

Global Research Unit

Working Paper #2019-018

Belt and Road Initiative and Chinese Firms' Outward Foreign Direct Investment

Shu Yu, University of Rochester
Xingwang Qian, SUNY Buffalo State
Taoxiong Liu, Tsinghua University

© 2019 by Yu, Qian & Liu. All rights reserved. Short sections of text, not to exceed two paragraphs, may be quoted without explicit permission provided that full credit, including © notice, is given to the source.

Belt and Road Initiative

and Chinese Firms' Outward Foreign Direct Investment

Shu Yu*

Xingwang Qian**

Taoxiong Liu †

Abstract: This paper studies the impact of China's "Belt and Road Initiative" (BRI) on Chinese firms' outward foreign direct investment (OFDI). Overall, the BRI positively impacts on Chinese OFDI activities. However, both the direction and the magnitude of this impact depend on the host countries' willingness to participate in the BRI. The BRI promotes more OFDI to developing countries that welcome China's economic engagement and alters the effect of Chinese domestic push factors on its OFDI patterns. In addition, Chinese firms in construction and infrastructure, manufacturing, and trade-related sectors are more responsive to the BRI than firms in other sectors.

Keywords: Belt and Road Initiative; Outward FDI

JEL Classification Numbers: F21, F23

* Shu Yu, the Skalny Center for Polish and Central European Studies, University of Rochester, Rochester NY 14627 USA, Email: shu.yu.752@gmail.com.

** Xingwang Qian, Economics and Finance Department, SUNY Buffalo State, Buffalo, NY 14222, USA; Shandong University of Economics and Finance, China. Email: qianx@buffalostate.edu.

† Taoxiong Liu, Institute of Economic Research, Tsinghua University, China, Email: liutx@tsinghua.edu.cn.

1. Introduction

China, as an increasing provider of foreign direct investment (FDI), is increasingly drawing the world's attention (e.g., Cheung and Qian 2009, Cheng and Ma 2010). The outward FDI flow from China accelerated to 183 billion USD in 2016 (from 28.6 billion USD in 2003), officially surpassing the FDI inflow to China and making China a net FDI provider for the first time in history (Figure 1). The OFDI flow experienced a significant jump in year 2014 (Figure 2), in response to the “Belt and Road Initiative” (BRI) proposed by President Xi Jinping in the fall of 2013. Ever since, the BRI has been heavily promoted in China and around the world, with the aim of having profound regional and global impact by promoting economic development and integration across countries (mainly) in Asia, Europe and Africa.¹

There has been a plethora of discussion about the purposes of the BRI (Cheng, 2016; Huang, 2016). As a long-term national strategy promoted by the Chinese government, some observers describe the initiative as China's new economic strategy aimed at enhancing the economic connection between its domestic market and the global market.² Others argue that amid the normalization phase of China's economy, the initiative is mainly proposed to help rebalance China's economic structure and sustain growth by reconfiguring the external sectors and reducing supply-side redundancy (Shen, 2013; Chen, Dollar and Tang 2015 and 2016).³ Among the key areas of the BRI, trade and financial integrations (esp. OFDI) are identified as the crucial pillars of the initiatives' economic plan.⁴

As an emerging FDI provider, many researchers question whether Chinese firms' investment decisions are driven by domestic policies or economic motives, especially after the launch of the BRI. Some studies, such as Cheung and Qian (2009), Luo et al. (2010) and Chen et al. (2016),

¹ The State Council of the People's Republic of China, 2015, “China Unveils Action Plan on Belt and Road Initiative”, http://english.gov.cn/news/top_news/2015/03/28/content_281475079055789.htm (accessed on Feb 8, 2018).

² The Economist, 2 June 2016, “Our bulldozers, our rules: China's foreign policy could reshape a good part of the world economy”, <http://www.economist.com/news/china/21701505-chinas-foreign-policy-could-reshape-good-part-world-economy-our-bulldozers-our-rules>; B. Hofman, “China's One Belt One Road Initiative: What we know thus far”, East Asia & Pacific on the rise, The World Bank, 12 April 2015, <http://blogs.worldbank.org/eastasiapacific/china-one-belt-one-road-initiative-what-we-know-thus-far>.

³ Past studies show that for the home country, FDI outflow can lead to new sources of economic growth (Lipsey, 2004), diversify output capacity, technology, and exports (Kogut and Chang, 1991; Lim and Moon, 2001; Ma et al. 2014), and help realign the economic structure of the home country (Blomstrom and Kokko, 1994; Tang and Altshuler, 2015; Lee et al. 2015).

⁴ Hong Kong Trade Development Council (HKTDC), 2017, “Belt and Road Basics”, <http://beltandroad.hktdc.com/en/belt-and-road-basics> (accessed on Feb 8, 2018); The State Council of the People's Republic of China, 2015, “China Unveils Action Plan on Belt and Road Initiative”, http://english.gov.cn/news/top_news/2015/03/28/content_281475079055789.htm (accessed on Feb 8, 2018).

show that Chinese firms actively responded to China's "Going Global" policies and expanded their operations to AEs and other EMDEs. Others find that Chinese firms are motivated by traditional economic factors (e.g., market potential, trade openness and regulatory constraints) when investing abroad (Cheung et al. 2012 and 2014). So far, both the impact of the BRI on China's OFDI flows and whether the impact varies across countries remain unclear. With ample data on Chinese OFDI behaviours before and after the launch of the BRI, we conduct quantitative analyses on one important research question: how does the BRI affect Chinese OFDI?

The Chinese government and its policies played an important role in determining China's outward FDI (Chen and Tang, 2013; Luo et al., 2010). As a national strategy, the BRI can propagate its impact through a network of Chinese firms that invest globally and have profound implications on both the Chinese and the global economy. In this paper, we first conduct nonparametric analyses on Chinese OFDI data to extract stylized facts on the plausible implications of the BRI and form testable hypotheses. Chinese OFDI is found to increase substantially after the inception of BRI, both in terms of the volume (in millions of USD) and the number of deals. When focusing on the number of OFDI deals, the data show that more deals went to advanced economies (AEs), such as the U.S., than to emerging market and developing countries (EMDEs), although the latter group is more covered in the BRI.

The amount of Chinese OFDI differs across host countries and industrial sectors. While some countries (e.g., Belize, Burkina Faso, and Chad) barely receive any FDI from China, Chinese OFDI accounts for a significant share of other countries' GDP and total FDI (e.g., Laos, Cambodia, and Mongolia). The top three sectors in which firms invest abroad are trade and related services, manufacturing, and the construction and infrastructure sectors. After the implementation of the BRI, OFDI deals' sectoral distribution gradually changed in a pattern that is consistent with one of the objectives of BRI: investing in infrastructure that connects China to BRI countries. The percentage of OFDI deals in the construction and infrastructure sectors increased markedly more than in other sectors. Furthermore, we find that there is a high correlation between the overcapacity index and the number of OFDI deals, which supports widespread speculation that the BRI will partially ease China's domestic production over-capacity.

Utilizing the Differences-in-Differences regression framework recommended by Ashenfelter and Card (1985), we test the following hypotheses: 1, the BRI promotes Chinese OFDI, especially in countries on the BRI; 2, China's domestic economic issues, such as production overcapacity,

drive Chinese OFDI (esp. under the BRI); 3, the BRI alters the effect of domestic push factors on Chinese OFDI; and 4, the BRI's impact on Chinese OFDI deals differs between SOEs and private enterprises and varies across industries.

To summarize, Chinese OFDI is found to increase substantially after the inception of BRI. The results indicate that on average, Chinese firms registered approximately 45% more OFDI deals under the BRI than in the previous period. Using a numerical variable to capture the extent of emphasis on the BRI,⁵ one percent more promotion of the BRI from the Chinese government is found to be associated with approximately 12% more Chinese OFDI deals in the rest of the world. In addition, using various definitions of "BRI countries" suggested by prior studies, we find that in general, more OFDI deals are established in BRI countries after 2013. On average, the BRI promotes 36% more Chinese OFDI deals to BRI countries than to non-BRI countries. The increase in OFDI deals is particularly strong in EMDEs that are on the BRI and appear to endorse it.

Domestic push factors, such as overcapacity, GDP growth, exports growth, credit availability, capital controls, and RMB value expectation, are found to affect Chinese OFDI. More importantly, these factors' impacts on Chinese OFDI deals change after the inception of the BRI. While both state-owned and private enterprises invest more abroad after 2013, private enterprises, when making their investment decisions, weigh more on host countries' attitude towards the BRI than SOEs. Finally, the BRI is found to promote Chinese OFDI across all industrial sectors, with firms from construction and infrastructure, manufacturing, and trade-related industry sectors investing substantially more under the BRI than other sectors. The finding is in line with the notion that BRI emphasizes infrastructure investment and trade promotion across the BRI region.

Our study contributes to the literature in three respects. First, we are among the first cohort of studies to quantitatively assess the policy impact of BRI on Chinese OFDI. Second, while other studies employ aggregate OFDI volume data and ignore the heterogeneity among firms' response to the BRI, our study utilizes firm-level information (e.g., ownership structure and sectoral information) from the unique dataset of OFDI deals approved and registered by MOFCOM. Third, we investigate the plausible domestic economic push factors (e.g., to rebalance economic structure and promote exports) that motivated the Chinese government to propose the BRI and assess whether the BRI attempts to address those issues by promoting OFDI.

⁵ That is the number of "Belt and Road Initiative"-titled articles that appeared in Chinese official newspaper, the "People's Daily".

The remainder of this paper is arranged as follows. Section 2 reviews the related literature. Section 3 describes Chinese OFDI data and presents some stylized facts about Chinese OFDI and the BRI. Section 4 describes our empirical strategy, with the main results reported in Section 5. Section 6 covers further discussion and robustness checks. Section 7 presents the study's conclusions.

2. Related literature papers

First, this paper is related to a vast literature discussing the economic impact of government policies on FDI. Hartman (1985) finds that domestic tax policy changes strongly affect FDI flows in the U.S. Globerman and Shapiro (1999) use Canadian data from 1950-1995 and find that only general trade policies, such as free trade agreements (FTA and NAFTA), significantly increase the levels of both FDI and OFDI. Some restrictive government policies, such as employment protection and antitrust policies, are identified to reduce both inward FDI and outward FDI (Fournier, 2015). More related to our study, Cheung and Qian (2009), Luo et al. (2010) and Chen et al. (2016) show that China's "Going Global" policies stimulate Chinese firms to invest abroad.

Second, this paper is related to a group of studies focusing on the BRI policy. For instance, Cheng (2016) discusses the potential objectives of BRI. Is it market-based and economically motivated? Does it target certain countries for economic cooperation? Huang (2016), while admitting it is too early to assess the impact of the BRI, asserts that the BRI has the potential of turning the underdeveloped BRI region into a vibrant economic corridor. He also highlights the possible barriers that face the BRI, such as the lack of central coordination, the presence of political divergence, and potential financial risks concerning cross-border projects.

In addition to studies that adopt a global perspective, many papers focus on region-specific economic opportunities and challenges linked to the BRI. For example, Herrero and Xu (2017) and Esteban and Li (2017) assess whether Europe will gain from the BRI in terms of trade. Kaczmarek (2017) suggests that the BRI could mutually influence China and Eurasia. Ma et al. (2017) analyse the BRI's effect on the agriculture trade in Central Asia, and Vangeli (2017) explores the economic connection between Central, East and Southeast Europe and China under the influence of the BRI.

Previous studies show that countries differ in their attitude towards the BRI, especially in their willingness to accommodate Chinese OFDI and participate in the BRI. For example, Hofman

(2016) explores the impact of the BRI on Tajikistan and suggests that Tajikistan may welcome Chinese farm land investment, which may help develop its agriculture market. From the trade perspective, Fardella and Prodi (2016) argue that railway and port construction under China's BRI poses challenges for Italy, which should coordinate its ports and railway system to cautiously embrace and benefit from the BRI. Huang et al. (2017) use a case study to highlight the environment and social challenges facing Pakistani economy when engaging in the BRI and receiving China's OFDI. They also emphasize Pakistan's positive attitude towards Chinese OFDI and the BRI. Jacob (2017) compares the different views about China's BRI held by India and Pakistan. Kadilar and Erguney (2017) argue that Turkey should refrain from being ambivalent towards the BRI. Kong (2017) points out that Malaysia needs China's industry overcapacity to develop its infrastructure, and Sino-Malaysia relations will be strengthened through the BRI. Spruds (2107) and Timofeev et al. (2017) examine the possible opportunities and challenges associated with China's BRI in Latvia and Russia, respectively. Timofeev et al. (2017) conclude that a successful Sino-Russia economic collaboration under the BRI depends crucially on the future dynamics of the Eurasian integration and an agreement to co-develop the Eurasian Economic Union.

