

THE BELT AND ROAD INITIATIVE: ARE CHINA'S INVESTMENTS SENSITIVE TO THE QUALITY OF GOVERNANCE IN A HOST COUNTRY?

Nader Habibi and Xinge Ruan

GDS WORKING PAPER SERIES / GENERAL DEVELOPMENT STUDIES / NO 2023-01 / JULY 2023



CENTER FOR GLOBAL DEVELOPMENT + SUSTAINABILITY

GENERAL DEVELOPMENT STUDIES

WORKING PAPER 2023-01

The GDS Working Paper series shares the findings of our ongoing research and seeks to contribute to a global dialogue on critical issues in development. The findings may be preliminary and subject to revision. The analysis and findings in the papers are those of the author(s) and do not necessarily represent the views of the Center for Global Development and Sustainability, the Heller School for Social Policy and Management, or those of Brandeis University.



The Belt and Road Initiative: Are China's Investments Sensitive to the Quality of Governance in a Host Country?

Nader Habibi and Xinge Ruan
(July 2023)

Abstract

This article uses statistical analysis to explore the correlation between the quality of governance in a host country and the size and nature of China's investments in that country, based on the available data for 2005-2020. We focus on two types of Chinese economic engagements with each host country: direct investment by Chinese firms and the volume of service contracts awarded to Chinese firms for construction projects.

Overall, our statistical analysis demonstrates that China's direct investments and service contracts both show significant correlations with the governance characteristics of the host country. At the same time, we observe a large degree of diversity in the significance of specific governance indicators across regions and economic sectors. The Regulation Quality indicator, for example, has a strong positive correlation with total investment and total service contract, but the significance is lost when the sample is restricted to the Middle East or South Asia.

The most intriguing finding of our research is that in some sectors, the correlation between governance indicators and China's direct investments and service contracts varies significantly. The Voice and Accountability indicator has a positive correlation with China's direct investments but a negative correlation with China's service contracts for the entire sample. This suggests that China is awarded more service contracts in less democratic countries of these regions. An alternative explanation is that Chinese firms prefer to invest directly in more democratic countries and operate as contractors in less democratic countries. Similarly, we find a positive correlation between the absence of corruption and China's service contracts, but no significant correlation with its direct investments.

Xinge Ruan: Bachelor of Art in Economics & Psychology, May 2023, Brandeis University.
[xingeruan\(at\)brandeis.edu](mailto:xingeruan(at)brandeis.edu)

Nader Habibi: Faculty, Crown Center for Middle East Studies, and Department of Economics, Brandeis University. [nhabibi\(at\)brandeis.edu](mailto:nhabibi(at)brandeis.edu)
(Affiliated faculty of the Center for Global Development and Sustainability)

Acknowledgement: We would like to express our gratitude to the Asia Pacific Center in Brandeis University for financial support of this research project.

1) Introduction

In the 21st century China has emerged as the leading investor and provider of investment finance to the rest of the world. This new position was made possible by the robust export performance and record-breaking export earnings that China enjoyed after the market-oriented economic reforms of the 1980s and 1990s. These surpluses enabled China to accumulate as much as three trillion dollars in hard currency reserves by 2000 and it has used these savings to finance investment projects all around the world. These investments have led to the construction of hundreds of infrastructure projects, real estate, and manufacturing units in both developed and developing countries.

While China's outbound investments and engagement of Chinese firms in overseas projects began in the 1990s, their growth accelerated after 2000. China's total direct foreign investments rose from \$32.6 billion in 2002 to \$2,335 billion in 2019 (Saidi, 2021). This accelerated expansion followed the announcement of the "Going Global Strategy" by Chinese government in 2000. According to this strategy the government encouraged Chinese companies to invest abroad and expand their foreign operations. The initial focus was on the energy and natural resource extraction sectors, but in more recent decades the target sectors have become more diverse. This new strategy was followed by Chinese acceptance into the WTO in 2001, which gave China access to numerous countries' markets (Wang & Miao, 2016).

Recent empirical studies indicate that China's investments have had a positive economic impact on their host countries (Sylvaire et al., 2022). For many developing countries, Chinese investments have provided an unique opportunity to build crucial infrastructure projects for which they have been unable to find investors from other countries. Chinese firms have demonstrated a propensity to invest and operate in developing countries that are considered high risk by other industrial and creditor nations. Angola, for example, appealed to the IMF, the World Bank and Western investors for investment and financing, after its civil war came to an end in 2002, but there was no significant response. In exchange for crude oil, China provided substantial development loans for multiple infrastructure initiatives. The value of these loans in 2018 stood at \$60 billion (He, 2018). These investments have also resulted in transfer of knowledge and technology to the host countries. Furthermore, the rise of investments has been accompanied by a similarly rapid increase in bilateral trade relations. A substantial portion of China's investments in many developing countries have been concentrated on projects that enhance trade and transportation, such as railroads, highways, and commercial seaport terminals.

The objective of this research is to use the available data for 2005-2021 to determine if China's investments have a significant correlation with the governance characteristics of

the host countries. In other words, based on the available governance indicators for the host countries, did China invest more in countries that had higher governance scores? The more detailed goal is to identify the correlation of each specific type of governance indicator that we have included in this analysis. This investigation will also be repeated for China's construction service contracts in various countries. In these contracts, China does not invest directly. Instead, the host nation hires a Chinese construction company as a contractor.

2) **Review of Literature**

With the rapid increase of Chinese investments in many developed and developing countries, scholars have conducted several empirical studies in recent years to investigate two important questions. First, what effect do these investments have on the economy of the host country? Do Chinese investments have a positive impact on economic growth, financial stability, and economic development? Second, what attributes and characteristics of the host countries have made them attractive for Chinese investments. Our article contributes to this second research track. We are interested in how the quality of governance (as measured by six standard indicators) in the host country is correlated with the volume of Chinese investments since 2005.

A small number of publications have directly addressed this issue so far, and Sutherland et al. found Chinese investments has negative correlation between the rule of law and government accountability in the host country. (Sutherland et al., 2020). In addition, they propose a reverse causality and argue that the BRI investments might reduce the incentives of the host country to strengthen human rights institutions. Using panel data for BRI member countries, Liu et al. (2023) discovered that Chinese foreign direct investments were skewed toward countries that exported oils and natural gas. (Liu et al., 2022). Their study revealed that the land transportation capacity (which is an infrastructure indicator) had a positive impact on FDI, whereas political institutions had no significant impact.

In recent years, a small body of literature has argued that because Chinese firms are accustomed to poor governance conditions at home (such as bribery and corruption), they are comfortable operating in countries with poor governance. (Kang & Jiang, 2012). Sutherland et. al. (2020) presents two alternative explanations for why there might be a negative correlation between the volume of Chinese investments and some governance indicators. First, since the Chinese government is actively involved in negotiation and implementation of these projects in numerous countries, Chinese firms will perceive a lower country risk despite poor governance conditions in a host country, as they realize that the Chinese government will assume a portion of these risks. Second, Chinese firms

and the Chinese government might find it easier to invest in countries with lower voice and accountability, as their major infrastructure projects will be subject to less political scrutiny and fewer regulations.

Another reason that Chinese firms might be more willing to invest and operate in low governance countries is that the Chinese government overcomes the institutional vulnerabilities of the host country by establishing Special Economic Zones for Chinese firms. Then, it negotiates an agreement with the host government to improve the governance and regulatory environment of the SEZ for participating firms. Therefore, the quality of governance for firms within SEZs will be higher than the country in general (Bräutigam & Tang, 2014).

3) Model and Data

The data on China's outward investments that we have used for this study is extracted from the American Enterprise Institute's China Global Investment Tracker (CGIT). This comprehensive database provides information values of two types of economic activities conducted by Chinese firms: a) direct investments which result in the acquisition of assets by Chinese firms in a host country, b) construction projects that are awarded to Chinese firms by government or private firms in a host country. These projects generate economic activity and revenue for Chinese firms without resulting in ownership. This dataset has the advantage of providing project-level data, which identifies the Chinese firm, the year, and the economic sector of the project. Our annual data spans 2005 through 2021. We have aggregated the data to the reported economic sectors at the country level.

This level of detail in the CGIT database allows us to study the impact of host country governance characteristics not only on the aggregate level of the investment and Construction service contracts, but also at sectoral level. For our sectoral analysis we have selected three economic sectors with the most investment and contract value. These are the energy, real estate, and transportation sectors. Going beyond the aggregate investment data to the sector level is an original contribution that, to the best of our knowledge, has not been done before by other scholars.

Using these sector level investment and contract data as dependent variables will enable us to identify the differences in how the governance variables are correlated with Chinese investments in each sector. In addition, we will be able to determine the proportion of contracts and direct investments in each sector. This relative share will depend not only on the preferences of the Chinese firms, but also depend on the regulations and preferences of the host country. In many countries, foreign investment regulations vary by sectors. Some oil-producing countries, for example, prohibit foreign ownership in the

energy sector but encourage foreign investment in the manufacturing or transportation industries.

Our governance indicators were extracted from the World Bank's governance database, Worldwide Governance Indicators. The indicators that we have used in this study are: 1) Voice and accountability, 2) Political stability, 3) Corruption, 4) Regulations Quality, 5) Government Effectiveness, and 6) Rule of law. Fortunately, data for these indicators were accessible for most countries that we have included in our study. In the World Bank database, the values of these indicators fall between (-2.5 and 2.5) and a higher score indicates a higher level of governance quality (Appendix B). In our analysis we are interested in the correlation between the volume of Chinese investments (and Chinese service contract projects) and each of these governance indicators.

Our data consists of 2,635 country-year data records, allowing us to structure it as an unbalanced panel data set spanning 16 years and 154 countries. We utilized the panel data regression model based on the characteristics of our dataset and conducted the regressions with both fixed and random effects. Then we use the Hausman test to determine which model is the most appropriate. Each regression model's reported results are based on the model that is not rejected by the Hausman test.

4) Descriptive Analysis

This section provides an overview of China's investments in various global territories before and after the Belt and Road Initiative was launched in 2013. The earliest investment data available begins in 2005, preventing us from examining Chinese investments prior to this year. The aggregate annual investment data for China, however, suggest that the amount of investments was relatively small prior to that year. China's outward FDI began to rise in 2005. It was under 10 billion dollars in 2004, but by 2013, it had grown to 100 billion dollars (Yeoh et al., 2018).

Our annual data covers nine years prior to BRI (2005-2013) and eight years after (2014-2020). Although BRI was announced in 2013, we consider 2014 as the first year that BRI was in full effect. First, we will analyze the allocation of Chinese investments and contract projects at the aggregate (total) level, followed by sectoral analysis for three largest sectors: transportation, real estate, and energy.

4.1) Total Investment and Contract Projects:

Total Investment and Construction Services Contracts:

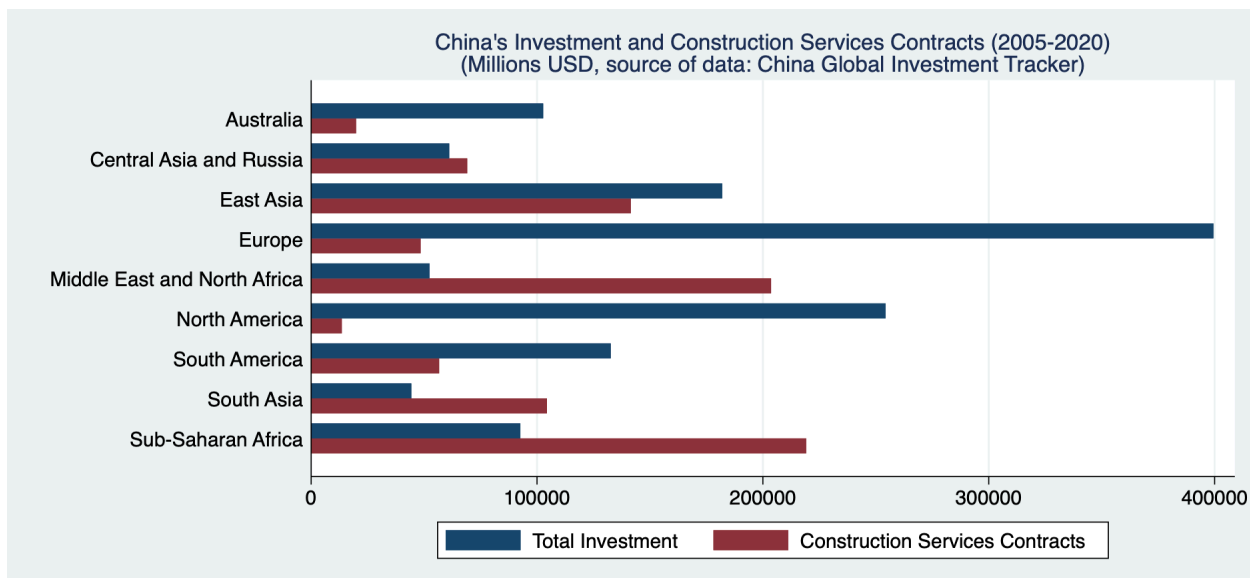


Figure 1

When considering the total value of China's investment and construction services over the entire period (Figure 1) we observe that Europe, East Asia and Sub-saharan Africa have received the largest amount respectively. In East Asia and Europe investments exceed construction service contracts but the opposite is true in Sub-Saharan Africa. We also observe that China's investments far exceed the value of project contracts in North America and Australia.

