

Investment In Infrastructure Construction of the "Belt and Road" And Its Influencing Factors

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Abstract. In 2013, after visiting Kazakhstan and Indonesia, General Secretary Xi Jinping threw a new issue to the world -- "the Belt and Road" initiative (including "the 21st-Century Maritime Silk Road" and "the Silk Road Economic Belt", abbreviated as BRI), intending to build a new model of international relations and building a community with a shared future for mankind. Transportation infrastructure investment, as an important component of this initiative, has always been of great concern. This article introduces the basic situation of infrastructure construction since the proposal was put forward, and sorted out the reasons for China's investment in infrastructure construction of the BRI, including factors, for example, adapting to "the new normal of China's economy", and bringing markets and resources to China; Summarize the impact on co-building countries from the perspectives of economy and trade. This paper also sorted out the factors that affect China's investment, including the improvement of labor force in countries participating the BRI, the improvement of infrastructure quality and co-build country's system. Finally, briefly point out the current challenges and challenges faced.

Keywords: Belt and Road Initiative; economics and trade; infrastructure construction; foreign direct investment.

1. Introduction

In 2013, after visiting Kazakhstan and Indonesia, General Secretary Xi Jinping threw a new issue to the world -- "the Belt and Road" initiative (including "the 21st-Century Maritime Silk Road" and "the Silk Road Economic Belt", abbreviated as BRI), intending to build a new model of international relations and a community with a shared future. Over the past decade, China has adhered to the principle of extensive consultation, shared benefits and joint contribution, and focused on infrastructure connectivity, policy coordination, financial integration, unimpeded trade, and closer people-to-people ties. China has made great efforts and achieved numerous accomplishments. BRI is a significant and also creative measure for China to open up to the outside world and bring a great many benefits to China and the country involved in it. It also promotes economic development, helps many countries upgrade their infrastructure, promotes exchanges and mutual learning among civilizations, and basically achieves a win-win situation.

In the ten years since the BRI was first appeared in the public eye, experts and scholars in different fields especially economists have conducted extensive research on its impact, including its impact on the co-built countries' national economy and trade, enterprises and finance, and the China-Europe freight trains; As well as its impact in China including the upgrading of Chinese enterprises, domestic economic growth, and international status enhancement; Or from other perspectives such as history, geopolitics, strategy, culture and other aspects of the BRI's impact on the world. This passage will introduce the achievements of China's foreign infrastructure construction in recent years, focusing on the reasons why China is dedicated to investing in infrastructure construction, the impact on co-build countries, and the factors affecting the investment, last briefly point out the current doubts and problems faced.

It can be concluded that the BRI infrastructure construction brings positive impacts to both China and co-build countries. The host country's infrastructure becomes more complete, the transportation cost is reduced, the trade facilitation is improved, the income gap of co-build countries is narrowed, and the connectivity partnership level is improved, as well as promoting bilateral trade exchanges.

Recently, China and co-build countries have almost achieved a win-win situation, which has a positive influence on the economic development of each corridor of foreign trade. The literature related to the infrastructure construction under the BRI is gradually improved with each passing day, thus this article collects and reviews the part of the literature in recent years, sorting out for providing convenience for experts and scholars to conduct subsequent research.

2. Analysis of Infrastructure Construction Investment of BRI and its Influencing Factors

Infrastructure is crucial to economic growth and social progress, and one of the main topics of the BRI focus on the infrastructure connectivity [1]. The "six corridors, six routes, multiple countries and ports" is the framework of the initiative. The official explanation is as follows: the "six corridors" are the New Eurasian Land Bridge, China-Central Asia-West Asia, China-Mongolia-Russia, China-Pakistan China-Indochina Peninsula, and Bangladesh-China India-Myanmar Economic corridors. The "six routes" are highways, railways, aviation, pipelines, shipping, and space integrated information networks. The "multiple countries" refers to those who cooperated with China in the early stages. The "multiple ports" are several ports under cooperative construction to ensure the smoothness and safety of major maritime transport corridors. In April 2019, at the opening ceremony of the second Belt and Road Forum for International Cooperation, General Secretary Xi Jinping clearly declared that the framework of "six corridors, six routes, multiple countries and ports" has been formed, and a large number of collaborative projects have launched with everyone's joint efforts. Decades passed by China and co-build countries have corporately made many achievements in major infrastructure projects. The Addis Ababa–Djibouti Railway, the China-Laos Railway, the Mombasa–Nairobi Standard Gauge Railway and the Jakarta–Bandung High-Speed Railway have been successfully built and opened to traffic. The port of Piraeus in Greece and other ports have risen, and the new terminal of Bole International Airport in Ethiopia has been officially put into use. It has become a reality for "land-locked countries" to borrow ships to go to sea, promote the formation of a land-sea linkage pattern, break the development status quo of "land-locked countries", and provide new development opportunities for more landlocked countries [2]. The BRI has increasingly highlighted the practical characteristics and role of providing important international public items and goods to the world [3].

