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Which Countries Have Benefited Most from China's Belt and Road Initiative?

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Abstract

We analyze project-level data on China's outbound FDI and construction projects throughout the world during the period 2010-2017 in order to investigate how the Belt and Road Initiative (BRI) has altered the determinants of Chinese investment flows to different countries. We find that the BRI has led to a large increase in China's outbound FDI in BRI countries compared to non-BRI countries, especially for greenfield FDI projects and in the energy sector. The importance of economic fundamentals in allocating Chinese investment to different countries has declined substantially under the BRI, raising concerns that the expected returns to such investments has declined. The importance of governance quality in explaining China's outbound FDI increased significantly under the BRI, dispelling concerns that under the BRI China targets investments toward corrupt, poorly governed countries.

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1 Introduction

China's Belt and Road Initiative (hereafter, BRI) is a major initiative to increase connectivity with China in 2013 for the deeper connection and cooperation with the world economy. The national project encourages China's corporations to trade and invest abroad via economic corridors along the historical inland and maritime trade routes. Such economic corridor region covers as many as 65 countries across three continents, i.e., Asia, Europe, and Africa. Many countries join the project to attract more China's outward foreign direct investment (OFDI) for local economic prosperity. In this paper, we will estimate the extent to which the BRI could promote China's OFDI and figure out the determinant changes of China's OFDI location choice in terms of host countries' characteristics.

The official bilateral FDI data published by the Ministry of Commercial (MOFCOM) is incomplete due to the missing information on the final destination. About 75% of China's OFDI goes to Hong Kong or tax havens (e.g., British Virgin Islands and the Cayman Islands) with final destination unknown. To track China's actual OFDI flow, we build up an integrated database with two comprehensive datasets, the fDi Market (FM) and the China Global Investment Tracker (CGIT). The integrated database would be more accurate on destinations than the MOFCOM database because both FM and CGIT datasets take advantage of the detailed project-level information to identify the final destination of tax havens. The FM dataset follows as many as possible Greenfield project covered by Financial Times. The CGIT dataset tracks published corporation reports and official documents for both investment and construction transactions with capital amount no less than US$ 100 million. We merged the two datasets because neither of

them covers the full sample of China's OFDI projects. The merging methodology is to match projects in terms of the available information in the datasets as well as online media news. The match of the datasets results in a sample of 5,053 cross-border investment projects with a total value of US$ 1,221 billion from 2010 to 2017.

Based on the integrated database, we find that the effect of the BRI on China's OFDI is significantly positive. China's OFDI increased by around 50% from US$ 115 billion in 2013, when the BRI was just launched, to US$ 237 billion in 2017. Those countries that participated in the project (hereafter B&R countries for short) received much more investment than others. The simple regression result suggests that the total OFDI influx to B&R countries increases by 91% higher than to non-B&R countries after 2013.

We then examined the determinants of China's OFDI location choice. In particular, we address three questions: what kind of country's characteristics attracts China's OFDI? What's the change of those determinant patterns after the launch of the BRI? Why does the BRI change China's OFDI location choice? We examined the host countries' characteristics by three categories, i.e., governance quality (7 indicators), economic condition (7 indicators), and cultural proximity (1 indicator). Economic determinants have been well discussed with both theoretical models and empirical works in current literature. There is also emerging literature on the role of governance quality and cultural proximity in the location choice of multinational corporations. We use between model to estimate the determinants' effect within periods and country groups. We focus on Greenfield FDI because of its significant impact on the local economy by creating job opportunities and raising total factor productivity. We also compared the Greenfield FDI with

construction transaction, which is another essential part of the BRI to strengthen transportation infrastructure along the Belt and Road corridors.

Our main results are as follows. According to our baseline estimation, we find that China's outward Greenfield FDI would influx to countries with a better economic condition, better governance quality, and closer cultural proximity. When comparing the determinant patterns before and after 2013, we find that China's investors care much more about better governance quality but less about economic conditions and culture proximity after the BRI was launched. We've controlled the B&R country dummies such that the changes reflect within-group effect. The increasing concern with governance quality is mainly driven by political stability, government effectiveness and rule of law. Market demand, measured by GDP per capita, and market potential, measured by GDP per capita growth, have lost their attractiveness to China's investors. We also divide the sample into B&R and non-B&R countries and find that after the launch of BRI, China's investors show stronger preference to better governance quality but weaker preference to better economic condition or closer culture proximity in both B&R and non-B&R countries. The BRI has a more substantial effect on the determinant pattern in nonB&R countries than in B&R countries.

The BRI's effects on location decisions could diversify among different types of OFDI. The Chinese government, aiming to strengthen China's not only economic but also security interests by the BRI, might be inclined to specific kind of OFDI. We first examined whether the performance of Greenfield OFDI in resources sectors is distinguished from that in non-resources sectors. About 47% of China's Greenfield OFDI goes to resources sectors (Energy sector and Mineral & Metal sector) during 2010-2017. Despite the equivalent Greenfield OFDI amount in

resources and non-resources sectors, the determinants for their location decision is entirely different. In resources sectors, few determinants except for culture proximity, market size, voice and accountability, and political stability could affect investors' decision before the launch of the BRI but several determinants, both governance quality and economic condition, become significant after the launch of the BRI. In non-resources sectors, the start of BRI make Greenfield OFDI less rely on economic condition but more on governance quality. Except for Greenfield OFDI, we also examined non-Greenfield OFDI. Non-Greenfield OFDI tends to consider more about both better economic conditions and better governance quality but less about culture proximity. China also spends a massive effort on infrastructure projects. We further examine those construction transactions and find that governance quality is insignificant, but market size, natural resources, and cultural proximity play a crucial role.

The paper is organized as follows. Section 2 reviews the current literature on FDI location decision as well as specific literature on China's outward FDI location decision. Section 3 shows our empirical models. Section 4 introduces our integrated dataset, the variable definitions, and other data sources. Section 5 explains the empirical results. Section 6 concludes.

2 Literature Review

2.1 General FDI Location Decision

There are two kinds of motivation for capital outflow, horizontal FDI and vertical FDI. Horizontal FDI is motivated by seeking more market opportunity in host countries while vertical

FDI is driven by reducing production cost for export (e.g., Markusen 1984; Helpman 1984; Helpman and Krugman 1985). Based on the two kinds of motivation, the literature has examined a series of determinants on FDI.

Among the determinants of horizontal FDI, market size is regarded as a fundamental motivation. Fajgelbaum, Grossman, and Helpman (2015) examine the worldwide bilateral FDI and find that like international trade, FDI is more likely to influx to countries with similar per capita income as the home country. Empirical studies using different country sample also support the positive relationship between market size and FDI (Cheng and Kwan, 2000; Bevan and Estrin, 2004, Asiedu, 2006).

As for vertical FDI, factors affecting product costs are examined in the current empirical literature. To access cheap resources will help multination enterprises reduce their production cost (Hajzler, 2014). However, natural resources could also generate macroeconomic uncertainty and crowd out FDI (Asiedu and Lien, 2004, Gastanaga et al., 1998, Gylfason, 2001, Papyrakis & Gerlagh, 2003, Poelhekke and van der Ploeg, 2010). When the host country is in Africa, the FDI is more likely to resource seeking (Asiedu, 2006). Exchange rate is another factor for consideration because of trade cost reduction. Froot and Stein (1991) confirm that there is a correlation between FDI inflow and local currency depreciation in the United States subject to informational imperfection. Blonigen (1997) explains the link between exchange rate and FDI by a better return of acquiring the local firm-specific asset. Human capital is one of the most critical endowment and should be carefully checked. Noorbakhsh, Paloni, and Youssef (2001) find that local human capital measured by education level has a positive effect on FDI inflow and this effect will increase through time. Lewin, Massini, and Peeters (2009) find the demand for

qualified personnel would force firms to localize their R&D activities abroad. Infrastructure could facilitate commercial activities and reduce operation cost such that induce FDI inflow. Cheng and Kwan (2000) use the density of road, high-grade paved road, and railway to proxy infrastructure and find that good infrastructure would promote the FDI inflow. Asiedu (2002) checks the positive effect of infrastructure which is measured by the number telephones per 1000 population and gross fixed capital formation. Loree and Guisinger (1995) and Asiedu and Lien (2004) also provide evidence on the positive effect of infrastructures on FDI inflow. Financial development recently attracts researchers' interest. Desbordes and Wei (2017) find that both source and destination countries' financial development could promote FDI inflow.

Except for economic factors, institutional and cultural factors are gradually attracting researchers' interest. Generally, poor institutions in host countries would impede the international capital inflow (Benassy-Quere et al., 2007). Antras, Desai, and Foley (2009) examine the effect of financial contract enforcement and investor prosperity protection on cross-border investment of multinational enterprises. They find that weak financial institutions could increase the reliance on FDI from parent firms to satisfy the monitoring requirement of external investors. Javorcik and Wei (2009) found that corruption in host countries reduces inward FDI substantially. Julio and Yook (2017) examines the effect of political stability and finds that the FDI inflow decreases significantly in countries which are before and during the period of election. Culture proximity would attract more FDI. Loree and Guisinger (1995) and Li and Guisinger (1992) find that the closer culture distance will promote bilateral FDI. Both two pieces of research follow Hofstede (1980)'s culture distance definition: index composite of power distance, uncertainty avoidance, individualism, and masculinity/femininity. Siegel, Licht, and Schwartz (2012) also find

egalitarianism distance, a measurement on moral equals, has a negative causal effect on FDI flows.

2.2 China's FDI Location Decision

Due to the significant boost in the recent decade, China's FDI location decision begins to attract researchers' interest. Whether China's FDI is market seeking or resource seeking is the main question in the literature. Determinants of market seeking usually include market size (e.g., GDP and GDP per capita), market potential (GDP growth), market openness, infrastructure, and bilateral trade. Most of the literature agrees on the positive effect of the market seeking on China's FDI location decision (Cheung and Qian, 2009; Buckley, 2007). Resource seeking is often examined by the natural resource variable, e.g., the ratio of resources to the total export amount. Current literature supports a positive relationship between the natural resource and China's FDI (Kolstad and Wiig, 2012; Ramasamy, Yeung, and Laforet, 2012). Except for market and resource seeking, literature also focuses on institutional factors. The institutional factors include political risk, the regulative economic regime on trade freedom, institutional quality, and institutional/political distance. The results on institutional effect are mixed. On the one hand, Kolstad and Wiig (2012) find that poor institution will induce China's FDI. On the other hand, China's investors prefer countries with a more stable political environment (Ramasamy, Yeung, and Laforet, 2012; Buckley et al., 2007). Institutional factors could also have interacted effect with other factors, e.g., natural resources, on FDI (Ramasamy, Yeung, and Laforet, 2012). Even though there has been a large amount of literature on the determinants of China's FDI, most researches focus on the period before 2010. The BRI's effect on China's FDI location decision remains undiscovered.

3 Empirical Models

In this section, we will introduce my empirical strategy to examine the effect of the BRI on the change of China's OFDI with different types and the determinant patterns of China's OFDI in terms of host countries' characteristics.