3. Data and some stylized facts

The empirical analyses of this paper are mainly based on Chinese OFDI deal data obtained from the Ministry of Commerce of the People's Republic of China (MOFCOM). The dataset covers OFDI deals approved by (and registered at) the ministry from 1 January 2000 to the end of 2015.⁶ For every OFDI deal, the dataset records the name of the investing firm, its industrial sector, the province of origin, the deal's approval date, the recipient country of the OFDI, and a short description of the investment transaction. However, MOFCOM did not release information on

⁶ As shown in Chen et al. (2016) and MOFCOM (2014), any outward direct investment deal worth more than \$100 million was subject to approval by MOFCOM before 6 October 2014. Overseas investment in energy and mining, and projects between \$10 million and \$100 million needed approval from commerce departments at the provincial level. Companies investing in industries covered by China's export restriction policies or in projects that may affect foreign countries' interests remain subject to MOFCOM's approval (MOFCOM Order [2014] No. 3 (Sept. 6, 2014), <http://www.mofcom.gov.cn/article/b/c/201409/20140900723361.shtml>). The National Development and Reform Commission (NDRC) also has the power to approve or veto an overseas investment project. From October 2014, onwards, Chinese companies planning to invest less than \$1 billion overseas will only need to register with authorities instead of seeking approval from the NDRC. Any overseas investment project larger than \$1 billion must be approved by the NDRC and investments above \$2 billion must be approved by the State Council. Details on the evolution of China's regulation on outward foreign direct investment can be found in Stone et al. (2017) and <http://fec.mofcom.gov.cn/article/ywzn/dwtz/> (MOFCOM's official website in Chinese).

either the investment value of OFDI deals or whether an approved deal is a green-field project or a merger-and-acquisition.

It is also worth noting that MOFCOM only reports the deal's approval date, which is either slightly later or much later than most deals' announcement dates.⁷ Additionally, the dataset roughly separates the investing firms according to their ownership structure. It singles out state-owned enterprises controlled by the central government (Central SOEs) from others, without identifying SOEs controlled by other government entities. According to Shen (2013), who used the same database, most unmarked firms in this dataset are from the private sector.⁸ Therefore, this paper cautiously categorizes non-Central SOEs as private enterprises.

To cope with the lack of information on the amount of investment linked to investment deals, we also gathered data on the total OFDI flow from China to individual countries in each year provided by MOFCOM (in millions of USD, termed as "OFDI volume data" in the following sections). The OFDI volume data are used as complements for the deal data and will be utilized in robustness checks. We prefer using the deal data in this paper, since OFDI volume data have two limitations: first, the sectoral or ownership structure information about OFDI is missing; and second, China's OFDI flow data series are inconsistent over the time due to the changes of China's statistical rules in 2003 and 2008.⁹

The OFDI deal data include 29,305 firms that made 42,402 OFDI deals (3445 of which were made by central SOEs) that were approved and registered with MOFCOM. It covered 188 host

⁷ When cross-checking famous investment deals, we find that most of these deals' announcement dates are earlier than their reported approval dates. For instance, according to Reuters (accessed on Feb 7, 2018, <https://www.reuters.com/article/us-world-triathlon-m-a-dalian-wanda/chinas-wanda-buys-ironman-triathlon-owner-for-650-million-idUSKCN0QW04X20150827>), Dalian Wanda Group bought the World Triathlon Corp at the end of August 2015, while the deal is approved by MOFCOM in our dataset on 27 October 2015. Another famous example is the Chinese carmaker's (Zhejiang Geely Holding) acquisition of Volvo. The deal was finalized in August 2010 (accessed on Feb 7, 2018, <http://www.nytimes.com/2010/08/03/business/global/03volvo.html>) but recorded in the MOFCOM dataset on 23 June 2015. As one of China's largest TV manufacturer, TCL set up a joint venture with French company, Thomson, in Poland in 2003 (accessed on Feb 7, 2018, http://www.chinadaily.com.cn/en/doc/2003-11/03/content_277945.htm), but the approval of the deal was granted on 30 December 2014.

⁸ Since information on ownership is not readily available, Shen (2013) determines firms' ownership structure for 1586 Chinese investment projects by following firms' names and websites and occasionally by making phone calls. However, the same strategy cannot be applied to the large dataset we are using. When the number of investment deals reached 42,402, manually classifying firms will potentially introduce many errors.

⁹ China used to publish the approved OFDI in the *Almanac of China's Foreign Economic Relations & Trade*. In 2003, MOFCOM started to report the annual OFDI flow and stock data at *The Statistical Bulletin of China's Outward Foreign Direct Investment*. However, these data exclude financial OFDI. The Almanac and the Statistical Bulletin have a data discrepancy due to unspecified data rule changes. After 2008, MOFCOM added the financial sector OFDI to the Statistical Bulletin.

economies around the globe.¹⁰ Figure 2 shows that both OFDI deals and OFDI volumes have steadily increased since 2013, with a remarkable jump since the announcement of the BRI (i.e., the fall of 2013). By the end of 2015, the number of OFDI deals and aggregate OFDI volume reached 9,907 deals and 145.7 billion USD, respectively, doubling their 2013 levels. The average number of OFDI deals received by EMDEs per year tripled from 745 before the launch of BRI to 2,188 afterwards, while the average annual number of OFDI deals going to AEs went from 1,104 to 5,090 during the same period (Figure 3). The reasons that OFDI deals grew faster in AEs than in EMDEs after the launch of the BRI could be that firms attempt to hedge against Chinese RMB depreciation expectation or favour the market potential and institutional arrangements in AEs (Witt and Lewin, 2007; and Luo et al. 2010).

The Chinese government provided the blueprint for the BRI and suggested 65 countries covered in the BRI (termed as “BRC”; see Appendix Table A1 for country names). Meanwhile, the BRI is open to any other country that wants to participate. As far as we know, none of the officially announced BRI countries is legally obliged to participate in the BRI. In other words, a country’s engagement in the BRI depends on its own willingness to participate. For example, while Albania is in the BRC, it did not participate in China’s Belt and Road Forum (BRF) 2017 in Beijing, in which state heads or ministers from 57 countries actively participated. We assume these 57 countries endorse the BRI since they actively participated in the BRF hosted in China. We label them as “BRF countries” to distinguish them from other countries. As active BRI forum-participating countries, BRFs received approximately 70 percent of total OFDI deals in EMDEs and approximately 45 percent in AEs (Figure 4). When focusing on EMDE regions, we find that the East-Asia Pacific region (EAP) received the most OFDI deals (5,134 deals) over the period 2000-2015, followed by Sub-Saharan Africa (SSA, 3,091 deals) and East Central Asia (ECA, 2,887 deals). OFDI deals in ECA and EAP regions mainly went to BRF participants (more than 90 percent of total OFDI deals), especially after the launch of the BRI. Similar patterns are observed when using different classification methods to single out EMDEs that are on the BRI.¹¹

¹⁰ The raw data include investment deals in special territories of China (Hong Kong, China; Macao, China; and Taiwan, China) and offshore financial centers (e.g., Bermuda). We dropped transactions in these regions from our robustness check to ensure that our empirical results are not driven by transactions in these regions.

¹¹ Charts using different classifications of countries on the BRI will be provided upon request. Details on the different country groups are listed in the Annex in Global Economic Prospects (2018).

Chinese OFDI plays an important role in some EMDEs. Figure 6 shows the top ten Chinese OFDI recipient countries in percentage of GDP. On average, the annual amount of OFDI flow from China to these EMDEs ranges from 1 (Tajikistan) percent of GDP to 3 (Laos) percent, with all the top receivers being BRIC participants. Similarly, Chinese OFDI flows account for a large portion of the total FDI net inflows received by some EMDE countries (Figure 7). In the top 3 recipient countries (i.e., Afghanistan, Laos, and Central African Republic), more than 50 percent of total FDI net inflows are from China.

Based on the business descriptions recorded in the database, OFDI deals can be grouped into the following 7 industry categories: metal and chemicals, finance and high-tech, mining (including geo-probing activities), construction and infrastructure, manufacturing, trade and related services, and others (including agriculture, culture, food, and forestry). Over the period from 2000-2015, OFDI deals that focused on trade and related services alone accounted for 33 percent of all OFDI deals, which was 5 percentage points of GDP higher than the amount of OFDI deals from the manufacturing sector (Figure 8). OFDI deals from the construction and infrastructure sector amounted to 18 percent of total OFDI deals and grew more than other sectors after the launch of the BRI. Faster growth in sectors, such as construction and infrastructure, manufacturing, and finance and high-tech sectors, led to changes in the sectoral distribution of OFDI deals after the BRI (Figure 9). As the largest sector of firms investing abroad, deals from trade-related sectors fell from 35.3 percent of all OFDI deals before 2014 to 28.8 percent afterwards. Similar drops occurred in mining and metal and chemical sectors. Such changes in the sectoral distribution of OFDI deals before and after 2013 may reflect the rebalancing pattern of the Chinese economy, a plausible driver of the BRI.

Although it was not explicitly mentioned in the BRI, one of the potential objectives of promoting OFDI and the BRI is to address China's domestic overcapacity issue, and thus to help adjust its economic structure (Huang, 2016; Cheng, Dollar and Tang 2015; Pigato and Tang 2015). Figure 10 plots two production price indices—one for all sectors (PPI: All) and the other for heavy industry alone (PPI: HI)—alongside the number of OFDI deals from the construction sector, which is frequently discussed as one of overcapacity sectors in Chinese economy.¹² As shown in Figure 10, the cyclical components for PPIs dropped below zero in multiple years, indicating a lack of

¹² McKinsey, 2014, "Rethinking Infrastructure: Voices from the Global Infrastructure Initiative" <http://www.chinadaily.com.cn/a/201801/08/WS5a5318bca31008cf16da5c4a.html>; China Daily, 2018, <http://www.chinadaily.com.cn/a/201801/08/WS5a5318bca31008cf16da5c4a.html> (accessed on Feb 8, 2018).

demand and overcapacity concern. Meanwhile, the number of OFDI deals from the construction sector abruptly reversed the downward trend and jumped up after 2013. The conjecture that more OFDI deals are from overcapacity sectors will be investigated via regressions in Section 6.

4. Empirical strategy

To empirically test the hypotheses listed in Section 1, we use the following set of pooled data OLS regression models:

$$OFDI_{it} = \alpha + \beta X_{it-1} + \rho BRI_t + \gamma_i + \epsilon_{it}; \quad (1)$$

$$OFDI_{it} = \alpha + \beta X_{it-1} + \tau BRC_i + \rho BRI_t + \theta BRC_i * BRI_t + \gamma_i + \epsilon_{it}; \quad (2)$$

$$OFDI_{it} = \alpha + \beta X_{it-1} + \tau Z_t + \rho BRI_t + \theta Z_t * BRI_t + \gamma_i + \epsilon_{it}; \quad (3)$$

where the dependent variable $OFDI_{it}$ captures the number of OFDI deals going from China to country i recorded in year t .¹³ X_{it-1} is a vector of control variables that are lagged one year as predetermined variables to address potential endogeneity issues, and BRI_t is a dummy variable that equals one in and after year 2014.¹⁴ To better capture the degree to which the Chinese government carries out the BRI policy, we also constructed a proxy using the annual number of news articles with “Belt and Road Initiatives” in the title published by People’s Daily. We label this measurement *People’s Daily on the BRI*, and make it equal to zero before 2013. A higher value in *People’s Daily on the BRI* indicates that the BRI gains policy importance¹⁵, and we expect it to have a higher impact on Chinese OFDI. γ_i controls for country fixed effects.

BRC_i is a dummy variable indicating whether country i is a BRI country (= 1) or otherwise (= 0). Z_{it} contains a vector of variables on the domestic economic conditions in China that may “push” firms to invest abroad. To further understand whether “push factors” in China have different impacts on firms’ decision to invest abroad before and after the BRI, the interactive term $Z_{it} * BRI_t$ is added in Eq. (3).

¹³ Following Cheung et al. (2014), log transformation is done for the number of OFDI deals. Specifically, it has the following form: $OFDI_{it} = \ln(\text{number of deals from China to country } i \text{ in year } t + 1)$. The transformation reduces the skewness of the raw data and avoids the issue of missing values.

¹⁴ Since the BRI was first introduced in September 2013 and it took time for MOFCOM to approve OFDI deals, the BRI is unlikely to make an impact on the number of ODI deals recorded in our database in 2013. Hence, BRI_t equals one from year 2014 onwards.

¹⁵ The BRI was raised for the first time by President Xi Jinping on 7 September 2013. (Source: <https://eng.vidaiyilu.gov.cn/ztindex.htm>, retrieved on November 30th, 2017).

Regarding control variables in X_{it-1} , we follow existing studies, such as Cheung et al. (2012), and include variables that capture recipient countries' economic and institutional conditions. First, as suggested by Chen and Tang (2013) and Cheung et al. (2012), OFDI from China is largely driven by market- and resource-seeking motives. Hence, we include the following variables to proxy for market- and resource-seeking motives. First, $\ln(GDP)$, the recipient country's GDP in current USD (in logs), is commonly used to represent market size (Frankel and Wei, 1996). Second, $\ln(GDPpc)$, the recipient country's GDP per capita in current USD (in logs), is an indicator of market opportunities (Lipsey, 1999; Kinoshita and Campos, 2003). Third, $\ln(Trade)$, the commodity trade volume of the recipient country with China in USD (normalized by the recipient country's population and logged), shows the importance of country i as a trading partner with China (Cheung et al. 2012). Fourth, *Energy* is a proxy for energy output, including crude oil, natural gas and coal output, and is a composite variable that captures the recipient country's energy output in general. It is normalized by the recipient country's gross national income to facilitate comparison across countries. Data on GDP and energy are obtained from *World Development Indicators* (WDI, 2016), while trade data are provided by UN Comtrade (2017).

