly skewed. One standard deviation equals to around 200 patents.

[10] We also use the Stata command firthlogit to correct for potential bias due to the small probability of Chinese acquisitions in our sample (not reported), and the results are very similar to logit estimation results.

they may be less cautious of investing in poorly-performing targets than others, or that they are more optimistic about improving the post-acquisition performance of such targets.

5.4 Comparison between Chinese and Non-Chinese State-Owned Acquirers

An open question is whether Chinese SOEs are different from government-led acquirers in other countries. We identify 619 non-Chinese state-owned acquirers with cross-border acquisitions in our sample, for 522 of which we obtain basic country-level characteristics. We then run a logit estimation where the dependent variable equals 1 if a target is acquired by a Chinese SOE, and 0 if it is purchased by a non-Chinese SOE. We report the marginal effects based on this logit estimation in Table 7. We use alternative specifications for the year and host-country fixed effects in the different columns.

In Columns 1 and 2, we consider host country-level characteristics that were previously found to matter for Chinese state-owned acquirers. In Columns 3 and 4, we add three target level characteristics: the indicator Industry Diversity, and the targets' pre-acquisition Size and ROA. These three target-level characteristics matter most for Chinese SOEs, when we compare them to non-Chinese investors previously. One caveat is that we end up with a smaller sample size in the last two columns, since we do not observe target-level characteristics for many of acquisitions by state-owned or government-backed investors.

While the estimated marginal effects on certain factors vary across different columns due to changes in specifications and sample sizes, two robust results emerge. That is, Chinese SOEs are more likely to acquire larger targets and those with poorer pre-deal financial performances, as measured by ROA. These patterns are consistent with previous findings when we use a broader set of non-Chinese acquirers as the control group. The estimated marginal effects are generally larger in Table 7, relative to those in previous tables, since the sample size becomes much smaller and the share of Chinese acquisitions increases. Interestingly, relative to non-Chinese SOEs, Chinese state-owned acquirers no longer appear to be particularly focused on seeking natural resources, and there is only weak evidence in Column 3 that they are especially keen on industry diversification. Our findings thus echo Karolyi and Liao (2017) that government-led acquirers in general are more oriented towards targets in resource-rich countries, and targets with the potential to diversity their own industry portfolio. In these dimensions, Chinese SOEs are no different from other government-led acquirers.

5.5 Effects of Recent Chinese Policy Initiatives

Another aspect in which Chinese acquisitions may differ from others is that they are more likely to be influenced by strategic government policy initiatives. In recent years, the Chinese government announced the *Belt and Road Initiative* in 2013 and *Made in China 2025* in 2015, which

both reinforce the "Go out" policy from 2000. Do these policy initiatives have a material impact on Chinese overseas acquisitions?

We first analyze the impact of the *Belt and Road Initiative*. The initial aim of BRI is to improve trade, infrastructure, and investment links between China and 65 countries in Central, South, and South East Asia, Europe, the Middle East, and North Africa.[11] We use a difference-in-differences approach to test whether the BRI changes the regional focus of Chinese overseas acquisitions. To do so, we first construct a dummy PostBRI, which equals 1 if the cross-border deal happened in or after 2013 and 0 otherwise. We also construct a dummy BRI, which equals 1 if the target is located in one of the 65 BRI countries narrowly defining the outreach of the BRI initiative according to the China International Trade Institute. The interaction term between BRI and PostBRI measures the effect of BRI on the location decisions of Chinese acquirers.

Table 8 shows that before 2013, Chinese acquirers were less likely to pursue targets in BRI countries, as the estimated coefficient on BRI is negative and statistically significant. For Chinese private acquirers, the *Belt and Road Initiative* fails to encourage acquisitions in BRI countries since 2013, as the estimated coefficient on BRI×PostBRI is insignificant. In contrast, the estimated coefficient on BRI×PostBRI is positive and statistically significant for Chinese state-owned acquirers. These results suggest that the BRI only influences the location choice of cross-border M&As by Chinese SOEs.

Next, we examine the impact of *Made in China 2025*. This initiative defines ten industries in which the Chinese government wants Chinese companies to become globally competitive.[12] One way to reach that goal is through takeovers of foreign firms in these industries. Again, we use the difference-in-differences estimator to investigate whether the policy influences the industry focus of Chinese overseas acquisitions. We construct a dummy variable CN2025 that equals 1 for industries that are related to the *Made in China 2025* strategy. We construct another dummy PostCN2025, which equals 1 for acquisitions since 2015. We then interact CN2015 with PostCN2025 for the difference-in-differences estimations.

Table 9 reports the estimation results. There is no evidence that Chinese acquisitions occurred more frequently in industries targeted by *Made in China 2025* before 2015, relative to non-Chinese acquisitions. However, targets in these industries become significantly more likely to be purchased by Chinese SOEs after the policy was introduced. Again, the policy fails to motivate Chinese private acquirers.

[11] The list of BRI countries is provided in Table B1 in Appendix B.

[12] These include new generation information technology, high-end computerized machines and robots, space and aviation, maritime equipment and high-tech ships, advanced railway transportation equipment, new energy and energy-saving vehicles, energy equipment, agricultural machines, new materials, and biopharma and high-tech medical devices (Conrad, Ives, Meissner, Wübbeke & Zenglein, 2016).

Taking together, these results suggest that Chinese cross-border M&As are indeed influenced by government policies and preferences. However, it is necessary to distinguish between Chinese SOEs and private investors, since only the former are affected by Chinese government initiatives.

5.6 Differences in Acquisition Prices?

We now investigate whether Chinese acquirers pay more or less than non-Chinese investors for targets with similar observable characteristics. The motivation for this analysis is the widespread view that Chinese MNEs may overpay relative to other investors to win bids since they are backed by cheap financing from domestic banks or direct government subsidies. As around 95% of target firms in our sample are unlisted, we do not observe the share prices of the target firms, which is the most common variable used in the literature for pricing analyses. Instead, we calculate $Price_{i,j,t}$ which is the amount the acquirer pays for 1% of equity of target firm i in country j in year t.[13]

We then estimate Equation 2 as below:

$$(2)\quad \ln Price_{i,j,t} = \alpha + \beta_1 CN_{i,j,t} + \beta_2 \ln Equity_{i,j,t} + \beta_3 ROA_{i,j,t} + \beta_4 Full\ AC_{i,j,t} + \beta_5 Any\ Patent_{i,j,t} + \gamma Z^{TC}_{i,j,t} + Year\ FEs + Industry\ FE + Target\ country\ FE + \varepsilon_{i,j,t}.$$

In Equation 2, CN is a dummy that equals 1 if the acquirer is a Chinese firm. To differentiate between Chinese private and state-owned acquirers, we include in some specifications a dummy CNpriv that equals 1 if the acquirer is a Chinese private firm, and a second dummy CNSOE that equals 1 if the acquirer is a Chinese SOE. We include several target characteristics: ROA and Book equity are the average value of return on assets and book value of equity over the three years prior to the deal;[14] Leverage is the sum of long-term debt and short-term loans as a ratio to total assets also measured over the three years prior to the deal; Full AC is a dummy variable indicating whether 100% of the target's equity is acquired; Any Patent is a dummy indicating whether the target firm holds any patents. We include a set of country-level variables, $Z^{TC}_{i,j,t}$, as further controls. Furthermore, we control for industry and target-country fixed effects, and allow for different time fixed effects in different specifications.