From the perspective of China's economy development, the main reason why China invests in infrastructure is that it can promote the flow of production factors, drive the transformation of China's economic structure, and optimize the industrial structure [4]. China can benefit by transferring relatively backward industries to economic entities that are more suitable for its development and introducing high-quality production factors into China, for example, the renewable energy, advanced technology, human capital, and knowledge into China. At the same time, better infrastructure connections between China and co-build countries create a larger platform and market for the products and goods "Made in China" and provide abundant goods choices to more Chinese families as domestic consumption keeps growing. Last but not least, this investment contributes to the internationalization process of the RMB, alleviates the risks of global financial globalization that brought to Chinese economy [4], and avoids trading risks caused by fluctuations of the US dollar effectively.

The improvement of the comprehensive level of national infrastructure construction can significantly promote the per capita output growing, economic aggregate, and improve the living standards of residents in participating countries, according to the comprehensive analysis of various indicators of infrastructure [1]. Transportation infrastructure links economic activities between regions and exhibits positive spatial spillover effects, promoting overall growth of regional economic [5]. The benefits of the BRI are generally positive and make an impact on the entire transportation network [6]. The economic and trade effects of connectivity between each economic corridors have improved the level of trade and economic cooperation [7]. It is expected that other regions in the world will also benefit from it. In general, joining the BRI can drive the upgrading of infrastructure

and lay a solid production foundation for the sustainable economic growth of the overall European economy [8].

From the perspective of impact on trade, the infrastructure construction of BRI has improved connectivity, expanded product demand, and increased exports of countries. The trade scale expansion has had a positive impact on the export growth of countries around the world through the sharing effect formed through the trade network of participating countries [3]. In recent years, Europe's imports and export volume from countries participating the BRI have been growing, and the proportion of each total volume has increased [2]. According to existing literature, the growth of imports and exports has promoted the economic growth of both countries along the BRI and china [9]. In addition, different types of infrastructure construction and their interactions have different effects on trade. Specifically, the import effect, export effect, and bilateral trade effect of energy infrastructure, transportation infrastructure, and energy-communication network infrastructure are all positive, while the import effect of communication network infrastructure is positive, and the export effect is negative. The overall import effect, export effect, and bilateral trade effect of energy-transportation infrastructure and transportation-communication network infrastructure are negative [10]. For trade costs, as infrastructure continues to improve, trade costs gradually decrease. For example, the higher the density of railway and telephone lines, the lower the cost of bilateral trade. Internet is significantly negatively correlated with bilateral trade costs, and the impact of the three--railway, telephone lines, and Internet use--is diminishing [11]. The BRI has promoted bilateral economic and trade exchanges by improving the infrastructure construction of countries along this policy, therefore, it attracted much investment [12].

Regarding the income and employment of people in co-build countries, existing literature has shown that the annual increase in investment in road infrastructure can create abundant employment opportunities, provide solutions for employment issues [8], and narrow the income gap in co-build countries [13]. Infrastructure construction improves transportation levels, shortens regional spatial distance, and reduces time, transaction, and transportation costs, thereby accelerating the factor flow, reducing the degree of regional monopolies, and reducing the average income gap between co-build countries and non-co-build countries by 8.9% [13]. The reduction of the degree of polarization between rich and poor in the co-built countries promoted social equity and helped facilitate harmonious social development.