Since institutional quality can affect foreign direct investment (Asiedu 2002, Cuervo-Cazurra 2006, Cheung et al. 2012, and Chen, Dollar and Tang 2015), four relevant indices are obtained from the *International Country Risk Guide* (ICRG). They are *Bureaucratic quality*, *Law and order*, *Corruption*, and *Investment profile*. In all cases, higher value indicates better institutional quality. For instance, if the *Corruption* index has a higher value, the recipient country's government is less corrupted.

Relevant “push factors” in China can be grouped into the following three categories: 1) proxies for overcapacity concerns, 2) proxies for China's economic rebalancing needs, and 3) proxies for China's financial/monetary conditions.¹⁶ To measure the extent of industrial overcapacity, we first use the capacity utilization ratio provided by People's Bank of China to measure the rate of equipment utilization. This captures the demand for production equipment. A lower ratio means that Chinese producers need less production equipment than they possess, indicating that the economy has an overcapacity issue. Alternatively, we use the inflation rate of producer price index (PPI; over all sectors) provided by Haver analytics to directly measure

¹⁶ Since economic conditions in China are not likely to be influenced by firms' investment behavior in an individual country, the current values of these proxies are used in the regression analyses.

overcapacity from the supply side of the Chinese economy. Following the basic supply and demand theory, an increase in supply without an increase in demand results in a decline in producer price. Therefore, a drop of PPI suggests more overcapacity.

In addition to the overcapacity issue, there are increasing concerns about the misalignment of the Chinese economy after its 30 years of high-speed growth, reflected in decreasing economic growth and declining exports. The Chinese economy may need to adjust its economic structure to sustain growth. The BRI may facilitate the process of rebalancing. To test this, we include GDP growth rate and export growth rate in the regressions to check whether the need for rebalancing promotes OFDI.

Furthermore, various variables, such as interest rates to measure domestic credit availability (Shibor: 1-Year (%), provided by Haver analytics), outlook for RMB appreciation (RMB non-deliverable forward rate) and the level of capital controls on OFDI (Chen and Qian, 2016), are added to measure China's financial/monetary conditions that might push firms to invest abroad.

To accommodate the DID framework, we first use pooled data regression.¹⁷ Due to the issue of cross-sectional dependence¹⁸ and autocorrelation in the error term, we use a pooled data regression with Driscoll and Kraay (1998) standard errors that control for both cross-section correlation and AR(1) autocorrelation.

The data on OFDI deals are left-censored (i. e., $OFDI_{it} > 0$ or $=0$), with a large portion of the observations being zero. The large amount of zero in our observations could be due to the approval system implemented by MOFCOM (Cheung et al., 2012). To check whether the potential bias arises because of using left-censored data, we use the panel data Tobit regression model (with random-effect) as a robustness check in the following section.¹⁹ Additionally, OFDI data may subject to time serial data persistency issue in which current OFDI may be affected by previous years' OFDI (Cheng and Kwan, 2000). Since a panel data regression with lagged dependent variable typically has a data persistency issue, which usually yields biased estimates (Anderson

¹⁷ Normally, a fixed effect panel data regression is appropriate for cross-section and cross-time data. However, in a DID regression, a fixed effect regression causes multicollinearity between the fixed effect and the country dummy in DID. Hence, we use pooled data regression first; then we use panel data Tobit and system GMM to check the results' robustness. The results from fixed effect models are consistent with our main findings.

¹⁸ Pesaran (2004) cross-section independence test rejects the null.

¹⁹ The fixed effect specification would generate biased estimates (Greene, 2004a, 2004b). The Tobit model has the following form: $OFDI^*_{it} = \alpha + \beta X_{it-1} + \tau Z_t + \rho BRI_t + \theta Z_t * BRI_t + u_t + \epsilon_{it}$, where $OFDI^*_{it} = 0$ if $OFDI_{it} > 0$ and $OFDI^*_{it} = 0$ if $OFDI_{it} = 0$. $OFDI^*_{it}$ is the latent value of the number of OFDI deals or OFDI inflow if the approval system on OFDI did not exist in China.

and Hsiao, 1982), we follow Cheng and Kwan (2000) and use dynamic panel system GMM (Generalized Method of Moments).

Another issue with our OFDI data is that it also includes OFDI deals investing in the special territories of China (i.e., Hong Kong, Macau, and Taiwan, China) and offshore financial centres. Some of the ODI deals going to these locations involve round-tripping and offshoring (Casanova et al. 2015), which are usually motivated by different set of factors than normal OFDI deals. As a robustness check, we also drop deals going to the three special territories of China and the offshore financial centres (OFCs) jointly identified by the IMF, the SFI and the OECD (see Appendix Table A2 for the detailed list).

5. Empirical results

5.1 More OFDI after the launch of the Belt and Road Initiative (BRI)

Table 1 reports the regression results on the quantitative differences before and after the launch of BRI. We start with a typical OFDI regression, which includes those canonical OFDI determinants such as proxies for firms' market-seeking and resource-seeking motives. As shown in Column [1], we find that host country's market size and its trade ties with China strongly motivate Chinese firms to invest there. In line with the literature (Cheung et al. 2012), Chinese OFDI went to countries with a poor bureaucratic system, which deters investors from advanced economies and lowers the competition level for Chinese firms.

Then, we add the time dummy variable, *BRI*, to study how OFDI behaves differently before and after the launch of BRI. To deal with the data and regression issues outlined in the previous section, we report results from pooled data regression, panel data Tobit regression, and dynamic panel data system GMM regression in Columns [2], [3], and [4], respectively, for robustness. The results are generally in line with Column [1] and the findings of other literature papers (Cheung et al. 2012). The BRI is found to be significantly associated with Chinese OFDI: averaged across three regressions, Chinese firms invested 45% more OFDI after the launch of BRI than beforehand.

[Insert Table 1 about here]

A simple time dummy, *BRI*, may not be able to capture the variation of the importance of the BRI over time. *People's Daily on the BRI*, a proxy for the intensity of promotion behind the BRI, is used in Column [5]-[7] to test the importance of BRI to the rise of Chinese OFDI. All coefficients on *People's Daily on the BRI* are found to be positive and statistically significant at 1 percent. The

results suggest that a 1 percent increase in the number of headlines titled with the BRI in People's Daily newspaper leads to a 12 percent increase in the number of OFDI deals from China.

5.2. More Chinese OFDI to BRI countries after the BRI?

In this section, we use the difference-in-difference (DID) regression specification, as shown in Eq. (2). The time dummy, *BRI*, the country dummy, *BRC*, and their interaction term *BRI * BRC* are added here. Although China highlighted 65 countries as a part of its BRI (Chin and He 2016)²⁰, some of these countries may not necessarily wish to participate in the BRI. Without concrete information about a country's willingness to participate in the BRI, we first use a dummy variable to single out the 65 countries suggested by the Chinese government as countries on the BRI (*BRC*). Later, we use an alternative approach to re-categorize countries based on their perceived willingness to participate.

The results of using *BRC* are reported in Columns [1] to [4] of Table 2, in which samples of all observations, non-OFC countries, advanced economies (AEs), and emerging markets and developing countries (EMDEs) are used, respectively. The results in Columns [1] and [2] show that although the launch of the BRI significantly promotes OFDI, BRI countries are not necessarily receiving more OFDI than others after the launch. Indeed, the coefficient of *BRC*BRI* is estimated to be negative, albeit insignificant. More interestingly, as listed in Column [3], in which only AEs samples are used in the regression, AEs covered in the BRI seem to receive significantly less OFDI deals than those not covered in the BRI. A plausible explanation is that OFDI depends on the policy coordination between the home and the host countries. Although some AEs are proposed as BRI countries by China, they may neither wish to actively participate in the BRI nor welcome Chinese OFDI.²¹ As Overholt (2015) points out, at least the policy should meet “the need for the host countries to feel ... equitably profitable.” Without cooperation from these host AEs, the BRI's efforts to promote Chinese OFDI to those countries may turn out to be limited. Thus, it is reasonable that AEs received less OFDI after 2013.

In Column [4], focusing on BRCs in EMDEs yields expected results – with the impact from BRI, 20% more Chinese OFDI deals went to EMDEs covered in the BRI. In contrast to some AEs,

²⁰ The list of countries is retrieved from https://eng.yidaiyilu.gov.cn/info/iList.jsp?cat_id=10076 on Oct 15, 2017.

²¹ For instance, 6 out 10 AEs identified as BRCs—namely, Estonia, Israel, Latvia, Lithuania, Slovakia, and Slovenia—did not participate in the 2017 Belt-and-Road Forum in Beijing, which perhaps indicates these countries' lack of interest in the BRI.

many EMDE BRCs need capital to develop their poor infrastructure. They welcome Chinese firms to invest in their infrastructure sector and hence, they are more willing to economically cooperate with China in the BRI (Hofman, 2016; Huang et al., 2017; Kong, 2017).

These different results from AEs and EMDEs may partially answer a question raised by Cheng (2016): which of the 60 or so countries in Asia, Europe and Africa along the Belt and Road will likely be the Initiative's priority targets of economic cooperation? Due to the difficulty of working with all 65 countries at the beginning of the BRI, our results seem to suggest that China is strategically putting more priority on EMDEs when promoting the BRI via OFDI.

We now turn to a country categorization that might help reveal countries' willingness to participate in the BRI. To promote the BRI, the Chinese government, led by both President Xi and Premier Li, organized the Belt-and-Road Forum in Beijing (BRF, thereafter) in May 2017, in which 29 heads of state and 28 delegates (at least) at the ministerial level participated. We postulate that participating in BRF reflects countries' willingness to participate in economic cooperation under the BRI (*BRF*).²²

[Insert Table 2 about here]

When countries actively participated in the BRF, we find that the amount of Chinese OFDI deals went up by 64 percent after the launch of the BRI. BRF countries received 60 percent more Chinese OFDI deals than other countries after 2013 (Column [5]). Estimations without OFCs and China's special territories, AEs, and EMDEs all garner similar results, namely, that the BRI significantly promotes Chinese OFDI deals to BRF countries after 2013. These results are in accordance with the pattern shown in Figure 2.

In sum, the results are contrasting when comparing estimates using *BRC* (Columns [1]-[4]) from those using *BRF* (Columns [5]-[8]) in Table 2. The estimates using *BRF* are not only more significant but also substantially greater than those using *BRC*. In addition, as suggested by adjusting R-squared, models using *BRF* explain slightly more variation of China's OFDI than those using *BRC*. These saliently different results may highlight the importance of bilateral cooperation between China and host countries when promoting OFDI.

²² Fifty-seven countries sent delegations at the presidential/ministerial-level to China's Belt and Road Forum held in Beijing on 14-15 May 2017. (See <https://thediplomat.com/2017/05/belt-and-road-attendees-list/> for the full list, retrieved on Dec 7, 2017).

5.3. Domestic push factors and the BRI

The FDI literature usually categorizes FDI deterministic factors into two groups: “push factors” in home countries and “pull factors” in recipient countries. Based on the past discussions on the potential domestic “push” factors that led China to propose the BRI to further promote OFDI, we focus on the following three testable factors: 1, overcapacity concern (proxied by capacity utilization); 2, China’s economic rebalancing needs (measured by exports growth or GDP growth rate); and 3, China’s financial/monetary conditions (measured by borrowing cost, capital controls, and expectation of RMB exchange rate). The proxies for these push factors are added in model Eq. 1 one by one, and the results are reported in Table 3.

[Insert Table 3 about here]

As shown in Table 3, from 2000 to 2015, neither export growth nor GDP growth has a significant coefficient. This suggests that the needs of economic rebalancing have no impact on China’s OFDI behaviour. Domestic financing cost does not contribute to Chinese OFDI, either. It seems that it is not new for China to address overcapacity issue using the OFDI approach, as we estimate “Capacity utilization” as positive and significant at the 10% level. A higher level of capital controls on OFDI reduces OFDI, as the expectation of RMB appreciation is linked with lower OFDI.

Does the BRI change how those push factors affect Chinese OFDI, as some scholars argued (Huang, 2017; Yu, 2017)? We approach this question by including the interaction terms between the dummy variable, *BRI*, with those relevant domestic push factors in Table 3. If Chinese firms are responding to the government’s initiative, the impact of domestic push factors on China’s OFDI should strengthen after the launch of BRI. Indeed, Table 4 shows that a 1% reduction in capacity utilization (high level of overcapacity) is associated with 0.34% more OFDI deals after 2013.

[Insert Table 4 about here]

In this instance, both export growth and GDP growth are found to have significant coefficients, which supports the argument that the BRI may serve China’s rebalancing needs. The results also show that Chinese OFDI reacted to the economic slowdown in China quite strongly after 2013. A 1% drop in Chinese GDP growth rate is linked with a 1.34% increase in the number of OFDI deals

after the launch of the BRI. Similarly, but in a lesser manner, a 0.04% increase in OFDI is associated with a 1% decrease in exports from China.

Higher domestic financing costs (less credit availability) reduce Chinese OFDI. This, in some sense, reflects the importance of establishing the Asia Infrastructure Investment Bank (AIIB) to manage the financing cost for the BRI OFDI project (Gabusi, 2017). Capital controls on OFDI show no significant association with the number of ODI deals from 2014 onwards, while the high propensity for RMB depreciation is found to be associated with more OFDI deals after 2013. The latter hints a situation in which some Chinese firms take advantage of the BRI and disguise their capital outflow as OFDI deals to hedge against RMB depreciation.²³

6. Robustness checks

6.1. Other definitions of BRI countries

In this section, we gather four other plausible sets of countries on the BRI (shown in Appendix Table A1) to check the robustness of our results. These alternative definitions of countries on the BRI are either associated with an institution, appear in reports by some well-known think tanks or are shown on some influential websites. The results are shown in Table 5.