Table 10 shows the estimation results based on Equation 2. As expected, larger Equity or ROA increases the payment for the target among all types of acquirers. Similarly, investors pay more to purchase targets with patents. Surprisingly, all acquirers tend to pay more for highly-levered firms. This may reflect the potential tax advantages associated with debt or unobserved factors improving both borrowing capacity and value. These results are robust throughout the different

[13] This is to account for the fact that not all acquirers in our sample bought 100% of the target firm.

[14] We control for equity value instead of total assets because acquirers purchase the equity of the target firm, which is different from asset acquisition. Our result is robust to controlling for total assets instead of equity.

specifications in Table 10. Whether the deal is a full acquisition or not has no significant impact on the prices paid.

Most importantly, controlling for these observable characteristics, we do not find any tendency of overpayment by Chinese acquirers relative to non-Chinese investors as the estimated coefficient on CN is not statistically significant across specifications. When we distinguish between Chinese SOEs and private investors, neither appears to pay more for similar targets as compared to non-Chinese investors (Columns 2, 4, 6, and 8). The results in Table 10 question the view that Chinese investors systematically outbid others in the global M&A market. One should also note that we do not find any systematic difference between Chinese SOEs and non-Chinese acquirers, even though in particular the former are very likely to receive government subsidies and support in other forms. As a robustness test we estimate equation 2 using acquisition prices rather than logarithms of prices. In this case we even find slightly lower prices paid by Chinese investors, confirming the result that they do not overpay.[15]

6. What Are the Effects of Chinese Overseas Acquisitions on Target Firms?

As a last step of the analysis, this section investigates how a takeover by a Chinese company affects the target firm and its employees. Again, the focus is on the question of whether these effects differ from the changes brought about by a non-Chinese acquisition.

6.1 Empirical Approach

When estimating the effects of a Chinese acquisition, a simple OLS-estimation is likely to yield biased results as the selection of targets by Chinese investors is endogenous. To address this issue, we use a difference-in-difference approach, investigating the change in a number of financial variables after the acquisition. The treatment group consists of firms acquired by a Chinese company, the control group comprises firms acquired by non-Chinese investors. Following the approach taken by Wang & Wang (2015), the dependent variable in all regressions is the accumulated change in the target firm's financial variables. We run separate regressions for the acquisition year and each of the two subsequent years.

The results presented above suggest that targets of Chinese acquirers are different in a number of dimensions as compared to other acquisition targets. Targets of Chinese acquirers tend to be larger, have lower profitability and tend to have higher levels of debt before the acquisition. In addition, Chinese acquirers focus on certain industries. In the baseline OLS regressions we

[15] See Table C1 in the Appendix.

therefore control for these dimensions, namely total assets, return on assets, leverage, and industry of the target in the pre-acquisition year. Since Chinese acquirers were particularly active in the later years of the sample period, deal year dummies are included in all estimations. To account for the specific industry distribution of Chinese acquisitions across industries, industry group dummies are added.

Since the difference-in-difference estimator crucially relies on the suitability of the control group, we employ two re-weighting strategies to improve the comparability of treatment and control group: entropy balancing and propensity score matching.

Entropy balancing as a re-weighting strategy is described by Hainmueller (2012).[16] This approach re-weights the observations in the control group such that it matches the distribution of a set of pre-specified covariates in the treatment group. The weights are chosen in a way that the balancing constraints are met, but remain as close as possible to uniform weights. In the baseline specification, the weights are calibrated based on the variables used as controls in the OLS estimation as described above. Target country characteristics are included in the balancing as a robustness check.

In addition, propensity score matching is used to test the robustness of the results (see Abadie & Imbens (2016) on this approach). The propensity score reflects the conditional probability of assignment into the treatment group. Here, the propensity score is calculated using a logit regression based on the same independent variables as described above (total assets, return on assets, leverage, industry, and deal year). In a second step, all observations in the treatment group are then matched with three observations from the control group based on their propensity score.[17]

Only those target firms can be used for the different estimations for which the necessary information from the pre-deal period is available. This constraint leaves a pool of 351 targets with Chinese acquirers and 14,243 companies that were acquired by non-Chinese companies. Both mainly contain target firms from European countries. This is not surprising, as in general, a large share of the acquisitions of the sample were of European firms. However, data availability is reinforcing the focus on European targets.

Since an acquisition could potentially influence a whole range of financial variables, effects of Chinese acquisitions on a number of different dependent variables are tested. The focus of the estimations lies on the effects on productivity with two measures of labor productivity and two measures of capital productivity. A definition of all dependent variables used as well as a summary statistic is provided in Table A4 in Appendix A.

[16] For the implementation of this approach, we rely on the STATA package described in Hainmueller & Xu (2013).

[17] Nearest neighbor matching with three matches per observation in the control group. Using a lower number of matches per observation does not change the results substantially.

The analysis covers the year of the acquisition and the two subsequent years. To ensure that results are comparable across the different periods, a balanced sample of targets is used. Since the coverage of the different dependent variables used varies considerably, individual samples are constructed for each of them. For most dependent variables, the treatment group contains between 100 and 150 target firms.

6.2 Results on Acquisition Effects

The results of the main estimations from the three different approaches (OLS without re-weighting, re-weighting with entropy balancing and propensity score matching) are summarized in Table 11. Each cell of Table 11 reports the treatment effect for an individual estimation. Columns (1) to (3) present the results from the basic difference-in-difference estimation without re-weighting. According to these estimations, the effects of an acquisition by a Chinese company seem to be similar to those of a non-Chinese acquisition in most of the dimensions tested. The treatment effect is insignificant in all three periods tested in the estimations on labor productivity, leverage, return on assets, and the share of intangible assets in total assets. In contrast, capital productivity in the acquisition year is negatively affected by a Chinese acquisition. This effect fades over the subsequent years. The average compensation of employees is developing more positively in target firms with Chinese acquirers as compared to firms that are bought by non-Chinese companies.

The control groups for the estimations of Columns (4) to (6) of Table 11 are re-weighted using entropy balancing. Table A5 illustrates the effects of the re-weighting based on entropy balancing.[18] Part A of Table A5 shows mean and variance for a number of variables in treatment and control group without reweighting. As discussed above, on average, the leverage of target firms in the treatment group is higher, while their return on assets is lower than for the control group. Firms in the treatment group also tend to be larger. As shown in Part B of Table A5, these differences are taken care of by the reweighting of the control group, allowing for a more reliable estimation of the acquisition effects. The results from the corresponding estimations confirm the findings of the basic regressions described above as shown in Columns (4) to (6) of Table 11. Again, the treatment effect is statistically significant for two variables: capital productivity and average compensation of employees. While capital productivity is lower in the case of Chinese acquisitions, average employee compensation is higher.[19]

[18] The re-weighting shown in Table A5 reports the data used for the estimations on return on assets as an example. Results for the samples for all other dependent variables look very similar.

[19] In Appendix D we also provide graphs for the development of these variables up to three periods before and after the acquisition (Figures D1-D3).

For the estimations of Columns (7) to (9) of Table 11, the control group is constructed using propensity score matching. Results are again very similar compared to the previously described approaches both in size and significance levels.

In a further robustness check, additional controls at the target country level are included. While this reduces the sample size by about 10-20% in all estimations, results on the treatment effect, however, are very similar.

To check whether an acquisition by Chinese private firms and SOEs have different effects on the targets, all estimations are also conducted including an interaction term between treatment and a dummy that equals one, if the acquirer was a Chinese SOE. In most cases, about half of the treatment group was acquired by an SOE. However, most of the coefficients for this interaction term are insignificant, which may also be due to the relatively small sample of Chinese SOEs.

