The Belt and Road Initiative and Chinese Cross-border Mergers & Acquisitions

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Abstract

The Belt and Road Initiative was introduced by President Xi in an attempt to further economic connections with partner countries and foster development within China. We examine the effect of the Initiative on Chinese cross-border M&As. We find that the Initiative significantly increases the probability and the transaction amount of M&A deals in target countries. Moreover, the market reacts more positively to these deals. We find that the effect is entirely driven by state-owned enterprises and it is more pronounced in firms that are located on the more-developed eastern coast of China. The evidence suggests that the announcement of the Belt and Road Initiative was followed by economically meaningful cross-border M&A in targeted countries.

JEL classification: G34, G38.

Keywords: The Belt and Road Initiative, Cross-border Mergers & Acquisitions, China

1. Introduction

The Belt and Road Initiative was created to promote China's economic cooperation with countries in Asia, Europe, and Africa. President Xi Jinping expressed his vision of the Silk Road Economic Belt in September of 2013 as part of his state visit to Kazakhstan. Subsequently, he introduced the New Maritime Silk Road before the Indonesian Parliament in October of the same year as part of his state visit to Indonesia. These two proposals, known jointly as the Belt and Road Initiative, were followed by a series of policies introduced at the end of 2013 to strengthen political, economic, and cultural ties between China and participating countries in Asia, Europe, and Africa.

The 21st Century Maritime Silk Road begins on the Chinese coast, extending to Europe and East Africa via the South China Sea and the Indian Ocean on one route, and to the South Pacific via the South China Sea on another route. The Silk Road Economic Belt concentrates on linking China with the Persian Gulf and the Mediterranean Sea through Central Asia and West Asia, as well as connecting China with Southeast Asia, South Asia, and the Indian Ocean. In total, the Belt and Road Initiative includes more than 60 countries with a total population of over 4 billion people, representing a large fraction of the world's output. For China, several factors led to the creation of the Belt and Road Initiative. They include excess productive capacity in some sectors; the twin surpluses in the current and capital accounts during 2001-2014 that has resulted in a substantial accumulation of foreign reserves; and Chinese dependence on imports for some key inputs, especially oil,

gas, and minerals. Further, China's infrastructure is primarily on its eastern coast with a less developed interior. Improving infrastructure and promoting growth in the interior are priorities for the Silk Road Economic Belt. Finally, many of China's neighbors also have economic incentives to increase their economic ties with one of the world's largest economies.

The Belt and Road Initiative has a number of specific goals. First, it aims to improve infrastructure in countries included in the Initiative by promoting Chinese outward foreign direct investment (OFDI) to these nations. The Initiative has made China the main source of finance for many countries included in the Silk Road Economic Belt for critical infrastructure projects such as roads, airports, and railways. These types of projects facilitate transport among countries included in the Initiative (as well as their neighbors) and China's western regions. China's leadership expects that the central and western parts of China will experience faster economic development by becoming a new frontier for the country. The Chinese government facilitates domestic firms' foreign investment in infrastructure projects in the identified Initiative countries through subsidies and greater access to credit from state-owned Chinese banks. Further, the increased trade routes between China and countries included in the initiative are expected to boost cross-border commerce and increase access to natural resource inputs, critically including oil and gas from countries such as Russia and Iran.

Many Chinese firms have chosen internationalization by cross-border mergers and acquisitions (M&A). There are two main advantages of this mode of entry. First, M&A carries

lower (institutional) risk compared with green field investment. Second, the acquiring firm enjoys greater control than if it had pursed a joint venture instead. Previous work by Du and Zhang (2018) shows that the Belt and Road initiative mainly boosts cross-border M&As rather than greenfield investment by Chinese publicly listed enterprises in countries included in the Initiative. We build on Du and Zhang (2018) but in so doing, we use a different sample and identification strategy. Du and Zhang's (2018) sample includes all the countries that were originally part of the initiative planned by the Chinese government, however, some of these countries did not join the Initiative, at least not initially. For example, France and South Korea were expected to join, but their governments had not come into an agreement with the Chinese government until years after the Initiative had begun. In contrast, some countries such as Afghanistan and Albania that were not originally part of the Initiative joined during Du and Zhang's (2018) sample period, yet they were excluded from their empirical analysis. Second, and more importantly, Du and Zhang's (2018) identification strategy employs a control group of cross-border M&A source countries, such as Australia, Canada, Japan, Singapore, United Kingdom and United States, which are likely not a good comparison group for China. For example, there are few state-owned listed enterprises in the control group countries.

In this paper, we provide an arguably better set of estimates of the effects of the Belt and Road Initiative on Chinese outbound cross-border M&A activity. To do so, we compare cross-border M&A activity from China to countries included in the Belt and Road Initiative to cross-border M&A activity from China to countries that are not included in the Initiative,

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before and after the Initiative came into effect. The countries included in the control and treatment groups for the difference-in-differences strategy we employ are based on their actual participation in the Initiative. Finally, we use detailed transaction-level data on individual Chinese outward M&A deal activity from 2010 to 2016 in order to shed some light on the mechanisms behind our results.

