

# THOUGHT LEADERSHIP BRIEF

## KEY POINTS

- ▶ Analysis of project-level data on China's outbound FDI and construction projects finds that the Belt and Road Initiative (BRI) has led to a large increase in China's outbound FDI in Belt and Road (B&R) countries compared to non-B&R 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

This research is supported by the Strategic Public Policy Research Funding Scheme from the Central Policy Unit of the Hong Kong SAR government.

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

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### Issue

China's ambitious Belt and Road Initiative (BRI) aims to promote connectivity with countries along China's traditional trade routes and increasingly with countries throughout the world. Since the Initiative was announced in September 2013, China has committed hundreds of billions of dollars to infrastructure and foreign direct investment projects in B&R countries.

Debates over China's intentions and practices under the Initiative have been

polarized. Some accuse China of seeking out weak, corrupt governments to exploit and create dependency. In contrast, others emphasize that the investments seek to promote development and shared prosperity.

Although six years have now passed since the start of BRI, there has been little systematic analysis of which B&R countries have seen the greatest increase in investments, and what country characteristics best predict which countries have attracted more investments

from China. A better understanding of these questions can help shed light on which countries are benefiting most from the Initiative, and also on the nature of the Initiative itself, since a quantitative assessment can move beyond the rhetoric to uncover the underlying determinants of the flow of Chinese investments to different countries.

