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Does One Belt One Road initiative promote Chinese overseas direct investment?☆



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ABSTRACT

In response to the One Belt One Road (OBOR) initiative, China's overseas direct investment (ODI), especially whole or majority-ownership mergers and acquisitions, rose significantly in the belt-road countries, especially the ones along the continental route. Comparatively speaking, China's state-controlled acquirers played a leading role in infrastructure sectors, whereas the non-state-controlled acquirers were particularly active in non-infrastructure sectors. Central and West Asia, Western Europe and Russia are favorable destinations of Chinese ODI.

1. Introduction

The One Belt One Road (OBOR) initiative, i.e., the Silk Road Economic Belt and the 21st Century Maritime Silk Road policy, is a great vision for economic integration of China with Asia, Europe and Africa. Since the inception of this vision in late 2013, the Chinese government has made it a paramount national strategy. The initiative provides a blueprint of a strong integration of China into the world economy and represents the commitment of the Chinese government to a more open economy.

The strategy was formed at a critical point of China's economic transformation. In recent years, the Chinese overseas direct investment (ODI) has increased at a rapid pace, prompted by China's structural transformation and domestic production overcapacity. The OBOR initiative is widely regarded as a means of enhancing the prowess and expanding the reach of Chinese companies in the global economy, especially in the countries covered by the OBOR Strategy (the belt-road countries).

It is then a natural question to ask whether the OBOR initiative has promoted the overseas investment of Chinese companies, particularly in the belt-road countries. This question could be of interest to not only policymakers and industry experts but also academics because it may help us understand the impacts of an infrastructure-led economic integration plan on foreign direct investment (FDI). Firstly, as will be argued in detail in [Section 2.3](#), the OBOR strategy's massive investment in infrastructure would improve the quality and availability of logistics facilities in the belt-road countries, which can boost FDI inflow from China. Furthermore, the high-level international political cooperation, policy coordination and government support embedded in the OBOR initiative can considerably reduce host country policy uncertainty and political risks for Chinese firms investing in the belt-road countries, which further encourages China's ODI in the belt-road countries. In the early stage of the OBOR initiative, some of these motivating benefits for ODI may already take shape, but many others are still largely expected ones instead of realized ones. Since Chinese enterprises typically have high confidence in the success of the OBOR initiative, they may be encouraged by the bright

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prospects of the OBOR initiative and respond actively to increase ODI ahead of their counterparts from other countries. Meanwhile, some of China's ODI in the infrastructure sectors in the belt-road countries, especially those by Chinese state-owned enterprises (SOEs) can be part of the OBOR infrastructure investment plan.

Secondly, China is characterized with a state capitalism model under an authoritarian regime. SOEs play a pivotal role in the commanding heights of the national economy, and they are the reliable forces to achieve government goals. In contrast, a vibrant private sector makes up the majority of the production of national output and employment. Disadvantaged in gaining access to resources such as capital, land, etc., non-state-owned enterprises (non-SOEs) are typically willing to cooperate well with and please the local or national bureaucrats (see, for example, Du & Wang, 2013; Kung & Ma, 2016). They tend to follow the call of the government in fulfilling various national or local goals. Thus, examining how Chinese enterprises respond to this national economic strategy can help shed light on the mechanisms of implementation of the national strategy and the functioning of a state capitalism model.

Albeit an important and intriguing question to the international community, there is no serious study to analyze whether this strategy has generated real effects on China's economic integration with the belt-road countries.¹ This study attempts to fill in the void.

We examine China's ODI in the forms of both greenfield investment and merger and acquisitions (M & As), before and after the announcement of the OBOR initiative. In view of the variations in data availability in the different parts of analysis, we provide both descriptive statistics and econometric analyses of the impact of the OBOR initiative on China's ODI.

It is found that the Chinese overseas acquisitions of targets in the belt-road countries increased considerably in the years following the announcement of the OBOR national strategy (years 2014 and 2015), but the greenfield investment in the belt-road countries was growing at a slower pace than acquisitions in the belt-road countries and greenfield investments in the non-belt-road countries. There are signs that Chinese investing firms shifted a portion of ODI from greenfield investment to acquisitions in the post-OBOR years in order to capture the investment opportunities more quickly.

In terms of acquisition target industries, energy & power and industrials still remained as the top two in the belt-road countries in the post-strategy years, but the importance of high technology and financials rose rather quickly, occupying the third and fourth positions. This is largely consistent with the trend of industrial diversification in the overall structure of target industries of China's overseas acquisitions.

The OBOR strategy considerably raised the fractions of Chinese enterprises' full-ownership acquisitions and majority-ownership acquisitions in the belt-road countries. This illustrates the increasing commitment of Chinese investors toward the belt-road countries.

We pay close attention to the overseas acquisition activities of SOEs and non-SOEs. Both SOEs and non-SOEs, relative to their counterparts from other major acquirer countries, increased significantly their acquisitions of targets in the continental silk-road countries in the post-OBOR years (2014–15). Strikingly, SOEs played a leading part in acquisitions in infrastructure sectors in the belt-road countries. A large chunk of these acquisitions could be part of the infrastructure investment plan embedded in the OBOR initiative. Non-SOEs were particularly active in acquiring targets in non-infrastructure sectors in the belt-road countries, probably encouraged by the expected improvements in infrastructure, expected government policy coordination and political cooperation, etc.

A close look at the destination countries of China's overseas acquisitions demonstrates that SOEs mainly increased acquisitions of infrastructure targets in Central and West Asia, Western Europe and Russia, but curtailed acquisitions in Africa. Non-SOEs mainly increased their acquisitions in non-infrastructure sectors in East Asia, Central and West Asia, Russia, and Western Europe. Clearly, Central and West Asia, Russia, and Western Europe are favorable destinations of both SOE and non-SOE acquisitions. It is likely that the expected improvement in infrastructure following SOEs' ODI in those regions encouraged non-SOEs to expand into the non-infrastructure sectors there.

Thus, this study demonstrates that the OBOR initiative, an infrastructure-led economic integration blueprint implemented under an authoritarian regime, prompted Chinese enterprises to expand their ODI in the belt-road countries.

The rest of the paper is organized as follows. Section 2 provides background information on the OBOR initiative and China's ODI in recent years, and discusses some conceptual issues. Section 3 discusses data and variables. Empirical methodology is introduced in Section 4. Descriptive empirical findings are discussed in Section 5. Section 6 presents and discusses the regression analysis results. Section 7 concludes the paper.

2. Background and conceptual issues

2.1. One Belt One Road strategy

President Xi Jinping unveiled his vision of the Silk Road Economic Belt at Nazarbayev University on September 7, 2013 as part of his state visit to Kazakhstan. The concept of New Maritime Silk Road was announced by President Xi before the Indonesian Parliament on October 3, 2013, as part of his state visit to Indonesia. These two concepts are combined as the One Belt One Road (OBOR).

The Silk Road Economic Belt focuses on bringing together China, Central Asia, Russia, Central and Eastern Europe, and Western

¹ Though studies such as Chen (2016) and Kaliszuk (2016) have discussed the recent Chinese FDI in some OBOR countries such as Africa and Poland, their studies are not focused on the systematic analysis of the effects of OBOR on China's ODI.

Europe, linking China with the Persian Gulf and the Mediterranean Sea through Central Asia and West Asia, and connecting China with Southeast Asia, South Asia and the Indian Ocean. The New Maritime Silk Road runs through a vast sea area, starting from China's coast and reaching Europe and East Africa through South China Sea and Indian Ocean in one route, and reaching South Pacific through South China Sea in the other route. It is estimated that the OBOR regions encompass more than 60 emerging market economies, a total population of over 4 billion, and a sizeable fraction of the world's output (65% for the land-based road and 30% for maritime silk road) (Swaine, 2015). It is a grand plan for China's economic integration with various parts of the world.

The OBOR initiative is not merely a free trade agreement. It is a massive infrastructure-led economic integration plan. It draws a blueprint for integrating China's trading partners by developing their infrastructure, i.e., ports, roads, airports, railways, etc., in a way that complements Beijing's own interests. Since the outset of the initiative, China has become a primary source of financing for many belt-road countries. For example, Export and Import Bank of China alone lent \$80 billion in 2015, compared with more than \$27 billion from Asian Development Bank (Knowledge@Wharton, 2017).

The OBOR initiative contains a Chinese commitment to investing heavily in a wide variety of infrastructure projects in order to strengthen the economic capacity and connectivity among the nations within the belt-road area and with China's western regions. Several mechanisms are designed entirely or in part to support such infrastructure development, including the Silk Road Fund and the Asia Infrastructure Investment Bank (AIIB), as well as Chinese foreign aid and the private capital of both Chinese and foreign business entities.

The OBOR strategy is expected to help develop China's vast western hinterland. The strategy will turn the western interior into the frontier in opening up to the world, development opportunities in the central and western regions will increase, and new growth points will emerge. Thus, it can help tackle the imbalances in socio-economic development between the country's flourishing coastal provinces and the less developed western and central provinces and reduce income inequalities (European Parliament, 2016).