Our empirical analysis reveals that the Belt and Road Initiative significantly increases both the probability and the number of outbound cross-border M&A deals completed by Chinese enterprises in countries included in the Initiative. In particular, we find that following the adoption of the Initiative, the annual likelihood of outbound Chinese cross-border M&A activity in the included countries grew by 20%, while the number of deals increased by 0.74. Moreover, the total dollar volume of cross-border M&A flows also rose, effectively doubling the pre-initiative level of cross-border M&A flows. We show that these impacts are driven by state-owned enterprises, which should be the firms most responsive to government programs. These firms likely have easier access to cheaper (possibly subsidized) credit from the dominant state owned banks, which may be one of the mechanisms behind the results. Foley and Manova (2015) discuss how financial constraints in international capital markets affect firms' choices on multinational investments. Our findings, that the likelihood of cross-border investment in Initiative countries grows, the number of deals in such countries rises, and that these deals increase acquirer's value and are confined to state-owned enterprises, are consistent with the idea that these financial constraints have been loosened, directly or indirectly as a result of the Initiative. We also find that the Belt and

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Road Initiative has the highest positive impact on the number of outbound cross-border M&A deals for targets in the transportation, mining, and energy industries, consistent with the stated goals of the Initiative. Finally, our estimates suggest that exports from China to countries in the initiative rose significantly, but imports from these countries to China were not affected, during our sample period of the early period of the Initiative.

The rest of the paper is organized as follows. Next, we provide a review of the existing literature on the Belt and Road Initiative and outbound cross-border M&A activity by Chinese firms. Section Three discusses the identification strategy and the data we use in our empirical work. The following section discusses the results, and the last section concludes.

2. Literature Review

There is a small but rapidly growing literature on the economic and political impacts of the Belt and Road Initiative. Recent work by the World Bank (Ruta et al., 2019) uses a computable general equilibrium model to show that overall FDI flows to countries included in the Belt and Road Initiative are projected to grow by about 5 percent. In their analysis of Chinese foreign investment in Africa, Chen et al. (2018) find that both horizontal and vertical FDI is profit-driven. Further, in skill-abundant countries, Chinese FDI is relatively more concentrated in skill-intensive sectors. Previous work also has suggested that the Initiative is not only an economic policy (Wang, 2016), but also a geopolitical project

(Ferdinand, 2016; Blanchard and Flint, 2017). When it comes to the impact of the Initiative on outbound foreign direct investment, Du and Zhang (2018) find that the initiative has positive effects for cross-border M&As. They find that state-controlled acquirers played a leading role in infrastructure sectors, while the non-state-controlled acquirers were more active in non-infrastructure sectors. Central and West Asia, Western Europe and Russia are favorable destinations of Chinese OFDI in the Belt and Road countries.

Much of the existing work on outbound Chinese OFDI has focused on motives for these investments. The literature suggests that the main goal of Chinese OFDI IS strategic assets such as natural resources, reputation (famous brands) and patents (Rui and Yip, 2008; Deng, 2009). Other goals include improving corporate governance (Hu and Cui, 2014).

Additional work evaluates the location decision of Chinese OFDI. Prior evidence indicates that the Chinese government plays an important role in the selection of location for such investments (Luo et al., 2010; Chen and Tan, 2012; Wang et al., 2012; Lu et al., 2014). Some previous research also suggests that high political risk in the host country does not discourage Chinese OFDI (Buckley et al., 2007; Kolstad and Wiig, 2012). In contrast, Kang and Jiang (2012) show that Chinese OFDI tends to flow into countries with well-developed institutional environments and good economic conditions.

Evidence that is more general – beyond Chinese OFDI – indicates that policy uncertainty in the source country (Julio and Yook, 2016) and differences in time zones (Stein and Daude, 2007) discourage OFDI. On the other hand, banking deregulation in the target mar-

ket (Kandilov et al., 2016), foreign ownership by shareholders in the source country (Wang and Wang, 2015), and previous investment experience in that market (Lu et al., 2014), tend to promote OFDI. Finally, local credit conditions in the source country (Kandilov et al., 2017), institutional factors in the target economy (Giovanni, 2005), and corruption in the source country (Javorcik and Wei, 2009) all influence location choice of cross-border M&A.

Another strand of the literature focuses on the entry mode of Chinese OFDI. The evidence shows that firms tend to adjust their entry strategies to attain regulative and normative institutional legitimacy in host countries (Cui and Jiang, 2012). There is a difference between OFDI driven by state-owned enterprises and that initiated by non state-owned firms. State-owned enterprises are attracted to countries with abundant natural resources and risky political environments in contrast to non state-owned firms that more generally seek proximity to markets (Ramasamy et al., 2012).