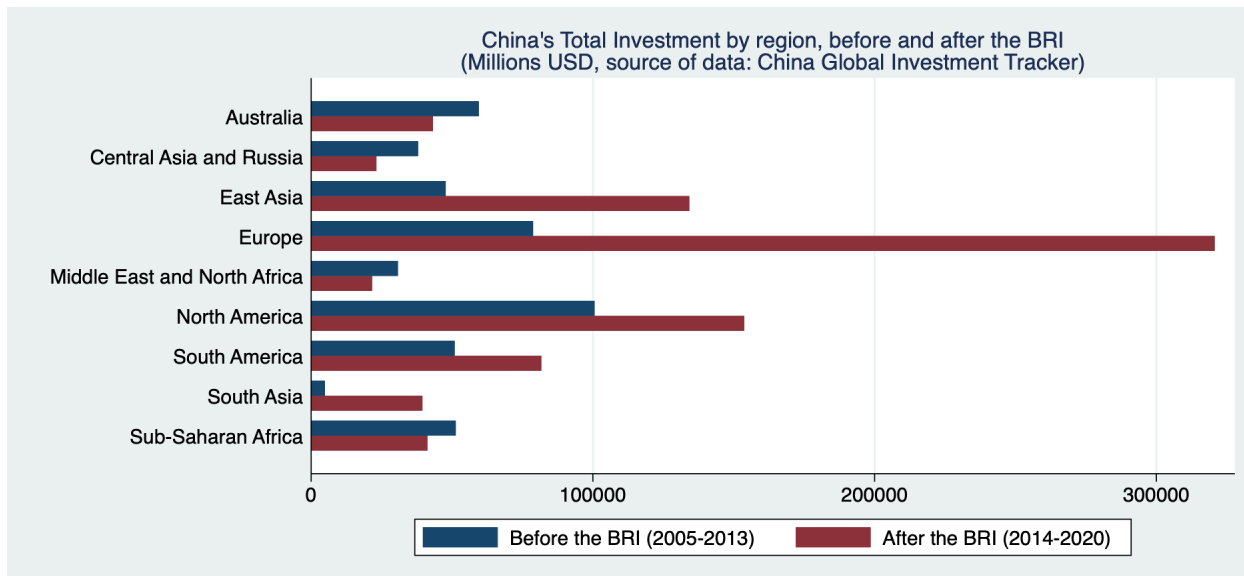


Figure 2

These differences suggest that China prefers investment (relative to project contracts) in more advanced economies which have better governance indicators. Another possible explanation is that these regions have more open capital and investment markets relative to emerging market economies, which tend to impose more restrictions on foreign investment. Most oil-exporting countries, for instance, impose stringent restrictions on foreign investment and foreign ownership in their energy industry (Eissa & Elgammal, 2019).

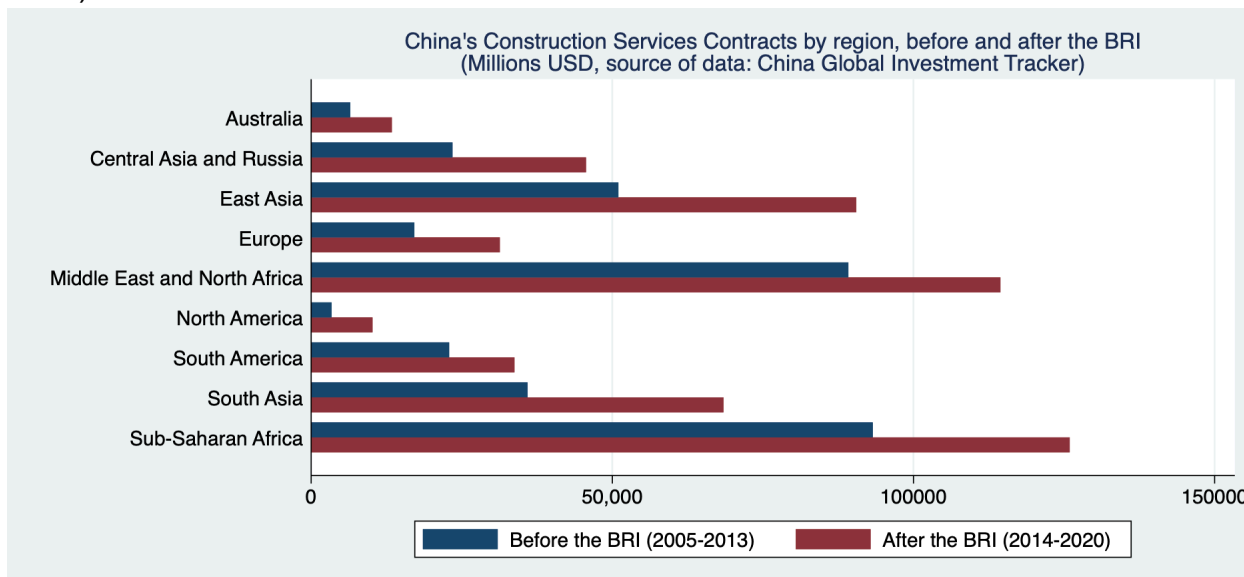


Figure 3

Comparing China's investments before and after the BRI (figures 2 and 3), we observe that the volume of investments has increased most in Europe, East Asia, and North

America after the introduction of the BRI. Europe clearly stands out for its remarkable and exceptional increase in investment after the BRI, and most of these new investments went to Eastern and Central European countries (Brown, 2020). We observe an opposite pattern when we compare the regional distribution of Chinese firms' service contracts. The value of these projects has increased the most in developing nations and emerging market regions, such as Sub-Saharan Africa and South Asia, as a result of the BRI. In addition, we find that the value of Chinese service contract projects has increased across all regions.

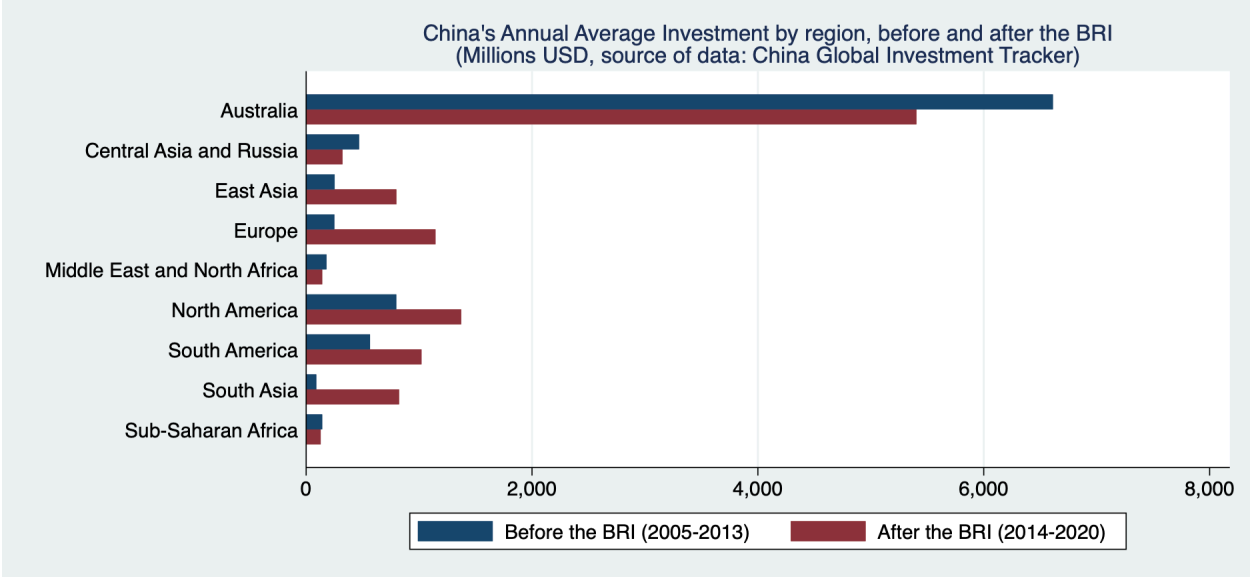


Figure 4

As demonstrated in Figure 4, China's investments in Australia substantially exceed all regional averages on an annual basis. This assessment is valid both before and after the BRI and reflects China's massive investments in that country in order to gain access to minerals and natural resources. Since 2000, Australia's proximity to China and its well-developed infrastructure and institutions are two additional positive factors that have contributed to this high level of Chinese investments. While annual investment peaked at \$16.2 billion in 2008 and remained above \$8 billion in many years, it has steadily declined since 2016, which explains the lower annual average during the BRI period (Yang, 2022).

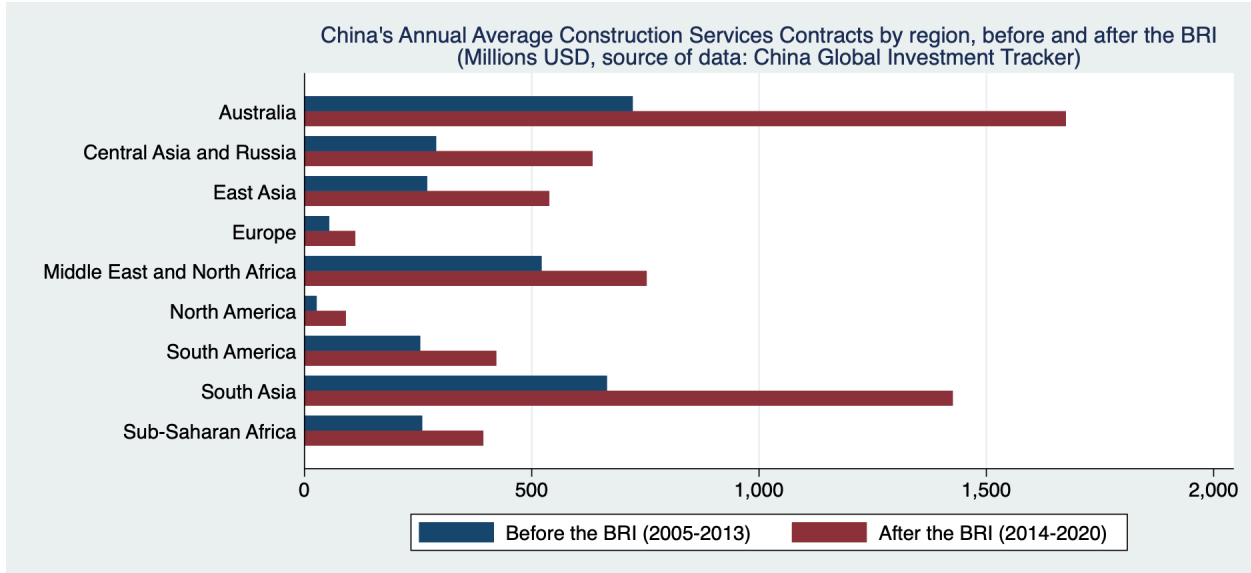


Figure 5

Setting Australia aside, Figure 4 illustrates a visible increase in annual Chinese investments in Europe, East Asia, North and South America, and South Asia during the BRI period. The smallest amount of annual investments were in Sub-Saharan Africa and the Middle East and North Africa (MENA). When we compare these with the annual volume of China’s construction projects (Figure 5), we notice that the annual Chinese contract projects are much larger than Chinese direct investments in South Asia and MENA.