The OBOR initiative is also viewed as a tool for promoting national economic development by boosting exports, enhancing access to natural resources, and providing support to important domestic industries. In this regard, the OBOR initiative can be a way of relieving overcapacity in certain Chinese capital goods and construction-oriented industrial sectors. This could become an increasingly important component of China's adjustment to lower economic growth rates over the long term (Ernst and Young, 2016).

2.2. China's overseas direct investment

China's ODI has increased substantially over the past decade and become one of the important developments of the world economy. Today, outbound investment flow exceeds USD 100 billion, making China the world's second largest overseas investor. This marks the historical transformation of the role of Chinese companies from global manufacturers to global investors.

Since the beginning of the new millennium, encouraging Chinese enterprises to go abroad has remained as one important task in the Chinese government's agenda (Sauvant & Chen, 2014). After the launch of the OBOR initiative, a range of new government policies have been providing strong support to Chinese companies' overseas expansion. For example, under the newly revised Measures for Foreign Investment Management enacted in September 2014, the approval-based system has been replaced with a registration and filing system and the administrative procedures for overseas investment have been simplified.

Earlier, Chinese overseas investment activities were concentrated in the energy and mining sectors. Currently, the focus of China's ODI is shifting from natural resources to high technology- and consumption-oriented sectors. It is reported that high technology, real estate, finance, agribusiness, health care sectors, etc. have become the favorable target sectors (Ernst and Young, 2015).

This shift in the target industry structure reflects China's accelerated economic transformation and China's evolving overseas investment interests. Chinese investors are now looking beyond resource-rich countries in Asia, Latin America and Africa, and turning more attention to developed economies in Europe and the Americas as their attractive investment destinations.

With the transformation and strengthening of the Chinese economy and the development of Chinese enterprises, the objective of investment has shifted from acquiring production factors such as resources to acquiring advanced technology and brands. This shift in focus is aimed at increasing the international competitiveness of Chinese companies and meeting the changing domestic consumption behavior.

2.3. The OBOR initiative and the promotion of China's ODI

2.3.1. Infrastructure improvement and China's ODI in the belt-road countries

As the OBOR initiative is an infrastructure-led integration scheme, it is expected that China's ODI in infrastructure sectors in the belt-road countries will increase as part of the infrastructure investment campaign. Given that large infrastructure investment projects are mainly initiated and coordinated by governments and SOEs play a leading part in China's infrastructure sectors, SOEs are expected to be the primary force in ODI in infrastructure sectors in the belt-road countries. Meanwhile, the ODI of non-SOEs in infrastructure sectors can also increase because of their active participation in the OBOR initiative in response to the start and the expected continuation and enlargement of massive state-led investment in infrastructure. The massive state-led ODI in infrastructure sectors can generate related investment opportunities for non-SOEs to play a complementary role.

The massive investment of the OBOR initiative is expected to improve the quality and availability of infrastructure in the belt-road countries, which in turn would attract more FDI from China as well as other countries. It is widely agreed in the literature that infrastructure development, such as the quality of and the access to transportations and telecommunication networks, plays a crucial role in attracting FDI. For example, when examining the determinants of FDI into U.S. states for 1981–1983, Coughlin, Terza, and Arromdee (1991) find that more extensive transportation infrastructures were associated with increased FDI. Wheeler and Mody

(1992) find that infrastructure quality is an important factor for developing countries in attracting FDI from the U.S. Similarly, Cheng and Kwan (2000) find that good infrastructure (density of roads) is an important determinant of FDI into 29 Chinese regions from 1985 to 1995. Subsequent studies such as Asiedu (2002), Deichman, Karidis, and Sayek (2003), Li and Park (2006), Bellak, Leibrecht, and Damijan (2009), etc., confirm the importance of infrastructure development for attracting FDI. Thus, the expected development of infrastructure under the OBOR initiative is likely to boost inward direct investment into the belt-road countries. Chinese enterprises, especially those non-SOEs, are likely to be motivated by the Chinese government's commitment to the initiative and be encouraged by the bright prospects of improved facilities and business environment in the belt-road countries so as to respond more actively by investing in the belt-road countries than their counterparts from other countries.

The improvement in infrastructure in the belt-road countries is also expected to boost trade development (see, for example, Francois & Manchin, 2013; Limao & Venables, 2001; Vijil & Wagner, 2012). Meanwhile, the OBOR is expected to facilitate international trade through government policies, especially trade liberalization policies. Free trade agreements may promote FDI as the cross-border economic activities increase in the wake of free trade agreements (Globerman & Shapiro, 1999).

2.3.2. Government promotion, policy coordination and China's ODI in the belt-road countries

Government policies in promoting ODI are also reflected in the programs launched by governments to facilitate outward investment. They provide information and technical assistance in support of outward investment; they offer financial schemes and fiscal incentives to firms going abroad; they provide investment insurance and guarantees. These agencies and institutions are typically outward investment promotion agencies, development finance institutions, and investment guarantee schemes (United Nations, 1999), and they tend to be more effective in promoting ODI in politically risky host countries (Hayakawa, Lee, & Park, 2014).

The OBOR contains plans and mechanisms to facilitate cross-border trade and investment. Under the direct supervision of the Chinese central leadership and the coordination of the Leading Group on the OBOR Work (established by the central government in February 2015), the OBOR campaign has established ODI promotion agencies and supporting mechanisms at various levels of government. Even before the establishment of these formal organizations, the central government and the provincial governments had already been active in promoting the OBOR initiative by various means, and more than 20 provinces out of 31 province-level administrative areas had expressed strong interests in participating in the OBOR campaign in their governments' annual work reports (European Parliament, 2016).

As China is coping with production overcapacity, rising production costs at home, etc., ODI from China has kept increasing, and the trend is expected to continue even without the OBOR initiative. The geographic specificity of the OBOR strategy can further push Chinese ODI, especially in the belt-road countries.

It is important to notice that political cooperation has played a significant role in the OBOR initiative. Political cooperation on OBOR has taken place at multiple levels. It extensively utilizes the existing regional organizations such as the Shanghai Cooperation Organization for Central Asia, ASEAN for Southeast Asia, the China-Arab States Cooperation Forum for the Middle East, the Forum on China-African Cooperation for Africa, and, to a much lesser extent, the BRICS (Brazil, Russia, India, China, and South Africa) format. For Europe, the 16 + 1 format (comprising 11 central and eastern European countries, five Western Balkan countries and China) was set up in 2012, one year before OBOR was launched. At the 2015 EU-China summit, OBOR was incorporated as a new dimension to the EU-China strategic partnership. It has added strength to the EU-China dialogue on connectivity in the Asia-Europe Meeting format, which has featured prominently on the ASEM agenda in recent years (European Parliament, 2016).

This element of international political cooperation can help reduce considerably the policy uncertainty and political risks that Chinese firms could face when they carry out direct investment in the belt-road countries. In this sense, the OBOR initiative contains more political support and inter-government coordination than what a conventional free trade agreement has.

In the general theory of FDI location choice, the primary motivations for FDI are largely said to seek foreign markets, to seek efficiency (e.g., new technology to reduce cost), and to seek resources including strategic assets (Dunning, 1993). When studying the determinants of China's outward direct investment, Buckley et al. (2007) consider these three classical factors; in addition, they also consider political risk, cultural proximity, policy liberalization, exchange rate, host inflation, exports and imports, geographical distance to China, etc. In a more recent study, Wang, Du, and Wang (2015) show that institutions, taxation and resources all matter in Chinese firms' ODI location choice.

Against the backdrop of the framework of the determinants of Chinese firms' ODI location choice, we expect that the OBOR initiative can potentially contribute to Chinese enterprises' ODI in the belt-road countries relative to the non-belt-road countries. The massive investment of the OBOR initiative in infrastructure would improve infrastructure quality and availability, which can boost China's ODI into the belt-road countries. The facilitation of trade following the improvement in infrastructure in the belt-road countries can also indirectly promote China's direct investment in the belt-road countries. Furthermore, the high-level international political cooperation and government support embedded in the OBOR initiative can considerably reduce host country policy uncertainty and political risks for Chinese firms investing in the belt-road countries. As the OBOR initiative is regarded as a grand scheme of economic diplomacy (Wong, 2015), the cooperativeness of host country governments can also help mitigate the negative effects of cultural dissimilarity and geographical distance on Chinese ODI in the belt-road countries.

2.3.3. State and non-state-controlled acquirers under OBOR

The expected effect of the OBOR on ODI of Chinese firms is also associated with the state capitalism model of the Chinese economy (Du & Wang, 2013). As the Chinese government plays a very significant part in the national economy, the corporate sector is willing to follow the call of the government to achieve some goals in economic development. SOEs, as the main instruments of the

government, are certainly instrumental to the implementation of the national economic objectives. As the OBOR initiative is led by infrastructure investment, and SOEs play a primary role in infrastructure-related industries in China, SOEs with industry expertise and substantial financial resources are expected to be particularly active in ODI in infrastructure sectors in the belt-road countries.

At the same time, non-state enterprises are also typically active to respond proactively to the call of the government in order to gain favorable treatments from various levels of government. According to a survey conducted by the China Council for the Promotion of International Trade in 2011, the majority of Chinese firms identify Chinese government's "go out" policy in encouraging ODI as an important or very important factor in their ODI decision-making process. The importance of government promotion policy surpasses that of host country's legal system, natural resources, and labor costs, and remains on par with that of host country's market size and potential. Although the SOEs' responses to government strategy are more active than do non-SOEs', the gap between the two types of enterprises is very small (Sauvant & Chen, 2014).