3.1 The OFDI Amount

To identify the impacts of the BRI, we exploit the first group of B&R country members to implement a simple difference-in-difference regression. The empirical specification used is as follows:

$$Y = \alpha + \alpha\, BR \times Post + \alpha\, Post + trend + \delta + \epsilon \quad (1)$$

where Y is the host country i's stock of China's OFDI at year t. The variable is expressed in logarithmic form. We examined four types of OFDI: Greenfield FDI, Greenfield FDI in resources sectors, Greenfield FDI in non-resources sectors, and non-Greenfield FDI. Except for OFDI, we also checked the country i's construction transaction with China. BR is a dummy variable equal to if country i is in the first group of members joining the BRI in year 2013, otherwise 0. $Post$ is the time operator indicating whether the BRI has been announced or not during year t and is equal to 1 after 2013. We also add a continuous year trend variable $trend$. The coefficient of interest is α , the different impact of BRI on outcomes between B&R and non-B&R countries. The coefficient α reflects the effect of the BRI announcement on nonB&R countries.

3.2 The OFDI Determinant

To examine the effect of each determinant, we construct our model as follows:

$$Y = \beta + \beta\, GDPPG + \beta\, GDPP + \beta\, POP + \beta\, TNRR + \beta\, EXR + \beta\, ESI + \beta\, DIS$$
$$+\beta\, VAE + \beta\, PVE + \beta\, GEE + \beta\, RQE + \beta\, RLE + \beta\, CCE$$

$$+\beta \qquad SCN + \beta \quad BR + \epsilon$$

(2)

where Y is our outcome of interest, China's OFDI. Same with equation (1), we will separately examine the four types of China's OFDI, i.e. Greenfield FDI, Greenfield FDI in resources sectors, Greenfield FDI in non-resources sectors, and non-Greenfield FDI, as well as construction transaction.

The economic factors include $GDPP$ (GDP per capita), POP (population), $GDPPG$ (GDP per capita growth), $TNRR$ (total natural resources rent), EXR (exchange rate), DIS (distance), and ESI (exportation sophistication). $GDPP$, POP , and DIS is taken logarithm. The governance quality covers six aspects: VAE (voice and accountability), PVE (political stability and absence of violence/terrorism), GEE (government effectiveness), RQE (regulatory quality), RLE (rule of law), and CCE (control of corruption). We also transfer those six indicators into one overall index via the principal component analysis. We use the overall index as a substitute measurement of governance quality for a separate estimation. The culture proximity, proxy by SCN (share of Chinese), is also included. Except for the independent variables, we also controlled BR , a B&R country dummy, to check the different effect between B&R and non-B&R countries.

We estimate the equation with between model to check the relationship across countries regardless of time variant effect. We will review the different consequences between two periods, before and after the launch of the BRI, as well as between two country groups, B&R and nonB&R countries.

4 Data and Measures

4.1 Data

The official data on bilateral FDI flows, recorded by the Ministry of Commerce, is highly incomplete due to the lack of information on the final destination. About 75% of China's OFDI from 2003 to 2017 in the dataset, amount to US$848 billion, goes to Hong Kong or tax havens (e.g., British Virgin Islands and Cayman Islands) with final destination unknown. To track China's OFDI flow, we combined two project-level datasets, the fDi Markets (FM) and the China Global Investment Tracker (CGIT).

The fDi Markets (FM) is a comprehensive dataset based on the information published in the Financial Times covering worldwide cross-border Greenfield investments. The dataset includes a series of project-level investment information, e.g., the name of investment firms, the date and capital amount of each project, the destination regions of the relevant investment, and the sector classification of investing activities. The dataset covers 4,685 projects of Chinese outward FDI across 146 countries during 2003-2017. The total amount of Chinese outward FDI recorded by the FM dataset is US$ 491 billion.

The China Global Investment Tracker (CGIT) is published by the American Enterprise Institute and the Heritage Foundation. The CGIT dataset contains all documented investment and construction transactions with capital among no less than US$ 100 million. The information about investment amount, Chinese parent company, destination country, and sector is available in the dataset. The total number of investment projects in the CGIT dataset is 1,130 projects worth US$ 857 billion inflowing to 114 countries from China during 2005-2017. The construction transaction includes 1419 projects amount to US$ 745 billion across 132 countries during 2005-2017.

Even though comprehensive, both the FM dataset and the CGIT dataset are incomplete due to their data selection method. The FM dataset only contains Greenfield investment projects and is based on single-information source, the Financial Times, while the CGIT dataset only contains large projects worth US$ 100 million or more. To construct a completed Chinese OFDI dataset, we matched information from the FM datasets with that from the CGIT dataset. The matching methodology is to merge projects based on the overlap variables, e.g., date, location, capital amount, and parent firms of the relevant investment. We use a fussy matching method to allow a two-year window when matching the projects to accommodate possible organizational changes. Matches were further verified in terms of online news for the project existence. The match of the two datasets resulted in a sample of 5,687 cross-border investment projects with a total value of US$ 1,279 billion. There are 128 overlap projects amount to US$ 109 billion.

To check our dataset's substantiality, we compared our dataset with the official FDI data published by the Ministry of Commerce (MOFCOM). Figure A1 shows that the trend of total FDI amount between the two datasets is consistent. The backward of MOFCOM dataset is that the MOFCOM does not track the real destination of China's OFDI to tax haven countries and regions (e.g., Hong Kong and the Cayman Islands). The incomplete information of MOFCOM dataset imposes our analysis based on the integrated FM and CGIT dataset.

4.2 Measures

1) Dependent variable

In line with the objectives of the study, the dependent variable of the model is China's OFDI to each country. Based on the integrated database, a country-year panel dataset is constructed covering 169 countries during the period 2010 – 2017. Tax-haven countries are

excluded from our sample to avoid bias. The list of tax-haven is shown in the Appendix. We convert the nominal value of FDI to real value by GDP deflator which is recorded by the World Development indicator based on the year 2010. The currency unit is exchanged from the US dollar to the Chinese yuan.

Our primary interest outcome focuses on the Greenfield FDI. We also analyzed the Greenfield FDI grouped by resources sectors and non-resources sectors. Resources sectors include Metals & Minerals sector and Energy sector. Non-resources sectors include the remained sectors. Except for Greenfield FDI, non-Greenfield FDI and construction transaction will also be examined for comparison.

Figure 1 shows the yearly trend of China's OFDI from 2010 to 2017. The growth rate of China's total OFDI increased dramatically as soon as the BRI was announced in December 2013. The growth rate of Greenfield FDI after 2013 is slightly larger than that in the previous period. The BRI stimulates China's total OFDI by more than two times, amount from 621 million CNY in 2013 to 1337 million CNY in 2016.

[Figure 1 about here]

There are 61 B&R countries out of 169 countries in our sample.[1] The BRI aims to enhance the regional cooperation on a trans-continental scale across Eurasia and the Persian Gulf. More than half of the B&R countries are from Asia. Europe is another destination of the BRI where 20 countries have joined the project. Few African countries have been included in the BRI even

[1] The B&R countries are defined in terms of country lists released by MOFCOM, HKTDC and China's international trade institute.

though Africa used to be the primary destination of China's FDI. No America and Oceania countries are involved in the BRI. The regional distribution of B&R countries is shown in Table 1. The regional distribution changes of FDI in B&R countries are shown in Figure 2. Among those countries, Southeast Asia receives most of China's OFDI before the launch of the BRI and remains as the most critical destination after the commencement of the BRI. The capital inflow of the Southeastern Asia region is also the highest increased value amount to 70 billion CNY per year. The FDI amount received by Africa and Southern Asia increases most quickly with a quite significant growth rate over 300% when comparing the two periods. The amount of total FDI to Southern Asia surpasses that in Southeastern Asia becoming the largest destination of China's OFDI after the BRI was launched. Middle east and Europe also receives prominent amount of China's OFDI, especially non-Greenfield FDI.

[Table 1 about here]

[Figure 2 about here]

The BRI has a foremost impact on both B&R and non-B&R countries. Figure 3 and Figure 4 shows the regional distribution of Total FDI and Greenfield FDI grouped by B&R countries and all countries. In Figure 3, we show the total amount of FDI in a certain period by groups. We find that the regional distribution of China's OFDI is very different between B&R countries and all countries. In B&R countries, China's OFDI mainly locates in Southeastern Asia and Southern Asia after the launch of the BRI while in all countries, China's OFDI mainly locates in Europe and Northern America. The difference indicates that a large amount of China's OFDI influx to non-B&R countries. In fact, the total amount of OFDI in non-B&R countries during

2010-2017 is 4,524 billion CNY, 2.7 times as large as that in B&R countries, 1,704 billion CNY. Both B&R and non-B&R countries receive over 50% more FDI after the launch of the BRI. The capital inflow in B&R countries is dominated by Greenfield FDI, about 79% in total during 20102017, while non-B&R countries mainly attract non-Greenfield FDI, about 66% in total during 2010-2017. The launch of the BRI changes the FDI structure in neither B&R nor non-B&R countries. As for construction transaction, B&R countries are more attractive than non-B&R countries. The total amount of construction transaction is 1.4 times larger in B&R countries than that in non-B&R countries during 2010-2017. In Figure 4, we examine the regional distribution of Greenfield FDI. The figure shows that different from total FDI, Greenfield FDI mainly flows to Southeastern Asia even when non-B&R countries are included. Countries in Africa and Southern Asia which are non-B&R countries also receive considerable amount of Greenfield FDI after the launch of the BRI.

[Figure 3 about here]

[Figure 4 about here]

Figure 5 shows the time trend of different kinds of FDI during 2010-2017. We calculate the average FDI received for each country in a specific year and take the logarithm of the mean. Both B&R and non-B&R countries receive more capital inflow after 2013 according to panel (a). When comparing panel (b) with panel (c), we find that the BRI has distinguished effects on B&R countries' Greenfield FDI inflow and non-B&R countries' non-Greenfield FDI inflow. The average amount of Greenfield FDI received by B&R countries is more than twice larger than non-B&R countries. Construction transaction in B&R countries is also affected by BRI as shown in panel (d).

[Figure 5 about here]

To check which country benefits most from the BRI, we list the top 10 countries receiving different types of FDI during a different period in Table 2. Half of the top 10 listed countries in Greenfield FDI column are B&R countries as shown in Table 2. The rank of those B&R countries increases after the BRI is launched. Egypt and Pakistan as the most vital hub along the Belt and Road economic corridor accept 13 times and 6 times more investment than the previous phase before the launch of BRI. Some countries beyond the B&R country list, e.g., Canada and Brazil, are confronted with a great descending amount of China's OFDI. The construction transactions are usually located in B&R countries.

[Table 2 about here]

2) Independent variable

We added several independent variables about the host country's characteristics that are significant in previous studies on the FDI location decisions. The primary independent variables are GDP per capita, population, GDP per capita growth, total natural resources rents, distance to China, export sophistication index, and CNY to local currency exchange rate, share of Chinese, and a bunch of governance quality measurement.

Economic Condition. We consider market characteristics, e.g., the market demand, measured by GDP per capita, and market size, measured by population. GDP per capita growth helps us to detect the market potential whether the country is an emerging market. Total natural resources rents, the sum of the rents from natural resources (e.g., oil, natural gas, coal, mineral, forest, etc.), implies the benefits a country could get from natural resources and indicates China's

resource seeking motivation. GDP per capita, population, GDP per capita growth, and total natural resources rents are collected from World Bank World Development Indicators (2018). GDP per capita is converted to real value by GDP deflator based on the year 2010. Distance to China is a proxy for the transportation cost which is defined as the distance from the local country's capital to Beijing. The distance is calculated through the geographic coordinates. Export sophistication index is defined as the productivity level of corresponding to the country's export basket, measuring the country's specialization patterns on exporting products. The calculation of export sophistication index follows Hausmann, Hwang, and Rodrick (2006). The exchange rate measures the currency's purchasing power for international investment. CNY to local currency exchange rate is calculated based on the exchange rate of USD to local currency and exchange rate of USD to CNY which are collected by World Bank World Development Indicators (2018).