Finally, much research has been devoted to the factors that affect the performance of M&As. There are internal factors such as ownership structure (Chen et al., 2009; Serdar and Erel, 2013; Ma et al., 2016), past experience with M&A (Aktas et al., 2013), financial conditions of the acquirer (Giovanni, 2005; Morck et al., 2008), and the acquirer's strategy (Kim W C, Hwang, 1992; Bauer and Matzler, 2014; Yu et al., 2016). There are also external factors such as the efficiency of the host government (Du and Boateng, 2015; Deng and Yang, 2015), the location of the target enterprise (Cuervo-Cazurra and Genc, 2008; Erel et al., 2012), the timing of the deal (Blonigen, 2014), the investor protection (Rossi and Volpin, 2004) as well as cultural differences (Morosini et al., 1988; Kogut and Singh,

1998; Ahern et al., 2012).

3. Data and Identification Strategy

3.1. Data

In our empirical investigation, we employ cross-border M&A data from SDC Platinum and China Stock Market & Accounting Research Database (CSMAR). Using information from both databases allows us to compile a more comprehensive data set with fewer missing observations. Additionally, data on the covariates we employ in our empirical models come from the Centre d'Etudes Prospectives et d'Informations Internationales (CEPII) database. Our sample period starts in 2010 and ends in 2016, with 2014 being the first year of the Initiative. We denote 2014 as the start of the Initiative as President Xi's announcements for the Initiative were in fall of 2013.

Our empirical analysis rests on the comparison of Chinese outbound cross-border M&A activity between two groups of countries: the treatment group of countries, which includes nations in the Initiative, and the control group, which includes most other nations. The lists of countries we include in the treatment group comes from official Chinese government sources – https://www.yidaiyilu.gov.cn/. The majority of Initiative countries during 2010-2016 have at least one cross-border M&A. As such, the control group includes all other countries that have been the target of at least one cross-border M&A transaction initiated by Chinese enterprises during the sample period. We exclude firms from Hong Kong,

Macau, and Taiwan (Republic of China) as either acquirers or targets in those locations have fundamentally different political status as compared to other sample countries. The list of the countries in the treatment and control groups is presented in Table 1.

We begin our sample in 2010, immediately after the official end of the Great Recession in 2009, in order to avoid identification concerns driven by the abnormal behavior of cross-border flows during the global financial crisis. We end our sample in 2016 as a small number of countries joined the Belt and Road Initiative in 2017. Thus, these countries move from the control group to the treatment group in 2017. These contemporaneous policy shocks may be endogenous, and they may affect cross-border M&A by Chinese publicly listed enterprises in the treatment group and the control group differently. Based on the above considerations, the sample from 2010-2016 includes 819 observations with 64 countries in the treatment group and 53 countries in the control group.

The summary statistics are presented in Table 2. On average, the likelihood of an outbound cross-border M&A deal in countries included in the Initiative is substantially lower, at 0.312, compared to the likelihood of a deal in the control group of countries at 0.509. Similarly, both the average number of deals and the average transaction value are lower for countries in the Initiative. The average GDP in the control group countries is higher than that in the treatment group but the average population is quite similar, resulting in a lower income per capita in countries that are included in the initiative. The treatment countries are also geographically closer to China. Our empirical specification will incorporate variables that can affect cross-border M&A activity as controls.

3.2. Identification Strategy

We start by estimating the impact of the Belt and Road initiative on the likelihood of at least one Chinese outbound cross-border M&A transaction in the counties included in the initiative. To this end, we specify a logit model, estimated via maximum likelihood, with a binary dependent variable that is equal to one if at least one outbound Chinese M&A transaction occurred in target country i in year t.

$$Pr(Y = 1) = f(\beta_1 T_i * P_t + X_{it-1}\beta + \lambda_i + \gamma_t) \quad (1),$$

where Y=1 if there is positive M&A activity in country i and in year t. The main variable of interest on the right-hand side is $T_i * P_t$, which is an interaction between two indicator variables, T_i and P_t. The first, T_i, is equal to one if country i is included in the Belt and Road Initiative, and the second, P_t, is equal to one, in year 2014 (when the Initiative began), and afterwards. As we discussed earlier, we also include a vector of control variables that affect cross-border M&A activity and may be correlated with main variable of interest, $T_i * P_t$. The vector of controls includes the natural logarithm of GDP per capita and population, membership in the World Trade Organization (WTO), membership in a free trade agreement with China (FTA), as well as measures of the cost and the length of time required to start a business. We include target country indicator variables to absorb time-invariant target characteristics and year dummies to control for global macroeconomic shocks that affect all target countries.