This survey result points to the importance of government policy in guiding the business strategy formation of Chinese enterprises. Since the OBOR initiative is one top national strategy of the Chinese government, and governments at various levels are active to push forward this strategy, we expect that the responses of Chinese firms, both state-owned and non-state-owned, would be quite enthusiastic. As non-state-owned enterprises are engaged more in non-infrastructure-related industries, they are also more likely to be more active in ODI in non-infrastructure-related industries in the belt-road countries.

Moreover, M & A deals can be completed more rapidly than greenfield investment projects. If Chinese firms really respond to the OBOR initiative, we expect that they would more frequently choose M & A as the mode of entry into the belt-road countries in order to take advantage of the opportunities offered by the OBOR strategy.

3. Data and variables

Data on Chinese greenfield investment are obtained from China Global Investment Tracker. It is compiled by the American Enterprise Institute and the Heritage Foundation. It claims to have a quite comprehensive coverage of China's outward investments, and it is the only publicly available database that records the information of Chinese greenfield investment. The dataset includes all greenfield investments that are no less than 100 million US dollars from 2005 to 2015. These are relatively significant investment projects, and the analysis of the number of initiations and the deal value of these deals would help us better gauge the impacts of the OBOR initiative on Chinese firms' major greenfield investment in the belt-road countries as well as other countries. Nonetheless, the sample is not complete. Given the difficulty of having complete information on China's greenfield investment, this dataset should be a good publicly available dataset for our research purpose. Information on both target nation and industry sector is available from the data set. The data on the aggregate greenfield investments made by other countries are obtained from the World Investment Report.²

Cross-border M & A data are obtained from the Thomson One (formerly known as SDC Platinum). The Thomson One database is a widely used data source in the cross-border M & A literature (see, for example, Erel, Liao, & Weisbach, 2012; Ferreira, Massa, & Matos, 2009; Huizinga & Voget, 2009). Our sample coverage is from 2005 to 2015. Following Ahern, Daminelli, and Fracassi (2015), we exclude deals whose values are less than 1 million US dollars.³ This way of sample selection is also widely adopted in the M & A literature (see, for example, Moeller, Schlingemann, & Stulz, 2004; Netter, Stegelmoller, & Wintoki, 2011). This treatment allows us to focus on relatively significant acquisition deals, and at the same time the threshold level is not too high so that we won't exclude many acquisition deals. We also drop deals involving China as a target nation. Since firms from Hong Kong, Macau and Taiwan may be subject to the effects of the OBOR policy initiative for ethnic reasons, we exclude all acquisition deals that involve firms in these Greater China areas as acquirers or targets from the sample. Besides target companies' nation, industry, variables such as government involvement and an acquirer's deal sought percentage (ownership shares acquired) are included as well.

In some parts of our analysis, we also distinguish between infrastructure-related sectors and non-infrastructure-related sectors. Based on the literature on the relationship between infrastructure and foreign direct investment or trade such as those cited above, we designate energy and power, aerospace and defense, transportation and infrastructure, telecommunication equipment, building/construction and engineering, and cable as infrastructure-related sectors, while the others as non-infrastructure-related sectors.

Table 1 illustrates the definitions and data sources for all variables mentioned above.

The list of the belt-road countries is from the "One Belt One Road" database hosted by Social Sciences Academic Press (China). The database also provides the information about whether a country belongs to the sea belt or land road landscape. Appendix Table A1 contains the belt-road countries and their affiliations to "Sea Belt" or "Land Road" blueprint.

4. Methodology

To quantitatively gauge the effects of the OBOR policy initiative on Chinese outward mergers and acquisitions, we employ Difference-in-Differences setting (DD strategy) to estimate the effect. This estimation strategy has also been employed in the literature on FDI (see, e.g., Cai, Lu, Wu, & Yu, 2016; Hanna, 2010).

As President Xi put forward this national strategy for the first time on September 7, 2013, we treat the two-year period from

² World Investment Report is published by UNCTAD (United Nations Conference on Trade and Development). The annex table in the World Investment Report contains aggregate greenfield investments by their source as well as destination countries.

³ Only for Figs. 1(a) and A1, in order to be compatible with the greenfield investment, we select the M & A deals with the same threshold level of 100 million US dollars for the sake of fair comparison. For all other figures, tables and the regression analysis involving M & A, we include deals greater than or equal to 1 million US dollars.

Table 1
Definitions and data sources of the key variables.

Variable	Source	Definitions
Buy side government involvement	Thomson One	Dummy variable and equals to 1 if the acquirers' ultimate owner is a state owned enterprise.
Sought percent	Thomson One	Total percent of the target firm acquired by the acquirer after the deal.
Full ownership	Thomson One	Dummy variable and equals to 1 if the sought percent equals to 100%.
Majority ownership	Thomson One	Dummy variable and equals to 1 if the sought percent greater than or equal to 50% and less than 100%.
Minority ownership	Thomson One	Dummy variable and equals to 1 if the sought percent less than 50%.
Chinese total greenfield investment	China Global Investment Tracker	Sum of all greenfield deal amount
Rest of World Greenfield Investment	Authors' own calculation.	World greenfield investment (from World Investment Report) excluding Chinese total greenfield investment (from China Global Investment Tracker).
Initials	Thomson One	Total number of deals announced
SOE initials	Thomson One	Total number of deals that the acquirer's ultimate owner is state owned enterprise.
Non-SOE initials	Thomson One	Total number of deals that the acquirer's ultimate owner is NOT a state owned enterprise.
SOE infra initials	Thomson One	SOE's initial in the infrastructure sectors
SOE non-infra initials	Thomson One	SOE's initial in the non-infrastructure sectors
Non-SOE infra initials	Thomson One	Non-SOE's initial in the infrastructure sectors
Non-SOE non-infra initials	Thomson One	Non-SOE's initial in the non-infrastructure sectors
Amount	Thomson One	Total log amount of deals announced
SOE amount	Thomson One	Total log amount of deals that the acquirer's ultimate owner is a state owned enterprise.
Non-SOE amount	Thomson One	Total log amount of deals that the acquirer's ultimate owner is NOT a state owned enterprise.
SOE infra amount	Thomson One	SOE's amount in the infrastructure sectors
SOE non-infra amount	Thomson One	SOE's amount in the non-infrastructure sectors
Non-SOE infra amount	Thomson One	Non-SOE's amount in the infrastructure sectors
Non-SOE non-infra amount	Thomson One	Non-SOE's amount in the non-infrastructure sectors

September 2013 to September 2015 as the post-shock or post-strategy period, and correspondingly the two-year period from September 2011 to September 2013 as the pre-shock or pre-strategy period. The two-year post-strategy period may be sufficiently long to incorporate the changes in the overseas acquisition behavioral patterns of the Chinese firms in response to the announcement of the OBOR national strategy.

In order to construct a meaningful control group of acquirer countries, we select six other countries that initiated most of the cross-border M & A deals during the sample period,⁴ namely, Australia, Canada, Japan, Singapore, United Kingdom, and United States. The absence of the similar policy shock in these countries makes them serve as a good benchmark for the global M & A trend, i.e., we can control for the worldwide M & A trend in our regression analysis. This further reduces our deal sample to 6717 deals and 127 target countries. The acquirer and target countries are listed in the Appendix Table A1.

Since we are interested in the aggregate M & A activities, we further construct an annual aggregate acquirer-target country pair balanced panel data sample by aggregating deals according to various criteria specified in the variable description part. Thus our final aggregate-level sample contains 3556 ($7 * 127 * 4$) observations.

The DD regression equation is specified as follows:

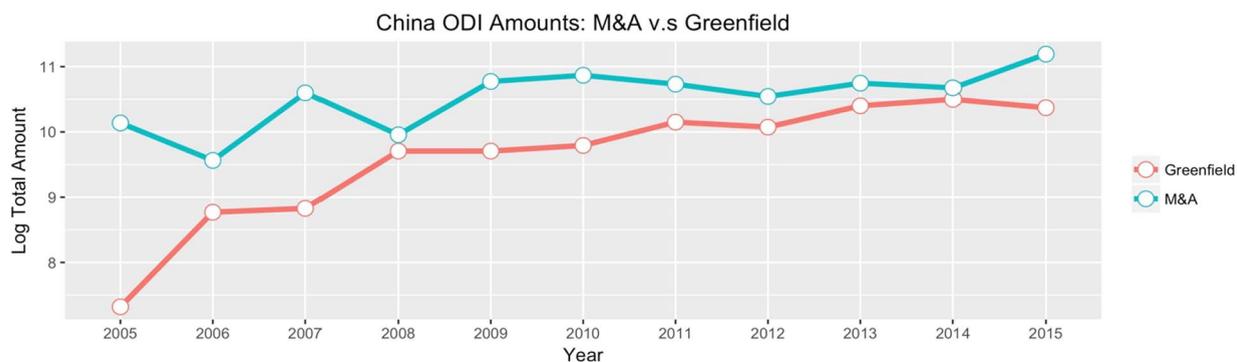
$$M\&A\ Dep_{ijt} = \beta_1 Post * China_i + \text{Country Pair FE} + \text{Year FE} + \text{Contant} + \varepsilon_{ijt} \quad (1)$$