[Insert Table 5 about here]

Following Chin and He (2016), countries are classified as those that are on the BRI (labelled as Fung [on]) and those that are interested in joining the BRI (Fung [in]). Dummies for these two group of countries are included here. The results echo those in Section 5: countries that expressed interest in joining the BRI receive significantly more OFDI deals than others after the launch of the BRI (Column [2] of Table 5), whereas countries on the BRI list receive less Chinese OFDIs (Column [1]). As the most important financing partner of the BRI, the results show that the Asia Infrastructure Investment Bank (AIIB) helped its members to receive significantly more OFDI deals after the launch of the BRI. Finally, using the list of BRI countries defined on Wikipedia, we find that the number of OFDI deals going to BRI countries increases by 37 percent after 2013. In sum, our main results are robust when using alternative country lists of the BRI.

²³ In 2017, the Chinese government banned some OFDIs from investing in football clubs, movie studios, etc., citing “irrational” investment. Meanwhile, the state council, China’s cabinet, encourages OFDI under the BRI (<https://www.bloomberg.com/news/articles/2017-08-18/china-further-limits-overseas-investment-in-push-to-reduce-risk> Accessed on Feb 8, 2018).

6.2. Size of OFDI flow

Despite the advantages of using Chinese OFDI deal data for our empirical exercises, there is a caveat that information on the investment amount of OFDI deals is unavailable. To overcome the limitation to the greatest extent possible, we redo all the regressions shown in Table 2 using the annual OFDI flow (in millions of USD) from China to recipient countries and report the results in Table 6. Consistent with the previous section, we used the dummy, *BRC*, in Columns [3] – [6], and the dummy, *BRF*, in Columns [7] – [9]. The dependent variable is the logarithm of aggregated OFDI flow in millions of USD. The same set of subsamples used in Table 2 are applied here to test whether the finding is consistent across country groups.

In general, the BRI significantly promotes Chinese OFDI flows to the rest of the world. Like the results in Section 5, the impact of BRI on Chinese OFDI volume depends on the willingness of host countries to participate in the BRI. For countries that are willing to participate (*BRF*), the BRI promotes 12% more Chinese OFDI by value than those that are not interested in the BRI (Columns [7] – [9]). In contrast, the BRI do not serve the *BRC* sample (especially the AEs) well in terms of attracting OFDI volume, which confirms the results in Section 5 that the BRI might give the priority to BRI EMDEs. Column [6] further suggests that the launch of BRI promotes 6% more Chinese OFDI flows to BRI EMDEs than to others.

[Insert Table 6 about here]

6.3. Central SOEs

Here, we study how firms with different ownership structures react to the BRI differently. The results are displayed in Table 7. The number of OFDI deals made by central SOEs is used as the dependent variable in Columns [1], [3] and [5], while the number of ODI deals made by other enterprises are used in Columns [2], [4] and [6]. While central SOEs tend to invest more in countries with a large market, other enterprises invest more in countries that have a strong trade tie with China and are rich in energy resources. Moreover, it seems that central SOEs prefer countries with poorer institutions more than other enterprises. The results shown in Table 7 are largely in line with those in Table 2.

[Insert Table 7 about here]

When comparing the coefficients before *BRI*, we find that private enterprises engaged in more OFDI deals (approximately 17 percent) after 2013 than central SOEs. Central SOEs follow

government policies more closely than private enterprises. As suggested in Column [3], the BRI push significantly more OFDI from central SOEs (10%) to countries emphasized by the Chinese government (BRC). Private enterprises seem to examine the host countries' attitude towards the BRI more in regard to their OFDI decisions: they make 68% more OFDI deals in countries that are willing to participate in the BRI (i.e., BRF participants, Column [6]) while showing no increase in their investment tendency in regard to the BRI countries suggested by the Chinese government (Column [4]).

6.4. Various industrial sectors

In Table 8, we first test whether firms from certain industrial sectors invest more after the launch of the BRI than other sectors and then examine whether they invest more in countries that are BRF participants. The number of OFDI deals made by firms from various industries is used as the dependent variable here. The results show that firms from all industries increase their investment abroad significantly after 2013, especially in construction-and-infrastructure sector, the manufacturing sector, and the trade-and-related service sector. In particular, the median number of deals in a country's construction sector raised from below 1 per year before the launch of BRI to 2 per year afterwards²⁴. The launch of BRI alone is associated with about 80 percent of the increase in the number of construction deals.

Additionally, BRI participants receive more OFDI deals from all industries than other host countries after the launch of the BRI. Particularly, the deals from the construction-and-infrastructure sector, the manufacturing sector, and the trade-and-related service sector increased in BRF participating countries by 80-120 percent after the launch of the BRI; whereas the increase in non-BRF participating countries is about 17-57 percent. As a joint result of other contributing factors and the launch of BRI, the median number of deals in the construction sector of a BRF participating country rose from 0 per year to 6 per year after the launch of BRI. In contrast, the median number of OFDI deals in the construction sector of a non-BRF participating country rose from 0 per year to 1 per year.

[Insert Table 8 and 9 about here]

There are debates on the production overcapacity issue associated with some industrial sectors in China (e.g., construction, infrastructure, and manufacturing sector). We attempt to assess the

²⁴ Due to the skewness of OFDI deal data, we present the results based on the median number rather than the average.

association between overcapacity in a certain sector and the BRI's impact on promoting OFDI to that sector. A positive association suggests that the BRI directs Chinese OFDI to address the overcapacity issue. China's production price index (PPI) is used to measure the level of overcapacity – a lower PPI indicates a higher level of overcapacity.

Table 9 reports results for six major industries. The results suggest that across all industrial sectors, rising production overcapacity is associated with more OFDI deals after the launch of the BRI. However, this association is substantially stronger in the construction-and-infrastructure and manufacturing sectors than in other sectors. Because these sectors are highlighted as the sectors associated with production overcapacity issues, the BRI seems to direct Chinese firms to export domestic production capacity to correct the worsening overcapacity situation in some industries, which some scholars have suggested is a motive for the BRI (Huang, 2016; Kong, 2017).

7. Concluding remarks

After the announcement of the BRI, there has been a plethora of debates on the possible underlying causes of the initiative and its potential economic impact on China, the countries mapped under the BRI, and the global economy. In this study, we collect OFDI deal (and aggregate volume) data from MOFCOM to quantitatively gauge the impact of the BRI on Chinese firm's OFDI pattern. We attempt to answer the following questions: Does the BRI promote Chinese OFDI (especially in BRI countries)? Does the BRI alter the effect of domestic push factors on Chinese OFDI behaviour? Does the BRI's impact OFDI differ across industrial sectors and different ownership structures? Various regression methods (e.g., Tobit regression and the dynamic panel data system GMM approach) are used to insure robustness.

We find that the BRI significantly promotes Chinese OFDI deals: on average, Chinese firms made approximately 45% more OFDI deals after the launch of the BRI. The magnitude of the initiative's impact on OFDI also depends on the willingness of host countries to participate in the BRI. When actively participating in the BRI (i.e., attending the BRF), these countries receive 60% more Chinese OFDI deals after the launch of the BRI. In addition, the results suggest that the BRI gives priority to emerging markets and developing countries (EMDEs) covered by the BRI.

There is empirical evidence that Chinese OFDI may help address domestic economic issues (e.g., production overcapacity), which was argued as one of the incentives for China to promote the BRI. The results show that Chinese OFDI deals increase more in industrial sectors with overcapacity issues. As the main vehicle for the Chinese government to pursue its economic plans,

central SOEs are more responsive to the BRI in terms of investing abroad. Private enterprises will also base their OFDI decisions on the host countries' willingness to participate in the BRI while taking advantage of the BRI.

While our results are robust to different definitions of BRI countries, our results suffer from a few caveats that are mainly associated with the OFDI deal data we use. First, the OFDI deal data are from 2000 to 2015, which provide us with only two years of observations of the BRI. Data availability limits our analysis on the long-term impact of the BRI on Chinese OFDI. Second, the OFDI deal data do not contain the monetary value of each OFDI deal. This forces us to treat all OFDI deals the same regardless of their investment size. We do, however, back up our results with additional analyses using aggregate OFDI volume data.

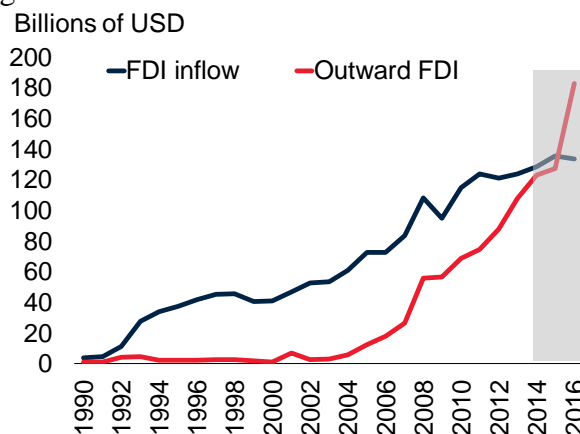
Reference

- Anderson, Theodore Wilbur and Cheng Hsiao. 1982. Formulation and Estimation of Dynamic Models Using Panel Data. *Journal of econometrics*, 18(1), 47-82.
- Ashenfelter, O. and D. Card. 1985. Using the Longitudinal Structure of Earnings to Estimate the Effect of Training-Programs. *Review of Economics and Statistics*, 67(4), 648-60.
- Asiedu, Elizabeth. 2002. On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different?, *World Development*, 30(1), 107-119.
- Blomstrom, Magnus and Ari Kokko. 1994. Home Country Effects of Foreign Direct Investment: Evidence from Sweden, National Bureau of Economic Research, working paper #4639.
- Chen, Wenjie and Heiwai Tang. 2013. Export Promotion of ODI from Emerging Markets – Transaction-level Evidence from China, Johns Hopkins University memo.
- Chen, Wenjie, David Dollar, and Heiwai Tang. 2015. Investment Renaissance. *Finance & Development* 52 (4), IMF: Washington DC.
- Chen, Wenjie, David Dollar, and Heiwai Tang. 2016. Why Is China Investing in Africa? Evidence from the Firm Level. *World Bank Economic Review* lhw049. 10.1093/wber/lhw049.
- Chen, Jinzhao and Xingwang Qian. 2016. Measuring On-Going Changes in China's Capital Controls: A De Jure and a Hybrid Index Data Set. *China Economic Review*, 38, 167-82.
- Cheng, Leonard K. and Z. Ma. 2010. China's Outward Foreign Direct Investment. in NBER book *China's Growing Role in World Trade*, edited by Robert C. Feenstra and Shang-Jin Wei, 545-578.
- Cheng, Leonard K. 2016. Three Questions on "China's Belt and Road Initiative". *China Economic Review*, 40, 309-13.
- Cheng, Leonard K. and Yum K Kwan. 2000. What Are the Determinants of the Location of Foreign Direct Investment? The Chinese Experience. *Journal of International Economics*, 51(2), 379-400.
- Cheung, Yin-Wong and Xingwang Qian. 2009. Empirics of China's Outward Direct Investment. *Pacific Economic Review*, 14(3), 312-41.
- Cheung, Yin-Wong, Jakob de Haan, Xingwang Qian, and Shu Yu. 2012. China's Outward Direct Investment in Africa. *Review of International Economics* 20 (2), 201-220.