In addition to specification (1) above, we also estimate two other econometric models;

the first one with the number of cross-border deals to country i in year t, $Number_{it}$ as the dependent variable,

$$Number_{it} = \beta_1 T_i * P_t + X_{it-1}\beta + \lambda_i + \gamma_t + \epsilon_{it} \quad (2)$$

and the second one with the total value (dollar amount) of all cross-border deals in country i during year t, $Log(Value + 1)_{it}$, as the dependent variable.

$$Log(Value + 1)_{it} = \beta_1 T_i * P_t + X_{it-1}\beta + \lambda_i + \gamma_t + \epsilon_{it} \quad (3)$$

We do not use the natural logarithm of the number of transactions in equation (2) because in some years, some target countries have no cross-border M&A deals originating from China. For the same reason, we add one to the total value of transactions before taking the natural log in equation (3). Both of these models are estimated as (target country) fixed effects panel data models (including both target country and year fixed effects), via OLS, using the same set of controls as in equation (1) above. In a series of robustness checks, we also use a linear probability model instead of the logistic regression for equation (1) above, and a Poisson (Pseudo Maximum Likelihood, PPML) model, typically used for count data models and estimated via maximum likelihood, instead of the linear fixed effects models (2) and (3) (see Santos-Silva and Tenreyro, 2006). We compute robust standard errors that are clustered by target country.

4. Empirical Results

4.1. Baseline Regression

In Table 3, we start by presenting the estimates of the impact of the Belt and Road Initiative on the probability and the number of cross-border M&A deals completed by Chinese enterprises. In column (1), we report the estimate of the impact of the Initiative on the likelihood of a Chinese outbound cross-border M&A deal. The estimated coefficient on the interaction term, $T_i * P_t$, implies that after the Initiative began in 2014, target countries included in the initiative experienced about 25 percentage point higher likelihood of a Chinese M&A deal. While most of the control variables have the expected signs, all but one are statistically insignificantly different from zero. The exception is the estimate on the WTO term, which implies that membership of the WTO has a negative association with cross-border M&A activity. The literature has documented that the WTO has a positive effect on cross-border trade, which it is designed to facilitate. Because trade and foreign direct investment, such as cross-border M&A activity, could be substitutes (see, for example Blonigen 2001), it is not surprising that membership in the WTO would promote trade at the expense of cross-border M&A.

We continue our empirical analysis in column (2), which reports the effects of the Initiative on the number of outbound cross-border M&A deals. While imprecisely estimated, the effect is positive and it suggests that following the Initiative, countries included in it,

experienced an increase of about 0.74 M&A deals. Our estimate suggests that the Initiative effectively doubled that number, given that the average number of deals annually in these countries during our sample period was about 0.73. The last column of Table 3 presents the impact of the Initiative on the total volume (dollar value) of cross-border M&A activity flowing into the target countries. Because some countries experience no M&A deals, and hence the amount is equal to zero, we use ln(Value+1) as a dependent variable. The estimated impact, which is statistically significant at the conventional 5 percent level, implies that the total volume of M&A deals channeled into Belt and Road countries effectively doubles, as well.

4.2. Sub-sample Regression

Our analysis continues in Tables 4 and 5, where we investigate the heterogeneity of the impact of the initiative by industry. We report models for the number of deals in Table 4 and the total volume in terms of transaction amounts in Table 5 and discuss these tables together.

We find that the impact is positive in the Transportation, Mining, and Energy industries, in which the Belt and Road countries experienced an increase in cross-border M&A activity following the Initiative. This is true for both the number (Table 4) and the total volume (Table 5) of cross-border M&A deals. The results indicate that the remaining industries (Agriculture, Retail, Manufacturing, Information Technology (IT), Finance, Real Estate, and Business Services) have not seen a positive effect on cross-border M&A activity

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stemming from the Initiative by the end of our sample period in 2016. These results are consistent with the stated goals of the Initiative.

In Table 6, we estimate the impact of the Initiative on outbound cross-border M&A deals initiated by Chinese state-owned enterprises as compared to those initiated by non state-owned firms. The results show that the positive effects of the Initiative on cross-border M&A deals we uncovered in our baseline Table 3 are entirely driven by M&A deals initiated by state-owned enterprises. While the Initiative increased both the number and the total volume of M&A deals initiated by state-owned enterprises (columns (1) and (2) of Table 6), it did not have an impact on Chinese non state-owned firm's M&A activity (columns (3) and (4) of Table 6). This finding may shed some light on one of the mechanisms that drive the positive effects of the Initiative on Chinese outbound cross-border M&A activity. One reason for this positive impact could be easier access to cheaper (subsidized) credit for state-owned enterprises compared to non state-owned firms following the government-led Initiative.

In Table 7, we examine the impact of the Initiative on Chinese firms headquartered in coastal provinces, which are near navigable water, large population centers, and production facilities, relative to firms in the interior provinces. One of the stated goals of the Initiative is to enhance development in the interior of the country by facilitating trade via the new Silk Road. However, it is likely that firms would better internalize the benefits of cross-border M&A activity spurred by the Initiative if they already have developed organizational capabilities in place, prior to the policy. These capabilities to grow through

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M&A are needed because of the complexities of international transactions and the need to manage new assets in foreign countries. Firms in the more economically developed and internationally connected coastal provinces are arguably more likely to have such capabilities. The empirical evidence suggests that during the early period of the initiative, firms headquartered in interior provinces did not increase their cross-border M&A activity. In contrast, firms headquartered in the coastal provinces experienced a significant growth in the volume and frequency of M&A transactions in Initiative countries following 2013. The evidence suggests that firms in the interior provinces may not have been initially prepared to take advantage of the Initiative through the M&A channel.

