


Bilateral Trade Between China and Other Countries: Role of “One Belt, One Road”

Liwen Ma, Taylor’s University, Malaysia*

 <https://orcid.org/0000-0001-9097-9678>

Ali Mohsin, Taylor’s University, Malaysia

Haseeb Muhammad, Taylor’s University, Malaysia

ABSTRACT

The purpose of this study is to analyze the performance of one belt, one road in member countries in the effects of bilateral trade. The sample for this study includes 67 countries along the route for the period between 2013 and 2018. The study employs the difference-in-differences model in a panel data setting to do an analysis. A parallel trend test is employed to test for difference-in-differences between the variables investigated. The results show that the belt and road initiative has had a positive impact on the bilateral trade between China and the belt and road countries along the route. China and the 67 countries along the route with different transaction potentials have different room for development. This paper focuses specifically on bilateral trade and analyses the influence of new initiative in this effort. It tests the moderating roles of new initiative in the relationship between “before 2015” and “after 2015,” concluding that new initiative enhances the effect of bilateral trade.

KEYWORDS

Bilateral Trade, One Belt One Road, Policy Effects

INTRODUCTION

Trade openness and bilateral trade creates many opportunities for businesses and the economy; however, trade imbalance can be a direct cause for friction among trade parties. To protect some or all domestic industries, an importing state can adjust its import quota, exchange rate, and imposition of tariffs on imported products (Kim et al., 2014). Trade friction occurs when an exporting country takes retaliatory measures along with the removal of trade barriers. Such an act can either directly or indirectly adversely affect the aggregate welfare of both countries. Meanwhile, the degree of restriction or trade friction is often linked with the closeness of the trade ties among countries (Borchert et al., 2020; Hook et al., 2011; Wu, 2020).

Turning toward the economy of China, One Belt One Road (OBOR) is a Silk Road Economic Belt. The 21st century maritime Silk Road policy focuses on significant integrations in the form of trade between China and regions like Africa, Europe, and Asia. The OBOR initiative aimed to promote regional trade relations and global economic development. Unblocked trade, one of the “five links,” is a core content of the new initiative. Chunbao and Jinping (2020) stated that China and the

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*Corresponding Author

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other countries have huge trade potential. On the one hand, strong economic development and the willingness of countries along the route have set the foundation for trade cooperation. Over 60 have 60% of the world's population. In addition, they generate 30% of the world's output. On the other hand, China and the countries along the route have strong economic complementarities and potential for trade cooperation. The Belt and Road initiative (B&R) has strengthened the ties between countries, promoting the development of trade and sustainability.

The Chinese government's OBOR initiative provides a blueprint of the country's effective integration into the world economy. OBOR offers a commitment from the Chinese government to be a more open economy to the world. The strategy was formed at a critical point of China's economic transformation. The contemporary world observes that the Chinese overseas direct investment (ODI) is increasing with rapid speed, promoting China's domestic production and identifying significant structural transformation. Additionally, the OBOR initiative is accepted as a significant means to enhance skills, expanding the global reach of Chinese governments and business ventures (Du & Zhang, 2018).

OBOR plays a significant role in the economic and financial development of China's economy. However, the initiative presents several issues that need attention and meaningful solutions. For this reason, it is natural to ask whether the initiative has promoted bilateral trade, especially in countries with which this track is directly or indirectly linked. This issue will attract the attention of policymakers, industry experts, and the academic community. It is an important and interesting issue for the international community; however, there is no serious research to analyze whether this initiative has had a real impact on the economic integration of China and the B&R countries. This study attempts to fill this gap by assessing the moderating role of B&R in the bilateral trade along the route.