- Cheung, Yin-Wong, Jakob de Haan, Xingwang Qian, and Shu Yu. 2014. The Missing Link: China's Contracted Engineering Projects in Africa. *Review of Development Economics* 18 (3), 564-584.
- Chin, He and Winnie He. 2016. The Belt and Road Initiative: 65 Countries and Beyond Report from Fung Business Intelligence Centre: https://www.fbicgroup.com/sites/default/files/B%26R_Initiative_65_Countries_and_Beyond.pdf.
- Cuervo-Cazurra, Alvaro. 2006. Who Cares about Corruption? *Journal of International Business Studies*, 37 (6), 807-822.
- Esteban, Mario, and Yuan Li. 2017. Demystifying the Belt and Road Initiative: Scope, Actors and Repercussion for Europe. IN-EAST Working Papers on East Asia Studies No. 177.
- Fardella, E. and G. Prodi. 2017. The Belt and Road Initiative Impact on Europe: An Italian Perspective. *China & World Economy*, 25(5), 125-38.
- Fournier, Jean-Marc. 2015. The Negative Effect of Regulatory Divergence on Foreign Direct Investment. OECD Economics Department Working Papers, No. 1268, OECD Publishing, Paris.
- Gabusi, G. 2017. "Crossing the River by Feeling the Gold": The Asian Infrastructure Investment Bank and the Financial Support to the Belt and Road Initiative. *China & World Economy*, 25(5), 23-45.
- Globerman, Steven and Daniel M Shapiro. 1999. The Impact of Government Policies on Foreign Direct Investment: The Canadian Experience. *Journal of International Business Studies*, 30(3), 513-32.
- Hartman, David G. 1985. Tax Policy and Foreign Direct Investment. *Journal of Public economics*, 26(1), 107-21.
- Herrero, A. G. and J. W. Xu. 2017. China's Belt and Road Initiative: Can Europe Expect Trade Gains? *China & World Economy*, 25(6), 84-99.
- Hofman, I. 2016. Politics or Profits Along the "Silk Road": What Drives Chinese Farms in Tajikistan and Helps Them Thrive? *Eurasian Geography and Economics*, 57(3), 457-81.
- Huang, Y. P. 2016. Understanding China's Belt & Road Initiative: Motivation, Framework and Assessment. *China Economic Review*, 40, 314-21.
- Huang, Y. Y.; T. B. Fischer and H. Xu. 2017. The Stakeholder Analysis for Sea of Chinese Foreign Direct Investment: The Case of "One Belt, One Road" Initiative in Pakistan. *Impact Assessment and Project Appraisal*, 35(2), 158-71.
- Jacob, J. T. 2017. China's Belt and Road Initiative: Perspectives from India. *China & World Economy*, 25(5), 78-100.
- Kaczmarek, M. 2017. Two Ways of Influence-Building: The Eurasian Economic Union and the One Belt, One Road Initiative. *Europe-Asia Studies*, 69(7), 1027-46.
- Kadilar, R. and E. Erguney. 2017. "One Belt One Road" Initiative: Perks and Challenges for Turkey. *Turkish Policy Quarterly*, 16(2), 85-90.
- Kinoshita, Yuko, and Nauro Campos. 2003. Why does FDI go and where it goes? New Evidence from the Transition Economies. IMF Working Paper No. 03/228, Washington DC: IMF.
- Kogut, Bruce and Sea Jin Chang. 1991. Technological Capabilities and Japanese Foreign Direct Investment in the United States. *The Review of Economics and Statistics*, 401-13.
- Kong, T. Y. 2017. Belt and Road Initiative: A New Impetus to Strengthen China-Malaysia Relations. *East Asian Policy*, 9(2), 5-14.
- Lee, In Hyeock; Shige Makino and Eunsuk Hong. 2015. Outward Fdi Does Not Necessarily Cost Domestic Employment of Mnes at Home: Evidence from Japanese Mnes. *Columbia FDI Perspectives*, (148), 1-3.

- Lim, Sung-Hoon and Hwy-Chang Moon. 2001. Effects of Outward Foreign Direct Investment on Home Country Exports: The Case of Korean Firms. *Multinational Business Review*, 9(1), 42.
- Lipsey, Robert E. 2004. Home-and Host-Country Effects of Foreign Direct Investment, Challenges to Globalization: Analyzing the Economics. University of Chicago Press, 333-82.
- Liu, Haiyue, Yingkai Tang, Xiaolan Chen, and Joanna Poznanska. 2017. The Determinants of Chinese Outward FDI in Countries Along “One Belt One Road” *Emerging Markets Finance & Trade* 53: 1374-1387.
- Luo, Yadong; Qiuzhi Xue and Binjie Han. 2010. How Emerging Market Governments Promote Outward Fdi: Experience from China. *Journal of World Business*, 45(1), 68-79.
- Ma, Yue, Heiwai Tang and Yifan Zhang. 2014. Factor Intensity, Product switching, and Productivity: Evidence from Chinese Exporters. *Journal of International Economics* 92: 349-362.
- Ma, J. L.; T. Balezentis; Z. J. Zhao and C. Fang. 2017. One Belt One Road (Obor) Initiative in Central Asia: The Study of Obor on China and Central Asia Agricultural Trade. *Transformations in Business & Economics*, 16(3), 41-55.
- Overholt, W. H. (2015). One belt, one road, on pivot. *Global Asia* summer, 8–12 and 51–52.
- Pigato, Miria, and Wenxia Tang. 2015. China and Africa: expanding economic ties in an evolving global context. *World Bank Working Paper No. 95161*. Washington, DC: World Bank.
- Pesaran, M. H. 2004. General diagnostic tests for cross section dependence in panels. University of Cambridge, Faculty of Economics, Cambridge Working Papers in Economics No. 0435.
- Shen, Xiaofang. 2013. Private Chinese investment in Africa: myths and realities. *World Bank Policy Research Working Paper No. 6311*, World Bank: Washington DC.
- Spruds, A. 2017. Towards a Balanced Synergy of Visions and Interests: Latvia's Perspectives in 16+1 and Belt and Road Initiatives. *Croatian International Relations Review*, 23(78), 37-56.
- Stone, Randall, Yu Wang, and Shu Yu. 2017. The Rise of China’s Multinationals. Unpublished Manuscript.
- Tang, Jitao and Rosanne Altshuler. 2015. The Spillover Effects of Outward Foreign Direct Investment on Home Countries: Evidence from the United States. Unpublished Manuscript.
- Timofeev, I.; Y. Lissovolik and L. Filippova. 2017. Russia's Vision of the Belt and Road Initiative: From the Rivalry of the Great Powers to Forging a New Cooperation Model in Eurasia. *China & World Economy*, 25(5), 62-77.
- Vangeli, A. 2017. China's Engagement with the Sixteen Countries of Central, East and Southeast Europe under the Belt and Road Initiative. *China & World Economy*, 25(5), 101-24.
- Witt, Michael A and Arie Y Lewin. 2007. Outward Foreign Direct Investment as Escape Response to Home Country Institutional Constraints. *Journal of International Business Studies*, 38(4), 579-94.
- Yu, H. 2017. Motivation Behind China's "One Belt, One Road" Initiatives and Establishment of the Asian Infrastructure Investment Bank. *Journal of Contemporary China*, 26(105), 353-68.

Figure 1: China's FDI inflow and outward FDI



Note: The data are obtained from UNCTAD (2017). The blue line is for China's FDI inflow (in millions of USD), while the red line is for China's FDI outward flow (in millions of USD). The period after the announcement of the Belt and Road initiatives is highlighted by the grey shade.

Figure 2: OFDI deals and volume

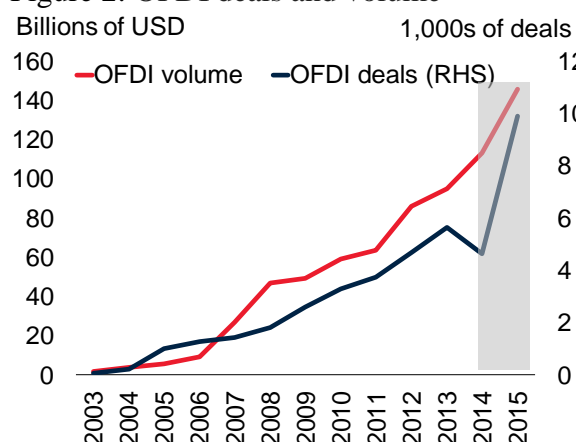
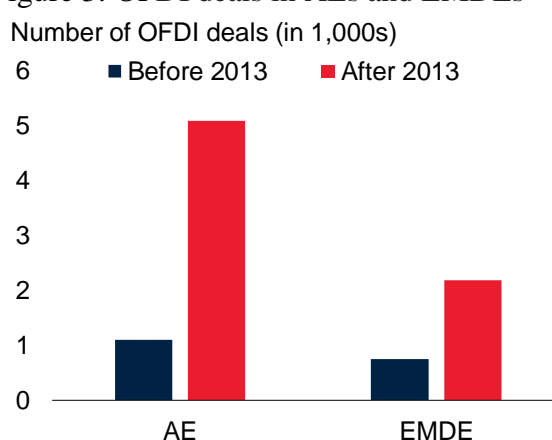


Figure 3: OFDI deals in AEs and EMDEs



Note: In Figure 2, the period after the announcement of the Belt and Road initiatives (BRI) is highlighted by the grey shade. The red line shows the annual number of OFDI deals on the right-hand side (in thousands of deals), while the blue line shows the annual volume of OFDI (in billions of USD) on the left-hand side. Figure 3 shows the number of OFDI deals (in 1,000s) received by advanced economies (AE) and emerging markets and developing economies (EMDE) before and after the BRI is launched. "Before 2013" includes 2013.

Figure 4: ODI deals and BRF participants

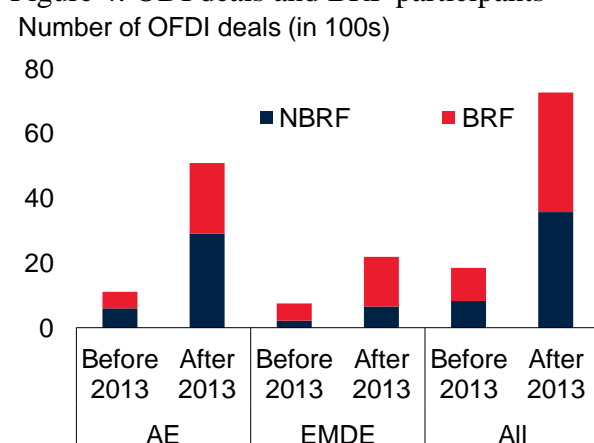
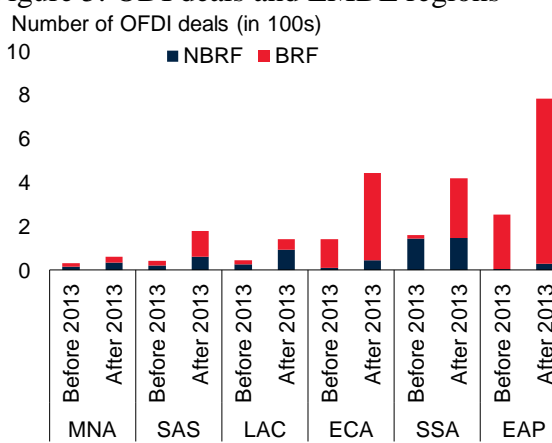


Figure 5: ODI deals and EMDE regions



Notes: Figures 4 and 5 show the average annual number of OFDI deals (in 100 s) received by each country group. Countries that participated in the Belt and Road Forum (BRF) are shown in red while the others that did not participate in the BRF (NBRF) are shown in blue. "AE" stands for advanced economies while "EMDE" stands for emerging markets and developing economies. "MNA"="Middle East and North Africa", "SAS"="South Asia", "LAC"="Latin America and Caribbean", "ECA"="Europe and Central Asia", "SSA"="Sub-Saharan Africa", "EAP"="East Asia and Pacific". See the Annex of Global Economic Prospects (2018) for detailed country group classification. "Before 2013" includes 2013.

Figure 6: Top recipient countries (in percent of GDP)

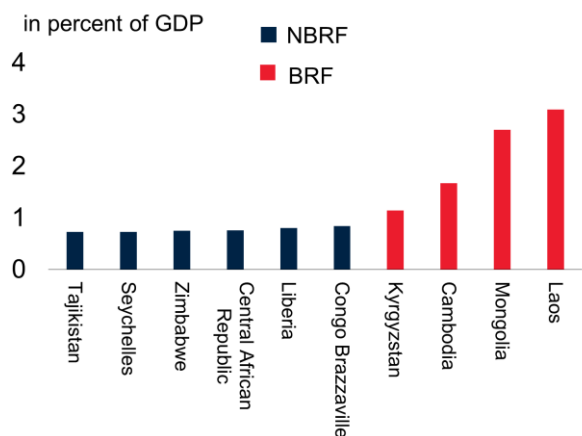
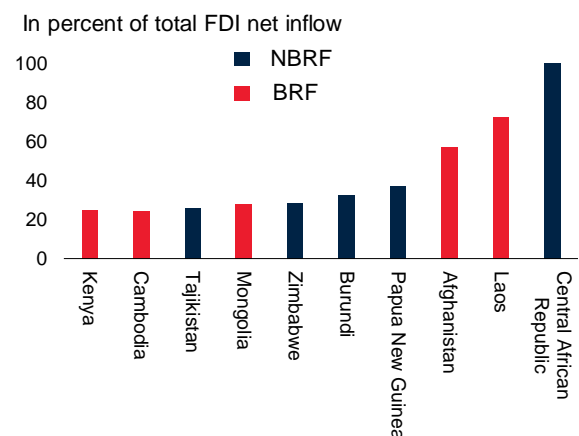


Figure 7: Top recipient countries (in percent of total FDI net inflow)



Notes: Figures 6 and 7 show the annual OFDI received by a country in percent of GDP (or total FDI net inflow) averaged over the sample period. Bars in red are countries that participated in the Belt and Road Forum (BRF), while bars in blue show countries that are not BRF participants (NBRF).