4.3. Robustness Tests

In Table 8, we perform a number of robustness checks. In columns (1) and (2), we re-estimate the impact of the Initiative on the likelihood of cross-border M&A activity using a linear probability model and a Probit specification instead of the Logit model we employed in column (1) of Table 3. The results are very similar to those in our baseline specification. In columns (3) and (4) of Table 8, we re-estimate the regression equations for the number of cross-border deals and the volume of M&A transactions using a Poisson model. The estimates of the impact of the initiative on the number of transactions appear fragile: the impact is estimated to be close to zero and it is statistically insignificant, while the effect on the volume of M&A transactions is still positive and quite robust.

In Table 9, we perform a number of falsification tests, where we reclassify the start

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of the Initiative to begin in 2011, 2012, or 2013, instead of 2014, when it actually started. If pre-trends exist, and they cause our identification strategy to erroneously attribute an increase in cross-border M&A activity to the discrete change in the policy environment with the arrival of the Initiative in 2014, these series of falsification test will help shed light on this problem. If the coefficient on the reclassified interaction term $T_i * P_t$ is still positive and statistically significant, that can signal spurious results caused by pre-existing trends.

Table 9 shows that results from the different falsification test we perform. While almost all coefficients are positive, they are all economically small in magnitude, and none of the them are statistically significantly different from zero. These results provide some assurance that the results showing the impact of the Initiative are not driven by pre-existing trends in cross-border M&A activity.

Up to this point, we have provided evidence that the Initiative was followed by an increase in M&A activity by Chinese firms in Initiative countries. We find that the Initiative was more important for firms in certain industries, government ownership, and geographic location. The channel for how the Initiative spurred such M&A activity is likely unobservable. One possibility is that the call to action from the President of China has been met by a patriotic response or perhaps by behind-the-scenes pressure. Another non-mutually exclusive explanation is that there are economic incentives such as greater access to capital on generous terms, other subsidies, or preferential treatment.

To shed some further light on the firm's incentives, we examine the valuation impact on the acquiring firm associated with these deals. In Table 10, we present the estimates

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of the impact of the Belt and Road Initiative on the acquirer's Cumulative Abnormal Announcement Return (CAAR). In this event study, we include deals using the following selection criteria: (1) the announcement data of the cross-border M&A deal is after January 1st, 2010; (2) the transaction amount of the deal is greater than 1 million US dollars (following previous work by Moeller et al. (2004) and Netter et al. (2011)); (3) the acquirer is listed on the Chinese A stock market;[1] and (4) the M&A deals with missing data are excluded. Based on the criteria above, we are left with 385 cross-border M&A deals from 2010 to 2016 for purposes of our event study. We compute CAARs using market-adjusted returns employing three, five, and seven day windows centered on the announcement date. We use market-adjusted returns following previous work by Fan et al. (2007), Shen (2007), and Hirshleifer et al. (2016).

The evidence in Table 10 suggests that the acquirer's CAAR for firms in the control group does not change much after the Initiative was put in place. On the other hand, acquirers in the treatment group experienced an economically large and statistically significantly higher returns in the 3 to 4% range. The abnormal returns for the treated group prior to the Initiative and for the control group before and after the Initiative are near zero, consistent with the stylized results in the M&A literature.

Additionally, we estimate a difference-in-differences model (via OLS) similar to that in equation (2) using the same set of deals that meet the selection criterion above. The

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[1]Chinese A listings are for Chinese investors alone; we focus on A listings because this market is larger and more liquid

dependent variable, CAAR, is regressed on the following control variables for the acquirer: (the natural log of) the total assets, the debt ratio, the book-to-market ratio, the fraction of independent directors, an index measuring the separation between ownership and management, and finally the ratio of free cash-to-assets. We further include target industry fixed effects and year effects. The estimates presented in Table 11, indicate that following the adoption of the Belt and Road Initiative, the cumulative abnormal announcement return is higher. These results suggest that economic incentives are part of the Initiative rather than firms simply following moral suasion from the government.

Before we conclude, we also investigate the impact of the Initiative on Chinese cross-border trade. The results, which are presented in Table 12, indicate that the Initiative likely increased exports to Belt and Road countries by about 6.6%, but it did not change imports from these trading partners. If the Initiative aimed at increasing foreign subsidiaries in transportation, mining, and the energy industries with the intention of increasing such imports, it may take time following the implementation of the Initiative before this happens. For example, improvements in infrastructure (building and improvements of roads and ports) will have to be completed first, before imports start flowing. Hence, our short sample period may prevent us from detecting growth in imports following the Initiative. The small, but positive impact of the initiative on Chinese exports is consistent with some of the existing literature on the complementarity of exports and FDI (see, for example, Lipsey and Weiss, 1984; Yamawaki,1991; Blonigen, 1999; Rob and Vettas, 2010).