The dependent variable, M & A Dep_{ijt} , is the number of acquisition initiations or the logarithm of (acquisition deal value + 1)⁵ by acquirer country i in target country j in year t . For the analysis of the number of deal initiations, we follow [John, Lin, and Qi \(2016\)](#) and use negative binomial regression to estimate the policy impacts. In the deal value part, we adopt a standard ordinary least squares method. The detailed definitions of the dependent variables are summarized in [Table 1](#). $China_i$ is a dummy variable that equals one if the acquirer is from China and zero otherwise. $Post$ is a dummy variable that takes value one if the time interval belongs to the post-shock period and zero otherwise. Year fixed effects capture the effects of macroeconomy, industry, markets, etc. on cross-border acquisitions in a specific year when the aggregate M & A activities take place. As countries' culture matters in cross-border M & A ([Aher et al., 2015](#)), we introduce the acquirer-target pair fixed effects to capture any bilateral country pair factors that do not change over time (e.g., geographical distance, cultural ties, etc.). It is noteworthy that only the interaction terms of $Post * China_i$ are presented in the regression specification as the effects of the separate terms of $Post$ and $China_i$ are absorbed by the year fixed effects and country pair fixed effects respectively. All the standard errors are clustered at the target country level to account for time-series correlation within each target country.

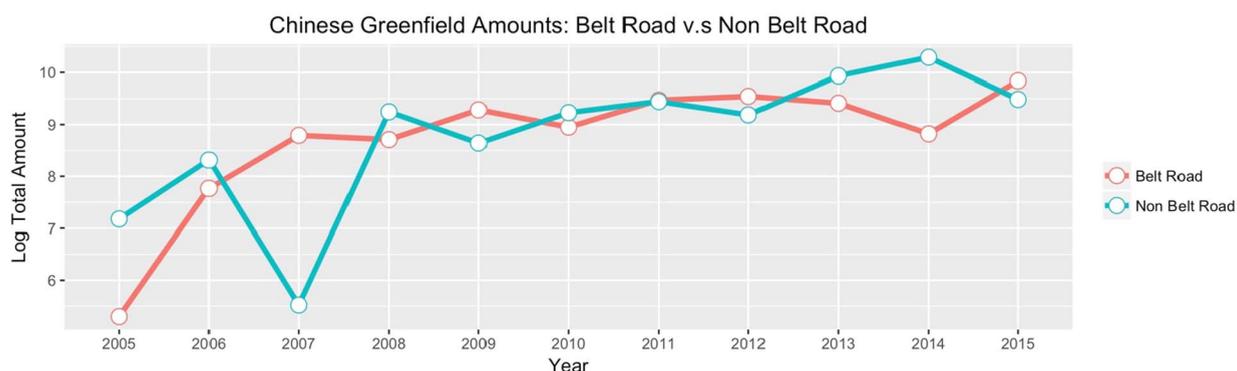
⁴ Chinese acquirers conducted 692 deals in our sample period, and China was ranked the 4th in the total deal initiations globally.

⁵ We add one to the acquisition deal value before taking logarithm to account for the zero problem.

(a) Chinese Overall Outward Investment Amounts: M&A versus Greenfield



(b) Chinese Greenfield Amounts: Belt Road versus Non Belt Road Countries



(c) Chinese M&A Amounts: Belt Road versus Non Belt Road Countries

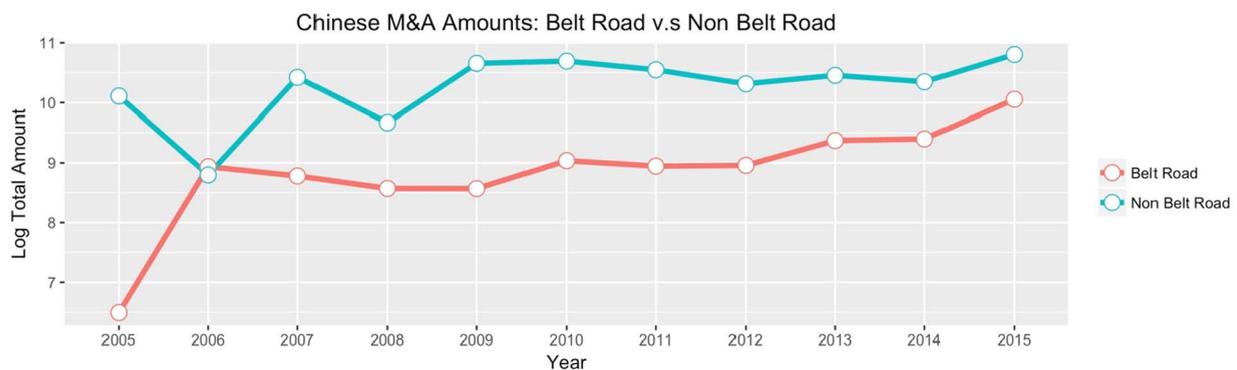


Fig. 1. Chinese outward investment amounts.

Note: This figure shows the global, One Belt One Road countries and non-belt road countries' total Chinese mergers & acquisitions investment and greenfield investment. The M & A data is from Thomson One and the greenfield data is from China Global Investment Tracker.

5. Insights from descriptive statistics

5.1. Overview of China's ODI responses to the policy initiative

We first present some figures to compare the values of overseas greenfield and acquisition investments from China in the period 2005–2015. Fig. 1(a) shows that both greenfield and M & A investment from China increased worldwide after 2013, and the increase in M & A investment was more striking.

Fig. 1(b) suggests that there exists substitution between China's greenfield investment in the belt-road countries and that in the non-belt-road countries. In 2013–14, China's greenfield investment shifted from the belt-road countries to the non-belt-road countries, whereas in 2015 a reverse switch took place, i.e., China's greenfield investment was diverted from the non-belt-road countries to

Table 2
Top 5 sectors of the M & A investment before and after the OBOR initiative.

(a) All countries: Top 5 Sectors before and after the policy announcement				
Rank	Sector (2012–2013)	USD mil (2012–2013)	Sector (2014–2015)	USD mil (2014–2015)
1	Energy and Power	37,353.96	Industrials	16,779.23
2	Industrials	14,079.08	High Technology	16,661.97
3	Materials	10,084.97	Financials	16,251.51
4	Consumer Staples	8949.60	Energy and Power	11,992.20
5	Financials	3895.15	Materials	10,778.29

(b) The belt-road countries: Top 5 Sectors before and after the policy announcement				
Rank	Sector (2012–2013)	USD mil (2012–2013)	Sector (2014–2015)	USD mil (2014–2015)
1	Energy and Power	12,293.49	Energy and Power	8774.22
2	Industrials	3936.05	Industrials	7207.30
3	Materials	2253.06	High Technology	4674.96
4	Telecommunications	522.85	Financials	3904.33
5	Real Estate	190.69	Materials	3901.35

(c) The non-belt-road countries: Top 5 Sectors before and after the policy announcement				
Rank	Sector (2012–2013)	USD mil (2012–2013)	Sector (2014–2015)	USD mil (2014–2015)
1	Energy and Power	25,060.47	Financials	12,347.18
2	Industrials	10,143.03	High Technology	11,987.01
3	Consumer Staples	8844.01	Industrials	9571.93
4	Materials	7831.91	Media and Entertainment	7388.58
5	Financials	3799.47	Materials	6876.94

Note: The table lists the top five target industries of the M & A investment worldwide, in the belt-road and non-belt-road countries in the periods 2012–13 and 2014–15, respectively. The sector classifications are from Thomson One, and more detailed industry taxonomy is illustrated in Appendix Table A2.

the belt-road countries. Unlike greenfield investment, Fig. 1(c) shows that the growth of China's M & A investment in the belt-road countries resulted from the upward trend in China's overseas acquisitions in recent years, i.e., it increased in both the belt-road countries and the non-belt-road countries, although the growth in the former was faster.

Overall, plots in Fig. 1 suggest that the increased ODI from China into the belt-road countries mainly takes the form of M & A investment. The rise in China's acquisitions in the belt-road countries does not divert M & A activities from the non-belt-road countries, but the greenfield investment exhibits substitutions between the belt-road and non-belt-road countries. The increased M & A activities following the OBOR policy initiative are likely to reflect the fact that M & A investment transactions can be more speedily executed. Consequently, Chinese investors prefer to adopt this ODI entry mode to approach the belt-road target countries expeditiously in response to the great prospects created by the OBOR strategy.