Governance quality. Our theoretical framework emphasizes the role of local institutional determinants on China's OFDI. We use the World Bank Institute Governance Indicators (2018) to proxy the institution quality in the host countries. There are six dimensions within the Governance Indicators: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption. Voice and accountability measures the political participation of local citizens. Political stability and absence of violence/terrorism measures the stability and safety of local society. Government effectiveness measures the capacity of local government to provide public goods and civil services. Regulatory quality measures the ability of local government to implement policies and regulations. Rule of law measures the quality of contract enforcement,

property rights, the police, and the courts. Control of corruption measures the public constraints on private gaining and corruption. Each index runs from -2.5 to 2.5. A higher value of each index indicates a better institutional environment for investment. Except for the separate indicators, we also constructed an integrated index by taking the average of the six Governance Indicator. Table A9 shows the correlation among those governance quality indicators.

Culture proximity. We introduce share of Chinese to measure culture proximity. Share of Chinese is defined as the percentage of "Chinese" ethnic group in the total population. The data of share of Chinese combines three databases, Infoplease, Wikipedia, and UN data.

B&R country dummy. We also add a B&R country dummy to identify the different effect between B&R and non-B&R countries.

The summary statistics of variables are shown in Table 3.

[Table 3 about here]

5 Empirical Results

In this section, we will discuss the empirical results of different types of OFDI and show the different impacts on different country groups and different periods.

5.1 The Pattern of OFDI Amount

To evaluate the impact of the BRI on China's OFDI, we estimate the equation (1) with four outcomes, i.e., total FDI, Greenfield FDI, non-Greenfield FDI, and Construction transaction. We focus on the 5-year window period before and after 2013 which is 2010-2017. The regressions with a longer pre-BRI period (2003-2017) are included in the Appendix. The baseline estimation result is shown in Table 4. We find that the BRI helps B&R countries get more China's OFDI. According to the coefficient in Column 1, there is 87.2% more FDI inflowing to B&R

countries rather than non-B&R countries after the launch of the BRI. Greenfield FDI drives this increase. B&R countries attract 99.8% more Greenfield FDI than non-B&R countries after 2013. After we have controlled the specific B&R countries-time characteristics, the effect of BRI on Greenfield FDI becomes even larger at a rate of 146%. Other types of FDI and transactions also increase, but the coefficient is smaller than Greenfield FDI and insignificant.

[Table 4 about here]

5.2 The Pattern of OFDI Determinant

Equation (2) is estimated to show what kind of factors could affect China's Greenfield FDI location decision. We focus on Greenfield FDI because of its significant magnitude as shown in Table 4. The result in Table 5 suggests that better overall governance quality, more stable political environment, and larger market size could always attract more China's Greenfield FDI. We've controlled the B&R country dummy in the first four columns to examine the within-group characteristics. The dummy is excluded in the last four columns, and the results remain similar to that in the first four columns. The empirical results indicate that the launch of BRI strengthens the impact of governance quality but weakens the impact of economic conditions and culture proximity. For one standard deviation (0.89) increase of overall governance quality indicator, we expect 170% increase in Greenfield FDI after 2013, two times larger than the percentage before 2013. The increasing concern with governance quality is mainly driven by political stability when we compare Column 2 and 4. Even though insignificant, the coefficients of government effectiveness, regulatory quality, rule of law, and control of corruption also increase slightly. The economic conditions, especially market demand measured by GDP per capita and market potential measured by GDP per capita growth, become less important after the launch of the BRI.

The coefficients of other economic conditions become larger but remain insignificant. The coefficient of culture proximity also declines by 52% when we compare Column 1 with Column 2. To exclude the endogenous problem, we aggregate 4-year data and regress by pre-BRI period (2009-2013) and post-BRI period (2013-2017). The result is shown in Table 6. We find that the governance quality is more influential in post-BRI period which supports our previous argument. Appendix also includes regression on 4-year aggregated data for other outcomes and subsamples.

[Table 5 about here]

[Table 6 about here]

How different will Chinese investors response to the BRI between B&R and non-B&R countries? We re-estimate equation (2) by dividing the sample into two groups, B&R and nonB&R country. The results in Table 7 show both B&R and non-B&R countries rely more on better governance quality instead of better economic condition and closer culture proximity to attract China's OFDI and non-B&R countries are more sensitive to the BRI than B&R countries. The rate of coefficient increase for overall governance quality indicator is ten times larger in nonB&R country sample than in B&R country sample. Four indexes of governance quality (government effectiveness, regulatory quality, rule of law, and control of corruption) increase in non-B&R countries while only three indexes (voice and accountability, governance effectiveness, and rule of law) increase in B&R countries. For economic conditions, the market demand lost its attractiveness in non-B&R countries after the launch of the BRI. For B&R countries, one-unit transportation cost decline would attract more Greenfield FDI after 2013. Culture proximity is an important determinant for non-B&R countries but less important for B&R countries. The BRI decreases the coefficient of culture proximity for non-B&R countries' FDI inflow by 53%.

[Table 7 about here]

To find what type of China's OFDI is most influenced by the launch of the BRI, we've made two comparisons, Greenfield FDI in resources sectors with that in non-resources sectors and large Greenfield FDI with large non-Greenfield FDI. Table 8 compares the Greenfield FDI in resources sectors with that in non-resources sectors. We make such comparison because about

47% of the Greenfield FDI is in resources sectors (i.e., Energy and Metals & Minerals) during 2010-2017 which is shown in Figure 6. The determinant patterns of Greenfield FDI in nonresources sectors distinguished from that in resources sectors. After the launch of the BRI, Greenfield FDI in resources sectors becomes more sensitive to economic conditions while Greenfield FDI in non-resources sectors becomes more sensitive to governance quality. Higher purchase power measured by exchange rate and lower transportation cost proxied by the distance to Beijing help host countries to attract more Greenfield FDI in resources sectors as the BRI was announced. Different from Greenfield FDI in resources sectors, the market demand measured by GDP per capita lost its significance for the capital inflow of Greenfield FDI in non-resources sectors after 2013. However, the impact of overall governance quality indicator increases much larger for non-resources Greenfield FDI than for resources Greenfield FDI. To attract Greenfield FDI in resources sectors, host countries only need better voice and accountability. But host countries have to meet a stricter governance quality requirement with the more stable political environment and the stronger rule of law for the inflow of Greenfield FDI in non-resources sectors. The culture proximity remains important for Greenfield FDI in both resources and nonresources sectors. The result without B&R country dummy is shown in Table A1.

[Figure 6 about here]

[Table 8 about here]

In Table 9, we compare the determinants of non-Greenfield FDI, e.g., merge and acquirement, with Greenfield FDI. Both Greenfield and non-Greenfield FDI projects we included for calculating the aggregate FDI are those worth more than US$100 million because of the limited information on non-Greenfield FDI projects. We only have data for large non-Greenfield

FDI projects worth more than US$100 million which is recorded by CGIT dataset. Similar to Greenfield FDI, non-Greenfield FDI requires better economic conditions, better governance quality, and closer culture proximity. After the launch of the BRI, both governance quality and economic conditions become more prominent for host countries to attract non-Greenfield FDI, but the culture proximity is no longer notable. The impacts of market demand measured by GDP per capita and the transportation cost measured by the distance to Beijing enlarge for nonGreenfield FDI. Except for the overall governance quality, voice and accountability is the most essential governance index when China's investors make location decisions on non-Greenfield

FDI. The coefficient of culture proximity becomes insignificant after 2013. The result without B&R country dummy is shown in Table A2.

[Table 9 about here]

Except for China's OFDI, we also checked the construction transaction in Table 10. Different from OFDI, China's investors tend to invest in construction transaction in countries with better economic conditions, worse governance quality, and closer culture proximity. The launch of the BRI make the economic condition less sensitive and the culture proximity more important. Few governance-quality indexes are significant. Among those determinants on economic conditions, market size measured by population and resources rent always have great

influence on China's investors when investing construction transaction. Except for those two indexes, other economic condition indexes, e.g., market potential measured by GDP per capita growth, currency purchase power measured by exchange rate, and transportation cost measured by distance to Beijing, become insignificant. The regulatory quality drives the adverse effect of governance quality on construction transaction. The coefficient of culture proximity increases slightly suggesting that its impact rises after 2013.

[Table 10 about here]

6 Conclusion

The "Belt and Road Initiative" is the latest plan proposed by China to expand its global influence. Learning China's OFDI location decision will help the rest of the world, especially those developing countries, to seek China's multinational enterprises' support on local economic prosperity. Since few datasets, even the official dataset, could concisely track the final destination of China's OFDI, we constructed a comprehensive database by integrating the fDi Market dataset and the China Global Investment Tracker dataset. Our empirical evidence shows that the launch of the BRI significantly increases the capital inflow to B&R countries. Host countries with better economic advantages (e.g., market size and market potential), better governance quality, and closer culture proximity could attract more China's Greenfield FDI. The trend changes after BRI that governance quality gains more weights while economic conditions and culture proximity loses their power.

References

Antràs, P., Desai, M. A., & Foley, C. F. (2009). Multinational Firms, FDI Flows, and Imperfect Capital

Markets. The Quarterly Journal of Economics, 1171-1219.

Asiedu, E. (2002). On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different? World Development, 107-119.

Asiedu, E. (2006). Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy, Institutions and Political Instability. The World Economy.

Asiedu, E., & Lien, D. (2004). Capital Controls and Foreign Direct Investment. World Development, 479-

490.

Benassy-Quere, A., Coupet, M., & Mayer, T. (2007). Institutional Determinants of Foreign Direct Investment. The World Economy, 764-782.

Bergstrand, J., & Egger, P. (2007). A knowledge-and-physical-capital model of international trade flows, foreign direct investment, and multinational enterprises. Journal of International Economics, 278-308.

Bevan, A. A., & Estrin, S. (2004). The determinants of foreign direct investment into European transition economies. Journal of Comparative Economics, 775-787.

Blonigen, B. (1997). Firm-Specific Assets and the Link between Exchange Rates and Foreign Direct Investment. American Economic Review, 447-465.

Buckley, P. J., Clegg, L. J., Cross, A. R., Liu, X., Voss, H., & Zheng, P. (2007). The Determinants of Chinese Outward Foreign Direct Investment. Journal of International Business Studies, 499-518.

Carr, D. L., Markusen, R. J., & Maskus, K. E. (2001). Estimating the Knowledge-Capital Model of the Multinational Enterprise. The American Economic Review, 693-708.

Cheng, L. K., & Kwan, Y. K. (2000). What are the determinants of the location of foreign direct investment? The Chinese experience. Journal of International Economics, 379-400.

Cheung, Y.-W., & Qian, X. (2009). EMPIRICS OF CHINA'S OUTWARD DIRECT INVESTMENT. Pacific Economic Review, 312-341.

Desbordes, R., & Wei, S.-J. (2017). The Effects of Financial Development on Foreign Direct Investment. Journal of Development Economics.

Fajgelbaum, P., Grossman, G. M., & Helpman, E. (2015). A Linder Hypothesis for Foreign Direct Investment. Review of Economic Studies, pp. 83-121.