4.2) Energy Investment and Construction Services Contracts:

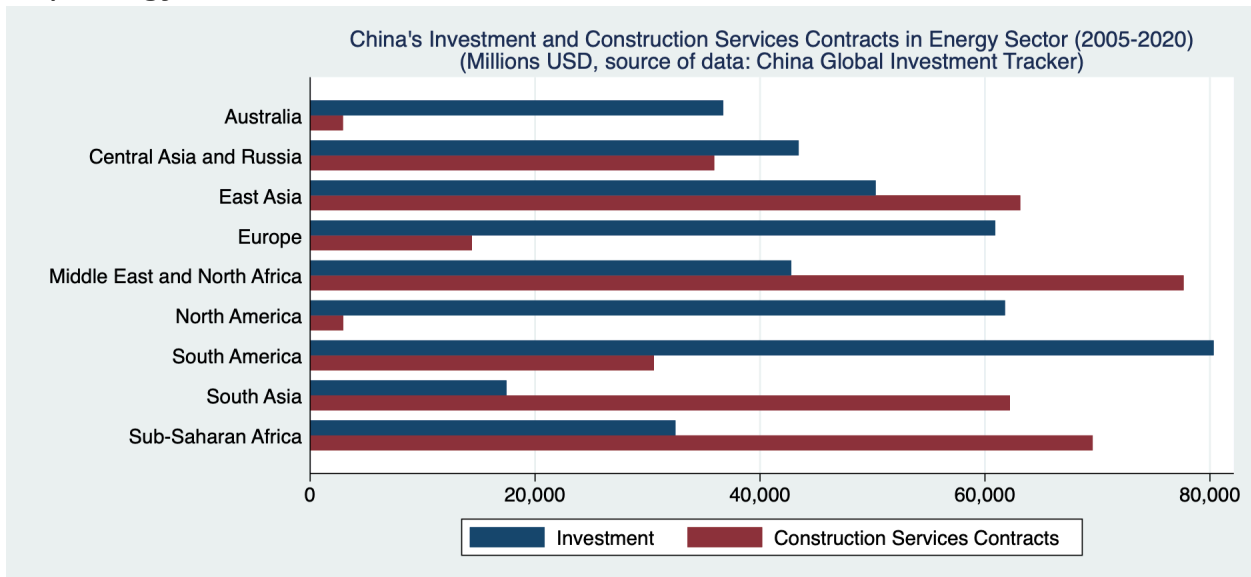


Figure 6

One of the most important sectors for China’s outward investments is the energy sector which accounts for 32.24% of investments and 48.52% of Service contract projects during 2005-2020. China has been a net crude oil importer since 1993, and imports now account for more than 70% of its total annual consumption (Zeng, 2022). The regional distribution of China’s investments and service contracts (Figure 6) shows that South America received the largest amount of China’s energy sector investments (\$80 billion) during 2005-2020, followed by North America. In both regions, the value of service contracts in the energy sector was relatively small. In contrast, MENA and Sub-Saharan Africa offered the largest amount of energy-related service contracts, which significantly exceeded China's direct investments (Figure 6).

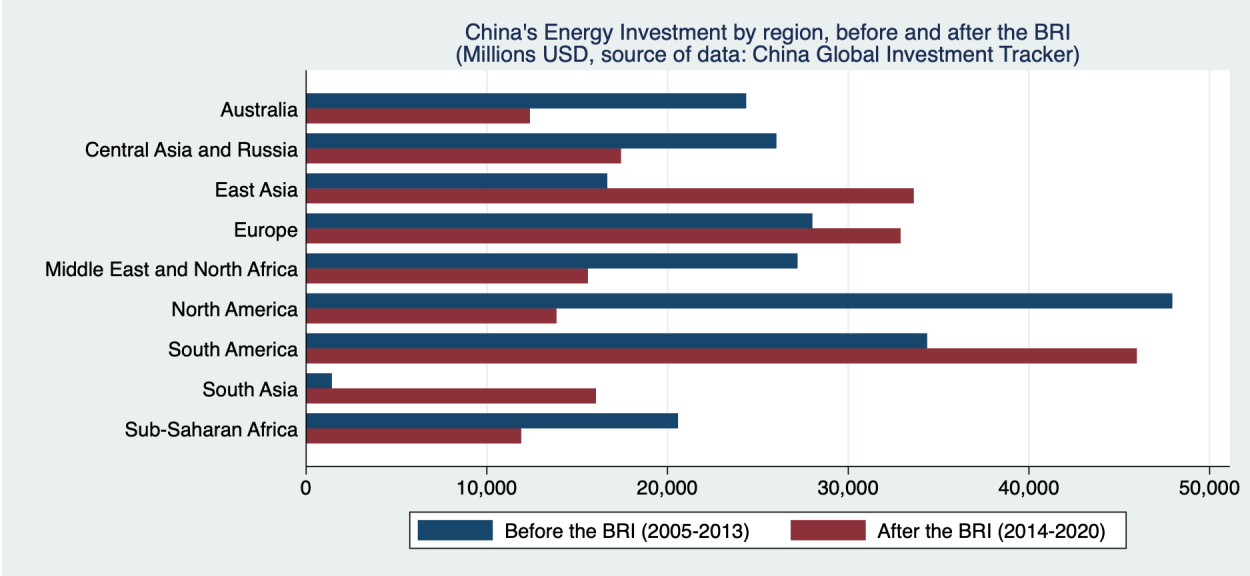


Figure 7

When comparing the energy sector investments before and after BRI (Figure 7), we observe significant increases after BRI in South America and East Asia. In contrast, North America and Australia had a sharp decline. The decline in North America is partly a result of restrictions and political opposition to Chinese investments in the US after 2014 according to Hart, 2015 and Scott et. al. 2019.

The post-BRI decline of China’s investments in Central Asia, Middle East and Sub-saharan Africa must be evaluated in combination with the increase in China’s service contract projects in these regions after the BRI (Figure 8). It appears that service contracts have replaced direct Chinese investments in these regions. Comparing Figures 7 and 8 reveals that although the volume of Chinese energy investments has declined in some regions because of BRI, the value of construction services projects in the energy sector has increased in all regions.

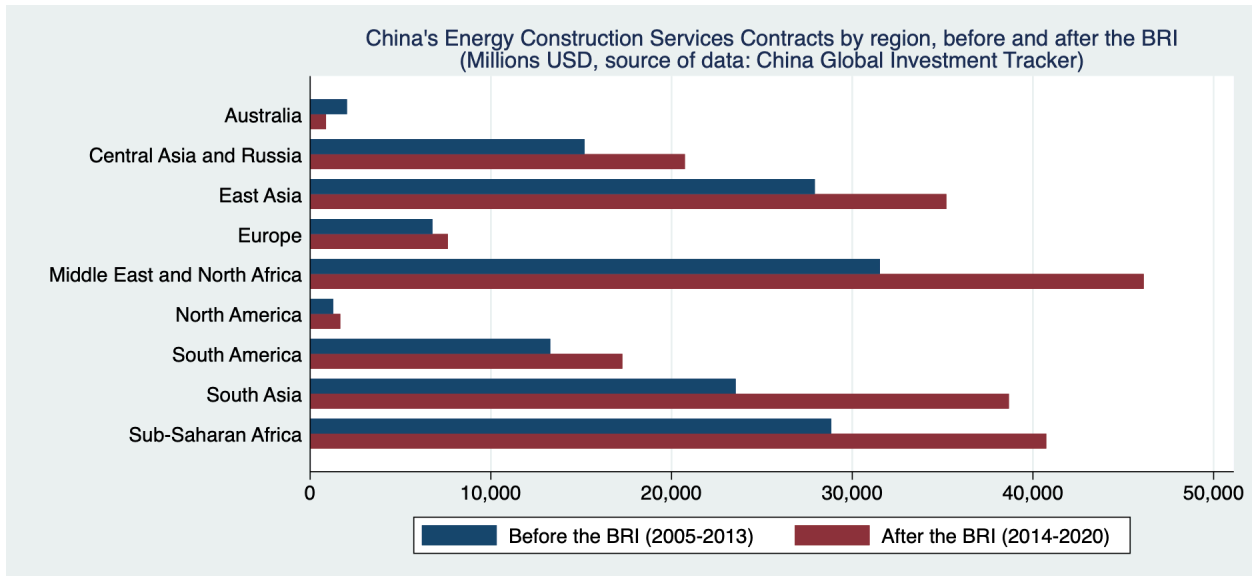


Figure 8

China's global investments before and after the BRI can be compared more accurately by comparing the annual investment volumes instead of the aggregate amount in each time period, as shown in Figure 8. Even though Australia has not signed a formal BRI agreement with China, it has received a much larger annual investment in the energy sector than any other country or region in the world. In the past two decades, China has made substantial investments in Australia's coal mines and renewable energy (Ferguson & Dent, 2022). It is also noticeable that annual investments in Australia were larger prior to the BRI.

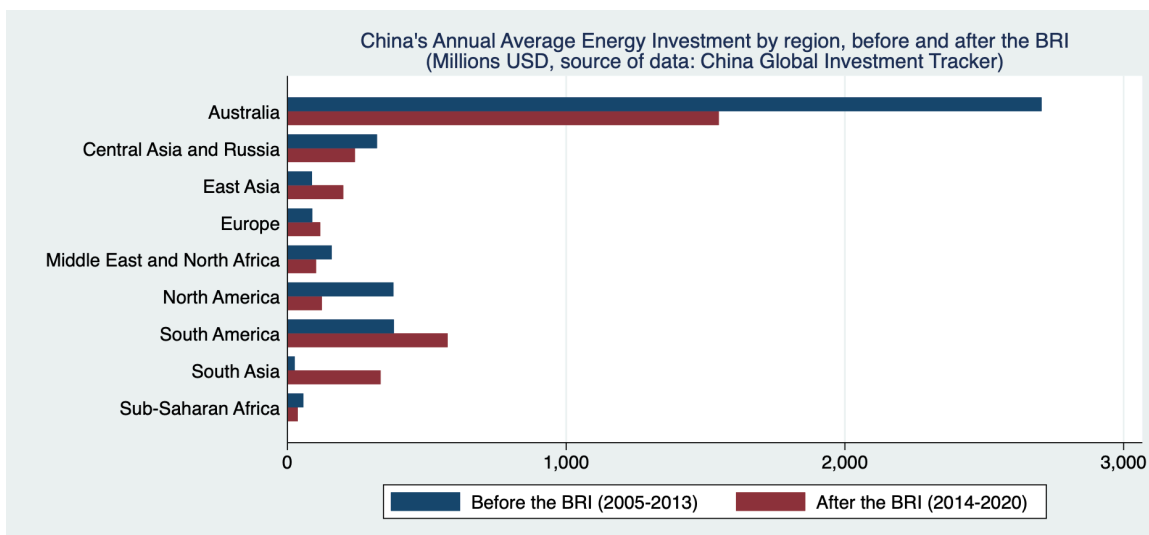


Figure 9

The small value of China's energy investments for other regions, particularly the Middle East and Sub-Saharan Africa, is offset by the relatively large volume of Chinese

construction contract services in these regions (Figure 9). There are two possible explanations for this situation. First, the business climate in these nations is less conducive to investment due to governance deficiencies and political uncertainty. Second, most countries in these developing regions impose restrictions on foreign investment in strategic sectors such as energy and mining. These restrictions limit China’s investment opportunities, so China prefers to engage with these economies via project financing and construction service contracts.

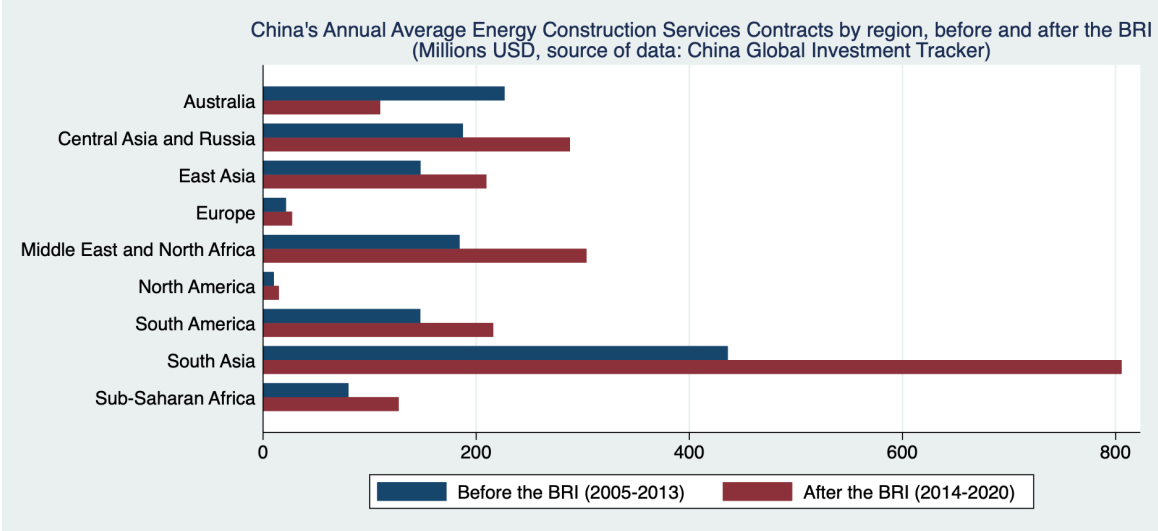


Figure 10

4.3) Transportation Investment and Construction Services Contracts:

Similar to the energy sector, we observe significant regional differences between China’s direct investments and contracts for construction services in various regions (Figure 11). While investments far outweigh service contracts in Europe and North America, the opposite is true in other regions, even in East Asia. The sharpest gap between investment and construction services is visible in MENA (\$45.5 billion) and Sub-Saharan Africa, which holds the record for transport sector service contracts relative to all other regions (\$87.5 billion). South Africa attracts the largest share of Chinese investments in Africa. The cumulative value of Chinese FDI in South Africa is estimated to be \$6 billion (Baah & Jauch, 2009). Furthermore, the value of these service contracts increased dramatically after BRI (Figure 13). The value of contracts in the transportation sector has decreased in North America and Europe as a result of BRI, but these regions have been able to attract more direct investments from Chinese sources in this sector. This happens because China mainly invests in infrastructures while western countries invest more in health, education and agriculture. China is estimated to have funded 31% of all construction projects in Africa valued at \$50 million or more in 2020 (Cheng, 2022).