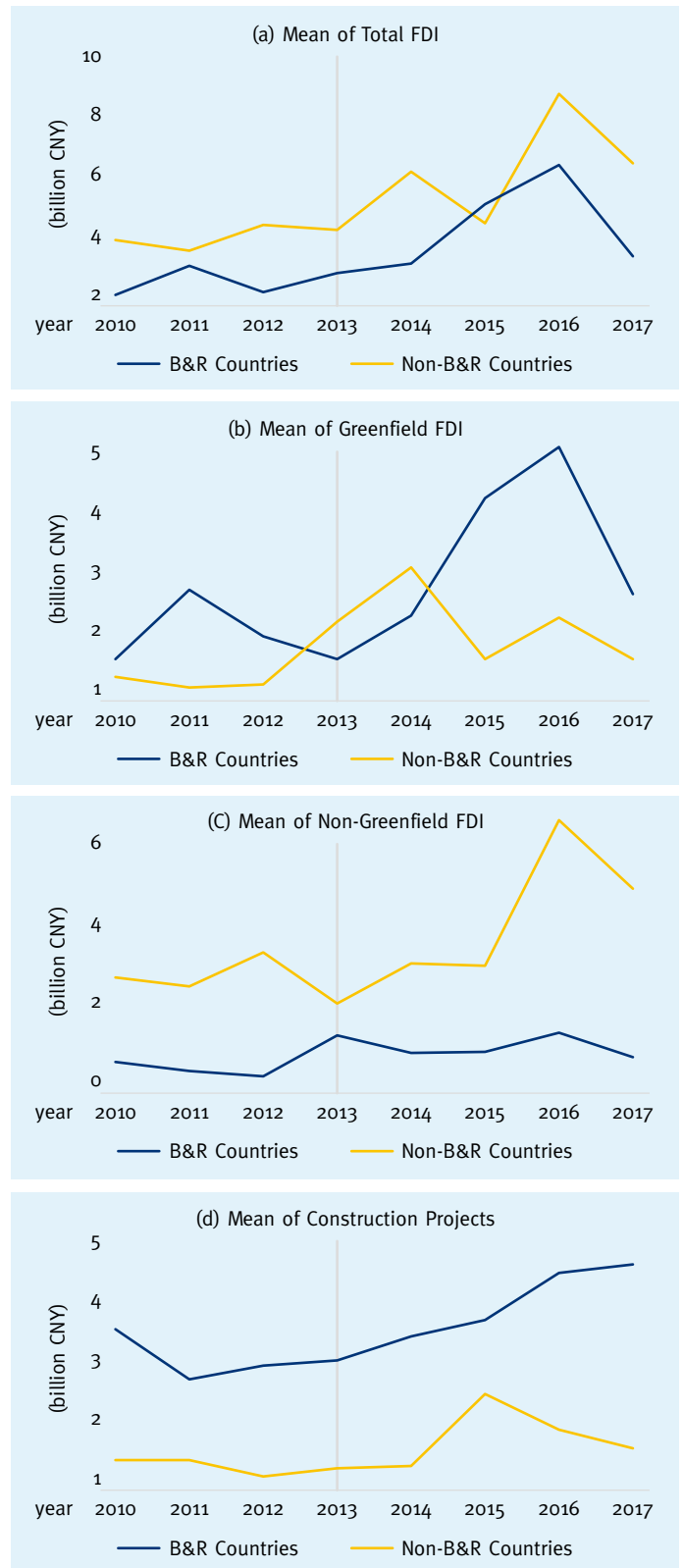
### Assessment

In order to assess how the BRI has influenced the amount of China's outbound investments to different countries, we assemble a global dataset of China's outbound FDI (OFDI) and infrastructure projects. According to bilateral FDI data published by China's Ministry of Commerce, about 75% of China's OFDI goes to Hong Kong or tax havens (e.g., British Virgin Islands and the Cayman Islands) with the final destination unknown, making the data unsuitable for analysis. In contrast, our project-level data comes from two independent sources that verify information on Chinese projects at final destination from government, company, and media websites: the Financial Times' fDi Market (FM) dataset on greenfield FDI projects, and the China Global Investment Tracker (CGIT) of the American Enterprise Institute, which records large (above \$100 million) construction and FDI projects (including greenfield and brownfield investments, and mergers and acquisitions). Merging the datasets results in a sample of 5,053 cross-border investment projects from 2010 to 2017 with a total value of \$1.22 trillion and 1,184 large construction projects with a total value of \$601 billion.

Using these data, we calculate that China's OFDI increased from \$395 billion during the four years before BRI (2010-2013) to US\$827 billion during the four years after BRI (2014-2017), an increase rate of 109.4%. The value of construction projects for the same periods increased from \$230 billion to \$370 billion, or by 60.5%.

In Figure 1, we compare the investment trends in B&R countries and non-B&R countries. Although recently China has dramatically expanded the number of countries invited to participate in the BRI, for this analysis we categorize 61 of the 169 countries in our dataset as B&R countries based on the set of countries initially targeted. B&R countries are located in the Middle East (15 countries), Eastern Europe including Russia (10), other parts of Europe (10), Southeast Asia (9), South Asia (8), Central Asia (5), and East Africa (3). We look separately at total FDI, greenfield FDI, non-greenfield FDI, and construction projects. The plots reveal that FDI in both B&R and non-B&R countries increased over time, but faster in B&R countries after 2013. It is revealing to divide FDI between greenfield and non-greenfield projects. Greenfield FDI increased substantially in B&R countries, but relatively little in non-B&R countries, while non-greenfield FDI increased significantly in non-B&R countries but remained at consistently low levels in B&R countries. This is consistent with much of China's OFDI in developed countries being in the form of mergers and acquisitions. The value of construction projects also is consistently higher and increased more in B&R countries compared to non-B&R countries. Regression-based

**Figure 1: 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.

estimates of how the BRI has affected annual investment flows over time within each country, and which account for differential trends in B&R and non-B&R countries prior to the BRI, find that total FDI from China to B&R countries increased by about 100% after 2013 compared to non-B&R countries, greenfield FDI increased by 146%, and the value of construction projects increased by 17%.