Froot, K. A., & Stein, J. C. (1991). Exchange Rates and Foreign Direct Investment: An Imperfect Capital Markets Approach. Quarterly Journal of Economics, 1191-1217.

Gastanaga, V. M., Nugent, J., & Pashamova, B. (1998). Host Country Reforms and FDI Inflows: How Much Difference do they Make? World Development, 1299-1314.

Globerman, S., & Shapiro, D. (2003). Governance Infrastructure and U.S. Foreign Direct Investment. Journal of International Business Studies, 19-39.

Grossman, G. M., & Helpman, E. (2014). Growth, Trade and Inequality. National Bureau of Econoimc Research Working Paper 20502.

Gylfason, T. (2001). Natural resources, education, and economic development. European Economic Review, 847-859.

Hajzler, C. (2014, January). Resource-based FDI and expropriation in developing economies. Journal of International Economics, 92(1), 124-146.

Head, K., & Ries, J. (2008). FDI as an outcome of the market for corporate control: Theory and evidence.

Journal of International Economics, 2-20.

Helpman, E. (1984). A Simple Theory of International Trade with Multinational Corporations. Journal of Political Economy, 451-471.

Hofstede, G. (1980). Culture's consequences: International differences in work-related values. SAGE Publications, Inc.

Holmes, T. J., McGrattan, E. R., & Prescott, C. E. (2015). Quid Pro Quo: Technology Capital Transfers for Market Access in China. Review of Economic Studies, 1154-1193.

Javorcik, B., & Wei, S.-J. (2009). Corruption and Cross-Border Investment in Emerging Markets: Firm-Level Evidence. Journal of International Money and Finance, 605-624.

Julio, B., & Yook, Y. (2016). Policy uncertainty, irreversibility, and cross-border flows of capital. Journal of International Economics, 13-26.

Kolstad, I., & Wiig, A. (2012). What determines Chinese outward FDI? Journal of World Business, 26-34.

Lewin, A. Y., Massini, S., & Peeters, C. (2009). Why are companies offshoring innovation? The emerging global race for talent. Journal of International Business Studies, 1406.

Li, J., & Guisinger, S. (1992). The Globalization of Service Multinationals in the "Triad" Regions: Japan, Western Europe and North America. Journal of International Business Studies, 675-696.

Loree, D. W., & Guisinger, S. E. (1995). Policy and Non-Policy Determinants of U.S. Equity Foreign Direct Investment. Journal of International Business Studies, 281-299.

Markusen, J. R. (1984). Multinationals, multi-plant economies, and the gains from trade. Journal of International Economics, 205-226.

Nocke, V., & Yeaple, S. (2008). An Assignment Theory of Foreign Direct Investment. The Review of Economic Studies, pp. 529-557.

noor Bakhsh, F., Paloni, A., & Youssef, A. (2001). Human Capital and FDI Inflows to Developing

Countries: New Empirical Evidence. World Development, 1593-1610.

Poelhekke, S., & van der Ploeg, F. (2010). Do Natural Resources Attract FDI? Evidence from Non-Stationary Sector-Level Data. DNB Working Paper No.266.

Ramasamy, B., Yeung, M., & Laforet, S. (2012). China's outward foreign direct investment: Location choice and firm ownership. Journal of World Business, 17-25.

Siegel, J. I., Licht, A. N., & Schwartz, S. H. (2012). Egalitarianism, Cultural Distance, and Foreign Direct Investment: A New Approach. Organization Science.

Figures & Tables

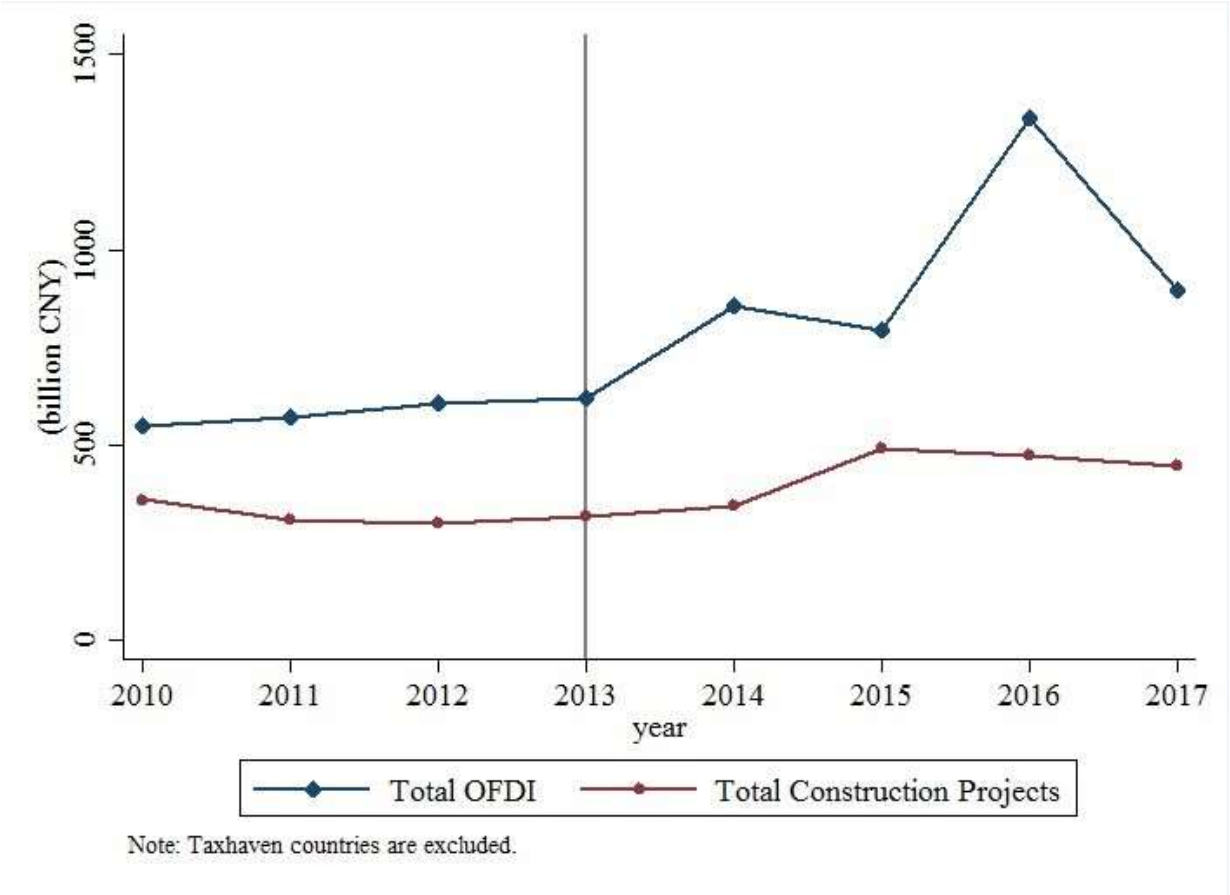

Figure 1: China's Worldwide Outbound Investment (2010-2017)

Note: The gray vertical line indicates year 2013, the year when BRI began. The data source for total FDI and Greenfield FDI is the integrated dataset of FM and CGIT. The construction transaction data is from the CGIT dataset. The total FDI includes both Greenfield and non-Greenfield investment. Tax haven countries are excluded.

For Total OFDI, 87.3% investment goes to non-tax haven countries.
For Greenfield OFDI, 90.8% investment goes to non-tax haven countries.

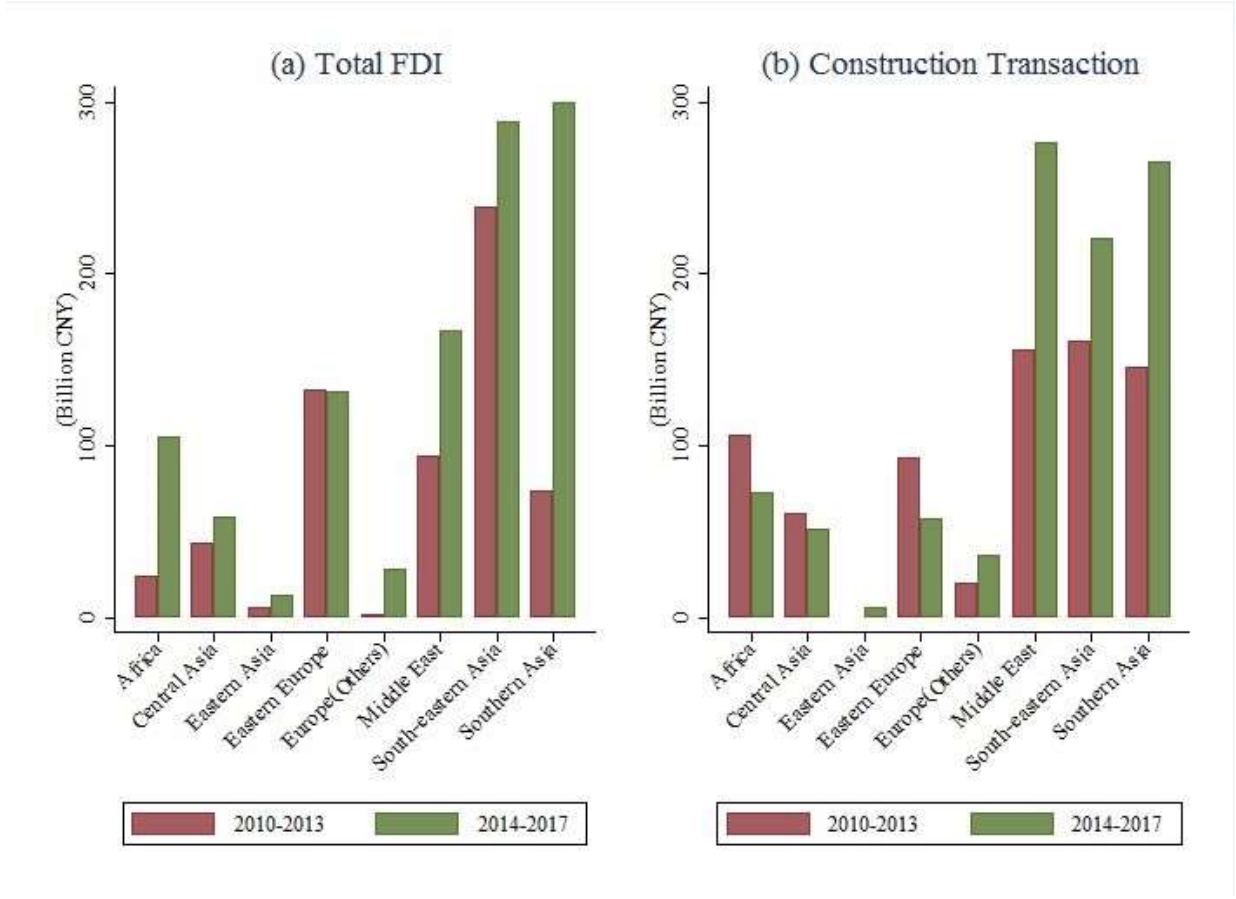

Figure 2: China's Outbound Investment in B&R Countries (2010-2017)

Note: The investment amount is the total value in each region for each period. The data source is the integrated dataset of FM and CGIT. The construction transaction data is from the CGIT dataset. The total FDI includes both Greenfield and non-Greenfield investment. Table A1 lists the countries in each region. Tax haven countries are excluded. Regions without B&R countries (i.e. Latin America and the Caribbean, Northern America, and Oceania) are excluded.