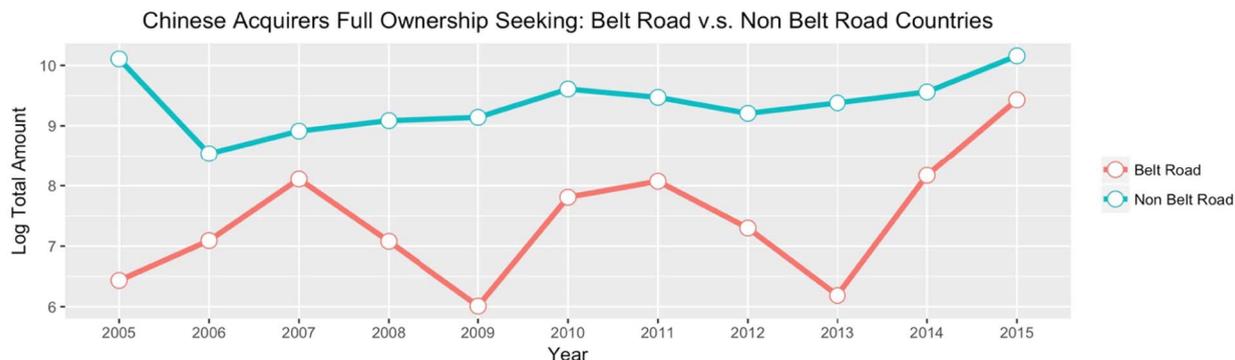
5.2. Target industries of China's M & A activities

Second, we investigate the target industries of China's overseas M & A investments. Table 2 lists the top five target industries of China's M & A investment worldwide, the M & A investment in the belt-road countries and the M & A investment in the non-belt-road countries in the pre-strategy period (2012–13) and the post-strategy period (2014–15), respectively. The detailed sector classifications are illustrated in Appendix Table A2. From Table 2(a), it is quite striking that there are substantial changes in the list of top five target industries for China's M & A investment worldwide over this short period around the OBOR policy initiative. Largely consistent with the findings of Ernst and Young (2015), our data show that Energy and Power as a target sector dropped from the first place to the fourth place, whereas the broad sector of Industrials rose from the second place to the first place. High Technology, a sector outside the top-five-industry list in the 2012–13 period, jumped to the second place in 2014–15. Financials also rose from the fifth to the third position in the post-strategy period.

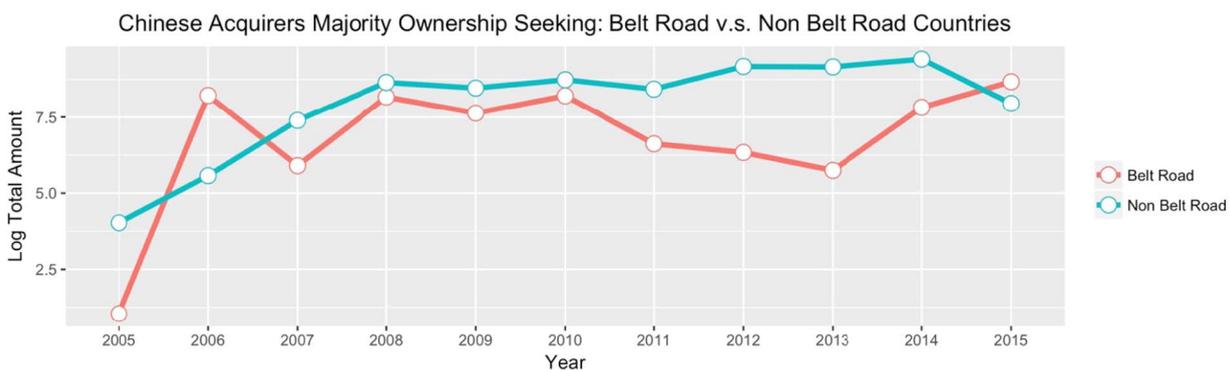
Table 2(b)–(c) looks at the target industry patterns in the belt-road and non-belt-road country groups separately. It is shown that Energy and Power still occupied the top position in the target industry list of China's M & A in the belt-road countries in the post-strategy years, but high-technology industries and financials entered the top five list in 2014–15 and occupied the third and the fourth positions, respectively. This signifies the rising importance of new types of high-value-added target industries in the belt-road countries.

The M & As in the non-belt-road countries witnessed more dramatic transformations in the structure of target industries. Financials and high-technology industries topped the list in 2014–15, and even media and entertainment captured the fourth

(a) Chinese Acquirers' Full Ownership Seeking



(b) Chinese Acquirers' Majority Ownership Seeking



(c) Chinese Acquirers' Minority Ownership Seeking

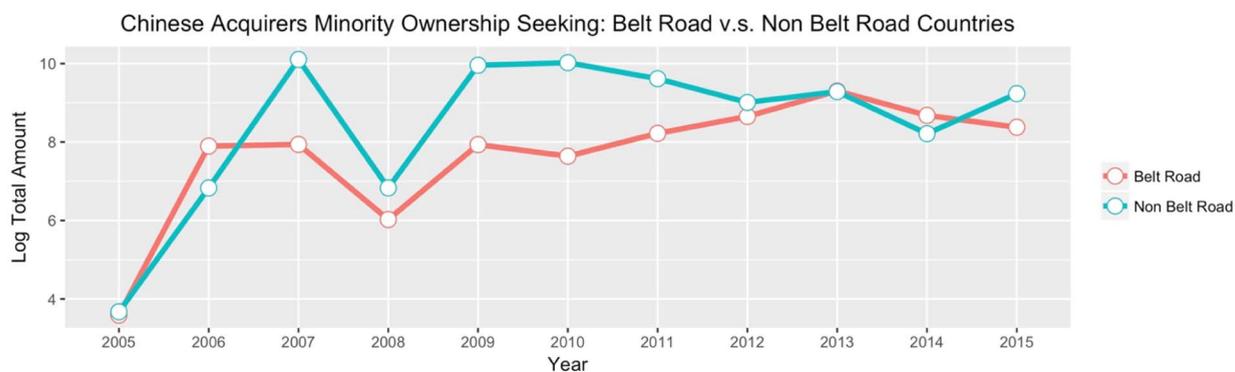


Fig. 2. Chinese acquirers' entry modes of mergers and acquisitions.

Note: This figure shows the Chinese full, majority and minority ownership acquisition values in the belt-road and the non-belt-road countries. The M & A ownership data is from Thomson One.

position.

Hence, China's overseas M & As displayed a salient structural transformation, and the M & A in the belt-road countries was no exception. Comparatively speaking, the structural transformation of target industries in the belt-road countries is still less striking than in the non-belt-road countries. This can be partly explained by the importance of the natural resources sectors in Central Asia, Russia, etc. in motivating Chinese ODI.

5.3. M & A modes

Fig. 2 presents the graphs of Chinese acquisition ownership modes in the belt-road countries and the non-belt-road countries. From Fig. 2(a), we observe a relatively stable size of whole-ownership (100%) acquisitions in the non-belt-road countries over the sample period. The whole-ownership acquisitions in the belt-road countries fluctuated substantially over years. It is, however,

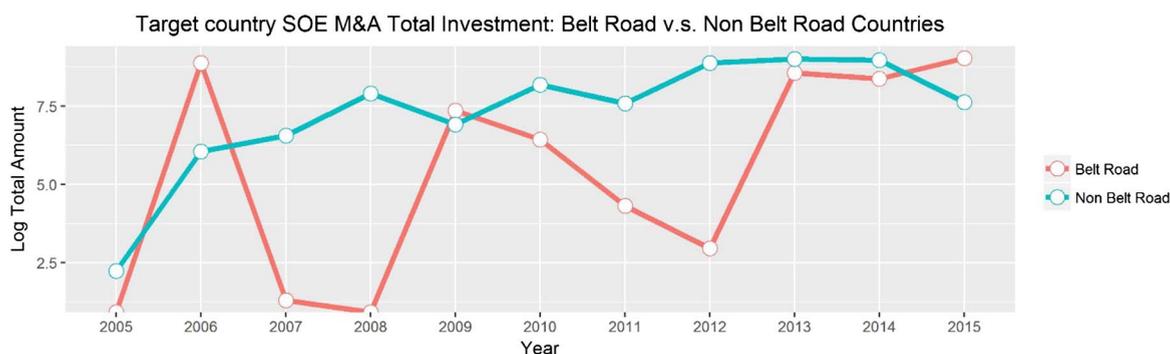


Fig. 3. State-owned targets: The belt-road versus non-belt-road countries.

Note: This figure shows SOE targets mergers and acquisitions investment in the belt-road and the non-belt-road countries. The M&A data is from Thomson One.

Table 3
The effects of OBOR policy announcement on total M&A investment.

Variables	(1)	(2)	(3)	(4)
	Initials	Amount (Log)	Initials	Amount (Log)
Post × China	0.366** (0.157)	0.353* (0.183)	0.089 (0.176)	0.060 (0.222)
Post × China × belt road countries			0.541** (0.246)	0.702* (0.362)
Observations	3556	3556	3556	3556
Country pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adjusted R-squared		0.670		0.670
Pseudo R-squared	0.254		0.255	

Robust standard errors in parentheses.