The notable exception is the share of intangible assets of the target firms (Table C2). Here, the overall effect of a Chinese acquisition is not different from that of a non-Chinese acquisition as reported above. When controlling for target country characteristics, the coefficient for Chinese private companies is positive and statistically significant in the basic and entropy balancing estimations. When a firm is acquired by a Chinese SOE, however, the treatment effect is negative and statistically significant in the acquisition year and two years after the acquisition according to all three estimation approaches.

As mentioned above, the analysis of pre- and post-acquisition performance of target firms is limited by data availability – the results reported in this section are based on a much smaller sample than the results presented in the preceding sections.

How can we explain that we observe lower capital productivity and higher average employee compensation in firms taken over by Chinese investors? The negative effect on capital productivity seems to be due to an increase in assets shortly after the acquisition. While turnover also increases after the acquisition, this sets in a little later. The positive effect on average compensation of employees is driven by an increase in costs of employees relative to firms acquired by non-Chinese companies. The number of employees develops similarly in the treatment and control groups.[20]

How can these findings be explained and how do they relate to findings of other studies? There is anecdotal evidence that Chinese investors place a larger impact on the 'footprint' of their investment and less on profitability, at least in the short term. This would be compatible with the observation that Chinese investors increase investment in target firms, even at the cost of declining capital productivity immediately after the acquisition. Employee compensation may be higher than in targets firms bought by other investors for various reasons. Higher investment

[20] These results are obtained by comparing the growth rates of the respective variables between treatment and control group. The corresponding estimation results are available upon request.

may raise the bargaining power of employees. It is also possible that employees are more hostile towards takeovers by Chinese investors than towards other investors so that Chinese investors are forced to offer higher salaries to get employees to cooperate with the new owners or to retain them.

7. Conclusions

The growing importance of Chinese cross-border mergers and acquisitions in recent years has given rise to a debate about the motivations and the likely impact of these investments. In this debate the idea is widespread that Chinese investors differ from investors from other countries. This idea is related to the far reaching influence of the Chinese government on economic activity of Chinese companies both domestically and abroad. A direct indicator of this influence is the large number of SOEs, who also play an important role as acquirers of foreign companies

Our analysis suggests that Chinese investment does indeed differ from investment coming from other countries in several aspects. Our findings support the view that Chinese acquirers tend to be less concerned about market size and economic risks of target countries, and more interested in factors like natural resources and technology transfer. Cross-border M&As by Chinese SOEs are also significantly influenced by government policies like the *Belt and Road Initiative* and *Made in China 2025*. However, the widespread view that government support enables Chinese companies to outbid other investors in the global M&A market is not supported by our results.

One robust finding in our analysis is that Chinese firms acquire less profitable and more highly indebted targets. This suggests that Chinese firms might have easier access to finance than other investors, which allows them to pursue less cautious investment strategies. Alternatively, it may be that Chinese acquirers are more optimistic about the improving targets' post-acquisition performance, have a longer time horizon or pursue objectives other than profitability, such as a large 'footprint' of the investment. We have also analyzed the impact of being acquired by a Chinese investor on target firms. Most importantly, we find that average employee compensation in these firms rises compared to other targets after the acquisition while the number of employees does not develop differently. Thus, our results do not support the concern that a Chinese takeover leads to lower wages for employees compared to other acquisitions.

Overall, our results confirm that Chinese economic policy strategies influence the pattern of acquisitions abroad, at least for state owned companies. For private investors, we find that they neither seem to outbid other investors by paying higher acquisition prices, nor do they cut wages or reduce the workforce more than others. Drawing policy conclusions from these findings is difficult though, for a number of reasons. First, some of our findings are based on a small number of observations, mostly because the surge in Chinses acquisitions abroad is a relatively recent phenomenon. The impact of takeovers by Chinese investors on target firms and host countries

will only be visible when more time has passed. Secondly, some potential consequences which are of key importance for investment policies like technology transfer or security issues can simply not be measured with the data used in this study. More research is needed to improve our understanding of the causes and consequences of foreign investment from China, as well as other countries.

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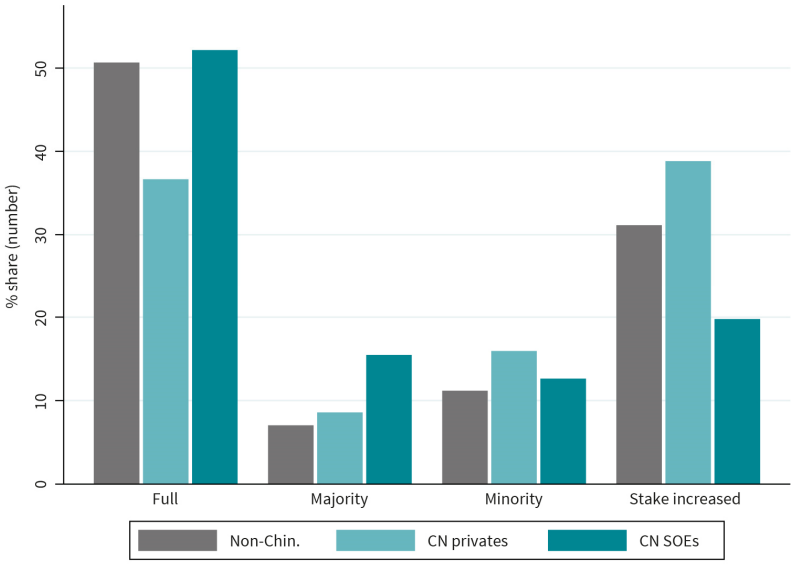
Figures and Tables

Figure 1: Number and Value of Deals by Deal Category

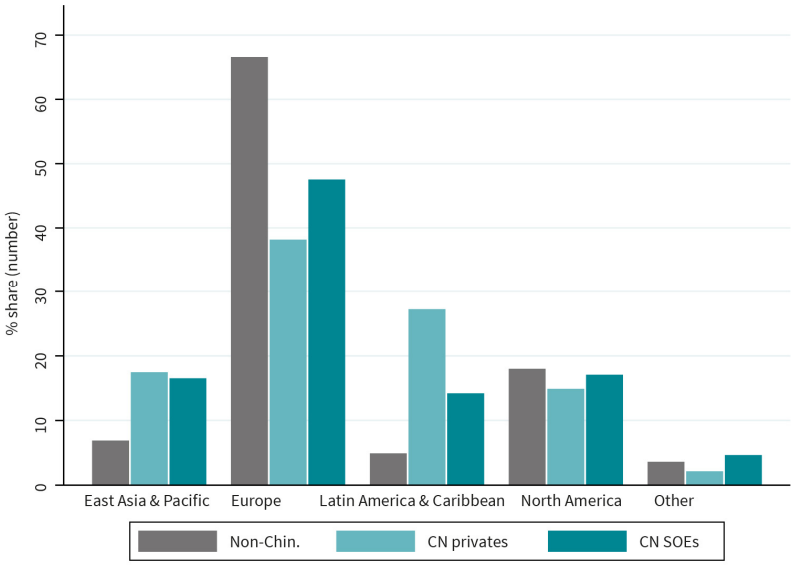
Notes: This figure shows the development of the number and value of deals over the sample period 2002-2017. We differentiate between different deal categories depending on the nature of the acquirer: non-Chinese acquirers (Panel A) and Chinese acquirers (Panel B). We furthermore decompose Chinese acquirers into private firms (Panel C) and SOEs (Panel D). The number of deals is reported in the right hand scale and the value of deals (in constant billion Euros with base year 2015) is reported in the left hand side.