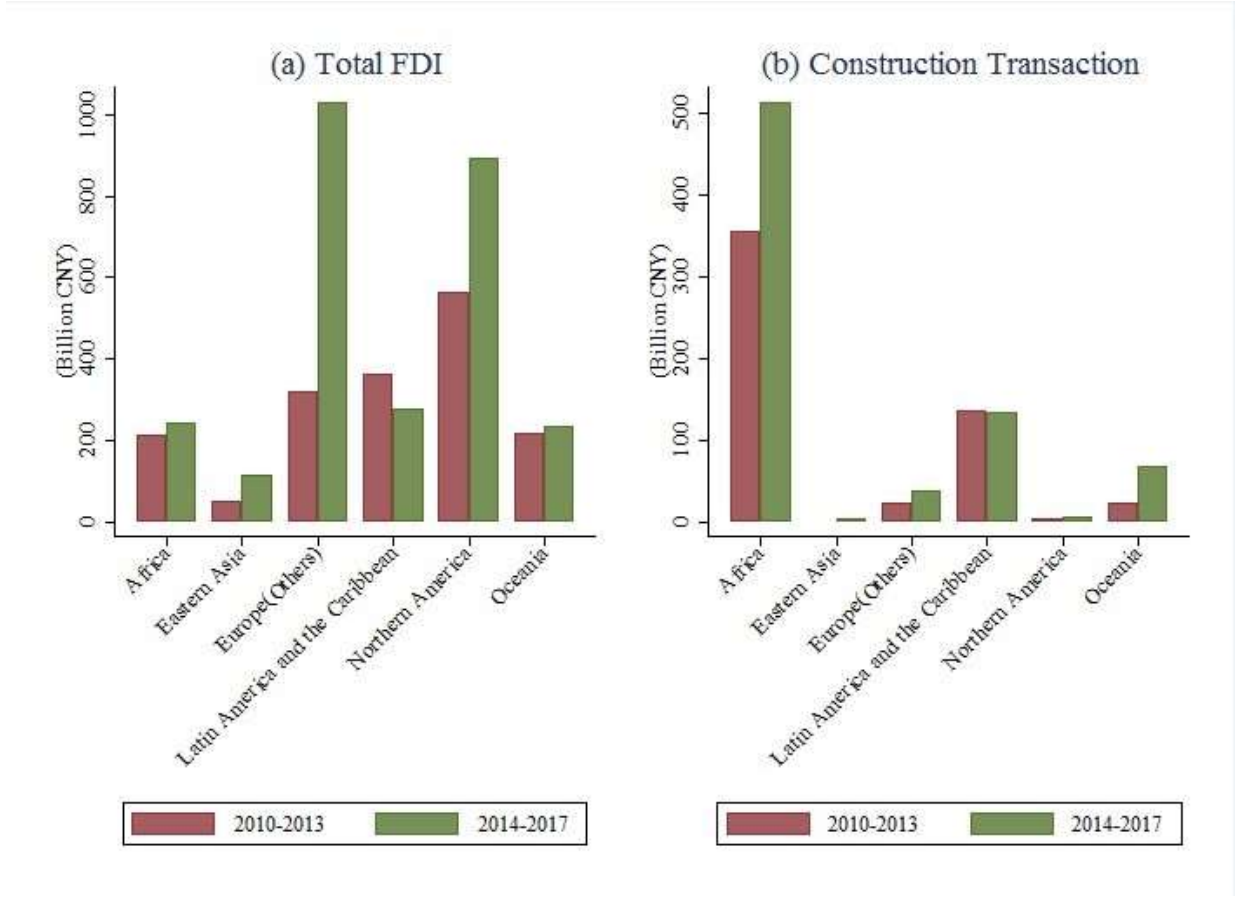

Figure 3: China's Outbound Investment in Non-B&R Countries (2010-2017)

Note: The investment amount is the total value in each region for each period. The data source for total FDI is the integrated dataset of FM and CGIT. The construction transaction data is from the CGIT dataset. The total FDI includes both Greenfield and non-Greenfield investment. Tax haven countries are excluded.

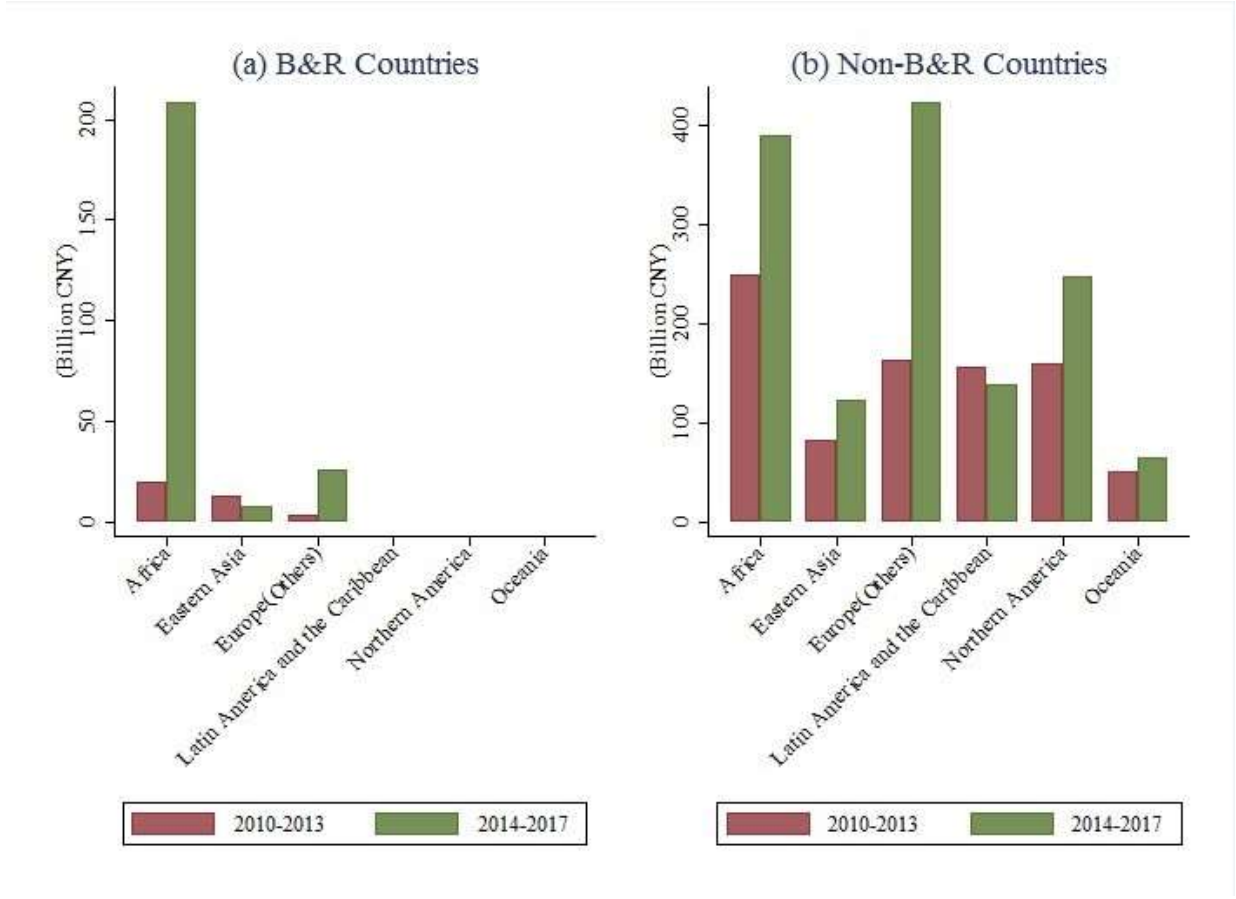

Figure 4: China's Greenfield OFDI in B&R and Non-B&R Countries (2010-2017)

Note: The investment amount is the total value in each region for each period. The data source for Greenfield FDI is the integrated dataset of FM and CGIT. Tax haven countries are excluded.

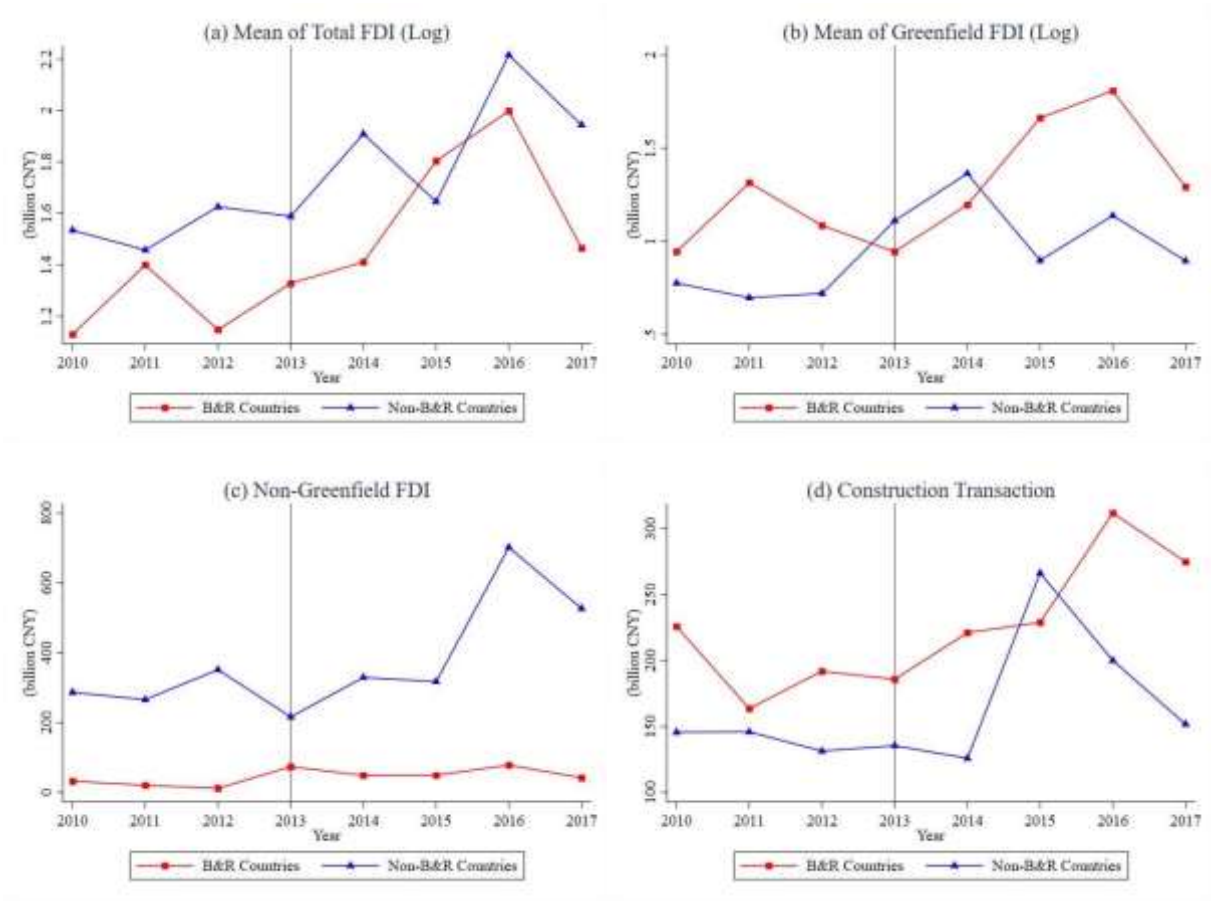

Figure 5: Trends in China's Outbound Investments (Country Averages, 2010-2017)

Notes: The gray vertical line indicates year 2013, when BRI began. The data source for total FDI and Greenfield FDI is the merged data from FM and CGIT. The non-Greenfield FDI and construction transaction data is from the CGIT dataset. Tax haven countries are excluded.