Standard errors are clustered at target country level.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Note: This table reports the difference-in-differences estimates of the effects of the OBOR policy announcement on yearly aggregate total initiations as well as aggregate logarithm of (total deal values + 1). Acquirer or target firms that come from the Greater China areas (Hong Kong, Taiwan and Macau) are excluded from the sample. China is a dummy that is equal to one if the acquirer is from Mainland China and zero otherwise. Belt Road Country is a dummy variable indicating whether the target country belongs to the One Belt One Road plan. The time period is September 7, 2011–September 7, 2015. Post is a dummy variable that equals one if deals are initiated after President Xi's speech about One Belt One Road on September 7, 2013. Country pair and year fixed effects are added. The estimates for M&A deal initiations and volume are reported in terms of negative binomial regression and ordinary least squares respectively. Standard errors clustered at the target country level are reported in parentheses.

noteworthy that the size of whole-ownership acquisitions dropped from 2011 to 2013, but suddenly rebounded in 2014 and surpassed the previous highest level in 2015.

Fig. 2(b) illustrates the size of China's majority-ownership (between 50% and 100%) acquisitions in the belt-road countries and the non-belt-road countries. Similar to the pattern of whole acquisitions, the value of majority-ownership acquisitions in the non-belt-road countries remained largely stable. Nonetheless, they fluctuated substantially in the belt-road countries. The size of majority acquisitions decreased from 2010 to 2013, but rose considerably in 2014 and 2015.

From Fig. 2(c), it is observed that the values of minority-ownership acquisitions in the belt-road countries rose from 2010 to 2013, but declined in 2014 and 2015. The values of minority-ownership acquisitions in the non-belt-road countries remained on par as those in the belt-road countries in 2013, dropped to a lower level than those for the belt-road countries in 2014, but rebounded in 2015 to a level that is higher than those for the belt-road countries in 2015.

Overall, the deal values of whole and majority ownership acquisitions increased substantially in the belt-road countries after the policy initiative, which perhaps reflects the increasing commitment of Chinese acquirers to the belt-road countries for their business expansion.

5.4. Acquisitions of state-controlled targets

Fig. 3 illustrates the evolution of the size of Chinese acquisitions of state-controlled targets in host countries. For the non-belt-road countries, the value of acquired targets increased from 2011 to 2012, but remained flat in 2013 and 2014, and declined in 2015. For

Table 4
The effects of OBOR policy announcement on SOE and non-SOE firms.

Panel A: The effects of policy announcement on total non-SOE M & A investment						
Variables	(1)	(2)	(3)	(4)		
	Non-SOE initials	Non-SOE amount (Log)	Non-SOE initials	Non-SOE amount (Log)		
Post × China	0.541*** (0.156)	0.493*** (0.146)	0.258 (0.189)	0.228 (0.187)		
Post × China × belt road countries			0.552** (0.255)	0.635** (0.286)		
Observations	3556	3556	3556	3556		
Country pair FE	Yes	Yes	Yes	Yes		
Year FE	Yes	Yes	Yes	Yes		
Adjusted R-squared		0.675		0.675		
Pseudo R-squared	0.255		0.255			
Panel B: The effects of policy announcement on total SOE M & A investment						
Variables	(1)	(2)	(3)	(4)		
	SOE initials	SOE amount (Log)	SOE initials	SOE amount (Log)		
Post × China	− 0.566* (0.335)	− 0.170 (0.151)	− 0.742** (0.311)	− 0.342* (0.180)		
Post × China × belt road countries			0.355 (0.432)	0.412 (0.307)		
Observations	3556	3556	3556	3556		
Country pair FE	Yes	Yes	Yes	Yes		
Year FE	Yes	Yes	Yes	Yes		
Adjusted R-squared		0.384		0.385		
Pseudo R-squared	0.339		0.339			
Panel C: SOE and non-SOE investment in land road and sea belt countries						
Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Initials	Amount (Log)	SOE initials	SOE amount (Log)	Non-SOE initials	Non-SOE amount (Log)
Post × China × land road countries	0.857*** (0.274)	1.080** (0.424)	0.694* (0.403)	0.776** (0.326)	0.850*** (0.301)	0.734** (0.354)
Post × China × sea belt countries	0.170 (0.371)	0.079 (0.495)	− 0.301 (0.986)	− 0.188 (0.485)	0.234 (0.354)	0.472 (0.347)
Post × China	0.093 (0.177)	0.060 (0.222)	− 0.743** (0.310)	− 0.342* (0.180)	0.262 (0.189)	0.228 (0.187)
Observations	3556	3556	3556	3556	3556	3556
Country pair FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared		0.671		0.387		0.675
Pseudo R-squared	0.255		0.340		0.255	

Robust standard errors in parentheses.

Standard errors are clustered at target country level.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Note: This table reports the difference-in-differences estimates of the effects of the OBOR policy announcement on state owned enterprises (SOE) and Non-SOE acquirers' total acquisition initiations and deal amount. The estimates for all M & A deal initiations and volume are reported in terms of negative binomial regression and ordinary least square respectively. Standard errors clustered at the target country level are reported in parentheses.

the belt-road countries, the amount of acquisition value of state-controlled targets kept declining from 2009 to 2012, but jumped in 2013 and remained at a high level in 2014 and 2015.

Provided the acquisitions of state-controlled targets are often subject to stricter host government approval process, the rise in the acquisition deal values of state-controlled targets in the belt-road countries in the post-strategy years suggests that the governments of the belt-road partner countries were in general cooperative with Chinese acquirers. This also shows the nature of both political and economic cooperation embedded in the OBOR initiative, which can mitigate social and political resistance to Chinese acquisitions of state-owned targets in the belt-road countries.

Table 5
The effects of the OBOR policy on SOEs' M & As in (non) infrastructure sectors.

Panel A: SOEs' M & A in infrastructure sectors						
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	SOE infra initials	SOE infra amount	SOE infra initials	SOE infra amount	SOE infra initials	SOE infra amount
Post × China × land road countries					2.428*** (0.863)	0.963*** (0.327)
Post × China × sea belt countries					1.328 (1.303)	0.112 (0.440)
Post × China	− 1.235** (0.588)	− 0.272 (0.168)	− 2.443*** (0.839)	− 0.540** (0.233)	− 2.446*** (0.839)	− 0.540** (0.233)
Post × China × belt road countries			2.021** (0.881)	0.642** (0.312)		
Observations	3556	3556	3556	3556	3556	3556
Country pair FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared		0.180		0.185		0.189
Pseudo R-squared	0.372		0.380		0.382	

Panel B: SOEs' M & A in non-infrastructure sectors						
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	SOE non-infra initials	SOE non-infra amount	SOE non-infra initials	SOE non-infra amount	SOE non-infra initials	SOE non-infra amount
Post × China × land road countries					0.200 (0.472)	0.177 (0.293)
Post × China × sea belt countries					− 0.839 (1.082)	0.016 (0.328)
Post × China	− 0.331 (0.364)	− 0.010 (0.117)	− 0.265 (0.372)	− 0.059 (0.142)	− 0.266 (0.371)	− 0.059 (0.142)
Post × China × belt road countries			− 0.151 (0.505)	0.116 (0.242)		
Observations	3556	3556	3556	3556	3556	3556
Country pair FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared		0.375		0.375		0.375
Pseudo R-squared	0.351		0.351		0.352	

Robust standard errors in parentheses.

Standard errors are clustered at target country level.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Note: This table reports the difference-in-differences estimates of the effects of the OBOR policy announcement on SOE acquirers' infrastructure and non-infrastructure sectors' M & A initiations and amounts in the belt-road countries. The estimates for M & A deal initiations and volume are reported in terms of negative binomial regression and ordinary least square respectively. Standard errors clustered at the target country level are reported in parentheses.

6. Regression results of M & A activities

To more rigorously analyze whether and to what extent the OBOR initiative has promoted China's ODI, we carry out DD regressions to compare the changes in China's ODI in the belt-road countries following the announcement of the national strategy with those in the non-belt-road countries, and further compare China's ODI changes with the changes of six other major acquirer countries. Owing to data constraint, we only consider the case of acquisitions.

6.1. OBOR initiative and acquisitions in the belt-road countries and the non-belt-road countries

Table 3 compares the number of initiations of acquisitions and the value of acquisitions before and after the OBOR initiative. Columns (1) and (2) show that both increased considerably in the post-announcement period. It can be inferred that the incidence ratio (i.e. the rate at which M & A occurs) in Chinese acquirers' aggregate M & A initiations was on average 1.5 times higher after the announcement of the OBOR initiative compared with other peer acquirer nations. The net percentage change of Chinese acquirers' aggregate M & A deal values were on average 40 percentage points higher after the OBOR announcement relative to other peer acquirer nations.

Columns (3) and (4) provide DD regression results by comparing the changes between the belt-road countries and the non-belt-

Table 6
The effects of the OBOR policy on non-SOEs' M & A in (non) infrastructure sectors.