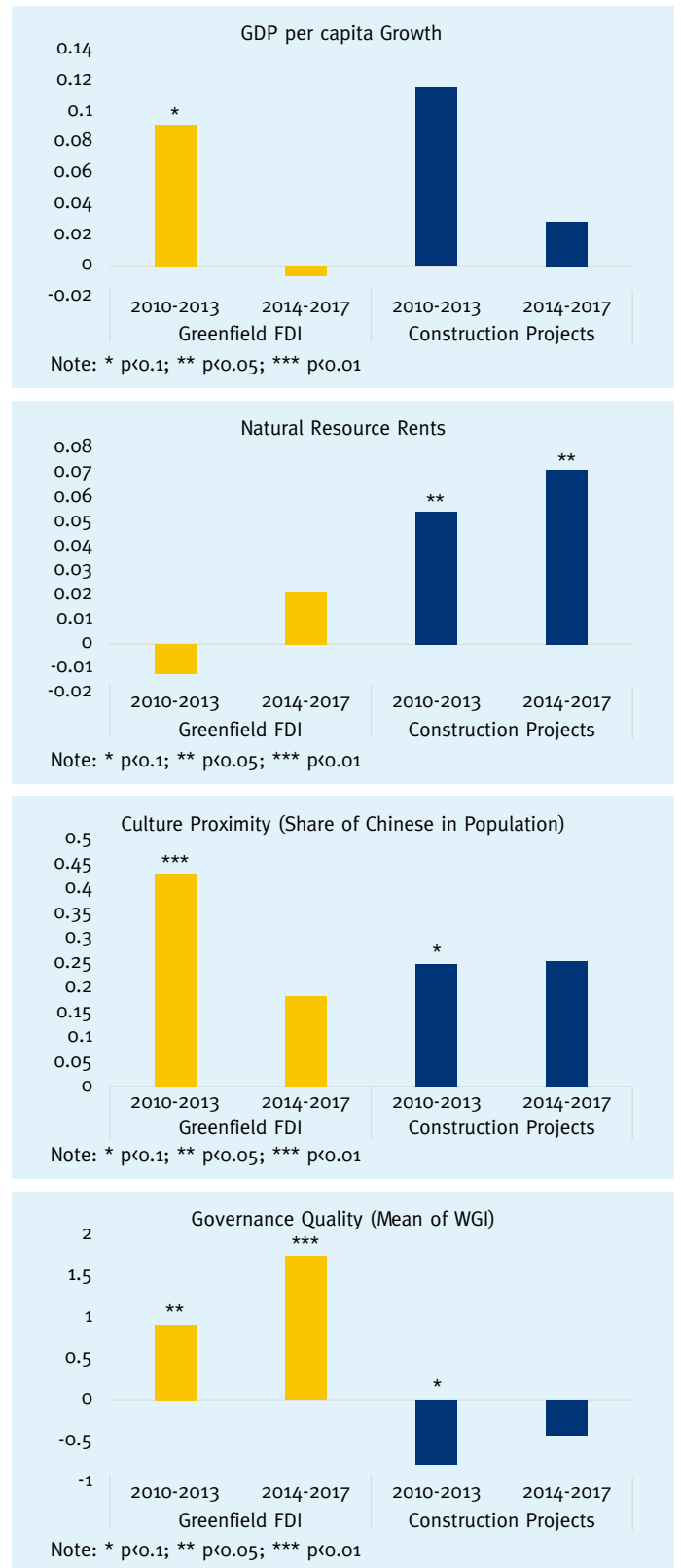
In recent years, South Asia and Southeast Asia have received the lion's share of Chinese outbound FDI to B&R countries. Much of the increase in outbound greenfield FDI to B&R countries is concentrated in South Asia, Africa, and Central Asia, while the increase in construction projects is concentrated in South Asia, the Middle East, and Southeast Asia. Consistent with China's quest for energy resources, the sector receiving the most greenfield FDI in B&R countries both before and after the BRI, and also showing the largest increase after the BRI, is the energy sector. In contrast, greenfield FDI in the energy sector changed little in non-B&R countries. After BRI began, resource sectors (energy and metals and minerals) account for 47% of greenfield investments in B&R countries.