Figure 2: Types of Deals by Percentage of Shares Acquired



Notes: This figure shows the share of different types of deals for the three types of acquirers. *Full* means that 100% of the target firm were acquired. *Majority* means that at least 50% but less than 100% were acquired. *Minority* means that less than 50% were acquired. *Stake increased* means that the acquirer already owned a share of the target firm and increased this share.

Figure 3: Distribution of Cross-Border M&As by Target Regions



Notes: This figure shows the distribution of cross-border M&As in different regions. The category "Other" includes countries in Central Asia, Sub-Saharan Africa, Middle East & North Africa, and South Asia.

Table 1: Summary Statistics by Acquirer Types Based on the Estimation Sample

Acquirer type	Number of deals		Mean deal value (in €million)	Median deal value (in €million)
	All	With deal value		
CN private	1,168	577	159.0	20.0
CN SOE	732	391	394.3	54.6
Non-CN	70,156	21,038	263.8	23.1
Total	72,056	22,006	263.4	23.0

Table 2: Number of Deals and Deal Value by Target Countries and Acquirer Types

	Number of deals						Total deal value (in €million)					
By Target Country	Non-Chinese		CN private		CN SOE		Non-Chinese		CN private		CN SOE	
	Count	Percent	Count	Percent	Count	Percent	Value	Percent	Value	Percent	Value	Percent
Virgin Isl.	553	0.79%	223	19.09%	54	7.38%	22,340	0.38%	12,898	13.76%	8,474	5.41%
US	9,885	14.09%	138	11.82%	90	12.30%	2,061,414	34.89%	25,790	27.50%	4,938	3.15%
Gr. Britain	10,105	14.40%	104	8.90%	61	8.33%	967,109	16.37%	4,758	5.07%	18,992	12.13%
Germany	4,897	6.98%	84	7.19%	87	11.89%	212,247	3.59%	1,519	1.62%	2,923	1.87%
Cayman Isl.	271	0.39%	76	6.51%	24	3.28%	47,186	0.8%	4,535	4.84%	9,968	6.36%
Singapore	682	0.97%	47	4.02%	24	3.28%	36,608	0.62%	4,023	4.29%	6,441	4.11%
Australia	2,118	3.02%	46	3.94%	46	6.28%	163,839	2.77%	4,909	5.24%	15,561	9.94%
France	3,032	4.32%	34	2.91%	19	2.60%	185,400	3.14%	118	0.13%	2,314	1.48%
Italy	1,720	2.45%	23	1.97%	22	3.01%	83,315	1.41%	2,229	2.38%	359	0.23%
Japan	280	0.40%	23	1.97%	8	1.09%	26,175	0.44%	1,865	1.99%	565	0.36%
Netherlands	3,234	4.61%	23	1.97%	27	3.69%	315,270	5.34%	3,185	3.40%	1,675	1.07%
Spain	3,144	4.48%	22	1.88%	41	5.60%	111,175	1.88%	2,937	3.13%	2,175	1.39%
Malaysia	475	0.68%	21	1.80%	19	2.60%	7,483	0.13%	2,533	2.70%	489	0.31%
Bermuda	142	0.20%	20	1.71%	12	1.64%	57,152	0.97%	8,156	8.7%	3,721	2.38%
Canada	2,602	3.71%	16	1.37%	23	3.14%	256,285	4.34%	361	0.38%	17,999	11.49%
Belgium	1,482	2.11%	14	1.20%	5	0.68%	78,600	1.33%	229	0.24%	1,890	1.21%
India	239	0.34%	13	1.11%	6	0.82%	35,634	0.60%	39	0.04%	48	0.03%
Switzerland	1,296	1.85%	12	1.03%	8	1.09%	113,653	1.92%	4,355	4.64%	37,432	23.9%
Russia	1,727	2.46%	11	0.94%	4	0.55%	106,778	1.81%	78	0.08%	3,155	2.01%
Brazil	1,005	1.43%	8	0.68%	15	2.05%	63,985	1.08%	914	0.98%	2,033	1.3%
RoW	21,267	30.32%	210	17.99%	137	18.7%	955,940	16.19%	8,336	8.9%	15,474	9.87%
World	70,156	100%	1,168	100%	732	100%	5,907,588	100%	93,767	100%	156,626	100%

Notes: This table shows the number of deals and total deal value by target countries and acquirer types. Total deal value is reported in constant €million with base year 2015.

Table 3: Host Country Characteristics and Probability of Chinese Acquisitions

Probability of being			All CN			CN Private	CN SOE
acquired by	(1)	(2)	(3)	(4)	(5)	(6)	(7)
GDPPC	-0.009***	-0.008***	-0.007***	-0.008***	-0.009***	-0.005***	-0.004***
	(0.001)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)
GDP growth	-0.001*	-0.001*	-0.000	-0.001*	-0.001*	-0.000	-0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Population	-0.009***	-0.009***	-0.009***	-0.009***	-0.009***	-0.005***	-0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Distance	-0.002***	-0.002***	-0.002***	-0.002***	-0.002***	-0.001***	-0.000*
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Trade	0.013***	0.014***	0.013***	0.013***	0.013***	0.008***	0.005***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Tax haven	0.016***	0.015***	0.014***	0.015***	0.016***	0.014***	0.000
	(0.005)	(0.005)	(0.005)	(0.005)	(0.005)	(0.003)	(0.005)
Resource	-0.010	-0.014	-0.020	-0.018	-0.010	-0.039***	0.021**
	(0.018)	(0.019)	(0.020)	(0.020)	(0.019)	(0.015)	(0.010)
Inflation	-0.001**	-0.001**	-0.001**	-0.001**	-0.001**	-0.000*	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
ΔExchange rate	-0.003	-0.004	-0.002	-0.003	-0.003	0.012**	-0.014***
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.006)	(0.004)
Political stability		-0.002					
		(0.002)					
Regulatory quality			-0.003				
			(0.002)				
Rule of law				-0.002			
				(0.002)			
Control of Corruption					-0.000		
					(0.001)		
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
No. of observations	63,085	63,085	63,085	63,085	63,085	62,536	62,373

Notes: In this table, we consider how target country-level economic and institutional characteristics affect the likelihood of Chinese cross-border acquisition. We report the marginal effects from logit estimations. Standard errors are robust and clustered at the target firm level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 4: Target Industries and Probability of Chinese Acquisitions

Probability of being acquired by	(1) All CN	(2) CN Private	(3) CN SOE
Agriculture	0.010	-0.009*	0.019**
	(0.009)	(0.005)	(0.008)
Construction	0.001	-0.003	0.005*
	(0.004)	(0.003)	(0.003)
Energy, water, gas.	0.004	-0.003	0.006**
	(0.005)	(0.004)	(0.003)
Finance & Insurance	0.004	-0.001	0.005***
	(0.003)	(0.002)	(0.002)
Information & Communication	-0.008***	-0.007***	-0.001
	(0.002)	(0.002)	(0.001)
Manufacturing of chemicals/oil, pharma	-0.002	-0.007**	0.005**
	(0.003)	(0.003)	(0.002)
Manufacturing of electricity & machinery	0.023***	0.007**	0.017***
	(0.004)	(0.003)	(0.003)
Manufacturing of metal products	0.011**	-0.006*	0.017***
	(0.005)	(0.003)	(0.004)
Manufacturing of vehicles	0.048***	0.017**	0.033***
	(0.010)	(0.008)	(0.008)
Mining	0.016***	-0.007**	0.025***
	(0.006)	(0.003)	(0.005)
Professional/scientific/techno-logical activities	-0.004	-0.008***	0.003**
	(0.003)	(0.002)	(0.001)
Macro Controls	Yes	Yes	Yes
Year FE	Yes	Yes	Yes
No. of observations	62,353	61,723	61,373