Current literature focuses on the correlation between the geographical distance and trade volume among economies. Huang (2007) claimed that transportation costs and unfamiliarity can significantly and negatively determine the correlation between geographical distance and bilateral trade volumes among economies. Furthermore, Huang (2007) explained that geographical distance and bilateral trade factors have a negative association. Li and Ren (2015) also addressed this issue, claiming that geographical proximity affects trade. Christen (2017) investigated the impact of distance and time zones on the service trade, confirming that time zone differences and latitudinal and longitudinal distances are major drivers for outward service sector sales in the United States. However, a bigger research gap is observed when investigating distance and bilateral trade between key members of the OBOR. The current study was propelled in an attempt to find answers to this gap and contribute to the current literature.

This study, therefore, adds to the existing literature on innovation and economic growth by making the following contributions. First, when analyzing the trade potential between China and countries along the route, most of the existing literature uses full-sample estimates. Few studies have classified and analyzed global countries based on single criteria like current policies or income levels. This article makes a classification analysis based on current policies. Second, regarding inefficiency influencing factors, income (gross domestic product [GDP]), geographical distance, and population variables make the analysis more targeted. The research results are more universal as the number of countries in the study increases. Third, the practical significance of the study can serve as a guiding document to policymakers. It is useful, for example, at the government level because these individuals analyze and maintain the OBOR project.

LITERATURE REVIEW

Variable Geographical Distance to Bilateral Trade

Geographical distance has become a consensus because it constitutes the impact of transportation costs on international trade. Subhani et al. (2011) used an extended gravity model to access trade flow data of 15 developed countries and 15 developing countries from 2001 to 2010. The study concluded that the transportation distance of trading partner countries impacts the import and export of both sides, which produces negative effects. Zhou's (2011) representative study used bilateral trade data from 174 sovereign countries worldwide (1950 to 2000) to analyze the following perspectives: (1) geographical homogeneity; (2) political homogeneity; and (3) cultural homogeneity. Through empirical research on the gravity model of trade, it is believed that geographical distance proximity, political similarity, and cultural proximity promote bilateral trade. In addition, geographical factors (geographical distance and adjacent relations) and cultural factors (common culture, common language) are increasing the role of global trade. Regarding geographical and cultural factors, the impact of political differences on trade has declined in recent years.

Rahman and Dutta (2014) used India and the Association of South-East Asian Nations (ASEAN) trade data from 1971 to 2010 to empirically draw the decisive influence of distance rather than the size of the partner economy on the choice of India's import and export partners. McCallum (1995) demonstrated through empirical analysis that the larger the GDP of a partner country, the smaller the impact of geographical distance. Regarding how geographical distance affects trade flow, Qiaozhan (2012) used three methods of decomposing total trade into trade breadth (that is, product types), quantity, and price (this article assumes that quality is equivalent to price), which is the meta-decomposition method based on the gravity model of trade. The study analyzed the contribution rate of various factors to geographical distance weakening trade flows. The results show that geographical distance has different effects on breadth, quantity, and price of trade. Geographical distance seriously affects the breadth of trade, quantity, and price; trade is almost negligible. Therefore, geographical distance is through the breadth of trade to weaken trade and flow.

Variable Income (GDP) to Bilateral Trade

Regarding income, Bernasconi (2014) conducted detailed empirical research on the impact of per capita income on the expansion margin of trade. Based on the empirical results, it can be found that per capita income has an expansion margin for trade at both the overall level and the subdivision level. This, therefore, has a significant positive impact. With the total GDP unchanged, increasing the GDP per capita by 1% and reducing the population by 1% will increase the expansion margin by 0.1%. Given the GDP and product category, countries with higher per capita income are more likely to import the product. Yang and Zhenhua (2011) conducted an empirical test through the feasible generalized least squares (FGLS) method. The research found that the higher the similarity of the income distribution between China and the destination country, the higher the degree of demand overlap between the two countries, the more exports, and the similarity of the income distribution to the different products is greater than the homogeneity product.