Figure 8: Sectoral distribution of OFDI deals over 2000-2015

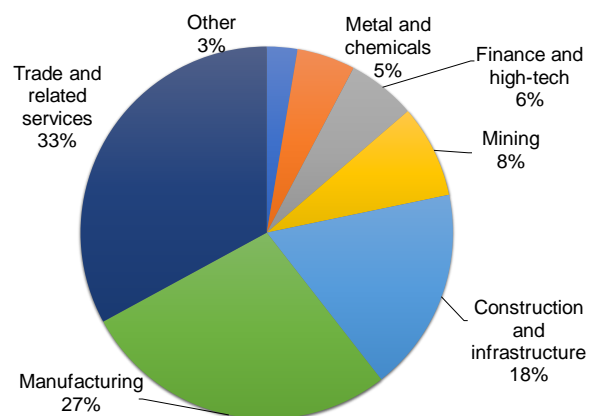
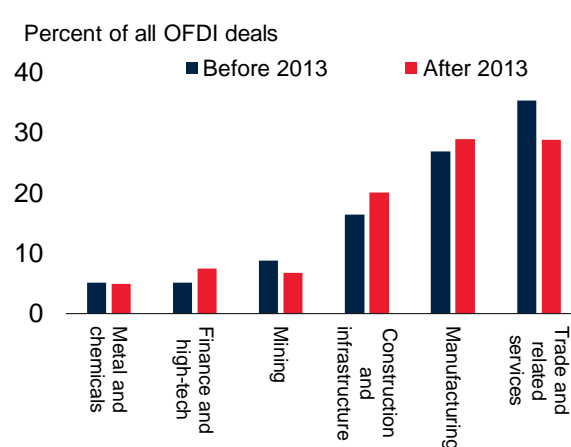
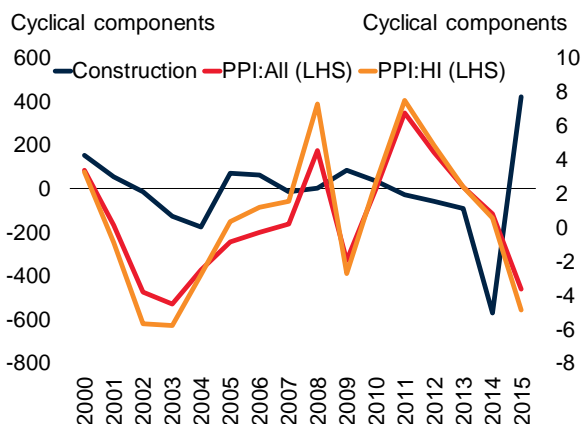


Figure 9: Changes in the sectoral distribution of OFDI deals before and after the BRI



Notes: Information on the sectoral distribution of OFDI deals are obtained from MOFCOM.. “Before 2013” includes 2013.

Figure 10: OFDI deals and overcapacity: evidence from the construction and infrastructure sector



Note: The cyclical component of the number of ODI deals in the construction and infrastructure sector is in blue and shown on the right-hand side (RHS). The cyclical components of PPI: ALL (all industries) and PPI: HI (Heavy industries) are in red and yellow, respectively and are shown on the left-hand side (LHS). An HP filter with a smoothing parameter set to 100 is applied here.

Table 1: The Effect of the Belt and Road Initiative (BRI) on OFDI deals

	[1] Pooled	[2] Pooled	[3] Tobit	[4] GMM	[5] Pooled	[6] Tobit	[7] GMM
$\text{Ln}(\text{GDP})_{t-1}$	0.51*** (0.07)	0.51*** (0.08)	1.36*** (0.12)	3.36*** (1.02)	0.51*** (0.08)	1.33*** (0.12)	3.12*** (0.99)
$\text{Ln}(\text{GDPpc})_{t-1}$	-0.11 (0.12)	-0.17 (0.11)	0.65*** (0.14)	-2.60** (1.07)	-0.19* (0.11)	0.64*** (0.13)	-2.36** (1.05)
$\text{Ln}(\text{Trade})_{t-1}$	0.02* (0.01)	0.02* (0.01)	0.03*** (0.00)	0.00 (0.01)	0.02* (0.01)	0.03*** (0.00)	0.00 (0.01)
Energy_{t-1}	0.01 (0.00)	0.01* (0.00)	0.02*** (0.01)	-0.00 (0.01)	0.01** (0.00)	0.03*** (0.01)	-0.00 (0.01)
$\text{Bureaucratic quality}_{t-1}$	-0.20*** (0.07)	-0.17** (0.07)	-1.19*** (0.14)	-0.35** (0.16)	-0.17** (0.07)	-1.18*** (0.14)	-0.37** (0.16)
$\text{Law and order}_{t-1}$	-0.06 (0.04)	-0.03 (0.03)	-0.34*** (0.07)	-0.02 (0.09)	-0.03 (0.03)	-0.34*** (0.07)	-0.01 (0.10)
Corruption_{t-1}	0.04 (0.07)	0.04 (0.07)	0.00 (0.05)	0.17*** (0.06)	0.04 (0.07)	-0.00 (0.05)	0.17*** (0.06)
$\text{Investment profile}_{t-1}$	-0.03 (0.04)	-0.00 (0.04)	0.02 (0.02)	0.02 (0.02)	0.00 (0.04)	0.02 (0.02)	0.02 (0.02)
BRI		0.86*** (0.28)	0.25*** (0.07)	0.26** (0.11)			
Ppl's Daily on the BRI					0.21*** (0.05)	0.08*** (0.02)	0.07*** (0.02)
$\text{Ln}(\#\text{OFDI}+1)_{t-1}$				-0.01 (0.10)			-0.01 (0.10)
Observations	2,058	2,058	2,058	1,934	2,058	2,058	1,934
Number of ctry_id	132	132	132	132	132	132	132
Adj. R-sq	0.37	0.41			0.42		

Note: The dependent variable is $\ln(\text{number of OFDI deals}+1)$. The same log transformation is done for “Ppl’s Daily on BRI”, which captures the number of articles with BRI in their titles. Robust standard errors in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Pooled: pooled data regressions controlling for both cross-section correlation and AR(1) autocorrelation in the error term. Tobit: censored panel data Tobit regression. GMM: dynamic panel data regressions controlling for lagged dependent variable, weak exogeneity, and autocorrelation.

Table 2: Belt and Road Forum (BRF) participants receive more OFDI deals

	[1] ALL	[2] NOFC	[3] AE	[4] EMDE	[5] ALL	[6] NOFC	[7] AE	[8] EMDE
Ln(GDP) _{t-1}	0.51*** (0.07)	0.53*** (0.08)	0.56*** (0.09)	0.46*** (0.07)	0.46*** (0.06)	0.50*** (0.07)	0.54*** (0.10)	0.41*** (0.06)
Ln(GDPpc) _{t-1}	-0.17 (0.11)	-0.23* (0.12)	0.76*** (0.30)	-0.14 (0.09)	-0.14 (0.10)	-0.21* (0.11)	0.53* (0.29)	-0.12 (0.08)
Ln(Trade) _{t-1}	0.02* (0.01)	0.02 (0.01)	0.05* (0.03)	0.01 (0.01)	0.02* (0.01)	0.02 (0.01)	0.06* (0.03)	0.01 (0.01)
Energy _{t-1}	0.01** (0.00)	0.01* (0.00)	-0.19*** (0.04)	0.01* (0.00)	0.01* (0.00)	0.01* (0.00)	-0.18*** (0.04)	0.01* (0.00)
Bur quality _{t-1}	-0.17** (0.07)	-0.17** (0.07)	-0.66*** (0.16)	-0.08 (0.07)	-0.18*** (0.07)	-0.17** (0.07)	-0.58*** (0.17)	-0.10 (0.06)
Law and order _{t-1}	-0.04 (0.03)	-0.01 (0.04)	-0.19*** (0.06)	0.02 (0.03)	-0.06** (0.03)	-0.04 (0.03)	-0.22*** (0.08)	-0.02 (0.03)
Corruption _{t-1}	0.05 (0.07)	0.01 (0.06)	0.26*** (0.06)	-0.04 (0.09)	0.05 (0.07)	0.04 (0.07)	0.20*** (0.06)	-0.04 (0.09)
Invest profile _{t-1}	-0.00 (0.04)	-0.03 (0.04)	0.12* (0.06)	-0.04 (0.04)	0.00 (0.04)	-0.03 (0.04)	0.12* (0.07)	-0.03 (0.04)
BRI	0.88*** (0.28)	0.90*** (0.30)	1.07*** (0.34)	0.66*** (0.23)	0.64*** (0.22)	0.65*** (0.22)	0.64** (0.28)	0.58*** (0.20)
BRC	0.03 (0.05)	-0.05 (0.05)	0.68*** (0.12)	0.02 (0.08)				
BRC*BRI	-0.05 (0.05)	-0.07 (0.04)	-0.77*** (0.20)	0.20** (0.10)				
BRF					0.21* (0.11)	0.16 (0.10)	-0.10 (0.08)	0.23** (0.11)
BRF*BRI					0.60*** (0.21)	0.59*** (0.21)	0.67*** (0.23)	0.54*** (0.20)
Observations	2,058	1,793	554	1,489	2,058	1,793	554	1,489
Number of ctry_id	132	115	35	96	132	115	35	96
Adj. R-sq	0.41	0.44	0.55	0.39	0.42	0.45	0.54	0.40

Note: the table reports regression results from pooled data regressions controlling for both cross-section correlation and AR(1) autocorrelation in the error term. The dependent variable is ln(number of OFDI deals+1). The same log transformation is done for “People’s Daily on BRI”, which captures the number of articles with BRI in their titles. Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1. Special territories of China and offshore financial centres (OFCs) are excluded in Columns [2] and [6].

Table 3: China's domestic push factors

	[1]	[2]	[3]	[4]	[5]	[6]
$\ln(\text{GDP})_{t-1}$	0.51*** (0.08)	0.54*** (0.07)	0.51*** (0.08)	0.65*** (0.02)	0.48*** (0.08)	0.48*** (0.08)
$\ln(\text{GDPpc})_{t-1}$	-0.18* (0.10)	-0.22* (0.12)	-0.17 (0.11)	-0.51*** (0.03)	-0.38*** (0.08)	-0.39*** (0.08)
$\ln(\text{Trade})_{t-1}$	0.01 (0.01)	-0.00 (0.00)	0.02* (0.01)	0.00 (0.00)	0.01 (0.00)	0.01*** (0.01)
Energy_{t-1}	0.01** (0.00)	0.00 (0.00)	0.01* (0.00)	0.02*** (0.00)	0.01*** (0.00)	0.01*** (0.00)
$\text{Bureaucratic quality}_{t-1}$	-0.15*** (0.06)	-0.12 (0.08)	-0.17** (0.07)	0.02 (0.03)	0.01 (0.03)	0.00 (0.02)
$\text{Law and order}_{t-1}$	-0.02 (0.02)	-0.00 (0.04)	-0.03 (0.04)	0.07*** (0.02)	0.06*** (0.02)	0.05*** (0.02)
Corruption_{t-1}	0.09* (0.05)	0.05 (0.08)	0.04 (0.05)	0.19*** (0.05)	0.11** (0.05)	0.06 (0.05)
$\text{Investment profile}_{t-1}$	-0.02 (0.03)	0.01 (0.04)	-0.00 (0.03)	-0.02 (0.02)	0.00 (0.02)	0.03 (0.02)
BRI	1.04*** (0.36)	0.57* (0.30)	0.86* (0.47)	0.40* (0.21)	0.18 (0.18)	0.08 (0.16)
Capacity utilization	0.08* (0.05)					
Export growth		-0.02 (0.01)				
GDP growth			0.00 (0.08)			
Borrowing rate				0.02 (0.05)		
Capital control					-0.26*** (0.02)	
Outlook of RMB						-0.79*** (0.09)
Obs	2,058	2,058	1,934	2,058	1,157	2,058
Number of ctry	132	132	132	132	132	132
Adj. R-sq	0.41	0.42	0.43	0.41	0.49	0.56

Note: the table reports regression results from pooled data regressions controlling for both cross-section correlation and AR(1) autocorrelation in the error term. The dependent variable is $\ln(\text{number of OFDI deals}+1)$. Robust standard errors in parentheses. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$. “Capacity utilization” is demeaned data for percentage of equipment utilization; “Capital control” is a de jure measurement for the Chinese government’s control of outward FDI (Chen and Qian, 2016); “Outlook of RMB” shows the expectation of the RMB exchange rate, measured as RMB/USD.

Table 4: China's domestic push factors and the BRI

	[1]	[2]	[3]	[4]	[5]	[6]
Ln(GDP) _{t-1}	0.50*** (0.08)	0.54*** (0.07)	0.51*** (0.08)	0.65*** (0.02)	0.48*** (0.08)	0.48*** (0.08)
Ln(GDPpc) _{t-1}	-0.18* (0.10)	-0.22* (0.12)	-0.17 (0.11)	-0.51*** (0.03)	-0.38*** (0.08)	-0.39*** (0.08)
Ln(Trade) _{t-1}	0.01 (0.01)	-0.00 (0.00)	0.02* (0.01)	0.00 (0.00)	0.01 (0.00)	0.01*** (0.01)
Energy _{t-1}	0.01** (0.00)	0.01 (0.00)	0.01* (0.00)	0.02*** (0.00)	0.01*** (0.00)	0.01*** (0.00)
Bureaucratic quality _{t-1}	-0.15*** (0.06)	-0.12 (0.08)	-0.17** (0.07)	0.03 (0.03)	0.01 (0.03)	0.01 (0.02)
Law and order _{t-1}	-0.02 (0.02)	-0.00 (0.04)	-0.03 (0.04)	0.07*** (0.02)	0.06*** (0.02)	0.05*** (0.02)
Corruption _{t-1}	0.09* (0.05)	0.05 (0.08)	0.04 (0.05)	0.19*** (0.05)	0.11** (0.05)	0.06 (0.05)
Investment profile _{t-1}	-0.03 (0.03)	0.01 (0.04)	-0.01 (0.03)	-0.02 (0.02)	0.00 (0.02)	0.03 (0.02)
BRI	14.31*** (1.86)	0.65** (0.28)	10.37*** (0.96)	2.71*** (0.19)	0.00 (0.00)	-35.13*** (0.56)
Capacity utilization	0.09** (0.04)					
Cap util*BRI	-0.34*** (0.04)					
Export growth		-0.01 (0.01)				
Export growth*BRI		-0.04*** (0.01)				
GDP growth in CHN			0.00 (0.08)			
GDP growth*BRI			-1.34*** (0.08)			
Borrowing rate				0.06 (0.06)		
Borrowing rate*BRI				-0.53*** (0.06)		
Capital control					-0.26*** (0.02)	
Capital control*BRI					-0.02 (0.02)	
Outlook of RMB						-0.79*** (0.09)
Outlook of RMB*BRI						5.67*** (0.09)
Obs	2,058	1,934	2,058	1,157	2,058	2,058
Number of ctry	132	132	132	132	132	132
Adj. R-sq	0.43	0.43	0.41	0.50	0.56	0.55

Note: the table reports regression results from pooled data regressions controlling for both cross-section correlation and AR(1) autocorrelation in the error term. The dependent variable is ln(number of OFDI deals+1). Robust S.E. in parentheses. *** p<0.01, ** p<0.05, * p<0.1. "Capacity utilization" is demeaned data for percentage of equipment utilization; "Capital control" is a de jure measurement for the Chinese government's control of outward FDI (Chen and Qian, 2016); "Outlook of RMB" shows the expectation of the RMB exchange rate, measured as RMB/USD.