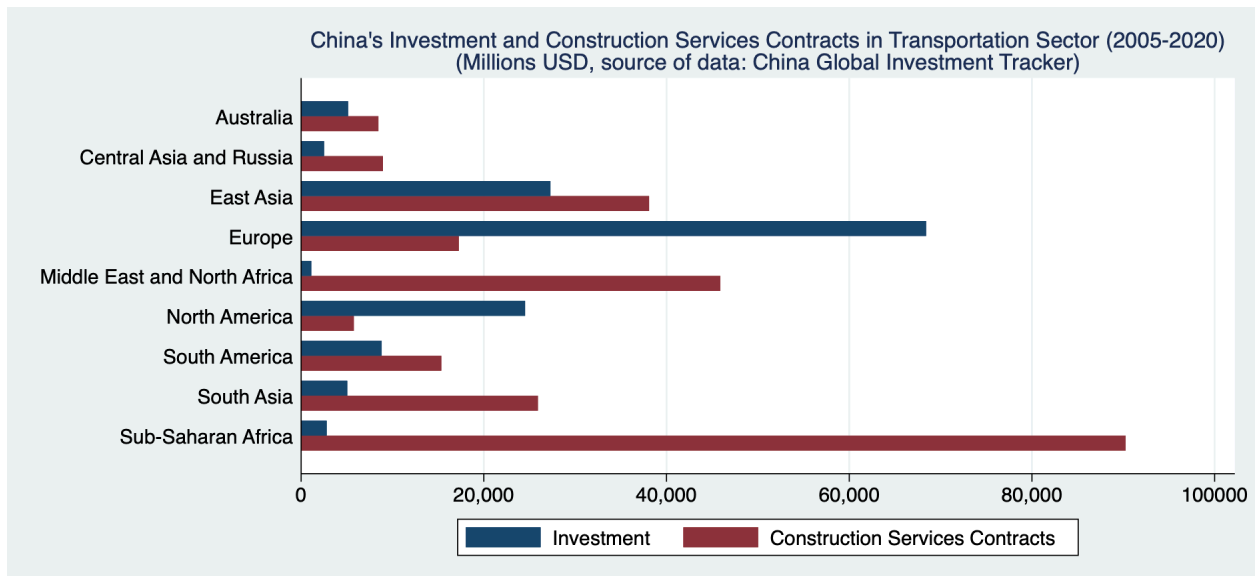


Figure 11

The record high Chinese investments in Europe's transportation sector represents several large-scale BRI projects in Eastern and Southern Europe (Ghiretti 2021). China has demonstrated a strong commitment to seaport and highway development projects. These will facilitate trade between Europe, Central Asia, and China. An important component of this network in Europe is the Budapest-Belgrade Railway. Additionally, China has invested in several logistics facilities in Poland (the Sławków logistics hub). Other important projects include new and expanded terminals in Vado Ligure (Ghiretti, 2021), Italy, and the Greek port of Piraeus (Karpathiotaki, 2022).

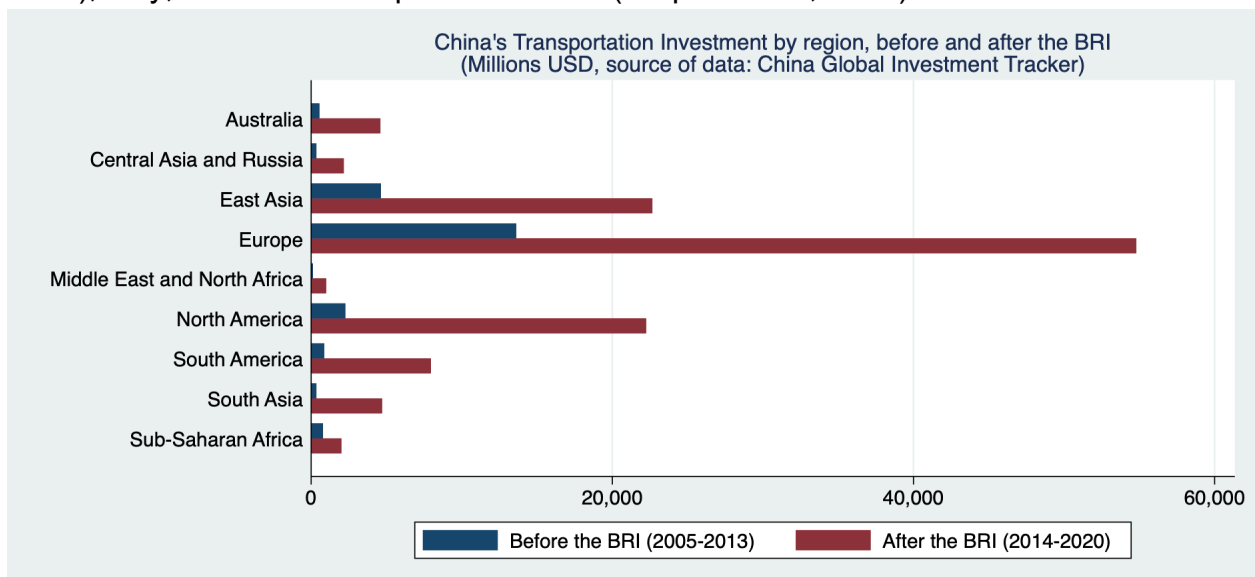


Figure 12

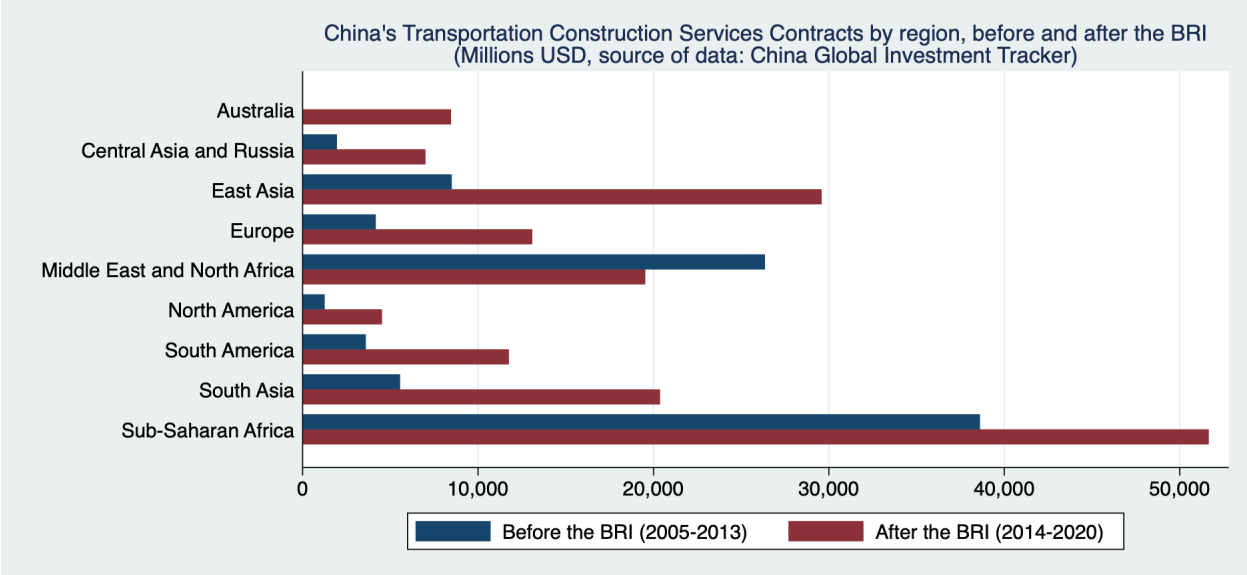


Figure 13

Looking at the annual average investment in the transportation sector (Figure 14), we notice that the post-BRI quantities are larger in all regions, with Australia experiencing the greatest increase. The Middle East and Sub-Saharan Africa received insignificant annual investments both before and after the BRI.

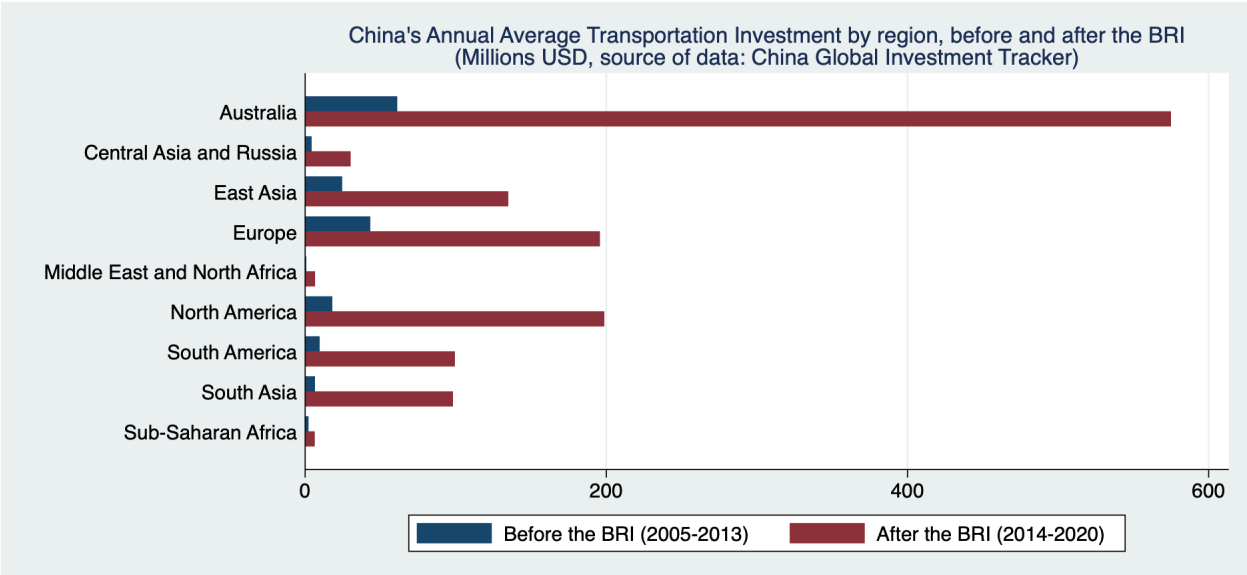


Figure 14

4.4) Real Estate Investment and Construction Services Contracts:

In many regions, the distinctions between China's direct investments and service contracts in the real estate sector are sharp. This large gap suggests that some regions have been more suitable for China's direct real estate investment, whereas in other regions, the level of investments is very low while construction service contracts are substantial. The Western countries (North America, Europe, and Australia) fall in the first category. The North American region, which has received the most direct investment relative to all other regions, has offered Chinese companies very small service contract opportunities (Figure 15). Chinese investors have greater access to real estate information in Western countries than they did prior to the BRI (Liu, 2019). They believe it is an attractive market that offers opportunities for long-term growth and high returns (Tomlinson, 2022). Three developed regions (Hong Kong, Australia, The U.S.) and Europe account for the majority of Chinese outbound real estate investments (Su et al., 2021).

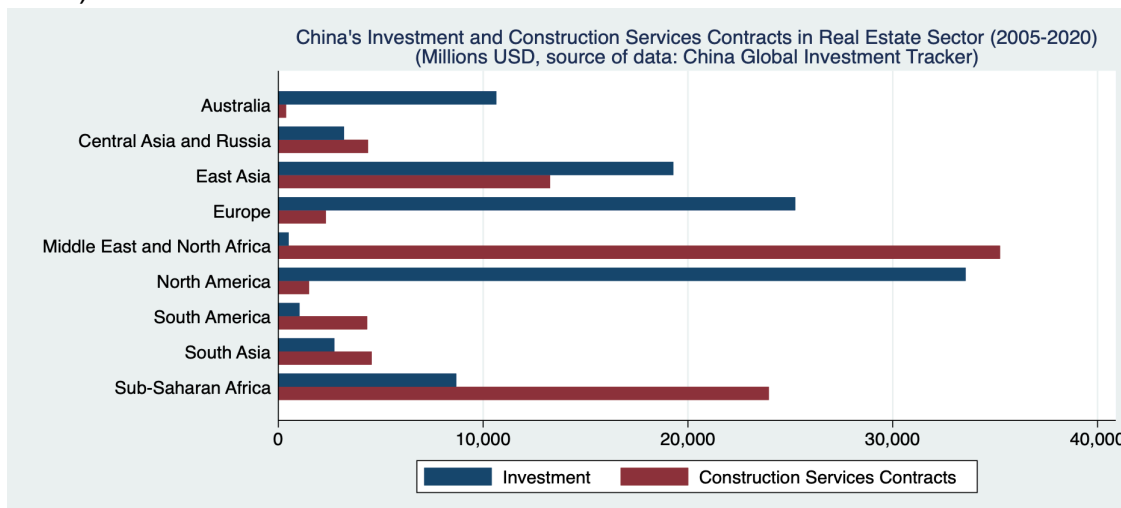


Figure 15

In contrast, Sub-Saharan Africa and MENA come into the second category (more service contracts than direct investments). The sharpest contrast is visible for the Middle East and North Africa, which holds the record in Chinese service contracts in the real estate sector, but it has received the smallest amount of Chinese direct investments in this sector (Figure 16). The cheap foreign labor and rich energy resources offer vast opportunities for substantial Chinese infrastructure investment in ports, railways and highways, as well as in nuclear energy and high-tech development. Moreover, these countries have become lucrative export markets for Chinese made goods and products (Sidlo, 2020). Overall, China's real estate investments in all regions have increased since the BRI (Figure 16), and the same is true for construction service contracts, excluding Europe and South America (Figure 17).