Bernasconi (2014) empirically studied the impact of the similarity of bilateral income on the expansion and intensification margins of trade. It was found that the more the income distribution between the two countries overlaps, the greater the bilateral trade volume of consumer products. The data of various industries (except for products like raw materials) also support the argument. Jinchun and Jianguo (2014), after basing their study on the income distribution overlap index, also considered the impact of the two countries' trade populations. They constructed two additional income distribution overlap indexes as they empirically studied the impact of overlapping income distribution on bilateral trade flows. Overlapping demand has a significant promotion effect on China's import demand; however, there are significant differences in the impact on various types of product imports.

Variable Population to Bilateral Trade

Population also plays a vital role in bilateral trade. Yang and Fang (2014) based their study on China's perspective, noting their belief that the "demographic dividend" brought sufficient labor supply while promoting high investment and high capital formation. Thus, their research explained the miracle of China's economic growth since the 1990s.

Regarding the impact of demographic transition on trade structure, the relevant literature focuses on the change of factor endowments. In other words, the change of population structure leads to the change of a country's factor endowments. This, thereby, affects the development of a country's foreign trade. For example, an aging population makes a country's labor factors relatively scarce. So, the comparative advantage of labor-intensive products will continue to decrease or disappear. Related research can be found in Naito and Zhao (2009) and Yakita (2012). Cai and Stoyanov (2016) is a recent representative study.

Based on existing research, the literature further increases (decrease) the value of workers' skill age and degree of dependence of various industries on related skills. It increases (decreases) industries by age. It is found that the economy with a larger median age (deeper aging) will be specialized in the production of products with intensive use of age-value-added skills. It will import products with an intensive use of age-impaired skills. This depicts changes in population structure, resulting in changes to comparative advantage.

Regarding research on population structure and international trade or current account, the classic "preventive saving" theory provides a powerful explanation. However, an increase to the nonworking age population increases the uncertainty of a family's future income and consumption. Individual's savings in the current period are, in turn, conducive to the formation of a current account surplus. Although the relevant research is based on the savings rate, the research conclusions are not consistent.

Grossman et al. (2015) consider the phenomenon of trade diversion caused by immigration to a third country, that is, trade diversion between one or two countries and a third country due to the frequent cross-border movement of labor between the two countries, but the total trade volume is still increasing. The direction of this effect may not be just one-way. In fact, the bilateral trade volume will increase when there is a return of migrants. In the case of a weak internal institutional environment, with the help of a close international immigrant or ethnic interpersonal network, it is possible to increase the contract signing rate and strengthen the implementation process of both parties. This is especially important in less developed countries (Aarons et al., 2014). Over time, the phenomenon of local preference transplantation may occur. That is, the preference impacts the local people. The combination of the two phenomena makes the local preference of immigrants for a special commodity diffuse, thereby increasing the import of this product (Böhme & Kups, 2017).

RESEARCH METHODOLOGY

To achieve the objective of this study, the authors employ the difference-in-differences (DID) model to analyze how B&R influences bilateral trade in countries along the route. In addition, the study will further analyze how B&R contributes to the economic growth of these countries. To analyze this model effectively, the authors first analyze the parallel trend test. If there is a certain difference between the treatment group and control group beforehand, the DID results can no longer represent the net effect of the policy. It is very likely that other factors affect changes in the study's explained variables. In turn, a DID model is estimated to analyze effects. The variables for this study are described in the following subsections.

Data Collection

Data for the present study is extracted from several sources, including World Development Indicator (WDI) and geobytes. More specifically, the data for variables like trade, income (GDP), and

population are collected through WDI. Among all the available sources for collecting the data of macroeconomic variables, WDI is the most authentic (with no question over integrity). A range of studies can be found in existing and past literature to collect data from WDI about macroeconomic variables. Furthermore, data for the geographical distance among members of OBOR is collected from geobytes over the study period. Therefore, authenticity for the stated data sources is sufficient to continue the current study. The data is collected from 2013 to 2018 for the OBOR member states from the above databases. See Appendix 1.