Table 5: Different sets of countries participating in the BRI

	[1]	[2]	[3]	[4]
Ln(GDP) _{t-1}	0.51*** (0.08)	0.51*** (0.08)	0.49*** (0.07)	0.48*** (0.07)
Ln(GDPpc) _{t-1}	-0.17 (0.11)	-0.18 (0.11)	-0.16 (0.11)	-0.17 (0.11)
Ln(Trade) _{t-1}	0.02* (0.01)	0.02* (0.01)	0.02* (0.01)	0.02* (0.01)
Energy _{t-1}	0.01** (0.00)	0.01* (0.00)	0.01 (0.00)	0.01 (0.00)
Bureaucratic quality _{t-1}	-0.17** (0.07)	-0.17** (0.07)	-0.19*** (0.07)	-0.19*** (0.07)
Law and order _{t-1}	-0.03 (0.03)	-0.03 (0.04)	-0.05* (0.03)	-0.07** (0.03)
Corruption _{t-1}	0.03 (0.07)	0.06 (0.07)	0.03 (0.07)	0.09 (0.08)
Investment profile _{t-1}	-0.00 (0.04)	-0.00 (0.04)	-0.00 (0.04)	-0.00 (0.04)
BRI	0.92*** (0.29)	0.75*** (0.26)	0.66*** (0.23)	0.72*** (0.25)
Fung(on)	-0.03 (0.05)			
Fung(on)*BRI	-0.15*** (0.05)			
Fung(in)		-0.19*** (0.07)		
Fung(in)*BRI		0.35*** (0.09)		
AIIB			0.16* (0.08)	
AIIB*BRI			0.50*** (0.16)	
RBC wiki				0.30*** (0.09)
RBC wiki*BRI				0.37*** (0.12)
Obs	2,058	2,058	2,058	2,058
Number of ctry	132	132	132	132
Adj. R-sq	0.41	0.41	0.41	0.41

Note: the table reports regression results from pooled data regressions controlling for both cross-section correlation and AR(1) autocorrelation in the error term. The dependent variable is ln(number of OFDI deals+1). Robust S.E. in parentheses. *** p<0.01, ** p<0.05, * p<0.1, . See Appendix Table A1 for the various list of countries.

Table 6: The BRI and OFDI volume

	[1] All	[2] NOFC	[3] ALL	[4] NOFC	[5] AE	[6] EMDE	[7] ALL	[8] NOFC	[9] AE	[10] EMDE
Ln(GDP) _{t-1}	0.04*** (0.01)	0.04*** (0.01)	0.04*** (0.01)	0.04*** (0.01)	0.04*** (0.01)	0.03*** (0.01)	0.04*** (0.01)	0.04*** (0.01)	0.06*** (0.02)	0.02*** (0.01)
Ln(GDPpc) _{t-1}	0.00 (0.01)	-0.01 (0.01)	0.00 (0.01)	-0.01 (0.01)	0.20*** (0.06)	-0.00 (0.01)	0.00 (0.01)	-0.01 (0.01)	0.17*** (0.05)	0.00 (0.01)
Ln(Trade) _{t-1}	0.00*** (0.00)	0.00 (0.00)	0.00*** (0.00)	0.00 (0.00)	0.01 (0.01)	0.00 (0.00)	0.00*** (0.00)	0.00 (0.00)	0.01 (0.01)	0.00 (0.00)
Energy _{t-1}	-0.00 (0.00)	0.00** (0.00)	-0.00 (0.00)	0.00** (0.00)	-0.04*** (0.01)	0.00** (0.00)	-0.00 (0.00)	0.00** (0.00)	-0.05*** (0.02)	0.00** (0.00)
Bureaucratic quality _{t-1}	-0.03*** (0.00)	-0.00 (0.01)	-0.03*** (0.00)	-0.00 (0.01)	-0.28*** (0.05)	-0.01*** (0.00)	-0.03*** (0.00)	-0.00 (0.01)	-0.27*** (0.06)	-0.01*** (0.00)
Law and order _{t-1}	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.02 (0.02)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.04 (0.02)	-0.00* (0.00)
Corruption _{t-1}	0.03*** (0.01)	0.01** (0.00)	0.03*** (0.01)	0.01** (0.00)	0.08*** (0.02)	-0.00 (0.00)	0.03*** (0.01)	0.01*** (0.00)	0.08*** (0.02)	-0.00 (0.00)
Investment profile _{t-1}	0.01 (0.01)	-0.00 (0.00)	0.01 (0.01)	-0.00 (0.00)	0.07* (0.03)	-0.01 (0.01)	0.01 (0.01)	-0.00 (0.00)	0.07* (0.03)	-0.01 (0.01)
BRI	0.12*** (0.03)	0.09*** (0.03)	0.13*** (0.03)	0.11*** (0.03)	0.34*** (0.06)	0.02 (0.02)	0.06*** (0.02)	0.04** (0.02)	0.22*** (0.05)	0.01 (0.01)
BRC			-0.03*** (0.01)	-0.02** (0.01)	0.03 (0.05)	0.00 (0.01)				
BRC*BRI			-0.04** (0.02)	-0.03*** (0.01)	-0.22*** (0.06)	0.06*** (0.01)				
BRF							-0.02 (0.01)	0.01 (0.02)	-0.17*** (0.04)	0.02 (0.01)
BRF*BRI							0.13*** (0.02)	0.13*** (0.03)	0.12*** (0.03)	0.11*** (0.02)
Obs	2,058	1,793	2,058	1,793	554	1,489	2,058	1,793	554	1,489
Number of ctry	132	115	132	115	35	96	132	115	35	96
Adj. R-sq	0.10	0.16	0.10	0.17	0.16	0.19	0.10	0.18	0.17	0.21

Note: the table reports regression results from pooled data regressions controlling for both cross-section correlation and AR(1) autocorrelation in the error term. The dependent variable is ln(OFDI volume (in 10⁹ USD)+1). Robust standard errors in parentheses. *** p<0.01, ** p<0.05, * p<0.1, *. Special territories of China and offshore financial centres (OFCs) are excluded in Columns [2], [4], and [8].

Table 7: Central SOEs and BRI

	[1] CSOEs	[2] Others	[3] CSOEs	[4] Others	[5] CSOEs	[6] Others
$\text{Ln}(\text{GDP})_{t-1}$	0.17*** (0.05)	0.50*** (0.08)	0.17*** (0.05)	0.50*** (0.08)	0.17*** (0.04)	0.45*** (0.06)
$\text{Ln}(\text{GDPpc})_{t-1}$	0.00 (0.04)	-0.22* (0.11)	-0.00 (0.04)	-0.22* (0.11)	0.01 (0.04)	-0.19* (0.10)
$\text{Ln}(\text{Trade})_{t-1}$	0.01 (0.00)	0.02* (0.01)	0.01 (0.00)	0.02* (0.01)	0.01 (0.00)	0.02* (0.01)
Energy_{t-1}	0.00 (0.00)	0.01* (0.00)	0.00 (0.00)	0.01* (0.00)	0.00 (0.00)	0.01* (0.00)
$\text{Bureaucratic quality}_{t-1}$	-0.14*** (0.03)	-0.13* (0.07)	-0.14*** (0.03)	-0.13* (0.07)	-0.14*** (0.03)	-0.14** (0.07)
$\text{Law and order}_{t-1}$	-0.05*** (0.02)	-0.01 (0.03)	-0.04*** (0.02)	-0.02 (0.03)	-0.05*** (0.02)	-0.04 (0.03)
Corruption_{t-1}	0.02 (0.03)	0.06 (0.07)	0.02 (0.03)	0.07 (0.07)	0.02 (0.03)	0.07 (0.07)
$\text{Investment profile}_{t-1}$	-0.02 (0.02)	0.01 (0.03)	-0.02 (0.02)	0.01 (0.03)	-0.02 (0.02)	0.02 (0.03)
BRI	0.58*** (0.18)	0.75*** (0.26)	0.54*** (0.16)	0.77*** (0.26)	0.43*** (0.13)	0.50** (0.20)
BRC			-0.02 (0.02)	0.05 (0.05)		
BRC*BRI			0.10** (0.05)	-0.04 (0.04)		
BRF					0.00 (0.04)	0.23** (0.11)
BRF*BRI					0.39*** (0.13)	0.68*** (0.21)
Obs	2,058	2,058	2,058	2,058	2,058	2,058
Number of ctry	132	132	132	132	132	132
Adj. R-sq	0.27	0.40	0.27	0.40	0.28	0.41

Note: the table reports regression results from pooled data regressions controlling for both cross-section correlation and AR(1) autocorrelation in the error term. The dependent variable is $\ln(\text{number of OFDI deals}+1)$. Robust S.E. in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$.

Table 8: OFDI deals from various industry sectors and the BRI

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]
	Constr	Constr	Finance	Finance	Manuf	Manuf	Metal	Metal	Mining	Mining	Trade	Trade
Ln(GDP) _{t-1}	0.25*** (0.06)	0.23*** (0.05)	0.12*** (0.03)	0.12*** (0.03)	0.35*** (0.06)	0.31*** (0.05)	0.14*** (0.03)	0.13*** (0.03)	0.16*** (0.04)	0.15*** (0.04)	0.38*** (0.06)	0.34*** (0.05)
Ln(GDPpc) _{t-1}	-0.07 (0.07)	-0.05 (0.06)	-0.05* (0.02)	-0.05** (0.02)	-0.19** (0.08)	-0.16** (0.07)	-0.08** (0.03)	-0.07** (0.03)	-0.09* (0.05)	-0.08 (0.05)	-0.14** (0.07)	-0.12* (0.06)
Ln(Trade) _{t-1}	0.01 (0.01)	0.01 (0.01)	0.00* (0.00)	0.00* (0.00)	0.02** (0.01)	0.02** (0.01)	0.01*** (0.00)	0.01*** (0.00)	0.01** (0.00)	0.01** (0.00)	0.01* (0.01)	0.01* (0.01)
Energy _{t-1}	0.01*** (0.00)	0.01*** (0.00)	-0.00* (0.00)	-0.00* (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Bureaucratic quality _{t-1}	-0.17*** (0.03)	-0.17*** (0.03)	-0.01 (0.02)	-0.01 (0.02)	-0.06 (0.05)	-0.06 (0.05)	-0.02 (0.02)	-0.02 (0.02)	-0.06** (0.03)	-0.06** (0.03)	-0.10** (0.04)	-0.10** (0.04)
Law and order _{t-1}	-0.02 (0.02)	-0.03 (0.02)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.02)	-0.02 (0.01)	-0.01 (0.01)	-0.02** (0.01)	-0.02** (0.01)	-0.03*** (0.01)	-0.01 (0.02)	-0.03 (0.02)
Corruption _{t-1}	0.02 (0.03)	0.03 (0.03)	0.06*** (0.02)	0.06*** (0.02)	0.05 (0.04)	0.06 (0.04)	0.04*** (0.02)	0.05*** (0.02)	0.05* (0.03)	0.06* (0.03)	0.04 (0.04)	0.05 (0.04)
Investment profile _{t-1}	0.00 (0.02)	0.01 (0.02)	0.02* (0.01)	0.02* (0.01)	0.01 (0.02)	0.01 (0.02)	0.02** (0.01)	0.02** (0.01)	-0.01 (0.02)	-0.01 (0.02)	0.03 (0.02)	0.03* (0.02)
BRI	0.80*** (0.21)	0.57*** (0.16)	0.19** (0.08)	0.08 (0.06)	0.56*** (0.20)	0.33*** (0.12)	0.23*** (0.08)	0.11** (0.05)	0.35*** (0.12)	0.22** (0.09)	0.39*** (0.14)	0.17** (0.08)
BRF		0.06 (0.06)		-0.05** (0.03)		0.14 (0.09)		0.05 (0.04)		0.04 (0.04)		0.16** (0.07)
BRF*BRI		0.62*** (0.15)		0.28*** (0.06)		0.64*** (0.24)		0.34*** (0.08)		0.37*** (0.11)		0.58*** (0.17)
Obs	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058	2,058
Number of ctry	132	132	132	132	132	132	132	132	132	132	132	132
Adj. R-sq	0.28	0.29	0.21	0.22	0.35	0.37	0.22	0.23	0.17	0.17	0.39	0.40

Note: the table reports regression results from pooled data regressions controlling for both cross-section correlation and AR(1) autocorrelation in the error term. The dependent variable is ln(number of OFDI deals+1). Robust S.E. in parentheses. *** p<0.01, ** p<0.05, * p<0. Year dummies are included. Xtreg FE is used here. See Table A1 for list of countries that participated in BR forum. Investment deals that cannot be grouped into industries that are listed above have been classified as “Other” and dropped. The results from “Other” are in line with the main results shown in Table 8 and will be provided upon request.