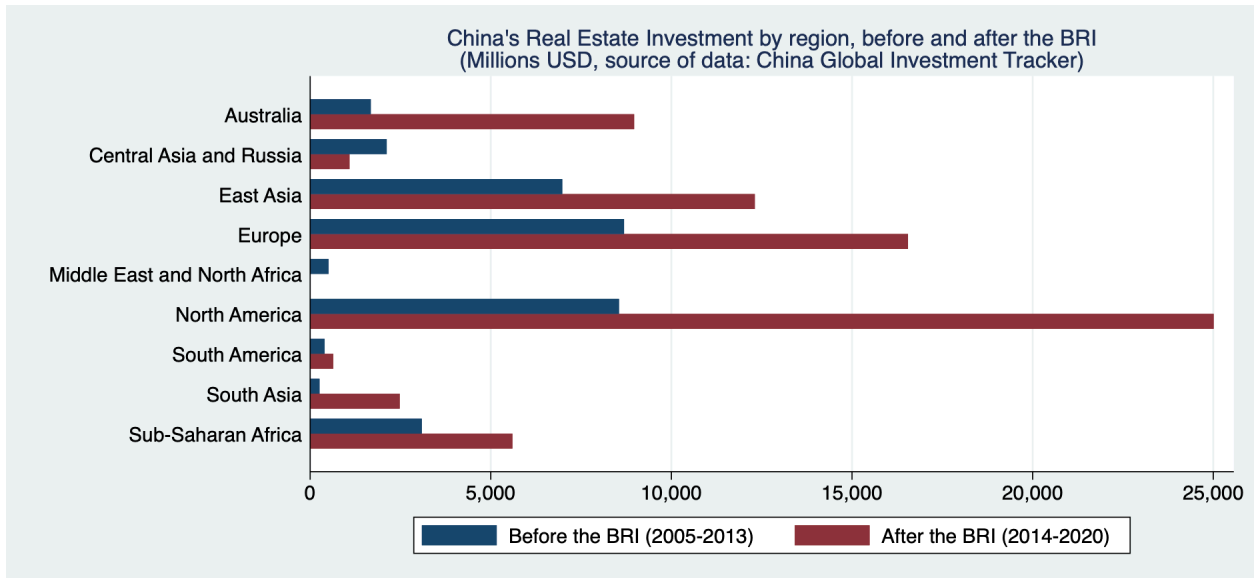


Figure 16

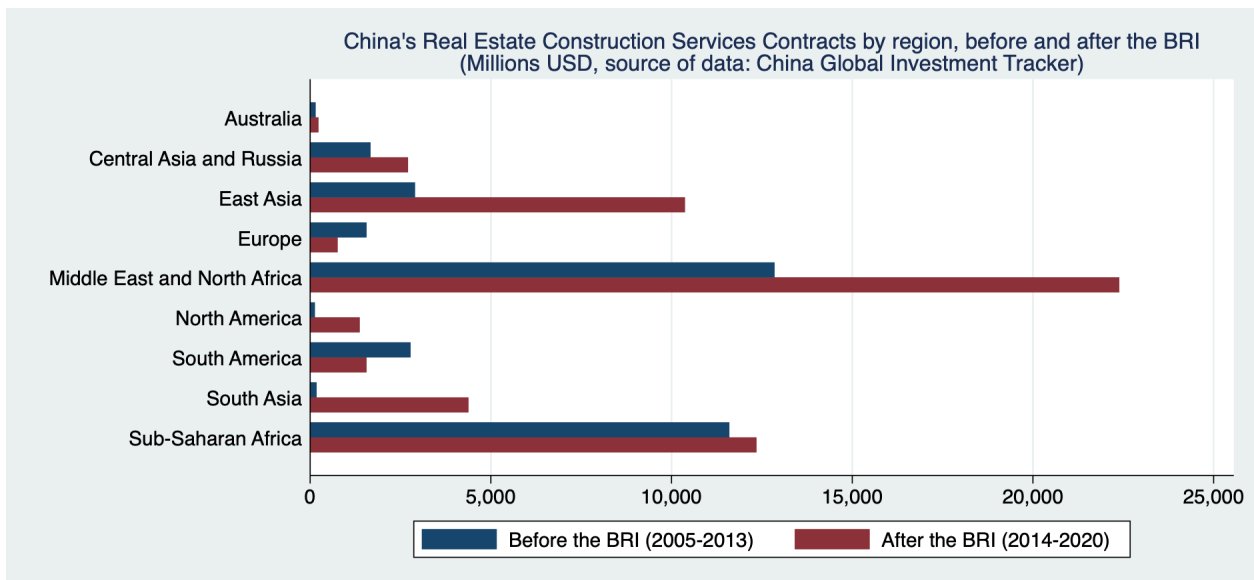


Figure 17

5) Regression Analysis

To examine the correlation between the host country governance conditions and China’s investments and contract projects, we regressed our investment and service contract variables on six governance indicators that are reported by the World Bank. We chose these indicators due to the availability of annual data for a significant number of countries during the period 2005-2021. Our regression analysis will allow us to determine if the governance characteristics of a host country has a significant correlation with the amount of Chinese investment and service contract projects. In recent years, numerous empirical studies of China’s outward foreign investment, such as Mourao, 2018, have used the World Bank governance indicators in their regression analysis (Mourao, 2018).

Correlation Table for Governance Indicators						
	Political Stability	Rule of Law	Government Effectiveness	Corruption	Voice and Accountability	Regulation Quality
Political Stability	1					
Rule of Law	0.733 ^{***}	1				
Government Effectiveness	0.715 ^{***}	0.933 ^{***}	1			
Corruption	0.717 ^{***}	0.914 ^{***}	0.910 ^{***}	1		
Voice and Accountability	0.621 ^{***}	0.779 ^{***}	0.776 ^{***}	0.747 ^{***}	1	
Regulation Quality	0.671 ^{***}	0.912 ^{***}	0.942 ^{***}	0.873 ^{***}	0.813 ^{***}	1
* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$						

Table 1

The correlation between these governance indicators in our dataset is reported in Table 1, and the results indicate that they are all positively correlated. We have also calculated these correlations for eight regions in Appendix A. Positive correlations exist between these indicators in all regions. The only exception is the Voice and Accountability indicator, which has a weak correlation with Central Asia and Russia region’s other indicators. The regional averages of these governance indicators (with scores that range from -2.5 to +2.5) are reported in Appendix B. Figures B-1, B-2, and B-3 in this appendix illustrate observable and significant differences in these averages. As a result of these high correlations, including them all in the same regression model can lead to multicollinearity issues. Therefore, we conduct individual regressions for each governance indicator.

In all of our regression models, we have included real GDP (and real GDP per capita) as a broad control variable. We also include region dummies and a dummy variable for the BRI years (2014-2020) in some of the regressions.

Our statistical analysis consists of multiple regression models for eight dependent variables. (Four regression sets for total investment and three sector investments; four regression models for total and sector specific construction service contracts). Instead of reporting the complete list of coefficients for each regression, we have created summary tables that identify the statistically significant governance indicators in each regression. In Table 2 each cell is a result of a separate regression model with Total Investment as the dependent variable. The second row of this table, for example, represents the results of six regressions that we conducted on the entire database (all countries) and all models included a dummy variable for the Belt and Road Initiative. The eleventh row represents the outcomes of the same regression models, but with sample restricted to European countries. (The detailed STATA regression outputs are available upon request.)

Correlation of Governance Indicators with China's Total Investments (2005-2020)							
Region	BRI dummy variable	Regulation Quality	Political Stability	Voice and Accountability	Corruption	Government Effectiveness	Rule of Law
All Countries		+***	+*	'+**	'+	+***	+***
All Countries	+***	+***		+**	'+	'+***	+***
All Countries (DV)	+***	+***	'+	+*	+	+***	+***
Europe		+**	'+	+	+	'+*	+**
East Asia		+**	'+**	-	+	'+*	+
Middle East and N. Africa		-	-	-	-	-	-
South America		+	+	+	-*	+	+
South Asia		-	-	+	+**	-	-
North America		+**	+*	+*	+	+**	+*
Sub-saharan Africa		-	-	-	-	-	-
Europe	'+***	+**	+	+**	+	+**	+**
East Asia	+***	+	+	-*	+	+	+
Middle East and N. Africa	-	-	-	-	-	-	-
South America	'+	'+	+	+	+	+	+
South Asia	'+***	-	_-***	_-***	-	-	-
North America	'+	+***	+*	+*	+*	+**	+*
Sub-saharan Africa	-	-	_*	-	-	-	-
Confidence levels: (P<0.01 ***), (P<0.05 **), (P<0.1 *); DV= Regressions include a dummy variable for developinig countries.							

Table 2

According to Table 2, the Regulation Quality, Government Effectiveness, and Rule of Law scores of the host country have a positive and strong (at least 99% confidence) correlation with the volume of Chinese investments for the sample of all countries. Furthermore, the Belt and Road Initiative has a positive but weak (at least 90% confidence) correlation with total investment. Unexpectedly, there is no significant negative correlation between corruption and China's direct investments in this table. Instead, its coefficient remains insignificant in most models. We observe a mildly significant positive coefficient for South

Asia. The Belt and Road Project has a significant positive impact in Europe, East Asia, and South Asia, but not in other regions.

While the voice and accountability indicator has a positive (95% confidence) correlation with the total sample, this is primarily due to the variable's strong impact on European nations, while it remains insignificant for other regions and even exhibits a negative correlation in South Asia. This regional result for South Asia is most likely driven by the large volume of China's investments in Pakistan (with low Voice score) relative to the more democratic India and Bangladesh. In the past decade, China has given top priority to Pakistan as a strategic and economic partner in the context of the China Pakistan Economic Corridor (CPEC) (Butt & Butt , 2015).

Correlation of Governance Indicators with China's Total Construction Services Projects (2005-2020)							
Region	BRI dummy	Regulation Quality	Political Stability	Voice and Accountability	Corruption	Government Effectiveness	Rule of Law
All Countries		+***	+	'+	+**	'+***	'+***
All Countries	+***	+***	'+	-	+***	+**	+***
All Countries (DV)	'+***	'+***	+	***	+***	'+	+***
Europe		+	'+	***	***	***	+
East Asia		+	+**	**	+	-	-
Middle East and N. Africa		+	+	*	+	+**	+
South America		***	-	**	**	**	***
South Asia		-	**	-	+	-	-
North America		+	+	+	-	+	+
Sub-saharan Africa		-	+	-	+	-	-
Europe	+*	+	+	***	***	***	+
East Asia	+***	-	+	***	-	-	-
Middle East and N. Africa	+*	+	+	**	'+*	+**	+
South America	+	***	-	**	**	**	***
South Asia	+**	-	***	-	+	-	-
North America	+**	+**	+	'+	-	+	+
Sub-saharan Africa	+**	*	+	**	'+	-	-

Confidence levels: (P<0.01 ***), (P<0.05 **), (P<0.1 *); DV= Regressions include a dummy variable for developing countries.

Table 3

The Correlation of the governance indicators with the total volume of China's construction service contracts is reported in Table 3. The Rule of Law, Government Effectiveness, Corruption, and Regulation Quality indicators have positive and highly significant coefficients for the entire sample. The Voice and Accountability indicator, on the hand, has a negative correlation with China's service contracts. This result suggests that China has been awarded more service contracts in countries with limited accountability and freedom of protest opportunities. This result was also visible in the regional comparisons in our descriptive analysis.

Possible explanations include supply and demand restrictions on direct Chinese investment in these countries. On one hand, Chinese firms prefer to operate as service contract firms rather than as long term investors due to the poor property rights and regulation environment. In addition, governments in these developing countries might impose restrictions on foreign investment and favor the use of foreign contractors.

Correlation of Governance Indicators with China's Investments in the Energy Sector (2005-2020)							
Region	BRI dummy	Regulation Quality	Political Stability	Voice and Accountability	Corruption	Government Effectiveness	Rule of Law
All Countries		'+	+	'+	'+	'+*	+
All Countries	-	+	+	'+	'+	+*	+
All Countries (DV)	-	+*	+	+	+	+**	+
Europe		'+	+	+	+	+	+
East Asia		+	+	-**	-	+	-
Middle East and N. Africa		-	-	-	-	-	-
South America		'+	'+	-	-	+	+
South Asia		-	-**	+	+	-	-
North America		+***	+*	+*	' +***	+***	+
Sub-saharan Africa		-	-	-	-	-	-
Europe	+	+	'+	+	+	+	+
East Asia	+**	+	-	-**	-	+	-
Middle East and N. Africa	-	-	-	-	-	-	-*
South America	+	+	-	-	-	+	+
South Asia	' +***	-	-***	-	-	-	-
North America	-	+***	' +*	+*	+**	+**	+*
Sub-saharan Africa	-	-	-*	-	-	-	-

Confidence levels: (P<0.01 ***), (P<0.05 **), (P<0.1 *); DV= Regressions include a dummy variable for developing countries.