Panel A: Non-SOEs' M & A in infrastructure sectors						
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Non-SOE infra initials	Non-SOE infra amount	Non-SOE infra initials	Non-SOE infra amount	Non-SOE infra initials	Non-SOE infra amount
Post × China × land road countries					0.841 (0.652)	0.166 (0.245)
Post × China × sea belt countries					− 0.710 (0.734)	− 0.551** (0.215)
Post × China	0.302 (0.342)	0.129 (0.098)	0.193 (0.328)	0.173 (0.119)	0.195 (0.328)	0.173 (0.119)
Post × China × belt road countries			0.255 (0.543)	− 0.104 (0.196)		
Adjusted R-squared		0.463		0.463		0.464
Pseudo R-squared	0.297		0.297		0.299	
Panel B: Non-SOEs' M & A in non-infrastructure sectors						
	(1)	(2)	(3)	(4)	(5)	(6)
Variables	Non-SOE non-infra initials	Non-SOE non-infra amount	Non-SOE non-infra initials	Non-SOE non-infra amount	Non-SOE non-infra initials	Non-SOE non-infra amount
Post × China × land road countries					0.699** (0.276)	0.626** (0.296)
Post × China × sea belt countries					0.365 (0.355)	0.849** (0.382)
Post × China	0.535*** (0.157)	0.428*** (0.130)	0.263 (0.199)	0.131 (0.170)	0.265 (0.200)	0.131 (0.170)
Post × China × belt road countries			0.525** (0.061)	0.710*** (0.261)		
Observations	3556	3556	3556	3556	3556	3556
Country pair FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared		0.675		0.676		0.675
Pseudo R-squared	0.263		0.264		0.264	

Robust standard errors in parentheses.

Standard errors are clustered at target country level.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Note: This table reports the difference-in-differences estimates of the effects of the OBOR policy announcement on non-SOE acquirers' infrastructure and non-infrastructure sectors' M & A initiations and amounts in the belt-road countries. The estimates for M & A deal initiations and volume are reported in terms of negative binomial regression and ordinary least square respectively. Standard errors clustered at the target country level are contained in parentheses.

road countries. Quite clearly, the number and size of Chinese acquisitions in the belt-road countries increased more significantly than those in the non-belt-road countries, relative to the other major acquirer countries. According to the regression results, for the Chinese acquirers, the inferred incidence ratio in Chinese acquirers' aggregate M & A initiations in the belt-road countries after the OBOR announcement was on average 1.7 times higher than that in the non-belt-road countries. Similarly, for Chinese acquirers, the net percentage change in aggregate M & A deal values in the belt-road countries in the wake of the OBOR initiative was on average 100 percentage points higher than that in the non-belt-road countries.

Panel A of Table 4 analyzes the effects of the belt-road policy initiative on non-SOE acquisitions. The number and the size of non-SOEs' overseas acquisitions rose significantly in the two years after the release of the policy initiative. More importantly, the increases in the number of acquisition initiations and the value of acquisition deals by non-SOEs are particularly strong in the belt-road countries.

Panel B of Table 4 conducts similar regressions for SOE acquisitions. SOE acquirers did not significantly increase their overseas acquisitions in the post-strategy period. The initiations of acquisitions actually declined. The SOE acquisitions in the belt-road countries did not show significant increases either.

Panel C of Table 4 classifies the belt-road countries into the continental silk-road countries and the maritime silk-road (sea belt) countries. From Columns (1) and (2), we observe that the number of acquisition initiations and the size of acquisitions increased significantly in the land-based silk-road countries only.

The results of Columns (3) and (4) demonstrate that Chinese SOEs' acquisitions in the continental silk-road countries, relative to their state-controlled counterparts from the other major acquirer countries, increased significantly, even though their acquisitions in

Table 7
The effects of the OBOR policy announcement on China's M & A investment in different OBOR regions.

Variables	(1)	(2)	(3)	(4)	(5)	(6)
	Initials	Amount (Log)	SOE initials	SOE amount (Log)	Non-SOE initials	Non-SOE amount (Log)
Post × China × East Asia	0.781*** (0.240)	1.412 (1.587)	− 19.056*** (0.768)	− 1.584 (1.322)	0.930*** (0.238)	2.172** (0.953)
Post × China × Central/West Asia	1.165*** (0.435)	1.356* (0.717)	0.833 (0.689)	0.990** (0.424)	1.164** (0.460)	0.804 (0.590)
Post × China × Southern Asia	− 1.362 (1.320)	0.835 (0.562)	− 18.962*** (0.917)	0.259 (0.182)	− 1.013 (1.408)	0.699 (0.550)
Post × China × South East Asia	− 0.176 (0.637)	− 0.113 (0.582)	0.062 (0.921)	0.057 (0.705)	− 0.118 (0.614)	0.126 (0.448)
Post × China × Russia	0.914*** (0.148)	− 0.530** (0.218)	− 0.195 (0.226)	− 0.215 (0.182)	0.990*** (0.160)	1.190*** (0.185)
Post × China × Eastern Europe	− 0.088 (0.532)	0.526 (0.385)	− 0.343 (1.029)	0.389* (0.222)	− 0.118 (0.512)	0.260 (0.340)
Post × China × Western Europe	0.944*** (0.289)	2.245*** (0.660)	1.513*** (0.456)	1.968 (1.350)	0.830*** (0.289)	1.659** (0.685)
Post × China × Africa	− 0.347 (0.737)	− 2.528** (1.012)	− 18.562*** (0.618)	− 2.377** (1.097)	− 0.134 (0.736)	− 0.027 (0.284)
Post × China	0.090 (0.176)	0.060 (0.222)	− 0.751** (0.307)	− 0.342* (0.180)	0.259 (0.189)	0.228 (0.187)
Observations	3556	3556	3556	3556	3556	3556
Country pair FE	Yes	Yes	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared		0.672		0.393		0.675
Pseudo R-squared	0.256		0.348		0.256	

Robust standard errors in parentheses.

Standard errors are clustered at target country level.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Note: This table reports the difference-in-differences estimates of the effects of the OBOR policy announcement on total, SOE and non-SOE acquirers' M & A initiations and deal amounts in different regions covered by the OBOR. The estimates for M & A deal initiations and volume are reported in terms of negative binomial regression and ordinary least square respectively. Standard errors clustered by target country level are reported in parentheses.

the whole group of the belt-road countries did not show significant increases.

Columns (5) and (6) carry out the analysis for non-SOE acquisitions. Again, the number of non-SOE acquisition initiations and the size of non-SOE acquisitions rose significantly only in the land-based silk-road countries.

Table 4 demonstrates that both SOE and non-SOE acquirers expanded their acquisitions in the land-based silk-road countries, and perhaps contrary to many people's expectations, non-SOE acquirers responded particularly actively to the OBOR strategy. The relatively lackluster performance of SOEs in ODI in the post-strategy years could be partly explained by the fact that SOEs had played a primary role in ODI in the pre-strategy years since the early 2000s. The potential for their further increase in ODI in the post-strategy years became smaller. On the contrary, non-SOEs had played a less significant role in the pre-strategy years, and the OBOR initiative has considerably stimulated their incentives to carry out overseas acquisitions, especially in the belt-road countries.

6.2. Acquisitions in infrastructure sectors and non-infrastructure sectors

Next, we investigate SOE and non-SOE acquisitions in infrastructure and non-infrastructure sectors where energy and power, aerospace and defense, transportation and infrastructure, telecommunication equipment, building/construction and engineering, and cable are categorized as infrastructure sectors, while the others as non-infrastructure sectors.

Panel A of Table 5 examines the SOEs' acquisitions of targets in infrastructure sectors. Columns (1)–(2) show that, relative to the situations of other major acquirer countries, Chinese SOE acquisitions of infrastructure targets worldwide exhibited a decline in the post-strategy period. Quite strikingly, however, as shown in Columns (3)–(4), the initiation and volume of SOE acquisitions of infrastructure targets increased significantly in the belt-road countries after the announcement of the OBOR strategy. Moreover, the significant increases were mainly concentrated in the land-based silk-road countries, whereas there was no significant increase in the sea-belt countries. As we control for the acquisition activities of SOEs from other six major acquirer countries, the regression results display a stronger effect of the OBOR initiative on China's SOEs' acquisitions in the land-based silk-road countries. Panel B of Table 5 looks at the SOEs' acquisitions in non-infrastructure sectors, and no significant responses are observed.

The results of Table 5 point to the relatively more active responses of SOEs to the OBOR initiative in the infrastructure sectors in the land-based silk-road countries.

Table 6 further examines non-SOEs' acquisitions in infrastructure sectors and non-infrastructure sectors, respectively. In Panel A, we observe that non-SOEs did not increase significantly their acquisitions of targets in infrastructure sectors worldwide in general and in the belt-road countries in particular in the wake of the OBOR initiative. In contrast, from Columns (1)–(2) of Panel B, we find that

Table 8
The effects of the OBOR policy on China's M & A in infrastructure sectors in different OBOR regions.