5. Conclusion

In this paper, we evaluate the impact of the Belt and Road Initiative championed by the Chinese President Xi Jinping on outbound cross-border M&A deals initiated by Chinese enterprises. In our empirical work, we use transaction level M&A data from 2010 to 2016 to evaluate the impact of the Initiative on the incidence and the number of transactions, as well as the total volume of M&A activity. Our estimates suggest that the likelihood of outbound M&A deals rose by about 25 percentage points following the Belt and Road Initiative. Further, total volume of M&A deals flowing into target Belt and Road countries almost doubled reaching 6.3 billion US dollar by 2016, three years after the Initiative began. We find that the impacts are driven by M&A transactions initiated by Chinese state-owned enterprises that appear to have positive economic incentives for doing so, perhaps through easier access to cheaper credit following the Initiative compared to non state-owned companies. Finally, our empirical results imply that the Initiative has had the highest positive impact on outbound cross-border M&A activity for targets in the transportation, mining, and energy industries, which is consistent with the goals of the policy.

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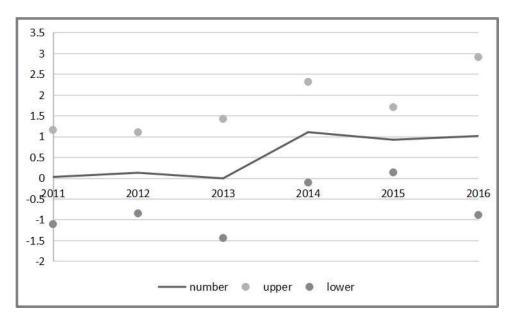
Figure 1: The Difference in the Number of Cross-border M&As in Treatment Countries and Control Countries with 95% confidence interval
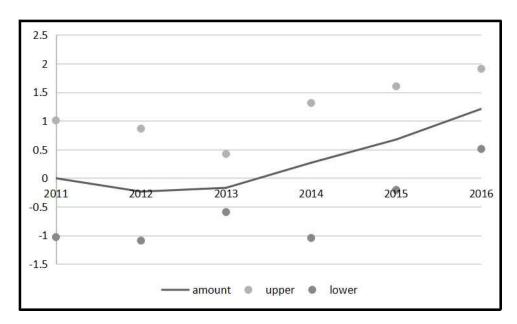

Figure 2: The Difference in the Transaction Amount of Cross-border M&As in Treatment Countries and Control Countries with 95% confidence interval

Table 1: Countries included in the Belt and Road Initiative (Treatment Countries) and excluded from the Belt and Road Initiative (Control Countries), 2010 to 2016

A. Treatment Country List(Alphabetical Order)				
Afghanistan	Albania	Armenia	Azerbaijan	Bahrain
Bangladesh	Belarus	Bhutan	Bosnia	Brunei
Cambodia	Croatia	Cyprus	Czech	Egypt
Estonia	Georgia	Greece	Hungary	India
Indonesia	Iraq	Iran	Israel	Jordan
Kazakhstan	Kenya	Kuwait	Kyrgyzstan	Laos
Latvia	Lebanon	Lithuania	Malaysia	Maldives
Macedonia	Mongolia	Montenegro	Moldova	Myanmar
Nepal	Oman	Pakistan	Philippines	Poland
Qatar	Romania	Russia	Saudi Arabia	Syria
Serbia	Singapore	Slovak	Slovenia	Sri Lanka
Tajikistan	Thailand	Turkmenistan	Turkey	Ukraine
Uzbekistan	Utd Arab Em	Vietnam	Yemen	
B. Control Country List(Alphabetical Order)				
Angola	Argentina	Australia	Austria	Belgium
Botswana	Bulgaria	Cameroon	Canada	Chile
Colombia	Congo	Denmark	Djibouti	Eritrea
Finland	France	Gabon	Germany	Italy
Ireland	Japan	Luxembourg	Madagascar	Malta
Mauritius	Mexico	Netherlands	New Zealand	Nigeria
Norway	Peru	Papua New Guinea	Portugal	Samoa
Sierra Leone	South Africa	Sonania	South Korea	Spain
Sweden	Switzerland	Tanzania	Togo	Trinidad and Tobago
Tunisia	United Kingdom	United States	Uruguay	Venezuela
Western Somoa	Zambia	Vanuatu		