Measure of Variables

Table 1. Definitions of variables

Variable	Details	Source
Trade	Exports and imports from country <i>i</i> to country <i>j</i> (in million USD)	World Development Indicator
Geographical Distance	Geographical distance between country <i>i</i> and country <i>j</i>	geobytes
Income (proxy by GDP)	Nominal GDP of country <i>i</i> and country <i>j</i> (in million USD)	World Development Indicator
Population	Size of population in country <i>i</i> and country <i>j</i> (in 1000)	World Development Indicator

The operational concept of the explanatory and outcome variables of the study is as follows:

Trade

The products' import and export variables of China and countries along the Silk Road Economic Belt are the explanatory variables for the factors that affect product trade between China and the countries along the Silk Road. Studying the flow of product trade between China and countries along the road plays an important role in promoting China-led regional value chains. It deepens the division and cooperation of value chains between China and the countries along the road. Data for the trade dimensions are collected from WDI. Total imports include various forms of imports, general trade, processing trade, and barter trade. Total exports include all forms of exports, general trade, and processing trade (not only processing fees but also the value of raw materials at the time of import).

Geographical Distance

Geographical distance is divided into sea distance and land distance. Some countries, such as Kazakhstan (a landlocked country), do not have shipping ports. To simplify the problem, the geographical distance is measured by the capital distance when China trades with multiple trading partners, regardless of distance by sea and land. It can be calculated with a distance calculator at www.geobytes.com.

Income (GDP)

Changes occur in China's demand for goods and the structure of imported and exported goods. Therefore, China's domestic income is introduced into the model. This study uses GDP to measure China's domestic income. GDP usually refers to the results of production activities of all resident units in a country or region in a certain time (usually one year) in the form of currency. The calculation for GDP is based on the following formula:

$$GDP(Y) = consumption(C) + investment(I) + government\ purchase(G) + net\ export(NX)...(1)$$

Population

Regarding population, the larger the population of a country, the smaller the bilateral trade volume. Yet, the larger the population, the greater the market potential and bilateral trade volume. In terms of calculation, the population variable is logarithm. The population data comes from WDI.

ANALYTIC STRATEGY

Parallel Trend Test

The DID model is a measurement identification strategy used in policy effect evaluation. The principle is based on the counterfactual framework to evaluate changes in observed variables (dependent variables) in the scenarios of policy occurrence and nonoccurrence. Therefore, the sample is divided into treat and control. An important assumption for this method is to satisfy the “parallel trend,” in which the two sets of samples must be comparable before the impact or policy occurs. The performance of the control group is assumed to be the counterfactual of the experimental group.

RESEARCH MODEL

This article adopts the DID method to empirically study this problem. Specifically, the first difference eliminates the difference between treatment group and control group (does not change with time). The second difference eliminates the increase in time change (the countries affected by B&R are experimental group and vice versa). The core of the DID method is to compare the differences between the explained variables of the experimental group and the control group before and after the implementation of the policy. This obtains the actual impact of the policy implementation. The DID method can effectively isolate the real effects of policy implementation. The implementation policy in this article is the OBOR policy proposed by China.

DID models can be used to estimate the net effect of trade between countries and their trading partners. First, this articles constructs the experimental group and control group. It uses the experimental group, B&R countries, as an alternative. The B&R countries are the DID model experimental group. The rest of the world serves as the control group. Therefore, there are trade-level changes in the experimental group and control group in this article (trade-level changes before and after the implementation of the B&R initiative). The impact of the B&R policy can be drawn by comparing the changes of the experimental group and control group before and after the implementation of B&R. The focus of this article is the value coefficient α_3 of the interaction. The specific econometric model is as follows:

$$Total_{it} = \pm 1du_{it} + \pm 2du_{it} + \pm 3du_{it}du_{it} + \pm 4E_{it} + \varepsilon_{it} \dots (2)$$

The subscripts i and t represent the i -th country and t -th year, respectively. ε is a random disturbance term. The explained variable, Totalit, measures the volume of trade between OBOR countries and other countries. Eit is the controlling variables of foreign trade of countries along the OBOR. The following details are considered for the implication of the DID model.