The BRI has accelerated the completion of the weak points of infrastructure construction in some countries, released the development potential of the co-build countries economy, and improved their international competitiveness [2]. This initiative not only promotes trade growth, but also provides the world with an economic network platform for economic and trade cooperation, and the development opportunities and achievements it brings are shared by countries all around the world [3]. For example, since the establishment of the China Europe freight trains in 2013, it has brought high-quality and affordable products to Europe, expanding the range of goods and enhancing the purchasing power of residents, tapping into their consumption potential [8].

In addition, China's foreign direct investment activities are influenced by many factors. Taking China's investment in Central and Eastern European countries as an example, the expansion of China's economic scale, the growth of China's total economic output, and the increase in total reserves will drive up the investment stock, leading to an increase in China's investment funds in the Central and Eastern European region. The increase in the per capita GDP of the host country, the proportion of imports of goods and services to GDP, the degree of opening up to the outside world, and the increase in the application of innovative technologies will have an evident positive effect on China's direct investment. The improvement of labor force can compensate for the problem of rising labor costs in China, and the perfection of the government and the legal system can provide institutional guarantees for investors, both of which can have a positive effect on China's direct investment. However, the increase in China's population has relatively increased domestic demand, while the improvement in infrastructure quality in Central and Eastern European countries has reduced the host country's demand for external investment, both of which will hurt China's direct investment [14]. The co-build

country's system is also one of the influencing factors. Whether China's investment in infrastructure construction in co-build countries can promote its economic growth depends on whether the quality of its system has exceeded the threshold. Besides, other direct investment activities conducted in China are not affected by the "threshold effect" of the co-build country's system and can promote economic growth on both sides [12].

In the meantime, the BRI investment in infrastructure construction has faced with many doubts. One of them is that due to the characteristics of the project, such as long cycle, long return time, large investment, thin profit, and strong public attributes, as well as high political risk and variable security environment [1,8], the issue of "debt trap theory" has attracted much attention, which main content is China invests in large-scale infrastructure construction and provides high loans co-build countries, ultimately leading to the termination of the project due to its inability to repay the loan, and the host country is forced to relinquish sovereignty in order to reduce debt. However, according to literature research, this initiative has not increased the frequency and probability of "problem investments" while promoting investment by Chinese enterprises in the transportation industry of co-build countries, thus the "debt trap theory" is not valid [15]. In recent years, the environmental issues brought about by infrastructure construction have received a lot of attention, and there have been many discussions on geopolitical and strategy. These issues require further research. Also, due to the significant cultural differences, customs, and beliefs among countries, international exchange and cooperation do not always go well. Therefore, it is urgent to cultivate a group of talents with an international perspective [13]. In terms of policy, as an important tool for China's foreign direct investment, foreign aid and foreign direct investment share similarities in purpose, function, and other aspects, resulting in blurred boundaries of rights and responsibilities and a lack of coordination. As a solution, it is also important to clarify the scale standards and differences between the two. Above all, although Chinese and foreign social media have different opinions on the BRI, it is undeniable that its concept has provided a brand-new direction and choice for the recovery and development of the world economy.

3. Conclusion

To sum up, at first the paper explains the basic content of infrastructure construction. After that, it reviews the reasons why China invests in infrastructure in the co-build countries and what affect the foreign direct investment. Then, it summarizes the impact of increased investment on different aspect, such as economy, trade, income, employment and international competitiveness on the co-build countries. In general, the infrastructure construction of the BRI has brought an obvious positive impact on China and the co-build countries. The host country's infrastructure has been upgraded, reducing transportation costs, improving production efficiency, narrowing the wealth gap, and promoting bilateral trade. China and the co-build countries have achieved a win-win situation, and the new changes in economic and trade relations between different countries and cultures have injected new vitality into the world's economic development. Of course, there is still significant room for us to improve in many areas such as environment, health, technology, and education, all of which can serve as future research directions. In general, the BRI initiative is a concrete manifestation of China's practice of the global governance concept of joint consultation, construction and sharing, a Chinese wisdom provided for the world economic recovery, and a manifestation of China's active commitment to major country responsibility and participation in global governance. It is believed that the BRI initiative will make greater contributions for the world economy to develop in a sustainable and better way by strengthening the construction of transportation infrastructure with trading partners, promoting cultural communication, improving the system of direct foreign investment, and adhering to the interconnection between countries.

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