In order to shed light on the motivations driving China's OFDI, we employ regression analysis to analyze how three different types of country factors—economic fundamentals, cultural proximity, and governance quality-- influence the value of greenfield FDI and construction projects in different countries. We conduct the analysis separately for the years prior to BRI and the years after BRI to test whether the importance of different factors changed after the BRI was implemented.

The 7 economic fundamentals we consider are the growth rate of GDP per capita, level of GDP per capita, population, natural resource rents (as a share of GDP), real exchange rate, distance to China, and export product sophistication. Cultural proximity is captured by the share of Chinese in the population. Finally, for governance quality, we use the World Bank's Worldwide Governance Indicators (WGI), which for each country in each year include indicators for 6 dimensions of governance: voice and accountability, political stability and absence of violence/terrorism, government effectiveness, regulatory quality, rule of law, and control of corruption. We define an overall governance quality indicator to be the mean of the 6 different dimensions of governance.

The magnitude and statistical significance of the coefficients on some of the key indicators (growth rate of GDP per capita, natural resource rents, share of Chinese in the population, and overall governance quality) are presented in Figure 2. Our main findings are that for greenfield FDI, economic fundamentals (like the growth rate of GDP per capita) and cultural proximity significantly influence the amount of investments before BRI but not after BRI, while the impact of governance quality matters in both years but significantly increases in importance after BRI. For construction projects, the importance of economic fundamentals also declines significantly after BRI, with the exception of natural resource rents, which unlike

**Figure 2: Impacts of Country Characteristics on Greenfield OFDI and Construction Projects Before and After BRI**



Notes: Coefficient estimates from regressions of annual Chinese investments in different countries on a set of country characteristics (7 economic fundamentals, share of Chinese in population, and governance quality). Data constructed from merged project-level data from FM and CGIT.

## Reference

Diao, Wentian and Albert Park.. *Which Countries Have Benefited Most from China's Belt and Road Initiative?*, working paper, HKUST, 2019.

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for greenfield FDI has a large impact before BRI, and an even greater impact after BRI. The importance of cultural proximity remains consistent over time, while governance quality is negatively related to construction investments before BRI but becomes unimportant after BRI.

The declining relevance of economic fundamentals to China's outbound investments to different countries (both greenfield FDI and construction projects) raises concerns that the economic returns to such investments may have declined under the BRI. This finding could be consistent with China's making efforts to assist poorer countries despite the lower expected returns to such investments.

The increasing importance of governance quality in determining the amount of Chinese greenfield FDI that countries can attract is a striking result that is inconsistent with the accusation that under the BRI, China is directing investments to corrupt, poorly governed countries. Additional analysis finds that the importance of governance is much greater in B&R countries than in non-B&R countries, and increasing in both types of countries. This suggests that Chinese greenfield FDI investors may be more concerned about governance in riskier environments where economic fundamentals are less strong. We also find that governance quality matters less for investments in resource sectors than in non-resource sectors, suggesting that the high priority of gaining

greater access to resources may lower investors' vigilance about governance quality. As just reported, governance quality does not influence construction investments and was even inversely related to such investments prior to the BRI. Analysis of specific dimensions of governance finds that it is the control of corruption that most negatively affects the amount of Chinese construction investments.

## Recommendations

Given the lower economic returns implied by the declining relationship between economic fundamentals and China's outbound investment flows, Chinese decision-makers may want to consider ways to improve the efficiency of such investments, for example by giving expected returns greater weight in project selection, increasing the rigor of project feasibility studies, and encouraging more OFDI by private firms.

Criticisms that Chinese investments ignore governance factors or even reward poor governance appear unfounded. However, there is still significant scope to improve the responsiveness of investment flows to governance quality for some types of investments, such as construction projects and greenfield FDI in resource sectors.



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