The difference of the control group is subtracted before and after the new initiative takes effect from the difference of the experimental group before and after the new initiative takes effect. This

provides the net effect of the OBOR policy. The policy variable and time variable are two dummy variables. The interaction coefficient of the two multiplied by the two is α_3 , which is the focus of the estimation using the DID method in this article. If the interaction coefficient α_3 is negative, it indicates that the OBOR hinders the development of trade. If the interaction coefficient α_3 is positive, it means that the new initiative has promoted bilateral trade. du , a policy dummy variable, indicates whether the trading partner country is a member of the new initiative. $du = 1$ indicates that the trading partner country is a member of the new initiative. $du = 0$ indicates that the trading partner country is not a member of the new initiative. For the dummy variable of the acting time all the way, the dt value after 2015 (including 2015) is equal to 1; the dt value before 2015 is equal to 0. The terms of trade are the same. The difference in policies is caused by the entry into force of the new initiative. Therefore, according to the existing gravity model, the distance between the two countries, population, and income (gross domestic product) are generally selected as the main control variables affecting trade.

EMPIRICAL ANALYSIS

Descriptive Analysis

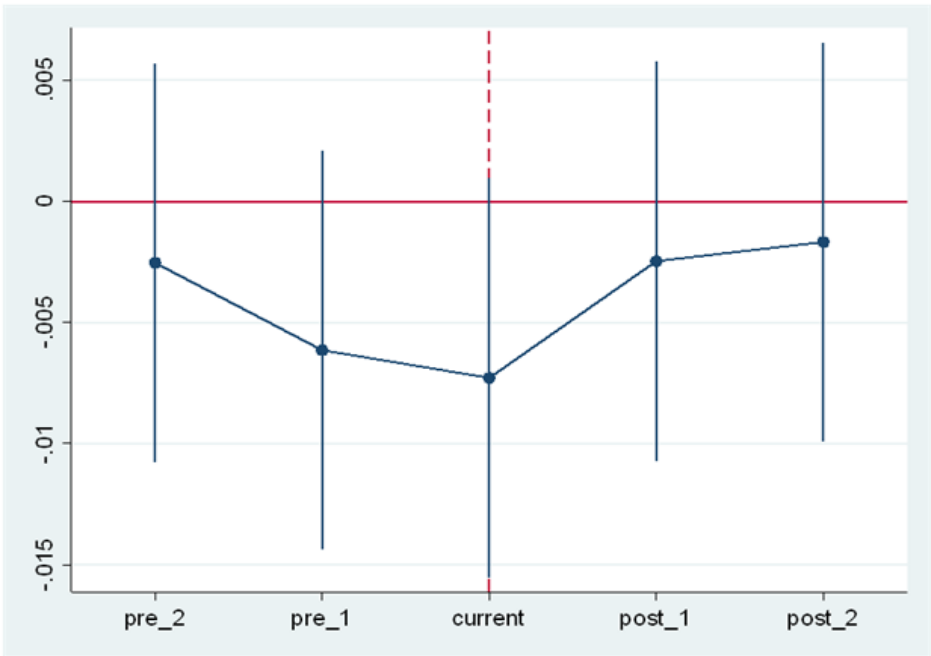
Table 2. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Trade	1087	.574	.185	0	1
Distance	1087	.717	.164	0	1
Population	1087	.533	.185	0	1
Gdp	1087	.515	.179	0	1

The first step is to normalize the data. The “standardization” is to uniformly compress or stretch the values of different measurement units to the length of 1 unit. Then, they are compared. Scaling the raw data to the [0,1] interval allows for better comparisons between variables. Analysis on the trade variables uses data from a six-year period (2013 to 2018). Table 4.1 shows the descriptive statistics obtained using 2013 to 2018 data from related countries around the world to analyze the B&R effects. For the period, it is observed that the average trade was approximately 0.574. Distance averages 0.717. An interesting find was that distance is more important than believed. The average population has an average of 0.533 and GDP average of 0.515.