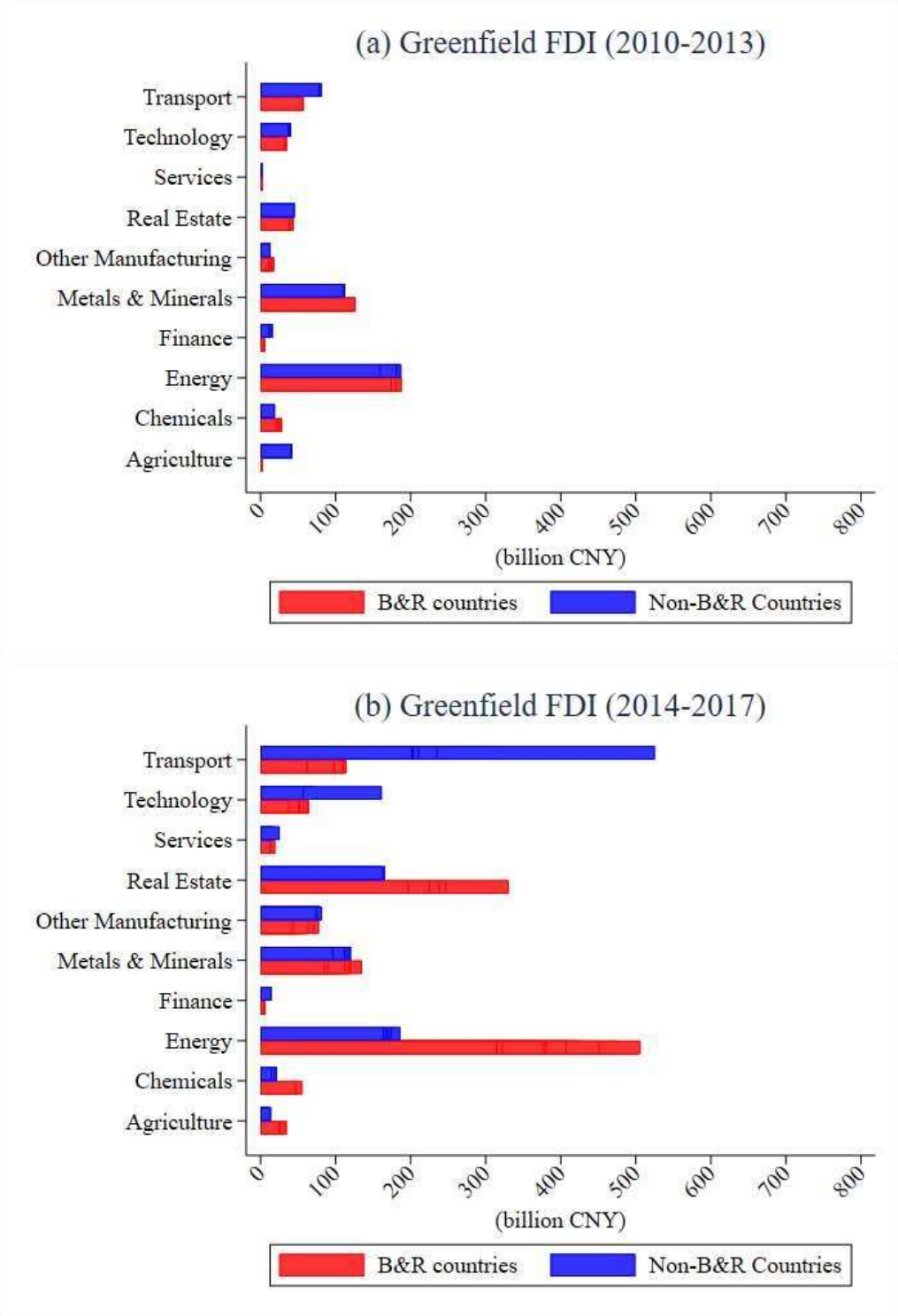

Figure 6: Greenfield FDI in Different Sectors

Note: The data source is the integrated dataset of FM and CGIT. The sector information is collected in both datasets. Tax haven countries are excluded.

Table 1: The Regional Distribution of B&R Countries

Region	Non-B&R Countries	B&R Countries	Total
Africa	49	3	52

Central Asia	0	5	5
Eastern Asia	3	1	4
Eastern Europe	0	10	10
Europe(Others)	17	10	27
Latin America and the Caribbean	24	0	24
Middle East	0	15	15
Northern America	3	0	3
Oceania	11	0	11
South-eastern Asia	0	9	9
Southern Asia	1	8	9
Total	108	61	169

Table 2: Country List for Top 10 China's outward FDI Destinations before and after BRI

Total FDI		Greenfield FDI		Non-Greenfield FDI		Construction Transaction	
2010-2013	2014-2017	2010-2013	2014-2017	2010-2013	2014-2017	2010-2013	2014-2017
United States	United States	United States	United States	United States	United States	Vietnam[b]	Pakistan[b]
Canada	United Kingdom	Indonesia[b]	Indonesia[b]	Canada	United Kingdom	Venezuela	Nigeria
Australia	Australia	Russia[b]	India[b]	Australia	Australia	Kenya[b]	Bangladesh[b]
Brazil	India[b]	Brazil	United Kingdom	Brazil	Italy	Ethiopia[b]	Indonesia[b]
United Kingdom	Indonesia[b]	Canada	Pakistan[b]	United Kingdom	Brazil	Nigeria	United Arab Emirates[b]
Indonesia[b]	Germany	Australia	Egypt[b]	Argentina	Germany	Chad	Saudi Arabia[b]
Russia[b]	Brazil	United Kingdom	Russia[b]	Germany	Netherlands	Ukraine[b]	Venezuela
Argentina	Italy	Peru	Australia	France	France	Algeria	Congo
Germany	France	India[b]	Korea	Russia[b]	Israel[b]	Pakistan[b]	Australia
Peru	Russia[b]	Turkey[b]	France	Portugal	Finland	Turkey[b]	Russia[b]

Table 3 (A): Summary Statistics (Mean) of Outbound Investment

	B&R		Non-B&R		B&R (%change)	Non-B&R (%change)
	2010-2013	2014-2017	2010-2013	2014-2017	1013:1417	1013:1417
Total FDI (bln RMB)	2.518	4.470	4.006	6.469	77.52	61.48
Greenfield FDI (bln RMB)	1.955	3.580	1.415	2.129	83.12	50.46
Resources Greenfield FDI (bln RMB)	1.144	1.798	0.618	0.605	57.17	-2.10
Non-Resources Greenfield FDI (bln RMB)	0.812	1.782	0.797	1.524	119.46	91.22
Large Greenfield FDI (bln RMB)	1.777	3.296	1.233	1.868	85.48	51.50
Non-Greenfield FDI (bln RMB)	0.563	0.890	2.591	4.340	58.08	67.50
MOFCOM FDI (bln RMB)	0.837	0.872	0.878	1.653	4.18	88.27
Construction Transaction (bln RMB)	3.038	4.041	1.252	1.770	33.02	41.37

Table 3 (B): Summary Statistics (Mean) of Factors

	B&R		Non-B&R	
	2010-2013	2014-2017	2010-2013	2014-2017
Real GDP per capita Growth (%)	0.032	0.021	0.013	0.010
Real GDP per capita (mln RMB)	0.064	0.070	0.088	0.091
Population (bln)	0.052	0.055	0.023	0.024
Total Natural Resources Rents (% of GDP)	10.865	8.290	9.910	8.079
Real Exchange Rate (CNY to 0.001 LCU)	0.182	0.337	0.058	0.083
Distance to China (thousand km)	5.769	5.769	10.595	10.595
Export Sophistication Index	0.075	0.075	0.054	0.054
Governance (Mean of WGI)	-0.319	-0.273	-0.105	-0.100
Voice and Accountability	-0.461	-0.460	-0.026	0.037
Political Stability and Absence of Violence/Terrorism	-0.421	-0.390	-0.076	-0.079
Government Effectiveness	-0.194	-0.097	-0.169	-0.191
Regulatory Quality	-0.129	-0.110	-0.164	-0.181
Rule of Law	-0.303	-0.241	-0.134	-0.109
Control of Corruption	-0.404	-0.338	-0.063	-0.074
Culture Proximity (% of Chinese in Population)	0.742	0.742	0.371	0.371

Table 4: Simple Regression on OFDI (2010-2017)

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FDI (log)	Greenfield (log)	Large Non-Greenfield (log)	Construction Transaction (log)	Total FDI (log)	Greenfield (log)	Large Non-Greenfield (log)	Construction Transaction (log)
	(2)	(3)	(4)	(5)	(6)	(7)	(8)
**	0.735**	0.377	0.163	0.762	1.122**	0.156	-0.138
	(0.310)	(0.299)	(0.355)	(0.599)	(0.550)	(0.545)	(0.733)
	0.062	0.126	-0.081	0.067	-0.078	0.205	0.028
	(0.299)	(0.273)	(0.320)	(0.378)	(0.351)	(0.323)	(0.353)
				-0.026	-0.097	0.055	0.075
				(0.130)	(0.122)	(0.112)	(0.158)
	0.040	0.041	0.117	0.057	0.075	0.021	0.090
	(0.059)	(0.054)	(0.072)	(0.080)	(0.074)	(0.069)	(0.084)

1,352	1,352	1,352	1,352	1,352	1,352	1,352
0.017	0.012	0.009	0.017	0.018	0.013	0.010
169	169	169	169	169	169	169

0)

3)

errors in brackets. Within model is used. Standard error is clustered at

country level

Table 5: Determinants of China's Greenfield OFDI (2010-2017)

	(1)	(2)	(3)	(4)
Period	2010-2013	2014-2017	2010-2013	2014-2017
Economic Conditions				
Real GDP per capita Growth (%)	6.252*	-1.685	6.152	-1.976
	(3.730)	(3.008)	(3.796)	(2.974)
Real GDP per capita (RMB log)	0.364**	0.156	0.361**	0.145
	(0.170)	(0.175)	(0.172)	(0.173)
Population (log)	1.241***	1.367***	1.243***	1.409***
	(0.100)	(0.110)	(0.101)	(0.111)
Total Natural Resources Rents (% of GDP)	-0.007	0.007	-0.007	0.008
	(0.013)	(0.014)	(0.013)	(0.014)
Real Exchange Rate (CNY to 0.001 LCU)	0.069	0.167	0.067	0.133
	(0.375)	(0.179)	(0.377)	(0.177)
Distance to China (km log)	-0.633**	-0.924***	-0.605*	-0.539
	(0.314)	(0.309)	(0.363)	(0.351)
Export Sophistication Index	0.387	0.664**	0.385	0.625*
	(0.331)	(0.331)	(0.332)	(0.328)
Culture Proximity				
Share of Chinese in Population (%)	0.362***	0.173*	0.362***	0.189**
	(0.085)	(0.088)	(0.085)	(0.087)
Governance Quality				
Voice and Accountability	0.672**	0.191	0.683**	0.323
	(0.315)	(0.290)	(0.324)	(0.292)
Political Stability and Absence of Violence/Terrorism	0.908***	0.893***	0.913***	0.992***
	(0.273)	(0.291)	(0.275)	(0.291)
Government Effectiveness	-0.159	0.637	-0.171	0.349
	(0.676)	(0.719)	(0.682)	(0.722)
Regulatory Quality	-0.380	-0.116	-0.400	-0.381
	(0.440)	(0.488)	(0.459)	(0.497)
Rule of Law	0.010	0.343	0.012	0.498
	(0.703)	(0.723)	(0.705)	(0.718)
Control of Corruption	-0.336	-0.517	-0.312	-0.264
	(0.546)	(0.543)	(0.568)	(0.548)
Governance (Mean of WGI)	0.690**	1.256***	0.643**	1.368***
	(0.299)	(0.266)	(0.307)	(0.271)
Belt and Road Country			0.065	0.905**
			(0.415)	(0.410)
Observations	676	676	676	676
R-squared	0.640	0.688	0.640	0.698

Number of Country	169	169	169	169

Note: *p<.1; **p<.05; ***p<.01. Standard errors in brackets. Between model is used. Sample is worldwide.