Notes: In this table, we consider how target industries affect the likelihood of Chinese cross-border acquisition. Classification of industries is based on NACE industry classification. NACE industries 77 to 99 are used as the reference group. We report the marginal effects from logit estimations based on Equation 1. Standard errors are robust and clustered at the target firm level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 5: Target-Level Characteristics by Acquirer Types

Variable	Non-CN	All CN	T-test of equal means (p-value)	CN SOE	T-test of equal means (p-value)	CN Private	T-test of equal means (p-value)
Total assets	101,189	702,026	0.0000	858,103	0.000	581,966	0.000
Leverage	0.191	0.256	0.7779	0.252	0.862	0.260	0.824
ROA	0.003	-0.045	0.0317	0.002	0.982	-0.080	0.005
Intangibles	0 .050	0.056	0.3705	0.055	0.570	0.056	0.483
Asset growth	14.258	4.942	0.8462	1.003	0.853	8.142	0.925
Patents	4.927	22.357	0.0003	8.927	0.568	30.819	0.000

Notes: In this table, we report the sample means of target-level characteristics, including size, leverage, return on assets (ROA), intangibility, asset growth, and number of patents. We report the sample means of each variable for targets acquired by non-Chinese, all Chinese, Chinese state-owned, and Chinese private investors, separately. We test the null hypothesis that the sample means of each variable are equal between targets acquired by non-Chinese and Chinese investors, that the sample means of each variable are equal between targets acquired by non-Chinese and Chinese state-owned investors, and that the sample means are equal between targets acquired by non-Chinese and Chinese private investors. We report the p-values from the associated t-tests. For definitions of target-level characteristics, see Table A1 in Appendix A.

Table 6: Target-Level Characteristics and Probability of Chinese Acquisitions

Probability of being	All CN			CN Private			CN SOE		
acquired by	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Industry Diversity	0.008**	0.006	0.007*	0.002	0.001	0.001	0.006**	0.006*	0.006*
	(0.003)	(0.004)	(0.004)	(0.002)	(0.003)	(0.003)	(0.003)	(0.003)	(0.003)
Size	0.007***	0.006***	0.006***	0.002***	0.001*	0.001	0.006***	0.005***	0.005***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
ROA	-0.018***	-0.020***	-0.020***	-0.006*	-0.008*	-0.009*	-0.013***	-0.014***	-0.013***
	(0.004)	(0.005)	(0.005)	(0.004)	(0.004)	(0.005)	(0.003)	(0.004)	(0.004)
Leverage	0.007	0.014**	0.013**	0.006	0.009**	0.007	0.001	0.006	0.008
	(0.005)	(0.006)	(0.006)	(0.004)	(0.005)	(0.005)	(0.004)	(0.005)	(0.005)
Asset Growth	-0.004	-0.004	-0.004	-0.002	-0.002	-0.001	-0.003	-0.002	-0.002
	(0.003)	(0.004)	(0.004)	(0.003)	(0.003)	(0.003)	(0.002)	(0.003)	(0.003)
Intangibles	-0.005	-0.001	0.001	-0.003	0.001	0.005	-0.002	-0.003	-0.003
	(0.013)	(0.015)	(0.015)	(0.009)	(0.011)	(0.011)	(0.010)	(0.013)	(0.014)
Patents	0.001**	0.001***	0.001***	0.000***	0.001***	0.001***	0.000	-0.000	-0.000
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.001)
Macro controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Target country FE		Yes	Yes		Yes	Yes		Yes	Yes
Target industry FE			Yes			Yes			Yes
No. of observations	8,786	7,509	7,509	8,459	6,918	6,787	8,410	6,947	6,849

Notes: In this table, we consider how targets' financial characteristics affect the likelihood of Chinese cross-border acquisition. We report the marginal effects from logit estimations based on Equation 1. Standard errors are robust and clustered at the target firm level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 7: Comparison between Chinese and Non-Chinese State-Owned Acquirers

Probability of being acquired by CN SOEs	**(1)**	**(2)**	**(3)**	**(4)**
GDPPC	-0.050	1.724**	-0.063	1.365
	(0.033)	(0.714)	(0.053)	(1.300)
GDP growth	-0.010	-0.030**	-0.008	-0.021
	(0.008)	(0.013)	(0.017)	(0.026)
Distance	-0.008	-2.592	-0.017	0.902
	(0.007)	(2.043)	(0.015)	(4.129)
Population	-0.052*	-0.023	-0.040	-1.346
	(0.027)	(1.940)	(0.053)	(4.638)
Trade	0.107***	-0.050	0.068	0.017
	(0.027)	(0.218)	(0.051)	(0.501)
Resource	0.027	0.941	-1.303	-11.382
	(0.480)	(2.669)	(1.027)	(12.552)
ΔExchange rate	-0.554**	-0.670**	-0.412	-0.382
	(0.261)	(0.294)	(0.460)	(0.564)
Industry Diversity			0.116**	0.054
			(0.055)	(0.060)
Size			0.063***	0.064***
			(0.013)	(0.015)
ROA			-0.264**	-0.301***
			(0.106)	(0.112)
Year FE	Yes	Yes	Yes	Yes
Target country FE		Yes		Yes
No. of observations	928	828	271	233

Notes: In this table, we compare Chinese and non-Chinese state-owned acquirers. The dependent variable is a dummy that equals 1 if a target is purchased by a Chinese SOE, and 0 if it is purchased by an SOE from other countries. We report the marginal effects from logit estimations. Standard errors are robust and clustered at the target firm level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 8: The Impact of the *Belt and Road* Initiative

Probability of being acquired by	**(1) All CN**	**(2) CN Private**	**(3) CN SOE**
PostBRI	-0.115	-0.182	0.103
	(0.254)	(0.327)	(0.392)
BRI	-0.223*	-0.0118	-0.539**
	(0.132)	(0.163)	(0.220)
BRI×PostBRI	0.0320	-0.181	0.386*
	(0.142)	(0.182)	(0.230)
Macro controls	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes
No. of observations	69,269	68,574	68,186

Notes: In this table, we analyze the impact of the BRI on Chinese cross-border acquisitions. We report the point estimates from logit estimations. *PostBRI* is a dummy that equals to 1 if the deal took place in or after 2013. *BRI* is a dummy variable that equals to 1 if the target country is one of the 65 BRI countries (see Table B1 in the Appendix for the list of countries). Standard errors are robust and clustered at the target firm level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 9: The Impact of *Made in China 2025*

Probability of being acquired by	**(1) All CN**	**(2) CN Private**	**(3) CN SOE**
PostCN2025	0.0116	-0.100	0.343
	(0.299)	(0.374)	(0.484)
CN2025	-0.0166	0.0960	-0.185
	(0.0868)	(0.107)	(0.148)
CN2025×PostCN2025	0.0815	-0.218	0.402*
	(0.143)	(0.198)	(0.214)
Macro controls	Yes	Yes	Yes
Year FEs	Yes	Yes	Yes
No. of observations	62,353	61,723	61,373