Table 2: Summary Statistics

Variable	Average	S.D	Max	Min
Panel A. Treatment Group(N=455)				
Indicator for M&A Activity	0.312	0.464	1	0
Number of M&A Deals	0.734	1.896	19	0
Ln(Dollar Value+1)	1.016	1.960	10.020	0
Ln(GDP)	8.694	1.217	16.411	6.111
Ln(Population)	2.405	1.631	7.718	-1.140
WTO Indicator	0.741	0.438	1	0
Regional Free Trade Agreement Indicator (FTA)	0.172	0.378	1	0
Business Startup Cost	15.032	23.374	157.7	0
Time Required to Start a Business (Days)	21.683	23.216	121.5	2
Panel B. Control Group(N=364)				
Indicator for M&A Activity	0.509	0.501	1	0
Number of M&A Deals	3.664	9.114	71	0
Ln(Dollar Value+1)	2.583	3.204	11.085	0
Ln(GDP)	9.247	1.581	11.667	5.811
Ln(Population)	2.493	1.692	5.688	-1.773
WTO Indicator	0.927	0.260	1	0
Regional Free Trade Agreement Indicator (FTA)	0.056	0.231	1	0
Business Startup Cost	24.692	41.204	240.1	0
Time Required to Start a Business (Days)	27.088	31.774	186	0.5

Table 3: Baseline Regression

Dependent Variable	(1)Likelihood of M&A Event	(2)Number of M&A Deals	(3)Ln(Value+1)
Model	Logit	OLS	OLS
$T_i * P_t$	0.249***	0.742	0.985***
	(0.063)	(0.592)	(0.251)
Ln(GDP)	-0.519	0.322	-1.472*
	(0.702)	(0.706)	(0.838)
Ln(Pop)	0.498	0.839	-0.312
	(2.467)	(1.233)	(1.439)
WTO	-1.399**	-0.357	-1.303
	(0.705)	(0.439)	(0.973)
FTA	13.578	1.800***	1.565
	(837.339)	(0.586)	(1.350)
Startup Cost	-0.004	-0.006	0.001
	(0.010)	(0.010)	(0.004)
Days to Start A Business	-0.011	-0.002	-0.010
	(0.010)	(0.011)	(0.012)
Country fixed effect	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes
R^2		0.116	0.138
N	819	819	819

Notes:(1)Standard errors clustered by country pair are reported in parentheses. Column (1)
reports the marginal effects from the Logit regression.
(2)*,**,*** indicates that the coefficient is statistically significant at 10%,5%,1%, respectively.

Table 4: The Impact of B&R Initiative on the Number of Cross-border M&A Deals in Different Industries

Panel A:	Transportation	Mineral	Energy	Agriculture	Retail
$T_i * P_t$	0.218***	0.637*	0.103*	-0.006	-0.059
	(0.063)	(0.364)	(0.056)	(0.043)	(0.051)
Control variables	Yes	Yes	Yes	Yes	Yes
Country fixed effect	Yes	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes	Yes
R^2	0.124	0.115	0.052	0.052	0.037
N	819	819	819	819	819
Panel B:	Manufacture	IT	Finance	Real Estate	Business Service
$T_i * P_t$	-0.049	0.041	0.095	-0.005	0.038
	(0.232)	(0.056)	(0.118)	(0.007)	(0.062)
Control variables	Yes	Yes	Yes	Yes	Yes
Country fixed effect	Yes	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes	Yes
R^2	0.031	0.103	0.022	0.010	0.206
N	819	819	819	819	819

Notes:(1)Standard errors clustered by country pair are reported in parentheses.
(2)*,**,*** indicates that the coefficient is statistically significant at 10%,5%,1%, respectively.

Table 5: The Impact of B&R Initiative on The Dollar Value of Cross-border M&A Activity in Different Industries

Panel A:	Transportation	Mineral	Energy	Agriculture	Retail
$T_i * P_t$	0.481***	0.817***	0.341*	-0.102	-0.002
	(0.174)	(0.245)	(0.178)	(0.103)	(0.093)
Control variables	Yes	Yes	Yes	Yes	Yes
Country fixed effect	Yes	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes	Yes
R^2	0.109	0.032	0.029	0.063	0.086
N	819	819	819	819	819
Panel B:	Manufacture	IT	Finance	Real Estate	Business Service
$T_i * P_t$	-0.164	0.199	-0.009	-0.102	-0.105
	(0.214)	(0.138)	(0.147)	(0.103)	(0.111)
Control variables	Yes	Yes	Yes	Yes	Yes
Country fixed effect	Yes	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes	Yes
R^2	0.048	0.018	0.022	0.026	0.189
N	819	819	819	819	819

Notes:(1)Standard errors clustered by country pair are reported in parentheses.
(2)*,**,*** indicates that the coefficient is statistically significant at 10%,5%,1%, respectively.