Parallel Trend Test

Figure 1. Parallel trend test



Judging from the results of the parallel trend test, the impact of the policy has been significantly reversed since the policy year. This indicates that the policy's impact on trade is significant. Therefore, the parallel trend test results passed.

Results of Model Estimation

The estimation result for the trade model is presented in Table 3.

Table 3.

	No Standardization	Standardization
VARIABLES	trade	trade
new initiative	0.0353	0.00547714
	(0.198)	(0.178)
after 2014	-0.0490*	-0.0743448*
	(0.0200)	(-2.453)
new initiative * after 2014	0.0839*	0.07736149*
	(0.0329)	(2.547)

Table 3 continued on next page

Table 3 continued

	No Standardization	Standardization
distance	-0.450*	-0.0770599*
	(0.177)	(-2.540)
population	0.173***	0.0999133***
	(0.0524)	(3.298)
gdp	0.821***	0.4691834***
	(0.0470)	(17.46)
Constant	2.831	2.831
	(1.776)	(1.776)
Observations	1,087	1,087
Number of id	182	182
	Standard errors in parentheses ***p < .001, **p < .01, *p < .05	z-statistics in parentheses ***p < .001, **p < .01, *p < .05

The DID empirical results of the impact of the B&R initiative on bilateral trade are shown in Table 3. The standardized correlation coefficient between DID and trade is 0.07736149, which is significantly positive. This indicates that this policy has a significant positive effect on trade. Essentially, standardized effects weaker than 0.10 are slightly weak, which is the main message obtained for the analysis.

In Table 3, the new initiative is a policy dummy variable. This indicates whether the trading partner country is a member of the new initiative. The dummy variable of the acting time all the way is found after 2014. The new initiative * after 2014 is the interaction item. To eliminate the differences between evaluation indicators, as well as facilitate subsequent operations like data comparison, it is necessary to standardize the data. Variables can be better compared after standardization.

This article draws the ideal conclusion after applying standardization. The results show that, under the premise that other variables remain unchanged, a 1% change in distance will adversely affect bilateral trade by 0.450%. A 1% change in population will affect bilateral trade by 0.173%. A 1% change in the GDP of trading countries will affect bilateral trade in the same direction, 0.821%. In some cases, export prices are lower than other countries. Due to increased transportation costs, importers will choose countries with shorter bilateral trade distances. On one hand, a high proportion of the working population will increase exports and domestic output, thereby increasing exports. On the other hand, a high proportion of the working population will bring more labor income to the importing country, thereby increasing imports.

Regarding GDP's result, it is in line with the current situation in China. The table shows that the positive effect of GDP on trade is much greater than population. Therefore, to promote the development of bilateral trade, people should pay more attention to the impact of GDP.

The reverse promotion effect of distance is smaller than GDP and population. Compared with population, distance should receive less attention. The coefficient of the interaction term is positive and significant as in the 95% confidence interval. This indicates that the B&R initiative has had a significant positive impact on the bilateral trade of China and other countries, which is consistent with the research conclusions reached by current scholars. At the same time, because the selected

research countries are countries with direct or indirect links to B&R, it verifies that the B&R initiative promoted bilateral trade between China and these countries.

Some scholars have applied the DID method to the policy analysis of B&R, exploring the impact of the initiative on inbound tourism and foreign investment. In turn, it has provided some experience for reference (Lyu, 2019; Tang et al., 2018). In this study, DID is applied to import and export trade. Endogenous problems, such as the common reverse causality problem, may be prone to occur in econometric regression. The DID model can solve such problems to a large extent because a national policy is generally exogenous to microeconomic agents.