Notes: In this table, we analyze the impact of the *Made in China 2025* policy on Chinese cross-border acquisitions. We report the point estimates from logit estimations. *PostCN2025* is a dummy that equals to 1 if the deal took place in or after 2015. *CN2025* is a dummy variable that equals to 1 if the target belongs to the industries defined in the *Made in China 2025*. Standard errors are robust and clustered at the target firm level.* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 10: Prices Paid for Targets by Chinese Acquirers

Dep. variable: $Price_{i,j,t}$	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CN	0.127		0.065		0.001		0.053	
	(0.095)		(0.098)		(0.110)		(0.165)	
CNpriv		0.084		0.002		-0.067		0.025
		(0.137)		(0.142)		(0.157)		(0.243)
CNSOE		0.164		0.119		0.060		0.077
		(0.117)		(0.125)		(0.139)		(0.213)
Equity	0.742***	0.742***	0.745***	0.745***	0.736***	0.735***	0.758***	0.758***
	(0.014)	(0.014)	(0.013)	(0.013)	(0.014)	(0.014)	(0.019)	(0.019)
ROA	0.289***	0.289***	0.252**	0.252**	0.331***	0.331***	0.346***	0.346***
	(0.102)	(0.102)	(0.101)	(0.101)	(0.105)	(0.105)	(0.133)	(0.133)
Leverage	1.182***	1.182***	1.190***	1.189***	1.126***	1.125***	1.212***	1.211***
	(0.097)	(0.097)	(0.095)	(0.095)	(0.099)	(0.099)	(0.135)	(0.135)
Full AC	0.016	0.016	0.022	0.021	-0.059	-0.059	-0.131	-0.131
	(0.055)	(0.055)	(0.054)	(0.054)	(0.058)	(0.058)	(0.088)	(0.088)
Any Patent	0.340***	0.340***	0.368***	0.368***	0.258***	0.258***	0.422***	0.422***
	(0.048)	(0.048)	(0.050)	(0.050)	(0.047)	(0.047)	(0.070)	(0.070)
Macro controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes			Yes	Yes
Target country FE	Yes	Yes			Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry-year FE			Yes	Yes				
Target country-year FE					Yes	Yes		
Target country-industry-year FE							Yes	Yes
No. of observations	5,166	5,166	5,159	5,159	5,131	5,131	3,350	3,350

Notes: In this Table we analyze whether the pricing of targets by Chinese acquirers is different from non-Chinese investors. The dependent variable $Price_{i,j,t}$ is the natural logarithm of what the acquirer paid for a 1% share of the target firm (in thousand €). *CN* is a dummy that equals 1 if the acquirer is a Chinese firm. *CNpriv* is a dummy that equals 1 if the acquirer is a Chinese private firm, and *CNSOE* is a dummy that equals 1 if the acquirer is a Chinese state-owned or state-controlled firm. *ROA*, *Equity* and *Leverage* are the average value of return on assets, the natural logarithm of the book value of equity and total debt in total assets over the three years prior to the deal. *Full AC* is a dummy variable indicating whether 100% of the target were acquired. *Any Patent* is a dummy indicating whether the target firm holds any patent. Standard errors are robust and clustered at the target firm level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 11: Estimation Results on Acquisition Effects

	OLS			EB			PSM		
	(1) Acquisition Year	(2) One year after	(3) Two years after	(4) Acquisition Year	(5) One year after	(6) Two years after	(7) Acquisition Year	(8) One year after	(9) Two years after
Labor Productivity 1	24.47	-15.92	43.53	22.16	-18.67	28.22	25.86	17.81	70.64
	(-78.83)	(-52.39)	(-62.92)	(-82.47)	(-53.16)	(-64.48)	(-86.32)	(-61.19)	-74.3)
Labor Productivity 2	2.101	-11.2	-7.595	2.014	-15.25	-7.362	5.453	-9.956	-7.207
	(-17.97)	(-21.93)	(-21.02)	(-19.45)	(-22.55)	(-21.11)	(-19.87)	-23.53)	-21.76)
Capital Productivity 1	-0.154***	-0.0339	-0.0934	-0.120**	-0.00447	-0.0663	-0.173**	-0.00343	-0.0959
	(-0.0478)	(-0.0843)	(-0.0822)	(-0.0468)	(-0.0831)	(-0.0799)	(-0.069)	-0.0975)	-0.0988)
Capital Productivity 2	-0.0591***	-0.0433*	-0.0489	-0.0527***	-0.0382*	-0.0481*	-0.0412*	-0.0434	-0.0414
	(-0.0192)	(-0.0235)	(-0.031)	(-0.0188)	(-0.021)	(-0.0273)	(-0.0223)	-0.027)	-0.0303)
Leverage	-0.00822	0.032	0.0127	-0.000271	0.0413	0.0241	0.0108	0.0653	0.0389
	(-0.026)	(-0.0352)	(-0.0311)	(-0.0324)	(-0.041)	(-0.0395)	(-0.0341)	-0.0433)	-0.0422)
Return on assets	-0.0236	0.00447	-0.00895	-0.0251	0.00322	-0.00545	-0.0227	0.00567	0.0121
	(-0.0279)	(-0.0208)	(-0.0236)	(-0.0334)	(-0.0335)	(-0.0339)	(-0.0382)	-0.038)	-0.0385)
Av. CoE	3.321	5.367*	8.744**	3.255	4.929	8.478**	2.354	4.317	8.474**
	(-2.249)	(-3.063)	(-3.569)	(-2.371)	(-3.123)	(-3.547)	(-2.63)	-3.2479	-3.682)
Intangibles Share	-0.00731	-0.00478	0.00131	-0.00923	-0.00792	-0.000451	-0.0108	-0.00828	-0.00402
	(-0.0072)	(-0.00812)	(-0.00943)	(-0.00725)	(-0.00817)	(-0.00947)	(-0.00777)	-0.00893)	-0.0104)

Notes: In this table, we analyze the effect of Chinese cross-border acquisitions on target firms. We report the marginal effects of difference-in-difference estimations using simple OLS (Columns 1-3), entropy balancing (Columns 4-6) and propensity score matching (Columns 7-9). Dependent variables are the differences in the respective variable between the pre-acquisition year and the year noted. Standard errors are robust. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Appendix A: Variable Definition and Summary Statistics

Table A1: Country-Level Control Variables

Variable	Definition	Source	Obs	Mean	Std. Dev.
GDP PC	GDP per capita (USD)	WDI	68,342	39,166	18,484
GDP growth	GDP growth rate (%)	WDI	68,363	2.25	2.58
Distance	Population weighted distance to China (1000 km)	CEPII	71,783	8.87	2.42
Population	No. of inhabitants (millions)	WDI	69,656	93.37	153.57
Trade	Export and import in goods with China (billions, USD)	UN Comtrade	69,543	92.33	142.03
Inflation	Annual inflation of consumer prices (%)	WDI	68,306	2.49	3.03
Tax haven	Dummy=1 if the host country is defined as a tax haven according to the OECD (see Table A3 for the list of countries)	OECD	72,056	0.0276	0.1639
Resource	Share of resource rents in GDP	WDI	63,653	0.0212	0.0203
ΔExchange rate	Annual growth rate of target country currency relative to Chinese Yuan	WDI and own calculations	66,687	0.0211	0.2590
Political stability	Measure for political stability on a scale from -2.5 to 2.5	WGI	68,918	0.5381	0.6089
Regulatory quality	Measure for regulatory quality on a scale from -2.5 to 2.5	WGI	68,894	1.2838	0.6331
Rule of law	Measure for rule of law on a scale from -2.5 to 2.5	WGI	68,917	1.2867	0.7500
Control of corruption	Measure for control of corruption on a scale from -2.5 to 2.5	WGI	68,896	1.2884	0.8798