Table 4

5.1) Energy Sector:

When examine the correlation of governance indicators with China's investments in the energy sector (Table 4), it is evident that coefficients of these indicators in most regression models are insignificant in comparison to the models for total investment in all sectors. This difference is particularly noticeable for the Government Effectiveness and the Regulation Quality indicators. This indifference to governance quality is partly due to the fact that China places such a high value on the security of its imported energy sources (crude oil and natural gas) that the government offers Chinese energy firms significant flexibility and support for foreign investment in this sector.

In the past two decades, Chinese state-owned oil companies have been willing to invest in high-risk countries that most Western energy firms have avoided. The Chinese government has facilitated these investments by offering loan guarantees and investment insurance to Chinese firms. Chinese investments in the oil and gas sectors of Iran (Downs and Malony, 2011) and Sudan (Manyok, 2016) during the 1990s and 2000s, when both countries were subject to Western sanctions, are exemplary of this behavior. We also

notice in Table 4 that China's energy investments increased in East and South Asia after the BRI was implemented (after 2013), but the BRI dummy variable remained insignificant for other regions. Pakistan is the main recipient of China's energy investments in South Asia, and the volume of these investments have increased after the BRI (Mirza et al., 2019).

Correlation of Governance Indicators with China's Construction Services Projects in the Energy Sector (2005-2020)							
Region	BRI dummy	Regulation Quality	Political Stability	Voice and Accountability	Corruption	Government Effectiveness	Rule of Law
All Countries		'+***	+	'+**	+	+**	+***
All Countries	+***	+***	+	+*	'+*	+**	+***
All Countries (DV)	+***	+***	+	+*	-	+	+***
Europe		+	***	***	***	***	**
East Asia		-	-	**	-	-	-
Middle East and N. Africa		+	+	-	+	+*	+
South America		***	-	**	**	**	***
South Asia		-	-	+	+	-	+
North America		-	-	-	-	-	-
Sub-saharan Africa		-	+	-	+	-	-
Europe	+	+	***	***	***	***	**
East Asia	+	-	-	**	-	-	*
Middle East and N. Africa	+	+	+	-	+	+*	+
South America	+	***	-	**	**	**	***
South Asia	+*	-	***	-	+	-	-
North America	+	-	-	-	-	-	-
Sub-saharan Africa	+	-	+	-	+	-	-

Confidence levels: (P<0.01 ***), (P<0.05 **), (P<0.1 *); DV= Regressions include a dummy variable for developing countries.

Table 5

The regression results for China's construction service projects in the energy sector are reported in Table 5. We observe positive and significant correlations between regulation quality and the rule of law, and this result (Table 3) is also true for China's total construction projects. The indicators of Corruption and Governance Effectiveness have positive coefficients but their statistical significance is weak. Table 3 displayed stronger positive coefficients for these variables in relation to the aggregate values for construction services. Comparing the coefficient signs of the governance indicators for the regional models in Table 5, we observe that the governance indicators had significant coefficients for Europe, South America but not in other regions. Furthermore, the coefficient signs for both regions are negative, implying that countries with poor governance awarded Chinese firms a substantial quantity of service contracts. One possible explanation is that Chinese firms are concerned about the higher financial and political risks associated with direct investment in countries with poor governance qualities and prefer to conduct business through contractors (CSIS 2019).

Correlation of Governance Indicators with China's Investments in the Transportaton Sector (2005-2020)							
Region	BRI dummy variable	Regulation Quality	Political Stability	Voice and Accountability	Corruption	Government Effectiveness	Rule of Law
All Countries		+**	+	+	'+	+	'+*
All Countries	+***	+**	+	+	+	+	+
All Countries (DV)	+***	+**	+	+	+	+	+
Europe		+**	+	+*	'+	+*	+
East Asia		-	-	_*	-	-	-
Middle East and N. Africa		+	+	'+	+	+*	+
South America		+	+***	-	-	+	+
South Asia		-	-	-	'+	-	+
North America		+**	+	+	+	+	+*
Sub-saharan Africa		-	-	-	-	-	-
Europe	+**	+**	+	'+**	+	+*	+
East Asia	+***	-	-	_*	-	-	-
Middle East and N. Africa	+	+	+	+	+*	+*	+
South America	+*	+	+***	-	-	+	+
South Asia	+**	-	-	-	-	-	+
North America	+*	+***	-	+	+	+*	+*
Sub-saharan Africa	+	-	-	-	-	-	-

Confidence levels: (P<0.01 ***), (P<0.05 **), (P<0.1 *); DV= Regressions include a dummy variable for developing countries.

Table 6

5.2) Transportation Sector:

China’s Belt and Road initiative has required massive investments in railroads, highways, pipelines and commercial seaport terminals. The high priority of this sector after the announcement of the BRI, as depicted in Figures 14 and 15, is also evident in Table 6’s regression models for China's transportation sector investments. The BRI dummy variable has a significant (at least 95% confidence) positive coefficient for the total sample and the regional samples in Europe, East Asia and South Asia.

However, most governance indicators lack significant coefficients. Regulation Quality is the only indicator with a significant coefficient in the majority of models. Furthermore, the significance of this governance indicator for the entire sample is driven by Europe and the North American, so it is not a significant factor for East Asia and developing economies. In the South American model, the Political Stability indicator has a significant positive coefficient. Besides, we observe a significant negative coefficient for the Voice and Accountability indicator in the East Asia model. This outcome is consistent with the larger volume of Chinese investments in less democratic Asian countries such as Vietnam, the Philippines, and Burma, relative to more democratic nations such as South Korea and Japan, which have strong alliances with the West.

Correlation of Governance Indicators with China's Construction Services Projects in Transportation Sector (2005-2020)							
Region	BRI dummy variable	Regulation Quality	Political Stability	Voice and Accountability	Corruption	Government Effectiveness	Rule of Law
All Countries		_*	+	_***	+	_*	_**
All Countries	+***	_**	+	_***	+	_*	_**
All Countries (DV)	+***	-	+	_***	-	-	-
Europe		_*	+**	_**	_***	_*	-
East Asia		+	+*	-	+	+	+
Middle East and N. Africa		-	-	-	-	-	-
South America		-	+	-	-	-	-
South Asia		-	_*	_**	+	-	-
North America		+	+	+	-	-	-
Sub-saharan Africa		-	_**	-	_**	-	-
Europe	+**	_*	+***	_**	_***	-	-
East Asia	+***	+	+	_*	+	+	-
Middle East and N. Africa	-	-	-	-	-	-	-
South America	+**	-	+	-	-	-	-
South Asia	+**	-	_***	_**	-	-	-
North America	+*	+	+	+	-	+	-
Sub-saharan Africa	+	-	_*	-	_**	_*	_*
Confidence levels: (P<0.01 ***), (P<0.05 **), (P<0.1 *); DV= Regressions includes a dummy variable for developing countries)							

Table 7

The correlations of governance indicators with the volume of Chinese contracts in Transportation projects are reported in Table 7. For the inclusive sample of all countries, negative and statistically significant negative coefficients are observed for the Regulation Quality (95%), Voice and Accountability (99%), and Rule of Law (95%). The negative indicators suggest that Chinese firms substitute service contracts for direct investment in nations with weaker governance quality. The BRI dummy variable has a significant positive coefficient, suggesting that volume of these service contracts has increased after the initiation of BRI in 2013. This result is similar to the impact of BRI on China's direct investments in the transportation sector (Table 6).

5.3) Real Estate Sector:

Table 8 displays the regression results for China's investments in the real estate sector, which indicate that the level of direct Chinese investments does not have a significant correlation with most of the governance indicators. The only exception is the East Asia region, where the Regulation Quality, Government Effectiveness, and Rule of Law indicators show positive coefficients and are statistically significant with a confidence level of 95% or higher. The BRI dummy also has a positive coefficient for the total sample, indicating that China's outbound real estate investments have increased after the introduction of the Belt and Road Initiative in 2013.

Correlation of Governance Indicators with China's Investments in the Real Estate Sector (2005-2020)							
Region	BRI dummy variable	Regulation Quality	Political Stability	Voice and Accountability	Corruption	Government Effectiveness	Rule of Law
All Countries		'+	+	'+	+	+	***
All Countries	+***	+	'+	+	+	+	+
All Countries (DV)	+***	+	+	-	+	+	+
Europe		'+	-	+	-	+	+
East Asia		+***	+	+	+*	+***	+**
Middle East and N. Africa		+	-	-	-	-	-
South America		-	-	'+	-	-	-
South Asia		+	+	'+	+*	+	+
North America		+	+	+	+	+	+
Sub-saharan Africa		-	+	-	-	-	-
Europe	+	+	+	+	-	+	'+
East Asia	+	+***	+	-	+	+**	+**
Middle East and N. Africa	-	-	-	+	-	-	-
South America	+	-	-	+	-	-	-
South Asia	+	+	+	+	+*	+	+
North America	+	+	+	+	-	+	+
Sub-saharan Africa	+	-	+	-	-	-	-

Confidence levels: (P<0.01 ***), (P<0.05 **), (P<0.1 *); DV= Regressions include a dummy variable for developing countries.

Table 8

The regression models for China's real estate service contracts (Table 9) also show a lack of sensitivity to most governance indicators for the total sample and regional samples. The Voice and Accountability indicator is the only governance indicator with a significant coefficient for the comprehensive sample of all countries. However, the coefficient of this indicator is negative. Interestingly, only the European regional model has a significant (negative) coefficient for this indicator. This outcome suggests that Eastern and Central European countries such as Hungary, Russia, and Belarus, which have relatively lower Voice and Accountability scores relative to Western Europe, have awarded more real estate service contracts to Chinese firms than Western European nations. We also notice a similar result for the Regulation Quality, Government Effectiveness, and Rule of Law indicators in the European regional model.

Correlation of Governance Indicators with China's Construction Services Projects in Real Estate Sector (2005-2020)							
Region	BRI dummy variable	Regulation Quality	Political Stability	Voice and Accountability	Corruption	Government Effectiveness	Rule of Law
All Countries		'+	+'	+	+	+'	+
All Countries	+***	-	+'	_-***	'+	+	+
All Countries (DV)	+***	+	+	_-***	+	+	+
Europe		_-**	-	_-***	-	_-**	_-**
East Asia		+'	'+	+	+	+	+
Middle East and N. Africa		+	+	-	+'	+'	+
South America		-	-	_-**	-	-	-
South Asia		-	+	-	-	-	-
North America		+'	+	+	-	+**	'+
Sub-saharan Africa		-	-	-	_*	-	-
Europe	-	_-***	-	_-***	_*	_-**	_-**
East Asia	+***	+	+	-	+	+	+
Middle East and N. Africa	+'	+	+	-	+**	+**	+
South America	-	-	-	_-**	-	-	-
South Asia	+**	-	-	-	-	-	-
North America	+	+**	+	+	-	+**	+
Sub-saharan Africa	+	-	-	-	_*	-	-

Confidence levels: (P<0.01 ***), (P<0.05 **), (P<0.1 *); DV= Regression includes a dummy variable for developing countries.

Table 9

6) Summary and Conclusion

China has had a profound impact on the global economy over the past four decades. It has more trade and investment ties with the rest of the world than any other economy and is now one of the largest players in the global financial markets. During the first two decades of its rapid economic growth, China served as the largest destination for international investment. China has maintained its position as the world's largest exporter of manufactured goods over the past two decades, while emerging as the largest global investor and supplier of development finance to the rest of the world.

With the encouragement and support of the Chinese government, thousands of Chinese state-owned enterprises and private firms have invested hundreds of billions of dollars in all corners of the world. These investments are predominantly directed toward economic sectors that address China's needs for natural resources and commerce; however, they have become more diversified in recent years and are now closely associated with the development of new technologies and advanced products by the Chinese economy.

Moreover, the categories of host countries in which the Chinese have made outward investments are diverse. China's investment and trade partners include countries with varying political and economic institutions, levels of development, and per capita incomes. In this article, we use statistical analysis to find out how the character of governance in a host country affected the size and nature of China's investments in that country over the past two decades. We investigated this question for two types of Chinese economic

engagements with each host country: direct investment by Chinese firms and the volume of service contracts awarded to Chinese firms for construction projects.

Overall, our statistical analysis reveals that China's direct investments and service contracts have significant correlations with the governance characteristics of the host country. Nonetheless, we observe a large degree of variation in the significance of specific governance indicators among regions and investment economic sectors. The Regulation Quality indicator, for example, has a strong positive correlation with total investment and total service contracts, but the significance is lost when the sample is restricted to the Middle East or South Asia.

The most interesting finding of our research is that in some sectors we observe sharp differences in how the governance indicators are correlated with China's direct investments and service contracts. The Voice and Accountability indicator correlates positively with China's direct investment but negatively with China's service contracts for the entire sample. This indicates that China is awarded more service contracts in less democratic countries of these regions. An alternative explanation is that Chinese firms prefer to invest directly in more democratic countries and as contractors in less democratic countries.