Table 6: The Impact of B&R Initiative on State-owned Enterprises compared to Private Enterprises

	State-owned		Non State-owned	
Dependent Variable	(1)Number M&A Deals	(2)Ln(Value+1)	(3)Number M&A Deals	(4)Ln(Value+1)
$T_i * P_t$	0.825***	0.879***	-0.119	0.069
	(0.362)	(0.259)	(0.424)	(0.208)
Control variables	Yes	Yes	Yes	Yes
Country fixed effect	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes
R^2	0.171	0.167	0.048	0.058
N	819	819	819	819

Notes:(1)Standard errors clustered by country pair are reported in parentheses.
(2)*,**,*** indicates that the coefficient is statistically significant at 10%,5%,1%, respectively.

Table 7: The Impact of B&R Initiative in Coastal Provinces compared to Interior Provinces

	Coastal Provinces		Interior Provinces	
Dependent Variable	(1)Number M&A Deals	(2)Ln(Value+1)	(3)Number M&A Deals	(4)Ln(Value+1)
$T_i * P_t$	0.798**	0.934***	-0.049	0.166
	(0.372)	(0.281)	(0.406)	(0.178)
Control variables	Yes	Yes	Yes	Yes
Country fixed effect	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes
R^2	0.081	0.096	0.106	0.164
N	819	819	819	819

Notes:(1)Standard errors clustered by country pair are reported in parentheses.
(2)*,**,*** indicates that the coefficient is statistically significant at 10%,5%,1%, respectively.

Table 8: The Impact of B&R Initiative, Alternative Specifications

Dependent Variable	(1)Likelihood M&A Event	(2)Likelihood M&A Event	(3)Number M&A Deals	(4)Value
Method	OLS	Probit	Poisson	Poisson
$T_i * P_t$	0.237***	0.231***	0.001	1.699***
	(0.057)		(0.278)	(0.478)
Control variables	Yes	Yes	Yes	Yes
Country fixed effect	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes
R^2	0.032			
N	819	819	819	819

Notes:(1)Standard errors clustered by country pair are reported in parentheses. Column (2) reports the marginal effects from the Probit regression.
(2)*,**,*** indicates that the coefficient is statistically significant at 10%,5%,1%, respectively.

Table 9: Falsification Tests

Year B&R Presumed to Start	2011	2012	2013	2011	2012	2013
	Number of M&A Deals			Ln(Value+1)		
$T_i * P_t$	-0.448	0.078	0.318	0.155	0.223	0.575
	(0.503)	(0.502)	(0.583)	(0.475)	(0.369)	(0.295)
Control variables	Yes	Yes	Yes	Yes	Yes	Yes
Country fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes	Yes	Yes	Yes
R^2	0.141	0.161	0.176	0.275	0.274	0.272
N	819	819	819	819	819	819

Notes:(1)Standard errors clustered by country pair are reported in parentheses.
(2)*,**,*** indicates that the coefficient is statistically significant at 10%,5%,1%, respectively.

Table 10: Summary Statistics, Cumulative Abnormal Announcement Returns

CAAR(-1,1)	Treatment=1	Treatment=0
B&R Initiative=1	0.031**	0.008***
	(0.004)	(0.003)
B&R Initiative=0	0.003	0.006*
	(0.004)	(0.004)
CAAR(-2,2)	Treatment=1	Treatment=0
B&R Initiative=1	0.039**	0.014**
	(0.005)	(0.006)
B&R Initiative=0	-0.017**	0.007
	(0.008)	(0.007)
CAAR(-3,3)	Treatment=1	Treatment=0
B&R Initiative=1	0.046*	0.009*
	(0.006)	(0.006)
B&R Initiative=0	-0.035**	0.001
	(0.011)	(0.009)

Notes:(1)Standard errors are reported in parentheses.
(2)*,**,*** indicates that the coefficient is statistically significant at 10%,5%,1%, respectively.

Table 11: The Impact of B&R Initiative on Cumulative Abnormal Announcement Returns

Dependent Variable	(1) CAAR(-1,1)	(2) CAAR(-2,2)	(3) CAAR(-3,3)
$T_i * P_t$	0.020***	0.019*	0.031***
	(0.006)	(0.010)	(0.011)
Control variables	Yes	Yes	Yes
Target industry fixed effect	Yes	Yes	Yes
Year fixed effect	Yes	Yes	Yes
F tests	2.08**	2.67***	3.76***
R^2	0.082	0.103	0.131
N	385	385	385

Notes:(1)Standard errors are reported in parentheses.
(2)OLS regressions in all columns.
(3)*,**,*** indicates that the coefficient is statistically significant at 10%,5%,1%, respectively.

Table 12: The Impact of B&R Initiative on Trade Volume

Dependent Variable	(1)Exports	(2)Imports
Method	Poisson	Poisson
$T_i * P_t$	0.066*	-0.001
	(0.035)	(0.046)
Control Variables	Yes	Yes
Country fixed effect	Yes	Yes
Year fixed effect	Yes	Yes
N	1,414	1,414

Notes:(1)Standard errors clustered by country pair are reported in parentheses.
(2)*,**,*** indicates that the coefficient is statistically significant at 10%,5%,1%, respectively.