Table A2: Firm-Level Control Variables

Variable	Definition	Source	Obs	Mean	Std.Dev.
Industry Diversity	Dummy=1 if the target and the acquirer are in different industries	Orbis	58,385	0.5429	0.4982
Size	Natural logarithm of total assets of the target firm	Orbis	21,999	8.51	2.12
ROA	(Profit/loss before taxes)/Total assets	Orbis	21,907	0.0267	0.3393
Book equity	Natural logarithm of Total assets-(loans+long-term debt)	Orbis and own calculation	23,589	71,019.7	806,934.4
Patents	Number of patents the target firm holds	Orbis	71,525	5.39	204.33
Any patent	Dummy variable indicating whether the target firm holds any patent	Orbis	71,525	0.1330	0.3393
Leverage	(Short-term loans+long term debt)/Total assets	Orbis	18,591	0.3133	6.91
Asset Growth	Annual growth rate of total assets	Orbis	23,783	14.04	1114.21
Intangibles	Intangible fixed assets/Total assets	Orbis	20,550	0.0504	0.1400

Table A3: The List of Tax Haven Countries

Andorra	Gibraltar	Netherlands Antilles
Anguilla	Grenada	Niue
Antigua and Barbuda	Guernsey	Panama
Aruba	Isle of Man	Samoa
The Bahama	Jersey	San Marino
Bahrain	Liberia	Seychelles
Bermuda	Liechtenstein	St. Lucia
Belize	Malta	St. Kitts & Nevis
British Virgin Islands	Marshall Islands	St. Vincent and the Grenadines
Cayman Islands	Mauritius	Turks & Caicos Islands
Cook Islands	Monaco	US Virgin Islands
Cyprus	Montserrat	Vanuatu
Dominica	Nauru	

Source: OECD (2000).

Table A4: Variable Description and Summary Statistics for Effects Estimations

Variable	Definition	Source	Obs	Mean	Std.Dev.
Labor Productivity 1	Turnover / No. of Employees	Orbis	7,273	24.91	506.3
Labor Productivity 2	Added Value / No. of Employees	Orbis	4,918	8.788	136.9
Capital Productivity 1	Turnover / Total assets	Orbis	10,226	0.006	1.065
Capital Productivity 2	Added Value / Total assets	Orbis	6,308	-0.005	0.374
Leverage	(Short-term loans+long term debt)/Total assets	Orbis	10,389	-0.022	0.251
Leverage	(Short-term loans+long term debt)/Total assets	Orbis	11,152	0.021	0.473
ROA	(Profit/loss before taxes)/Total assets	Orbis	11,078	-0.019	0.390
Average Cost of Employees	Total compensation of employees / No. of employees	Orbis	7,993	-3.829	156.4
Intangibles	Intangible fixes assets / total assets	Orbis	6,595	2.428	23.57

Notes: All information on the number of observations, mean and standard deviation of variables refer to the difference between the pre-acquisition year and the acquisition year.

Table A5: Reweighting (Entropy Balancing)

	Treatment		Control	
Variable	**Mean**	**Variance**	**Mean**	**Variance**
Part A: Without weighting				
Leverage	0.2633	0.1760	0.2035	0.09444
RoA	-0.03396	0.1354	0.03553	0.09874
Ln(total assets)	10.14	4.47	8.81	3.93
Part B: After weighting				
Leverage	0.2633	0.1760	0.2629	0.1758
RoA	-0.03396	0.1354	-0.03395	0.1352
Ln(total assets)	10.14	4.47	10.12	4.46

Notes: All variables as in the year before the acquisition. In addition to the variables reported here, reweighting is also based on deal year and industry (plus country controls). The sample shown here is used for the estimations using capital productivity 1 as dependent variable.

Appendix B: The Belt and Road Initiative

Table B1: BRI Countries

Region	Countries
East Asia	China, Mongolia
South East Asia	Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, Timor-Leste, Vietnam
South Asia	Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, Sri Lanka
Central Asia	Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan, Uzbekistan
Middle East and North Africa	Bahrain, Egypt, Iran, Iraq, Israel, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Palestine, Syria, United Arab Emirates, Yemen
Europe	Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Estonia, North Macedonia, Georgia, Hungary, Latvia, Lithuania, Moldova, Montenegro, Poland, Romania, Russia, Serbia, Slovakia, Slovenia, Turkey, Ukraine

Source: Cosentino, Dunmore, Ellis, Preti, Ranghetti & Routaboul, 2018.

Appendix C: Additional Estimations

Table C1: Prices Paid for Targets by Chinese Acquirers – Using the Level of Prices as the Dependent Variable

Dep. variable: $Price_{i,j,t}$	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CN	-2424.494*		-2203.574		-2960.911**		0.053	
	(1417.895)		(1523.209)		(1474.766)		(0.165)	
CNpriv		-4653.173**		-4218.189**		-5013.568**		-5116.780*
		(1997.395)		(1973.626)		(2362.119)		(2982.700)
CNSOE		-535.895		-511.017		-1228.737		-2104.896
		(1535.745)		(1821.940)		(1291.039)		(1698.110)
Equity	0.016***	0.016***	0.016***	0.016***	0.016***	0.016***	0.015***	0.015***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.003)	(0.003)
ROA	3463.583***	3463.315***	2793.068***	2788.582***	3757.663***	3760.757***	4846.722***	4867.686***
	(926.686)	(926.477)	(751.093)	(750.871)	(1066.452)	(1066.235)	(1507.116)	(1509.363)
Leverage	3908.232***	3879.613***	3619.331***	3587.898***	3740.527***	3714.813***	3275.285**	3260.287**
	(1123.496)	(1121.604)	(1113.375)	(1112.847)	(1077.128)	(1073.527)	(1655.421)	(1654.715)
Full AC	306.082	291.027	670.901	646.639	-105.951	-119.012	54.371	32.573
	(396.552)	(396.422)	(411.317)	(411.152)	(422.090)	(421.299)	(783.376)	(784.830)
Any Patent	728.078	719.542	1034.174	1026.319	1199.480**	1188.739**	1730.306*	1729.657*
	(621.747)	(620.436)	(682.207)	(680.880)	(571.627)	(570.944)	(975.267)	(974.221)
Macro controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes			Yes	Yes
Target country FE	Yes	Yes			Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry-year FE			Yes	Yes				
Target country-year FE					Yes	Yes		
Target country-industry-year FE							Yes	Yes
No. of observations	5,315	5,315	5,307	5,307	5,288	5,288	3,485	3,485

Notes: In this Table we analyze whether the pricing of targets by Chinese acquirers is different from non-Chinese investors. The dependent variable $Price_{i,j,t}$ is what the acquirer paid for a 1% share of the target firm (in thousand €). *CN* is a dummy that equals 1 if the acquirer is a Chinese firm. *CNpriv* is a dummy that equals 1 if the acquirer is a Chinese private firm, and *CNSOE* is a dummy that equals 1 if the acquirer is a Chinese state-owned or state-controlled firm. *ROA*, *Equity* and *Leverage* are the average value of return on assets, the book value of equity and total debt in total assets over the three years prior to the deal. *Full AC* is a dummy variable indicating whether 100% of the target were acquired. *Any Patent* is a dummy indicating whether the target firm holds any patent. Standard errors are robust and clustered at the target firm level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