Similarly, we observe a positive correlation between the absence of corruption and China's service contracts, but no significant correlation with its direct investments. While this result remains true for our total sample, our results suggest that, among European countries, China has enjoyed a larger volume of service contracts in more corrupt countries (Eastern and Southern Europe). The results for Regulation Quality, Government Effectiveness, and the Rule of Law indicators show a positive correlation with both of China's investment and service contracts. These three indicators reflect a government's quality of economic governance regardless of its level of democracy and political stability. China may have a higher tolerance for political instability and a lack of political accountability, but it is concerned with governance parameters that impact the business and investment climate.

The statistical results for specific sectors demonstrate that the interaction of governance indicators with China's economic engagement varies by sector. In the energy sector which has a high priority for China, direct political governance (Political Stability and Voice and Accountability) has no significance for China's direct investments. The same result holds for China's service contracts with the exception of Europe. China's service contracts are comparatively larger among less democratic and less stable countries in Europe. In contrast, there is a positive correlation between service contracts in the energy sector and the indicators of the Rule of Law, Government Effectiveness, and Regulation Quality.

China's investments in the transportation sector do not show any sensitivity to most governance indicators. The only indicator with a significant correlation is the Regulation Quality, and this significance is entirely driven by Europe. We also observe an increase in China's transportation sector investments after the introduction of the Belt and Road Initiative. The volume of China's service contracts in this sector show a significant negative correlation with the governance indicators, suggesting that Chinese firms prefer service contracts to direct investment in countries with deficient governance.

In the real estate sector, the sensitivity of China's direct investments to governance indicators remains weak. Our regional analysis model for East Asia is the only exception, revealing a positive correlation between a number of indicators. China's service contracts in the real estate sector show a significant correlation with only one governance indicator, the Voice and Accountability. Similar to the energy sector, this negative correlation suggests that China's service contract volume is larger in countries with weaker democratic and civil rights.

Overall, our analysis contributes to a better understanding of how the characteristics of the host countries affect the magnitude of China's investments in that country. This is a preliminary analysis that can be expanded in a number of ways. First, our statistical analysis was limited to the detection of correlations; however, it is possible to test for causality using additional data and alternative econometric methods. Second, we did not include trade data in our analysis. It is likely that China's investments in a host country are closely linked to the volume of bilateral trade. Third, we can add some additional variables that measure the intensity of bilateral diplomatic relations and geopolitical developments. For example, membership in the Shanghai Cooperation Organization or similar multilateral organizations in which China is prominent, might help a country attract more Chinese investment. Lastly, we believe that comparative panel data econometric studies must be supplemented with in-depth qualitative and institutional studies at the country to offer a deeper comprehension of the factors that influence China's outward investment behavior.

Appendix A: Correlation tables

Correlation among Governance Indicators within each Region (1)						
	Rule of Law	Political Stability	Government Effectiveness	Corruption	Voice and Accountability	Regulation Quality
Australia						
Rule of Law	1					
Political Stability	0.974	1				
Government Effectiveness	0.968	0.932	1			
Corruption	0.212	-0.124	0.73	1		
Voice and Accountability	0.976	0.958	0.974	0.471	1	
Regulation Quality	0.966	0.959	0.921	-0.478	0.945	1
Central Asia and Russia						
Rule of Law	1					
Political Stability	0.358	1				
Government Effectiveness	0.695	0.393	1			
Corruption	0.948	0.173	0.551	1		
Voice and Accountability	0.468	-0.024	0.658	0.324	1	
Regulation Quality	0.72	0.197	0.876	0.596	0.831	1
East Asia						
Rule of Law	1					
Political Stability	0.731	1				
Government Effectiveness	0.952	0.623	1			
Corruption	0.948	0.735	0.906	1		
Voice and Accountability	0.688	0.424	0.601	0.678	1	
Regulation Quality	0.925	0.603	0.964	0.891	0.666	1
Europe						
Rule of Law	1					
Political Stability	0.615	1				
Government Effectiveness	0.877	0.674	1			
Corruption	0.888	0.664	0.951	1		
Voice and Accountability	0.845	0.666	0.909	0.857	1	
Regulation Quality	0.87	0.651	0.942	0.901	0.939	1

Correlation among Governance Indicators within each Region (2)						
Middle East and North Africa	Rule of Law	Political Stability	Government Effectiveness	Corruption	Voice and Accountability	Regulation Quality
Rule of Law	1					
Political Stability	0.848	1				
Government Effectiveness	0.938	0.813	1			
Corruption	0.939	0.837	0.957	1		
Voice and Accountability	0.424	0.344	0.413	0.431	1	
Regulation Quality	0.932	0.762	0.912	0.908	0.439	1
North America						
Rule of Law	1					
Political Stability	0.804	1				
Government Effectiveness	0.906	0.708	1			
Corruption	0.623	0.663	0.747	1		
Voice and Accountability	0.782	0.546	0.786	0.53	1	
Regulation Quality	0.765	0.427	0.827	0.602	0.904	1
South America						
Rule of Law	1					
Political Stability	0.71	1				
Government Effectiveness	0.965	0.7	1			
Corruption	0.947	0.759	0.922	1		
Voice and Accountability	0.912	0.812	0.901	0.911	1	
Regulation Quality	0.907	0.474	0.893	0.834	0.801	1
South Asia						
Rule of Law	1					
Political Stability	0.521	1				
Government Effectiveness	0.864	0.503	1			
Corruption	0.837	0.469	0.742	1		
Voice and Accountability	0.651	0.298	0.523	0.549	1	
Regulation Quality	0.797	0.561	0.857	0.714	0.276	1
Sub-Saharan Africa						
Rule of Law	1					
Political Stability	0.705	1				
Government Effectiveness	0.93	0.63	1			
Corruption	0.891	0.66	0.86	1		
Voice and Accountability	0.819	0.597	0.765	0.732	1	
Regulation Quality	0.896	0.573	0.9	0.76	0.802	1