Table 6: Determinants of China's Greenfield OFDI (4-Year Aggregated)

	(1)	(2)	(3)	(4)
Period	2010-2013	2014-2017	2010-2013	2014-2017
Economic Conditions				
Real GDP per capita Growth (%)	5.346	0.270	5.779	-0.621
	(4.284)	(2.566)	(4.378)	(2.481)
Real GDP per capita (RMB log)	0.468	-0.032	0.448	-0.109
	(0.308)	(0.270)	(0.302)	(0.256)
Population (log)	1.409***	1.632***	1.421***	1.673***
	(0.149)	(0.149)	(0.148)	(0.140)
Total Natural Resources Rents (% of GDP)	-0.026	0.029	-0.025	0.029
	(0.028)	(0.026)	(0.028)	(0.026)
Real Exchange Rate (CNY to 0.001 LCU)	-0.217	0.256	-0.238	0.172
	(0.993)	(0.267)	(1.012)	(0.266)
Distance to China (km log)	-0.888*	-0.450	-0.639	0.327
	(0.495)	(0.519)	(0.581)	(0.546)
Export Sophistication Index	0.786**	0.589	0.766**	0.521
	(0.352)	(0.741)	(0.363)	(0.782)
Culture Proximity				
Share of Chinese in Population (%)	0.470***	0.205***	0.473***	0.227***
	(0.162)	(0.077)	(0.162)	(0.083)
Governance Quality				
Voice and Accountability	0.292	-0.091	0.372	0.187
	(0.497)	(0.462)	(0.493)	(0.497)
Political Stability and Absence of Violence/Terrorism	0.753*	1.322***	0.795**	1.418***
	(0.388)	(0.462)	(0.377)	(0.427)
Government Effectiveness	0.375	1.854*	0.308	1.508
	(0.944)	(0.960)	(0.932)	(0.940)
Regulatory Quality	0.219	-0.079	0.042	-0.577
	(0.810)	(0.682)	(0.882)	(0.667)
Rule of Law	-0.742	-0.311	-0.695	-0.186
	(1.211)	(1.203)	(1.223)	(1.180)
Control of Corruption	-0.494	-0.896	-0.336	-0.355
	(0.796)	(0.717)	(0.815)	(0.768)
Governance (Mean of WGI)	0.232	1.496***	0.327	1.737***
	(0.513)	(0.471)	(0.517)	(0.464)
Belt and Road Country			0.554	1.682***
			(0.623)	(0.604)

Observations	169	169	169	169
R-squared	0.484	0.545	0.486	0.565

Note: *p<.1; **p<.05; ***p<.01. Standard errors in brackets. Between model is used. Sample is worldwide.

Table 7: Difference between B&R and non-B&R Countries (2010-2017)

	(1)	(2)	(3)	(4)
Sample	B&R Countries		Non-B&R Countries	
Period	2010-2013	2014-2017	2010-2013	2014-2017
Economic Conditions				
Real GDP per capita Growth (%)	11.656	0.604	4.661	-8.111
	(9.362)	(3.529)	(4.075)	(7.423)
Real GDP per capita (RMB log)	-0.044	-0.005	0.496***	0.213
	(0.381)	(0.323)	(0.188)	(0.227)
Population (log)	1.729***	1.944***	1.122***	1.148***
	(0.193)	(0.205)	(0.114)	(0.134)
Total Natural Resources Rents (% of GDP)	-0.008	0.040	0.002	0.016
	(0.027)	(0.031)	(0.017)	(0.016)
Real Exchange Rate (CNY to 0.001 LCU)	-0.341	-0.014	0.244	0.263
	(0.430)	(0.181)	(1.164)	(0.792)
Distance to China (km log)	-1.365	-0.854	-0.227	-0.265
	(0.844)	(0.784)	(0.426)	(0.413)
Export Sophistication Index	-0.580	-1.590*	0.622*	1.073***
	(0.805)	(0.818)	(0.365)	(0.364)
Culture Proximity				
Share of Chinese in Population (%)	0.180*	0.049	0.855***	0.521**
	(0.100)	(0.102)	(0.193)	(0.200)
Governance Quality				
Voice and Accountability	-0.337	-0.413	1.046**	0.726*
	(0.502)	(0.429)	(0.432)	(0.395)
Political Stability and Absence of Violence/Terrorism	1.741***	1.531***	0.395	0.198
	(0.401)	(0.423)	(0.385)	(0.422)
Government Effectiveness	-1.198	-0.018	0.215	0.872
	(1.186)	(1.234)	(0.764)	(0.851)
Regulatory Quality	2.038**	1.659*	-1.009*	-0.322
	(0.875)	(0.954)	(0.547)	(0.618)
Rule of Law	-2.162	-1.076	0.259	0.179
	(1.376)	(1.424)	(0.849)	(0.832)

Note: *p<.1; **p<.05; ***p<.01. Standard errors in brackets. Between model is used.

Control of Corruption	1.451	-0.003	-0.517	-0.350
	(1.171)	(1.017)	(0.628)	(0.629)
Governance (Mean of WGI)	1.587**	1.751***	0.317	1.165***
	(0.647)	(0.472)	(0.330)	(0.338)
Observations	244	244	432	432
R-squared	0.728	0.775	0.702	0.725
Number of Country	61	61	108	108

Table 8: Difference between Resources and Non-Resources Greenfield FDI (2010-2017)

	(1)	(2)	(3)	(4)
Sample	Resources Sectors		Non-Resources Sectors	
Period	2010-2013	2014-2017	2010-2013	2014-2017
Economic Conditions				
Real GDP per capita Growth (%)	5.038	0.278	0.811	-2.121
	(3.536)	(2.859)	(3.456)	(2.738)
Real GDP per capita (RMB log)	0.264	0.050	0.418***	0.186
	(0.162)	(0.166)	(0.158)	(0.159)
Population (log)	0.750***	0.788***	1.127***	1.288***
	(0.095)	(0.105)	(0.093)	(0.101)
Total Natural Resources Rents (% of GDP)	-0.001	0.008	-0.014	-0.000
	(0.013)	(0.013)	(0.012)	(0.013)
Real Exchange Rate (CNY to 0.001 LCU)	0.378	0.367**	0.020	-0.203
	(0.356)	(0.170)	(0.348)	(0.163)
Distance to China (km log)	-0.201	-0.887***	-0.511*	-0.646**
	(0.298)	(0.294)	(0.291)	(0.281)
Export Sophistication Index	0.169	0.413	0.481	0.715**
	(0.314)	(0.315)	(0.307)	(0.302)
Culture Proximity				
Share of Chinese in Population (%)	0.408***	0.135	0.249***	0.191**
	(0.081)	(0.084)	(0.079)	(0.080)
Governance Quality				
Voice and Accountability	0.534*	0.513*	0.623**	-0.141
	(0.299)	(0.276)	(0.292)	(0.264)
Political Stability and Absence of Violence/Terrorism	0.486*	0.240	0.707***	0.745***
	(0.259)	(0.277)	(0.253)	(0.265)
Government Effectiveness	-1.028	0.724	0.286	0.022
	(0.640)	(0.683)	(0.626)	(0.654)
Regulatory Quality	-0.228	-0.296	-0.474	0.048
	(0.417)	(0.464)	(0.408)	(0.444)
Rule of Law	0.432	0.051	0.025	1.009
	(0.667)	(0.688)	(0.651)	(0.658)
Control of Corruption	0.027	-0.526	-0.445	-0.325
	(0.518)	(0.516)	(0.506)	(0.494)
Governance (Mean of WGI)	0.329	0.617**	0.675**	1.303***
	(0.279)	(0.250)	(0.274)	(0.241)
Observations	676	676	676	676
R-squared	0.437	0.502	0.641	0.701

Note: *p<.1; **p<.05; ***p<.01. Standard errors in brackets. Between model is used.

Number of Country	169	169	169	169

Table 9: Difference between Large Greenfield and Large Non-Greenfield FDI (2010-2017)

	(1)	(2)	(3)	(4)
Sample	Greenfield FDI(>$100m)		Non-Greenfield FDI(>$100m)	
Period	2010-2013	2014-2017	2010-2013	2014-2017
Economic Conditions				
Real GDP per capita Growth (%)	5.140	-1.169	-1.654	-3.484
	(4.038)	(3.354)	(3.755)	(3.215)
Real GDP per capita (RMB log)	0.225	-0.054	0.497***	0.625***
	(0.185)	(0.195)	(0.172)	(0.187)
Population (log)	0.825***	1.107***	0.777***	0.953***
	(0.108)	(0.123)	(0.101)	(0.118)
Total Natural Resources Rents (% of GDP)	-0.013	0.002	-0.004	0.012
	(0.014)	(0.015)	(0.013)	(0.015)
Real Exchange Rate (CNY to 0.001 LCU)	0.429	0.273	0.057	0.010
	(0.406)	(0.199)	(0.378)	(0.191)
Distance to China (km log)	-0.213	-0.808**	0.553*	-0.572*
	(0.340)	(0.344)	(0.316)	(0.330)
Export Sophistication Index	0.110	0.567	0.557*	0.351
	(0.358)	(0.370)	(0.333)	(0.354)
Culture Proximity				
Share of Chinese in Population (%)	0.490***	0.273***	0.194**	0.139
	(0.092)	(0.098)	(0.086)	(0.094)
Governance Quality				
Voice and Accountability	0.369	0.238	0.503	1.031***
	(0.341)	(0.323)	(0.317)	(0.310)
Political Stability and Absence of Violence/Terrorism	0.547*	0.586*	0.131	0.124
	(0.296)	(0.325)	(0.275)	(0.311)
Government Effectiveness	-0.471	0.539	-0.725	-0.844
	(0.731)	(0.801)	(0.680)	(0.768)
Regulatory Quality	-0.399	-0.398	-0.531	-0.167
	(0.476)	(0.544)	(0.443)	(0.522)
Rule of Law	0.604	0.462	0.912	0.496
	(0.761)	(0.807)	(0.708)	(0.773)
Control of Corruption	-0.591	-0.529	0.053	0.414
	(0.591)	(0.605)	(0.550)	(0.580)
Governance (Mean of WGI)	0.102	0.788***	0.498*	1.310***
	(0.316)	(0.293)	(0.292)	(0.286)
Observations	676	676	676	676
R-squared	0.442	0.536	0.429	0.554
Number of Country	169	169	169	169