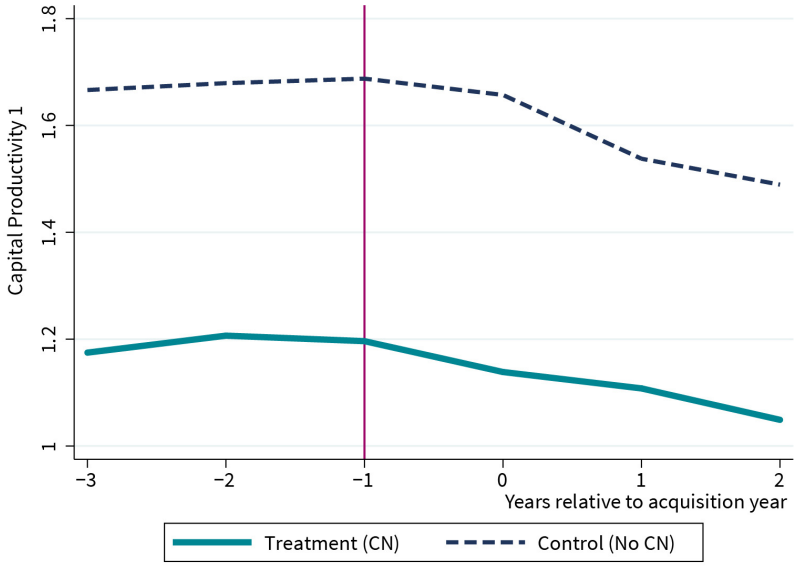
Table C2: Acquisition Effects of Chinese SOEs

Dep. variable: Intangibles	(1) Acquisition Year	(2) One year after	(3) Two years after	(4) Acquisition Year	(5) One year after	(6) Two years after
CN	0.00361	0.00377	0.0129	0.0134**	0.0134*	0.0180*
	(-0.006)	(-0.00785)	(-0.0102)	(-0.00648)	(-0.00805)	(-0.00971)
CNSOE	-0.0140*	-0.0163	-0.0251*	-0.0206**	-0.0222*	-0.0289**
	(-0.00831)	(-0.0117)	(-0.0143)	(-0.00875)	(-0.0121)	(-0.0142)
Balanced on target controls	YES	YES	YES	YES	YES	YES
Balanced on target country controls	NO	NO	NO	YES	YES	YES

Notes: This Table contains estimation results on the share of intangible assets. *CNSOE* is a dummy that equals 1 if the acquirer is a Chinese state-owned or state-controlled firm. The control group is re-weighted using entropy balancing. Standard errors are robust and clustered at the target firm level. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

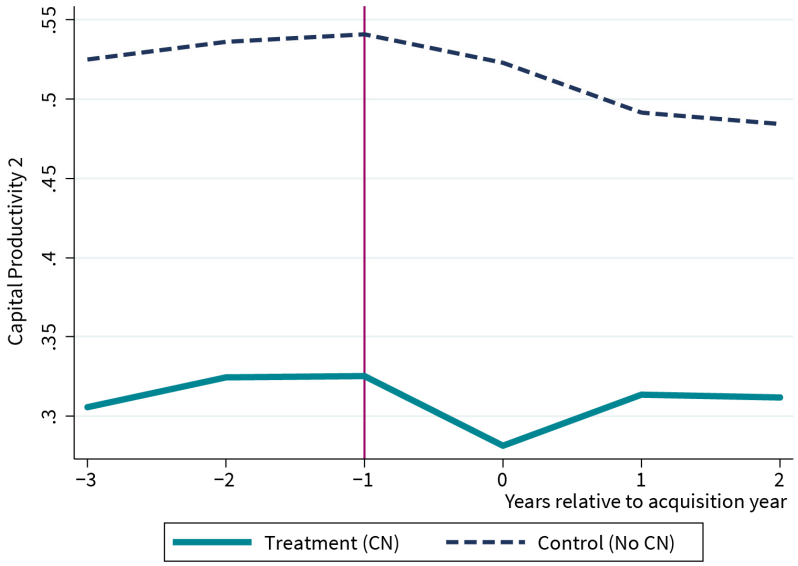
Appendix D: Additional Figures

Figure D1: Time Trend of Capital Productivity 1



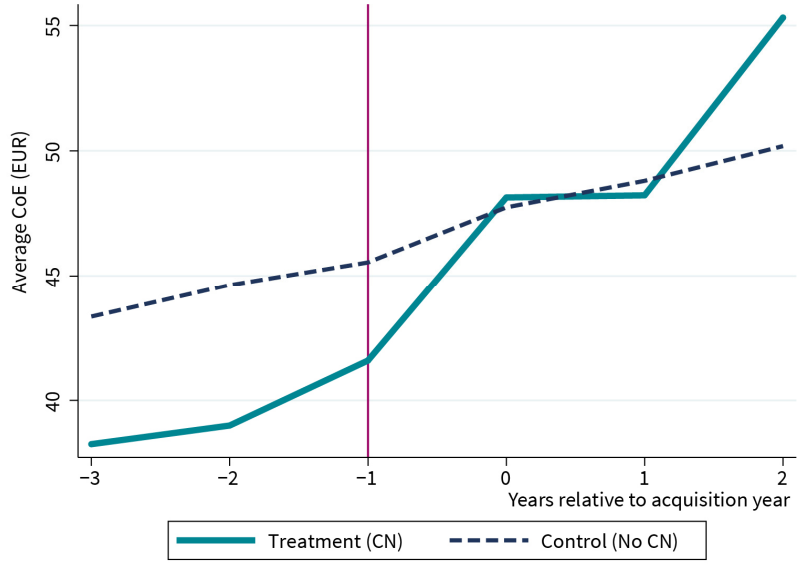
Notes: This figure shows the development of capital productivity 1 (turnover / total assets) for target firms of Chinese acquirers (treatment) and targets of non-Chinese acquirers (control).

Figure D2: Time Trend of Capital Productivity 2



Notes: This figure shows the development of capital productivity 2 (added value / total assets) for target firms of Chinese acquirers (treatment) and targets of non-Chinese acquirers (control).

Figure D3: Average of Employee Compensation



Notes: This figure shows the development of average compensation per employee (compensation of employee / number of employees) for target firms of Chinese acquirers (treatment) and targets of non-Chinese acquirers (control).

EconPol Europe

EconPol Europe - The European Network for Economic and Fiscal Policy Research is a unique collaboration of policy-oriented university and non-university research institutes that will contribute their scientific expertise to the discussion of the future design of the European Union. In spring 2017, the network was founded by the ifo Institute together with eight other renowned European research institutes as a new voice for research in Europe. A further five associate partners were added to the network in January 2019.

The mission of EconPol Europe is to contribute its research findings to help solve the pressing economic and fiscal policy issues facing the European Union, and thus to anchor more deeply the European idea in the member states. Its tasks consist of joint interdisciplinary research in the following areas

1) sustainable growth and 'best practice',

2) reform of EU policies and the EU budget,

3) capital markets and the regulation of the financial sector and

4) governance and macroeconomic policy in the European Monetary Union.

Its task is also to transfer its research results to the relevant target groups in government, business and research as well as to the general public.