Appendix B: Governance Indicators by Region

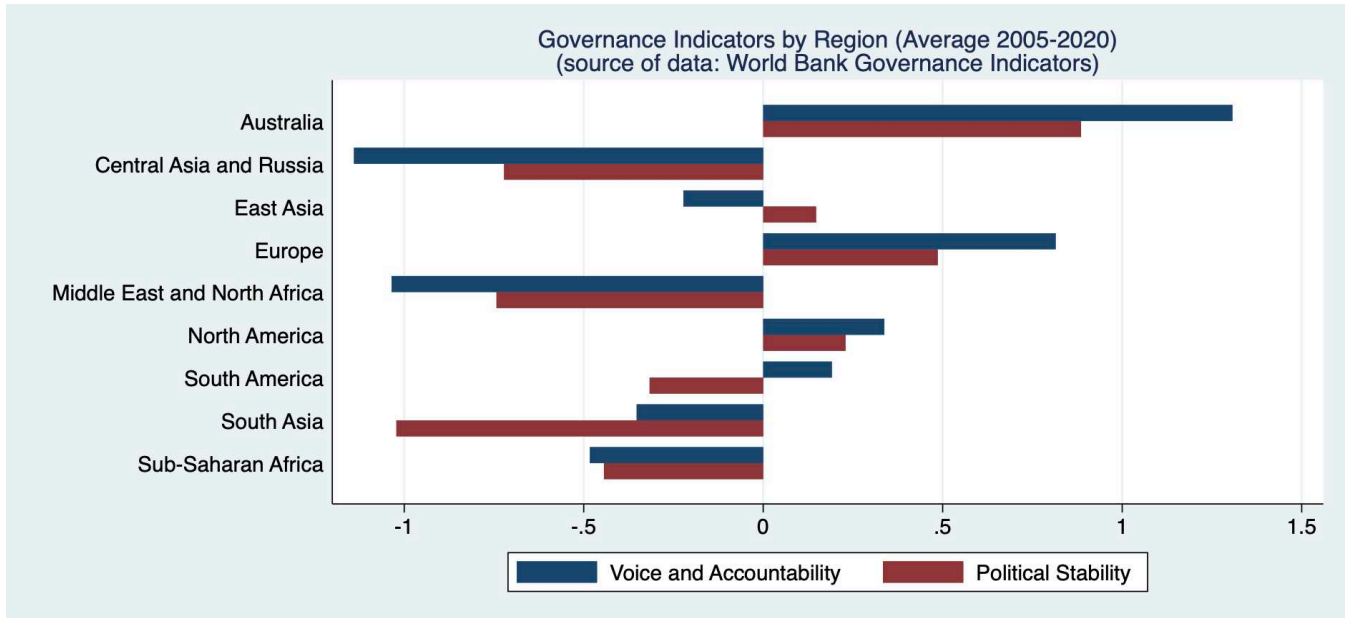


Figure B-1

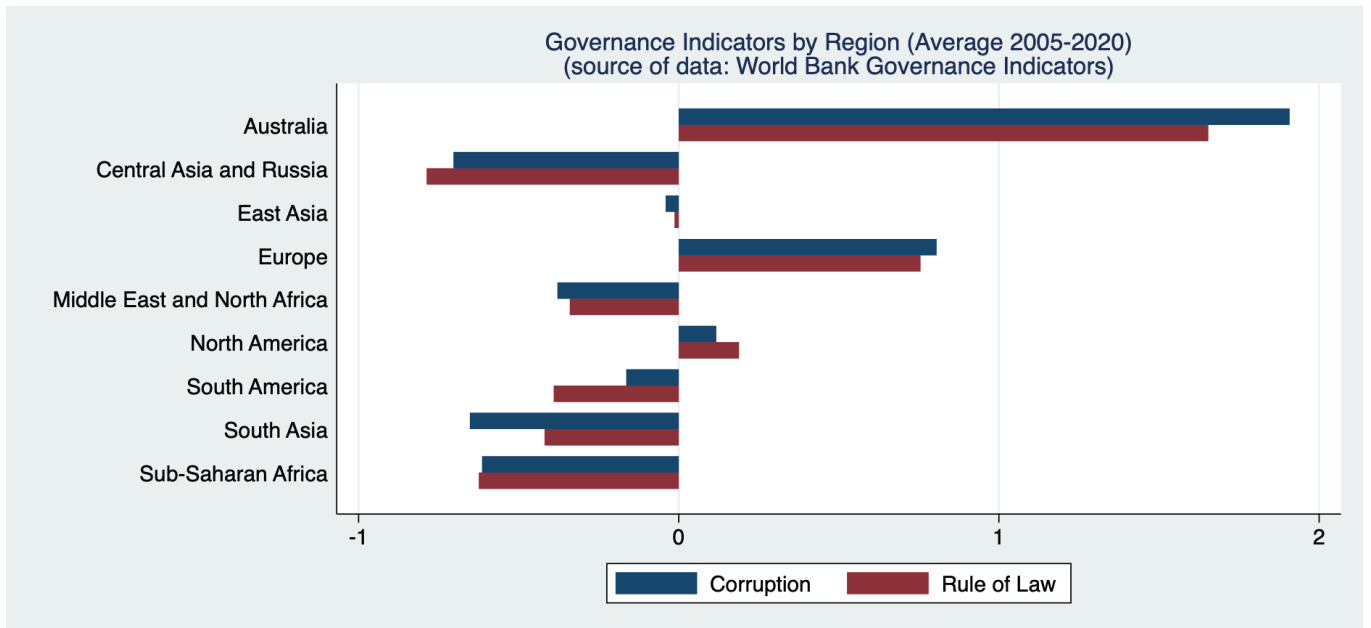


Figure B-2

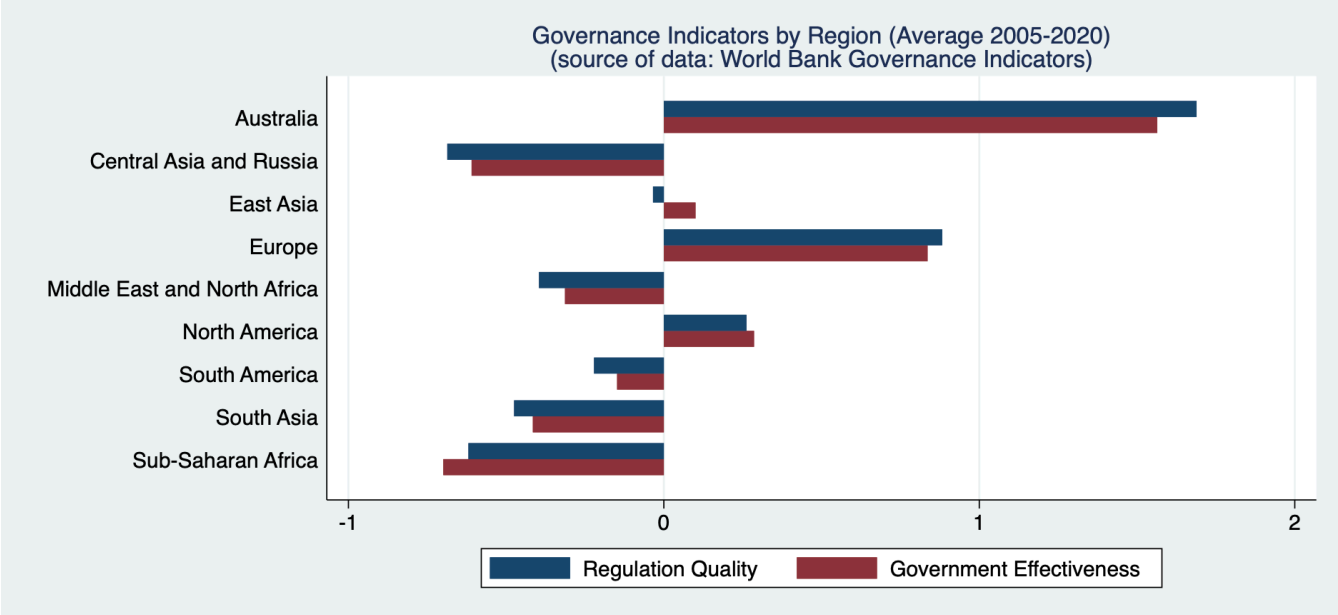


Figure B-3

Appendix C: China's Investment and Construction Services by sectors

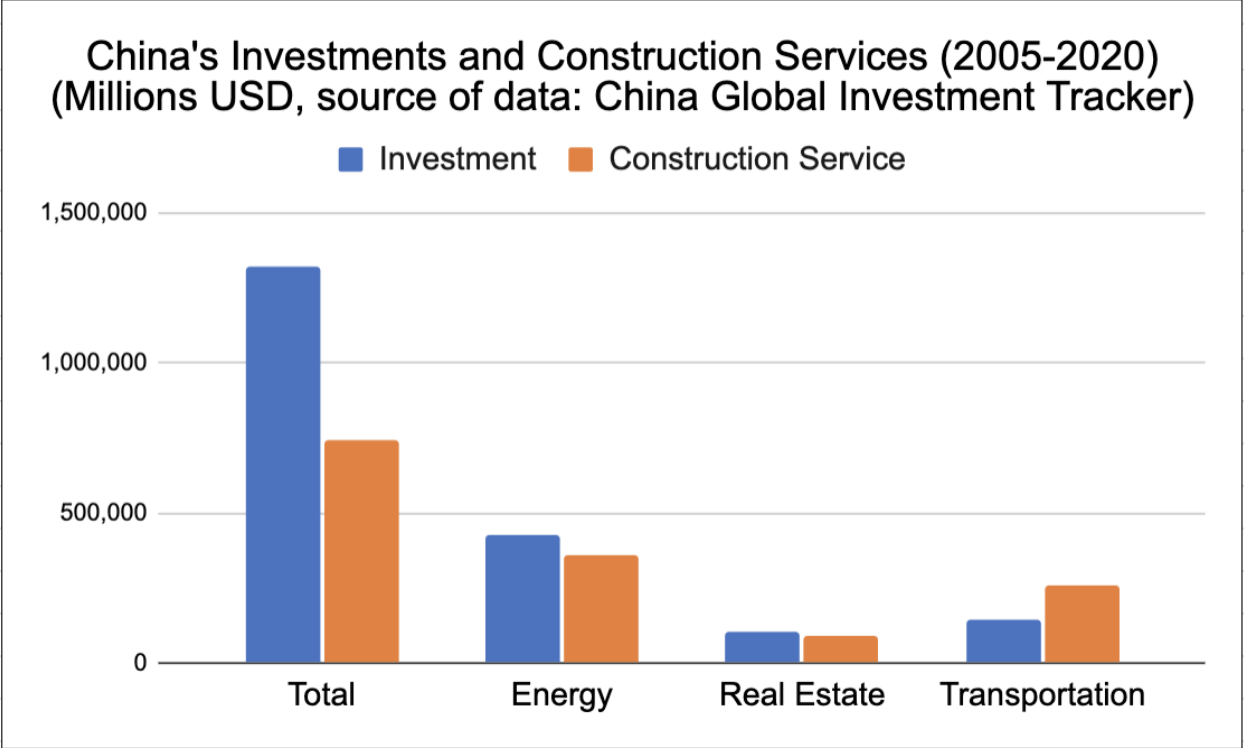


Figure C-1

REFERENCES

- Baah, A. Y., & Jauch, H. (2009). Chinese investments in Africa. In *Chinese investments in Africa: A labour perspective* (pp. 35–76). essay, African Labour Research Network.
- Brown, R. C. (2020). *China's BRI in Central Eastern European Countries: "17+1" Connectivity, Divisiveness, or Pathway to EU-CHINA FTA?* San Diego International Law Journal. Retrieved May 3, 2023, from <https://digital.sandiego.edu/ilj/vol22/iss1/2/>
- Bräutigam, D., & Tang, X. (2014). "going global in groups": Structural transformation and China's special economic zones overseas. *World Development*, 63, 78–91. <https://doi.org/10.1016/j.worlddev.2013.10.010>
- Butt , K. M., & Butt , A. A. (2015). *Impact of CPEC on regional and extra-regional actors* . ResearchGate. Retrieved May 3, 2023, from https://www.researchgate.net/publication/315843458_IMPACT_OF_CPEC_ON_REGIONAL_AND_EXTRA-REGIONAL_ACTORS
- Cheng, K.-C. (2022, March 16). *China is delivering over 30% of Africa's big construction projects. Here's why.* The Africa Report. Retrieved May 4, 2023, from <https://www.theafricareport.com/183370/china-is-delivering-over-30-of-africas-big-construction-projects-heres-why/>
- China Foreign Exchange Reserves.* China Foreign Exchange Reserves, 1989 – 2023 | CEIC Data. (n.d.). Retrieved April 30, 2023, from <https://www.ceicdata.com/en/indicator/china/foreign-exchange-reserves>
- China Global Investment Tracker | American Enterprise Institute - AEI.* China Global Investment Tracker. (2023). Retrieved April 30, 2023, from <https://www.aei.org/china-global-investment-tracker/>
- Downs, E., & Maloney, S. (2011). *Getting China to Sanction Iran: The Chinese-Iranian Oil Connection.* JSTOR. Retrieved May 6, 2023, from <https://www.jstor.org/stable/25800453>
- Eissa, M. A., & Elgammal, M. M. (2019). Foreign Direct Investment Determinants in oil exporting countries: Revisiting the role of Natural Resources. *Journal of Emerging Market Finance*, 19(1), 33–65. <https://doi.org/10.1177/0972652719880153>
- Ferguson, D., & Dent, H. Z. (2022). *Demystifying chinese investment in Australia.* KPMG. Retrieved May 2, 2023, from <https://kpmg.com/au/en/home/insights/2015/12/demystifying-chinese-investment-in-australia.html>

Foreign direct investment: Inward and outward flows and stock, annual. Beyond 20/20 WDS - table view. (2021). Retrieved April 30, 2023, from <https://unctadstat.unctad.org/wds/TableViewer/tableView.aspx?ReportId=96740>

Ghiretti, F. (2021, April 13). *Port of Vado Ligure, Vado Gateway Terminal*. The People's Map of Global China. Retrieved May 2, 2023, from <https://thepeoplesmap.net/project/port-of-vado-ligure-vado-gateway-terminal/>

Hart, M. (2015). *Mapping Chinese direct investment in the U.S. Energy Economy*. Center for American Progress. Retrieved May 4, 2023, from <https://www.americanprogress.org/article/current-patterns-and-future-opportunities/>

He, W. (2018). *BRI injects new energy into China-Angola cooperation*. The State Council Information Office. Retrieved April 28, 2023, from http://english.scio.gov.cn/beltandroad/2018-10/10/content_65548918.htm

Kang, Y., & Jiang, F. (2012). FDI location choice of Chinese multinationals in East and Southeast Asia: Traditional economic factors and institutional perspective. *Journal of World Business*, 47(1), 45–53. <https://doi.org/10.1016/j.jwb.2010.10.019>

Karpathiotaki, P. (2022, November 21). *Belt and road initiative in Greece and the success case of Piraeus Port*. NAYTEMΠΟΡΙΚΗ. Retrieved May 2, 2023, from <https://www.naftemporiki.gr/english/1405244/belt-and-road-initiative-in-greece-and-the-success-case-of-piraeus-port/>

Liu, Q. (2019, August 1). *Understanding Chinese growing investment into foreign real estate*. Dragon Social. Retrieved May 4, 2023, from <https://www.dragonsocial.net/blog/china-real-estate-investment/>

Liu, Y., Su, M., Zhao, J., Martin, S., Yuen, K. F., & Lee, C.-B. (2022). The determinants of China's outward foreign direct investment: A vector error correction model analysis of coastal and landlocked countries. *Economic Change and Restructuring*, 56(1), 29–56. <https://doi.org/10.1007/s10644-022-09407-2>

Manyok, P. (2016). Oil and Darfur's blood: China's thirst for Sudan's oil. *Journal of Political Sciences & Public Affairs*, 04(01). <https://doi.org/10.4172/2332-0761.1000189>

Mirza, F. M., Fatima, N., & Ullah, K. (2019). Impact of China-Pakistan economic corridor on Pakistan's future energy consumption and energy saving potential: Evidence from Sectoral Time Series analysis. *Energy Strategy Reviews*, 25, 34–46. <https://doi.org/10.1016/j.esr.2019.04.015>

Mourao, P. R. (2018). What is China seeking from Africa? an analysis of the economic and political determinants of Chinese outward foreign direct investment based on Stochastic Frontier Models. *China Economic Review*, 48, 258–268.
<https://doi.org/10.1016/j.chieco.2017.04.006>

Saidi, H. (2021). *The Geopolitical Economy of Chinese Influence in Iran: Empire of Capital and Uneven Development*. ResearchGate. Retrieved May 3, 2023, from https://www.researchgate.net/publication/354253941_The_Geopolitical_Economy_of_Chinese_Influence_in_Iran_Empire_of_Capital_and_Uneven_Development

Scott, D. (2019). *China's Indo-Pacific Strategy: The problems of success*. The Journal of Territorial and Maritime Studies. Retrieved May 4, 2023, from <https://www.jstor.org/stable/26912752>

Sidlo, K. W. (2020). *The role of China in the Middle East and North Africa (MENA). Beyond economic interests?* IEMed. Retrieved May 4, 2023, from <https://www.iemed.org/publication/the-role-of-china-in-the-middle-east-and-north-africa-mena-beyond-economic-interests/>

Su, Z., de La Paz, P. T., & Haran, M. (2021). *Investigating China's Outward FDI in the European Real Estate Industry with a Gravity-Model-Based Benchmark*. ResearchGate. Retrieved May 3, 2023, from https://www.researchgate.net/publication/355095955_Investigating_China's_Outward_FDI_in_the_European_Real_Estate_Industry_with_a_Gravity-Model-Based_Benchmark

Sutherland, D., Anderson, J., Bailey, N., & Alon, I. (2020). Policy, institutional fragility, and Chinese outward foreign direct investment: An empirical examination of the belt and road initiative. *Journal of International Business Policy*, 3(3), 249–272.
<https://doi.org/10.1057/s42214-020-00056-8>

Sylvaire, D. D., Qing, W. H., Ran, C. H., Kassai, D. L., Vincent, N., Candide Douce, D. A., Frank, O.-K., Nicaise, N. P., Traore, F., & Boris, A. F. (2022). The impact of China's investment on Africa's inclusive development. *SSRN Electronic Journal*.
<https://doi.org/10.2139/ssrn.4056070>

Tomlinson, P. (2022, June 22). *Where are Chinese property investors buying now? Why Thailand and Australia are booming, from Regal Azzura in Queensland to Bangkok's The Livin Ramkhamhaeng*. South China Morning Post. Retrieved May 4, 2023, from <https://www.scmp.com/magazines/style/news-trends/article/3177498/where-are-chinese-property-investors-buying-now-why>

Wang, H., & Miao, L. (2016). "Going global strategy" and global talent. *China Goes Global*, 144–152. https://doi.org/10.1007/978-1-137-57813-6_6

Worldwide governance indicators. DataBank. (n.d.). Retrieved April 30, 2023, from <https://databank.worldbank.org/source/worldwide-governance-indicators>

Yang, S. (2022, June 23). *Chinese investors fast abandoning Australia but still hold vast amounts of infrastructure, land and water*. ABC News. Retrieved May 2, 2023, from <https://www.abc.net.au/news/2022-06-22/chinese-investment-in-australia-plunges-70-per-cent/101048340>

Yeoh, E. K.-K., Chang, L., & Zhang, Y. (2018). China–malaysia trade, investment, and cooperation in the contexts of China–ASEAN integration and the 21st Century maritime silk road construction. *The Chinese Economy*, 51(4), 298–317. <https://doi.org/10.1080/10971475.2018.1457318>

Zeng, S. (2022). *China's oil dependence on imports sees drop*. The State Council, The People's Republic of China. Retrieved May 3, 2023, from https://english.www.gov.cn/news/topnews/202202/24/content_WS6216e221c6d09c94e48a569e.html