Table 9: OFDI deals, China's rebalancing, and the BRI

	[1] Construction	[2] Finance	[3] Manufacture	[4] Metal	[5] Mining	[6] Trade
Ln(GDP) _{t-1}	0.25*** (0.06)	0.12*** (0.03)	0.35*** (0.06)	0.14*** (0.03)	0.16*** (0.04)	0.38*** (0.06)
Ln(GDPpc) _{t-1}	-0.07 (0.07)	-0.05* (0.03)	-0.19** (0.08)	-0.08** (0.03)	-0.09* (0.05)	-0.14** (0.07)
Ln(Trade) _{t-1}	0.01 (0.01)	0.00* (0.00)	0.02*** (0.01)	0.01*** (0.00)	0.01** (0.00)	0.01* (0.01)
Energy _{t-1}	0.01*** (0.00)	-0.00* (0.00)	0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)
Bureaucratic quality _{t-1}	-0.17*** (0.03)	-0.01 (0.02)	-0.06 (0.05)	-0.02 (0.02)	-0.06** (0.03)	-0.10** (0.04)
Law and order _{t-1}	-0.02 (0.02)	-0.00 (0.01)	-0.00 (0.02)	-0.01 (0.01)	-0.02** (0.01)	-0.01 (0.02)
Corruption _{t-1}	0.01 (0.03)	0.06*** (0.02)	0.05 (0.04)	0.04*** (0.01)	0.05* (0.03)	0.04 (0.03)
Investment profile _{t-1}	0.01 (0.02)	0.02* (0.01)	0.01 (0.02)	0.02** (0.01)	-0.01 (0.02)	0.03* (0.02)
BRI	0.32* (0.18)	-0.03 (0.06)	-0.04 (0.15)	0.06 (0.06)	0.06 (0.11)	0.15 (0.14)
Infl(PPI)	-0.02 (0.03)	-0.00 (0.01)	-0.00 (0.02)	-0.00 (0.01)	-0.01 (0.02)	0.00 (0.02)
Infl(PPI)*BRI	-0.11*** (0.03)	-0.05*** (0.01)	-0.17*** (0.02)	-0.04*** (0.01)	-0.08*** (0.02)	-0.07*** (0.02)
Obs	2,058	2,058	2,058	2,058	2,058	2,058
Number of ctry	132	132	132	132	132	132
Adj. R-sq	0.52	0.22	0.43	0.22	0.32	0.41

Note: the table reports regression results from pooled data regressions controlling for both cross-section correlation and AR(1) autocorrelation in the error term. The dependent variable is $\ln(\text{number of OFDI deals}+1)$. Robust S.E. in parentheses. *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Year dummies are included. Xtreg FE is used here. Investment deals that cannot be grouped into industries that are listed above have been classified as “Other” and dropped. The results from “Other” are in line with the results shown in Columns [2], [4], and [5], Table 8. Detailed results will be provided upon request. BRI was omitted by stata due to collinearity with year dummies.

Appendix Table A1. Alternative lists of countries on the BRI

BRF	BRC	Fung (on)	Fung (in)	AIIB	BRC wiki
https://thediplomat.com/2017/05/belt-and-road-attendees-list/	https://eng.yidaiyilu.gov.cn/info/iList.jsp?cat_id=10076	https://www.fbicgroup.com/sites/default/files/B%26R_Initiative_65_Countries_and_Beyond.pdf		https://www.aiib.org/en/news-events/news/2016/annual-report/.content/download/Annual_Report_2016_Linkage.pdf	https://en.wikipedia.org/wiki/One_Belt_One_Road_Initiative
The links above are accessed on the following dates					
8-Oct-17	15-Oct-17	8-Oct-17	8-Oct-17	15-Oct-17	8-Oct-17
Afghanistan	Afghanistan	Afghanistan	Algeria	Australia	Armenia
Argentina	Albania	Albania	Argentina	Austria	Austria
Australia	Armenia	Armenia	Australia	Azerbaijan	Azerbaijan
Azerbaijan	Azerbaijan	Azerbaijan	Austria	Bangladesh	Bahrain
Bangladesh	Bahrain	Bahrain	Belgium	Brazil	Bangladesh
Belarus	Bangladesh	Bangladesh	Brazil	Brunei	Belarus
Brazil	Belarus	Belarus	Burundi	Cambodia	Brunei
Cambodia	Bosnia and Herzegovina	Bosnia and Herzegovina	Comoros	Denmark	Cambodia
Chile	Brunei	Brunei	Cyprus	Egypt	Cyprus
Czech Republic	Bulgaria	Bulgaria	Denmark	Finland	Djibouti
Egypt	Cambodia	Cambodia	Djibouti	France	Egypt
Ethiopia	Croatia	Croatia	Ethiopia	Georgia	Georgia
Fiji	Czech Republic	Czech Republic	Finland	Germany	Germany
Finland	East Timor	East Timor	France	Iceland	Greece
France	Egypt	Egypt	Germany	India	Hong Kong, China
Germany	Estonia	Estonia	Greece	Indonesia	Hungary
Greece	Ethiopia	Georgia	Guinea	Iran	India
Hungary	Georgia	Hungary	Iceland	Israel	Indonesia
Indonesia	Hungary	India	Italy	Italy	Iran
Iran	India	Indonesia	Kenya	Jordan	Israel
Italy	Indonesia	Iran	Korea South	Kazakhstan	Italy
Japan	Iran	Iraq	Luxembourg	Korea South	Kazakhstan
Kazakhstan	Iraq	Israel	Madagascar	Kuwait	Kenya
Kenya	Israel	Jordan	Malta	Kyrgyzstan	Kuwait
Korea North	Jordan	Kazakhstan	Mauritania	Laos	Kyrgyzstan
Korea South	Kazakhstan	Kuwait	Morocco	Luxembourg	Macao, China
Kuwait	Korea South	Kyrgyzstan	Mozambique	Malaysia	Malaysia
Kyrgyzstan	Kuwait	Laos	Netherlands	Maldives	Malta
Laos	Kyrgyzstan	Latvia	New Zealand	Malta	Moldova
Malaysia	Laos	Lebanon	Norway	Mongolia	Mongolia
Maldives	Latvia	Lithuania	Peru	Myanmar (Burma)	Myanmar (Burma)
Mongolia	Lebanon	Macedonia	Portugal	Nepal	Nepal
Myanmar (Burma)	Lithuania	Malaysia	Rwanda	Netherlands	Netherlands
Nepal	Macedonia	Maldives	Seychelles	New Zealand	Oman
New Zealand	Malaysia	Moldova	Somalia	Norway	Pakistan
Pakistan	Maldives	Mongolia	South Africa	Oman	Philippines

Philippines	Moldova	Myanmar (Burma)	South Sudan	Pakistan	Poland
Poland	Mongolia	Nepal	Spain	Philippines	Qatar
Romania	Myanmar (Burma)	Oman	Sudan	Poland	Romania
Russia	Nepal	Pakistan	Sweden	Portugal	Russia
Saudi Arabia	New Zealand	Philippines	Switzerland	Qatar	Saudi Arabia
Serbia	Oman	Poland	Tanzania	Russia	Serbia
Singapore	Pakistan	Qatar	Tunisia	Saudi Arabia	Singapore
Spain	Philippines	Romania	Uganda	Singapore	Sri Lanka
Sri Lanka	Poland	Russia	United Kingdom	South Africa	Sudan
Switzerland	Qatar	Saudi Arabia	Zambia	Spain	Switzerland
Syria	Romania	Serbia	Zimbabwe	Sri Lanka	Tajikistan
Thailand	Russia	Singapore		Sweden	Thailand
Tunisia	Saudi Arabia	Slovakia		Switzerland	Turkey
Turkey	Serbia	Slovenia		Tajikistan	UAE
UAE	Singapore	Sri Lanka		Thailand	United Kingdom
Ukraine	Slovakia	Syria		Turkey	Uzbekistan
United Kingdom	Slovenia	Tajikistan		UAE	Vietnam
United States	South Africa	Thailand		United Kingdom	
Uzbekistan	Sri Lanka	Turkey		Uzbekistan	
Vietnam	Syria	Turkmenistan		Vietnam	
	Tajikistan	UAE			
	Thailand	Ukraine			
	Turkey	Uzbekistan			
	Turkmenistan	Vietnam			
	UAE	Yemen			
	Ukraine				
	Uzbekistan				
	Vietnam				
	Yemen				

Appendix Table A2 Offshore Financial Centres and Special Territories of PRC

Offshore Financial Centres (OFCs)					
Antigua and Barbuda	Bahrain	Barbados	Belize	Bermuda	Botswana
British Virgin Islands	Brunei	Cayman Islands	Cook Islands	Costa Rica	Cyprus
Grenada	Hong Kong, China	Ireland	Lebanon	Lithuania	Luxembourg
Macao, China	Malaysia	Malta	Marshall Islands	Monaco	Panama
Samoa	Seychelles	Singapore	Switzerland	UAE	Uruguay
Vanuatu					
Special Territories of PRC					
Hong Kong, China	Macao, China	Taiwan, China			

Note: A country is classified as an offshore financial centre (OFC) if it is jointly defined as an OFC by the IMF, the OECD and the Financial Secrecy Index (managed by the Tax Justice Network).

Appendix Table A3 List of variables

Data	Description	Source
Ln(GDP)	The host country's GDP in current USD (in logs).	WDI
Ln(GDPpc)	The host country's GDP per capita in current USD (in logs).	WDI
Ln(Trade)	The host country's commodity trade volume with China in USD (normalized by the host country's population and logged).	UN Comtrade
Energy	The host country's energy output (including crude oil, natural gas and coal output) in percent of its gross national income (GNI).	WDI
Bureaucratic quality	The proxy assesses the host country's bureaucratic quality. It ranges from 1 to 4, with a higher value suggesting a better bureaucratic system.	ICRG
Law and order	The proxy assesses a country's level of law and order. It ranges from 1 to 6, with a higher value suggesting a better legal system.	ICRG
Corruption	The proxy assesses the level of corruption within the policies system. It ranges from 1 to 6, with a higher value suggesting a low level of corruption.	ICRG
Investment profile	The proxy assesses the level of risk to investment in the host country. It ranges from 0 to 12, with a low value being associated with a high risk.	ICRG
Belt and Road Initiative (BRI)	A dummy variable that equals one after 2013 and zero otherwise.	https://eng.yidaiyilu.gov.cn/ztindex.htm
People's Daily on the BRI	The number of articles with "the Belt and Road Initiative" in their titles published annually by People's Daily.	People's Daily
Ln(#OFDI+1)	The number of outward foreign direct investment deals (plus one) in natural logarithm.	MOFCOM
BRIC	A dummy variable that equals one if it is listed on the official website of China's "Belt and Road Initiative" and zero otherwise.	https://eng.yidaiyilu.gov.cn/info/iList.jsp?cat_id=10076
BRF	A dummy variable that equals one if the host country sent ministerial level or state heads as delegates to China's Belt and Road Forum held in 2017.	https://thediplomat.com/2017/05/belt-and-road-attendees-list/
Capacity utilization	The ratio of equipment utilization (demeaned).	PBOC
Export growth	China's annual export growth rate.	Haver analytics
GDP growth	China's annual GDP growth rate.	Haver analytics
Borrowing rate	Shibor: 1-Year (%).	Haver analytics
Capital control	A de jure measure on the level of control on outward FDI imposed by the Chinese government. A higher value means stronger control.	Chen and Qian (2016)
Outlook of RMB	The expectation of the RMB exchange rate, measured as RMB/USD (RMB non-deliverable forward rate, monthly averaged over a year)	Haver analytics
Fung(on)	A dummy variable that equals one if the host country is classified as countries on the Belt and Road Initiative by the report released by the FBIC group and zero otherwise.	https://www.fbicgroup.com/sites/default/files/B%26R_Initiative_65_Countries_and_Beyond.pdf
Fung(in)	A dummy variable that equals one if the host country is classified as countries not in the Belt and Road Initiative but interested in attending by the report released by the FBIC group and 0 otherwise.	
AIIB	A dummy variable that equals one if the host country is a member of the Asia Infrastructure Investment Bank (AIIB) and zero otherwise.	https://www.aiib.org/en/news-events/news/2016/annual-report/.content/download/Annual_Report_2016_Linkage.pdf
RBC wiki	A dummy variable that equals one if the host country is identified as being in the Belt and Road Initiative by Wikipedia and zero otherwise.	https://en.wikipedia.org/wiki/One_Belt_One_Road_Initiative
Infl(PPI)	The inflation rate of producer price index over all industrial sectors in China (PPI).	Haver analytics