Variables	(1)	(2)	(3)	(4)
	SOE infra initials	SOE infra amount (Log)	Non-SOE infra initials	Non-SOE infra amount (Log)
Post × China × East Asia	− 16.018*** (1.262)	0.506** (0.232)	0.737 (0.564)	− 0.473 (0.429)
Post × China × Central/West Asia	3.012** (1.285)	1.001** (0.405)	1.480 (0.936)	0.186 (0.402)
Post × China × Southern Asia	− 16.822*** (1.264)	0.506** (0.232)	− 0.033 (2.020)	0.192 (0.360)
Post × China × South East Asia	− 16.329*** (0.931)	− 0.071 (0.480)	− 17.375*** (0.510)	− 0.853** (0.422)
Post × China × Russia	2.031*** (0.765)	0.545** (0.232)	− 18.038*** (1.024)	− 0.199* (0.116)
Post × China × Eastern Europe	− 15.220*** (0.983)	0.506** (0.232)	− 15.691*** (0.548)	− 0.291** (0.146)
Post × China × Western Europe	3.234*** (0.858)	2.838*** (1.046)	0.419 (0.469)	0.655 (0.789)
Post × China × Africa	− 16.349*** (1.043)	− 2.130* (1.107)	− 17.274*** (0.685)	− 0.199* (0.116)
Post × China	− 2.459*** (0.837)	− 0.540** (0.233)	0.194 (0.327)	0.173 (0.120)
Observations	3556	3556	3556	3556
Country pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adjusted R-squared		0.206		0.463
Pseudo R-squared	0.395		0.301	

Robust standard errors in parentheses.

Standard errors are clustered at target country level.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Note: This table reports the difference-in-differences estimates of the effects of the OBOR policy announcement on SOE and non-SOE acquirers' infrastructure sectors' M & A initiations and deal amounts in different regions covered by the OBOR. The estimates for M & A deal initiations and volume are reported in terms of negative binomial regression and ordinary least square respectively. Standard errors clustered by target country level are reported in parentheses.

the non-SOEs' acquisitions of targets in non-infrastructure sectors increased statistically significantly worldwide in the post-strategy years. Columns (3)–(4) show that the significant increases of non-SOEs' acquisitions of non-infrastructure targets were concentrated in the belt-road countries. Moreover, from Columns (5)–(6), we observe that the increases in both the number of initiations and acquisition values are consistently statistically significant in the land-based silk-road countries, whereas the increases in the value of acquisitions are statistically significant in the sea-belt countries.

6.3. Acquisitions across the belt-road regions

Table 7 further classifies the destination countries into smaller regions, i.e., East Asia, Central and West Asia, Russia, Eastern Europe, Western Europe, South Asia, Southeast Asia, and Africa. Several observations emerge. Firstly, the overall pattern of China's overseas acquisitions exhibited a significant increase in both number of deal initiations and dollar values in the Central and West Asian countries and Western Europe.

Secondly, the significant increase in the dollar value of SOE acquisitions occurred in Central and West Asia and Eastern Europe, but the numbers of deal initiations in the two regions did not show significant increases. At the same time, the number of SOE acquisition initiations decreased significantly in Africa, East Asia, and South Asia, and the acquisition value decreased significantly in Africa. The deviation between the increment in number of initiations and value of acquisitions is largely caused by the variation in the average size of acquisitions in different regions.

Thirdly, the non-SOE acquisitions increased significantly in both number of initiations and deal value in East Asia, Russia, and Western Europe. The number of deal initiation of non-SOE acquisitions in Central and West Asia also rose significantly, but deal value did not, showing an insignificant change in average deal size.

Fourthly, both the number of deal initiation and deal value of Chinese non-SOE acquisitions increased in Russia, whereas those of SOE acquisitions did not change significantly. The total number of deal initiations increased significantly in Russia but the total deal value decreased significantly. This reflects the declining average deal size of acquisitions of Russian targets.

Finally, both the number of SOE acquisition initiations and the deal value of SOE acquisitions declined significantly in Africa in the post-strategy period compared with the non-belt-road countries.

These findings suggest that the OBOR initiative did enhance the SOE and non-SOE acquisitions in Central and West Asia, a priority area for the strategy. There are also signs of shifts in SOE acquisitions from Africa to Central and West Asia. Provided that the two big regions are both endowed with rich energy and power resources, it is possible that the OBOR strategy encouraged SOEs to shift

Table 9
The effects of the OBOR policy on China's M & A in non-infrastructure sectors in different OBOR regions.

Variables	(1)	(2)	(3)	(4)
	SOE non-infra initials	SOE non-infra amount (Log)	Non-SOE non-infra initials	Non-SOE non-infra amount (Log)
Post × China × East Asia	− 18.394*** (0.818)	− 1.847 (1.318)	0.988*** (0.225)	2.915** (1.387)
Post × China × Central/West Asia	− 0.305 (1.027)	0.231 (0.271)	0.875** (0.415)	0.590 (0.475)
Post × China × Southern Asia	− 18.556*** (0.903)	− 0.005 (0.143)	− 2.033*** (0.206)	0.385 (0.546)
Post × China × South East Asia	0.166 (0.950)	0.371 (0.623)	0.079 (0.631)	0.630 (0.531)
Post × China × Russia	− 18.807*** (1.023)	− 3.806*** (0.143)	1.315*** (0.172)	1.267*** (0.166)
Post × China × Eastern Europe	− 0.210 (1.021)	0.125 (0.191)	0.090 (0.535)	0.429 (0.346)
Post × China × Western Europe	0.990** (0.459)	1.128 (1.218)	0.821** (0.325)	1.746*** (0.338)
Post × China × Africa	− 17.047*** (1.034)	− 0.005 (0.143)	0.170 (0.720)	0.050 (0.272)
Post × China	− 0.276 (0.369)	− 0.059 (0.143)	0.263 (0.199)	0.131 (0.170)
Observations	3556	3556	3556	3556
Country pair FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Adjusted R-squared		0.382		0.676
Pseudo R-squared	0.359		0.265	

Robust standard errors in parentheses.

Standard errors are clustered at target country level.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Note: This table reports the difference-in-differences estimates of the effects of the OBOR policy announcement on SOE and non-SOE acquirers' non-infrastructure sectors' M & A initiations and deal amounts in different regions covered by the OBOR. The estimates for M & A deal initiations and volume are reported in terms of negative binomial regression and ordinary least square respectively. Standard errors clustered by target country level are reported in parentheses.

acquisitions from Africa, a region with relatively lower priority, to Central and West Asia, a region with higher priority. Meanwhile, the OBOR strategy pushed non-SOE acquirers to Russia, Western Europe and East Asia.

Table 8 examines the SOE and non-SOE acquisitions of targets in infrastructure sectors. Clearly, SOEs increased acquisitions of infrastructure targets in Central and West Asia, Western Europe and Russia, but curtailed acquisitions in Africa. Non-SOEs did not show statistically significant increases in acquisitions of infrastructure targets, but significantly decreased in Africa, Eastern Europe, Russia and Southeast Asia.

In Table 9, we examine the regional variation in the changes in Chinese SOEs' and non-SOEs' acquisitions of target firms in non-infrastructure sectors. SOEs significantly increased the number of acquisitions of non-infrastructure targets in Western Europe, but curtailed their initiations of acquisitions in Africa, East Asia, South Asia, and Russia. Non-SOEs increased their acquisitions in non-infrastructure sectors mainly in East Asia, Central and West Asia, Russia, and Western Europe.

From Tables 8–9, we can observe that Central and West Asia, Russia, and Western Europe are the most favorable destinations of Chinese SOE and non-SOE acquisitions. SOEs were particularly active in acquisitions of target firms in infrastructure sectors, whereas non-SOEs in non-infrastructure sectors. This suggests that there may be complementarity in ODI between infrastructure sectors and non-infrastructure sectors and between SOEs and non-SOEs. It is likely that non-SOEs were encouraged by the prospects of improved logistics infrastructure following SOEs' ODI in those regions, the expected reduction in trade costs and business environment uncertainty, the more cooperative government policies, etc., in the OBOR partner countries, so that they followed the footprints of SOEs to expand into the non-infrastructure sectors there.

7. Conclusion

The OBOR initiative is a national strategy of promoting international economic integration implemented in a state capitalism model under an authoritarian regime. Given its vast geographical coverage and economy size, the emergence of the belt-road country group is an important new development in the world economy in recent years.

In this study, we examine the ODI activities of Chinese firms in response to the formation of this great policy initiative. It is found that ODI, especially mergers and acquisitions, rose significantly in the wake of the strategy announcement. Both SOE acquirers and non-SOE acquirers contributed to the surge of acquisitions in the belt-road countries, especially the land-based silk-road countries. SOEs played a primary role in the acquisitions of target firms in infrastructure sectors in the belt-road countries, whereas non-SOE acquirers played a particularly active part in the non-infrastructure sectors. Comparatively speaking, East Asia, Central and West

Asia, Russia, and Western Europe witnessed the most significant inflow of Chinese non-SOE acquisitions in non-infrastructure sectors, whereas Central and West Asia, Western Europe and Russia are favorable destinations of Chinese SOE acquisitions in infrastructure sectors. Our results also show that the participating countries, especially the land-based silk-road countries, have been cooperative with Chinese acquirers, probably thanks to the high-profile international political cooperation feature embedded in the OBOR initiative. The whole or majority ownership acquisitions rose significantly, and an increasing number of state-controlled targets in the belt-road countries were acquired by Chinese enterprises.

Our study provides evidence on the efficiency and efficacy of the state capitalism system in promoting international economic integration by encouraging both SOE and non-SOE acquirers to follow the blueprint of the government to go out. The OBOR strategy is just unfolding. With the passage of time, we can obtain more evidences on various aspects of this grand project on international economic integration.

Appendix A. Supplementary data

Supplementary data to this article can be found online at <http://dx.doi.org/10.1016/j.chieco.2017.05.010>.

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