Table 10: Determinants of China's Construction Transaction (2010-2017)

	(1)	(2)	(3)	(4)
Period	2010-2013	2014-2017	2010-2013	2014-2017
Economic Conditions				
Real GDP per capita Growth (%)	8.437*	0.929	6.460	0.360
	(4.575)	(4.427)	(4.559)	(4.323)
Real GDP per capita (RMB log)	0.024	-0.130	-0.038	-0.153
	(0.209)	(0.257)	(0.207)	(0.251)
Population (log)	0.730***	0.798***	0.765***	0.881***
	(0.122)	(0.163)	(0.121)	(0.161)
Total Natural Resources Rents (% of GDP)	0.042**	0.033	0.042***	0.035*
	(0.016)	(0.020)	(0.016)	(0.020)
Real Exchange Rate (CNY to 0.001 LCU)	0.929**	0.165	0.887*	0.098
	(0.460)	(0.263)	(0.452)	(0.258)
Distance to China (km log)	0.352	0.206	0.905**	0.958*
	(0.385)	(0.455)	(0.435)	(0.511)
Export Sophistication Index	0.488	0.949*	0.446	0.873*
	(0.406)	(0.488)	(0.399)	(0.477)
Culture Proximity				
Share of Chinese in Population (%)	0.182*	0.203	0.196*	0.234*
	(0.104)	(0.130)	(0.103)	(0.127)
Governance Quality				
Voice and Accountability	-0.368	-0.560	-0.158	-0.302
	(0.387)	(0.427)	(0.389)	(0.425)
Political Stability and Absence of Violence/Terrorism	-0.003	0.267	0.083	0.461
	(0.335)	(0.428)	(0.331)	(0.423)
Government Effectiveness	1.057	1.888*	0.818	1.326
	(0.829)	(1.058)	(0.819)	(1.049)
Regulatory Quality	-0.828	-0.977	-1.217**	-1.495**
	(0.540)	(0.719)	(0.551)	(0.723)
Rule of Law	0.964	-0.114	1.001	0.189
	(0.862)	(1.065)	(0.847)	(1.044)
Control of Corruption	-1.416**	-0.736	-0.950	-0.242
	(0.670)	(0.799)	(0.682)	(0.797)
Governance (Mean of WGI)	-0.658*	-0.592	-0.467	-0.343
	(0.353)	(0.389)	(0.357)	(0.391)
Belt and Road Country			1.283**	1.768***
			(0.498)	(0.596)
Observations	676	676	676	676

Note: *p<.1; **p<.05; ***p<.01. Standard errors in brackets. Between model is used.

R-squared	0.450	0.346	0.473	0.382
Number of Country	169	169	169	169

Note: *p<.1; **p<.05; ***p<.01. Standard errors in brackets. Between model is used. Sample is worldwide.

Appendix

Table A1: Difference between Resources and Non-Resources Greenfield FDI (2010-2017)

	(1)	(2)	(3)	(4)
Sample	Resources Sectors		Non-Resources Sectors	
Period	2010-2013	2014-2017	2010-2013	2014-2017
Economic Conditions				
Real GDP per capita Growth (%)	4.810	0.183	0.975	-2.310
	(3.598)	(2.866)	(3.517)	(2.728)
Real GDP per capita (RMB log)	0.257	0.046	0.423***	0.178
	(0.163)	(0.166)	(0.160)	(0.158)
Population (log)	0.754***	0.802***	1.124***	1.316***
	(0.096)	(0.107)	(0.093)	(0.102)
Total Natural Resources Rents (% of GDP)	-0.001	0.008	-0.014	0.000
	(0.013)	(0.013)	(0.012)	(0.012)
Real Exchange Rate (CNY to 0.001 LCU)	0.373	0.355**	0.023	-0.225
	(0.357)	(0.171)	(0.349)	(0.163)
Distance to China (km log)	-0.137	-0.761**	-0.557*	-0.396
	(0.344)	(0.339)	(0.336)	(0.322)
Export Sophistication Index	0.164	0.400	0.485	0.689**
	(0.315)	(0.316)	(0.308)	(0.301)
Culture Proximity				
Share of Chinese in Population (%)	0.410***	0.140*	0.248***	0.201**
	(0.081)	(0.084)	(0.079)	(0.080)
Governance Quality				
Voice and Accountability	0.558*	0.556*	0.605**	-0.055
	(0.307)	(0.282)	(0.300)	(0.268)
Political Stability and Absence of Violence/Terrorism	0.496*	0.272	0.700***	0.810***
	(0.261)	(0.280)	(0.255)	(0.267)
Government Effectiveness	-1.055	0.630	0.306	-0.165
	(0.646)	(0.695)	(0.632)	(0.662)
Regulatory Quality	-0.273	-0.383	-0.442	-0.124
	(0.435)	(0.479)	(0.425)	(0.456)
Rule of Law	0.436	0.102	0.022	1.110*
	(0.669)	(0.692)	(0.654)	(0.659)
Control of Corruption	0.081	-0.444	-0.483	-0.161
	(0.539)	(0.528)	(0.526)	(0.503)
Governance (Mean of WGI)	0.292	0.650**	0.618**	1.375***
	(0.286)	(0.257)	(0.281)	(0.247)
Belt and Road Country	0.148	0.296	-0.106	0.588
	(0.393)	(0.395)	(0.384)	(0.376)
Observations	676	676	676	676
R-squared	0.438	0.504	0.641	0.706
Number of Country	169	169	169	169

Note: *p<.1; **p<.05; ***p<.01. Standard errors in brackets. Between model is used.

Table A2: Difference between Large Greenfield and Large Non-Greenfield FDI (2010-2017)

	(1)	(2)	(3)	(4)
Sample	Greenfield FDI(>$100m)		Non-Greenfield FDI(>$100m)	
Period	2010-2013	2014-2017	2010-2013	2014-2017
Economic Conditions				
Real GDP per capita Growth (%)	5.083	-1.324	-0.565	-3.251
	(4.110)	(3.356)	(3.786)	(3.201)
Real GDP per capita (RMB log)	0.223	-0.060	0.531***	0.634***
	(0.186)	(0.195)	(0.172)	(0.186)
Population (log)	0.826***	1.130***	0.758***	0.919***
	(0.109)	(0.125)	(0.101)	(0.119)
Total Natural Resources Rents (% of GDP)	-0.013	0.003	-0.005	0.011
	(0.014)	(0.015)	(0.013)	(0.015)
Real Exchange Rate (CNY to 0.001 LCU)	0.428	0.255	0.081	0.038
	(0.408)	(0.200)	(0.376)	(0.191)
Distance to China (km log)	-0.197	-0.602	0.247	-0.881**
	(0.392)	(0.397)	(0.362)	(0.378)
Export Sophistication Index	0.109	0.547	0.581*	0.382
	(0.360)	(0.370)	(0.331)	(0.353)
Culture Proximity				
Share of Chinese in Population (%)	0.491***	0.282***	0.186**	0.126
	(0.093)	(0.099)	(0.085)	(0.094)
Governance Quality				
Voice and Accountability	0.375	0.308	0.387	0.925***
	(0.350)	(0.330)	(0.323)	(0.315)
Political Stability and Absence of Violence/Terrorism	0.550*	0.639*	0.084	0.044
	(0.298)	(0.328)	(0.274)	(0.313)
Government Effectiveness	-0.478	0.385	-0.594	-0.613
	(0.739)	(0.814)	(0.680)	(0.777)
Regulatory Quality	-0.410	-0.540	-0.317	0.046
	(0.497)	(0.561)	(0.458)	(0.535)
Rule of Law	0.605	0.545	0.892	0.372
	(0.764)	(0.810)	(0.703)	(0.773)
Control of Corruption	-0.577	-0.394	-0.204	0.211
	(0.615)	(0.619)	(0.567)	(0.590)
Governance (Mean of WGI)	0.068	0.835***	0.341	1.146***
	(0.324)	(0.301)	(0.294)	(0.289)
Belt and Road Country	0.037	0.484	-0.707*	-0.725
	(0.449)	(0.462)	(0.414)	(0.441)
Observations	676	676	676	676
R-squared	0.442	0.540	0.439	0.562
Number of Country	169	169	169	169

Note: *p<.1; **p<.05; ***p<.01. Standard errors in brackets. Between model is used.

Table A3: B&R Country List

Country Name	Region	Country Name	Region	Country Name	Region
Kenya	Africa	Afghanistan	South Asia	Belarus	Eastern Europe
Egypt	Africa	Sri Lanka	South Asia	Slovak Republic	Eastern Europe
Ethiopia	Africa	Pakistan	South Asia	Serbia	Eastern Europe
Armenia	Central Asia	Iran	South Asia	Lithuania	Eastern Europe
Tajikistan	Central Asia	Maldives	South Asia	Moldova	Eastern Europe
Uzbekistan	Central Asia	Bangladesh	South Asia	Bosnia and Herzegovina	Eastern Europe
Azerbaijan	Central Asia	Nepal	South Asia	Ukraine	Eastern Europe
Georgia	Central Asia	India	South Asia	Bulgaria	Eastern Europe
Kyrgyz Republic	Central Asia	Saudi Arabia	Middle East	Romania	Eastern Europe
Mongolia	Central Asia	Oman	Middle East	Poland	Eastern Europe
Kazakhstan	Central Asia	Jordan	Middle East	Albania	Eastern Europe
Turkmenistan	Central Asia	Iraq	Middle East	Macedonia	Eastern Europe
Thailand	Southeast Asia	Israel	Middle East	Czech Republic	Eastern Europe
Myanmar	Southeast Asia	United Arab Emirates	Middle East	Croatia	Eastern Europe
Indonesia	Southeast Asia	Yemen	Middle East	Russia	Eastern Europe
Cambodia	Southeast Asia	West Bank and Gaza	Middle East	Hungary	Eastern Europe
Timor-Leste	Southeast Asia	Kuwait	Middle East	Slovenia	Eastern Europe
Lao PDR	Southeast Asia	Qatar	Middle East	Montenegro	Eastern Europe

Brunei	Southeast Asia	Turkey	Middle East	Latvia	Eastern Europe
Philippines	Southeast Asia	Syrian Arab Republic	Middle East	Estonia	Eastern Europe
Vietnam	Southeast Asia				

Table A4: Tax Havens and China's OFDI Inflow (2003-2017)

Country Name	Total FDI	Country Name	Total FDI
Andorra	0	Macao SAR, China	3355
Antigua and Barbuda	1	Malaysia	5766
Aruba	0	Malta	163
Bahrain	71	Marshall Islands	-2
Barbados	32	Mauritius	964
Belize	1	Monaco	0
Bermuda	2305	Nauru	0
British Virgin Islands	63750	Palau	12
Cayman Islands	64415	Panama	376
Costa Rica	0	Samoa	556
Cyprus	780	Seychelles	223
Dominica	1	Singapore	34257
Gibraltar	0	St. Kitts and Nevis	0
Grenada	0	St. Lucia	0
Hong Kong SAR, China	656366	St. Vincent and the Grenadines	33
Ireland	907	Switzerland	8068
Isle of Man	0	The Bahamas	59
Lebanon	1	Turks and Caicos Islands	0
Liechtenstein	12	Vanuatu	63

Luxembourg	5278

Note: The unit of total FDI is million USD. The data source of total FDI is MOFCOM. The selection of tax haven countries is based on IMF's list.

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