Therefore, this study also supplements the existing theories. The application of DID to the import and export trade in the context of B&R has fully verified its applicability. B&R is a moderator in bilateral trade relations. First, it will provide new impetus for the sustained growth of China's economy and the economies of countries along the route. Strengthening the cooperation between countries is a guarantee of energy and resource security for China and the countries along the route. Second, the construction of the Silk Road will boost the economic restructuring of China and the countries along the route. The central and western regions, which have long been in the rear of the opening pattern, will gradually become the new frontier. This will help the flow of factor resources and bring opportunities for the optimization and adjustment of the regional structure. At the same time, B&R will bring opportunities for the adjustment of the industrial structure of the countries along the route. Finally, the B&R will be an important platform for cultivating Chinese multinational enterprises. Chinese enterprises' foreign investment will not only benefit enterprises. More importantly, it will enhance its global voice and influence.

In terms of geographical space, with the continuous development of transportation lines, the channels for interconnecting countries have gradually increased. The era of interconnection of all things and the world has come. Regarding the western region of China, the implementation of the OBOR has provided new impetus to the economic development of the western region. The economy of the western region has achieved rapid development as the region with the most provinces passes through the Silk Road Economic Belt. The region took advantage of the country's promotion of B&R and the good geographical location of the region to strengthen cooperation with China. The economic and trade exchanges and interconnection of neighboring countries along the B&R are beneficial to the economic development of the western region.

In terms of win-win cooperation, B&R emphasizes the core concept of coexistence, win-win and common strength. It aims to achieve common development and prosperity of most countries in the region through mutual benefit and learning from each other's strengths. In turn, the developed economies can coexist harmoniously. B&R is conducive to the optimization of regional economic stratification (for example, China). During the construction of the B&R—according to natural basic conditions, regional policies, and the development of the regions (eastern, central, and western)—an effective layered and optimized development strategy was adopted: (1) optimize and upgrade; (2) vigorously develop the tertiary industry in the eastern region; (3) strive to achieve rapid economic development in the central region; (4) actively undertake labor-intensive industries transferred from the eastern region; (5) the western region should take advantage of the location advantages of the B&R; (6) actively integrate into development; and (7) update development concepts.

CONCLUSIONS

The main motivation for this study is the economic development of trade between China and the B&R countries. The discussion shows that the model has a strong predictive ability. The empirical results of the model will be used to investigate the prospects of China's B&R trade relations. It is obvious that the OBOR market has not yet been fully developed. One initiative promotes Chinese bilateral trade with member countries through trade activities. From the analysis of the status of trade between China and the countries along the B&R, it can be concluded that China, Central Asia,

and the ASEAN region are developing and the bilateral trade volume is increasing. According to the results between China and the countries along the B&R, bilateral trade is affected by the GDP of the countries along the B&R, the total population of the countries along the route, and the transportation distance between China and trading countries. The GDP of the countries along the route has a positive impact on the volume of bilateral trade between China and the countries along the B&R. If the GDP of the two countries is higher, the bilateral trade volume between the two countries will increase. Geographical distance is an obstacle to trade exports. An increase in geographical distance will increase the trade cost of exporting goods. Under the condition of maximizing profit, the buyer will consider the purchase cost of goods in a timely manner when choosing goods. Export prices are lower than other countries; however, due to increased transportation costs, importers will choose countries with shorter bilateral trade distances. Studies have shown that B&R has had a positive impact on the bilateral trade between China and the B&R” countries along the route. The advancement of China’s OBOR has brought development opportunities to its foreign trade through the momentous growth of industrial exports. This has optimized the trade pattern, promoting the export of capital items, deepening the degree of trade facilitation, and accelerating China’s industrial transfer. China and the 67 countries along the route have different transaction potentials and room for development. Therefore, this article puts forward suggestions to promote the development of bilateral trade based on the characteristics of bilateral trade of various countries.

The B&R initiative has driven a new pattern of Chinese trade and investment (Liu, 2022). DID can further quantify the impact of the initiative. B&R has potential for trade with countries along the route (Liugang, 2021). Therefore, this research model may take the research forward. It can provide managerial and academic insights for the same conclusion through different models, which fully demonstrates the reliability of the conclusions.

B&R promotes investment and growth trends in the Chinese economy and the international presence of its companies, especially in the countries of its direct partners. For this reason, policymakers, industry experts, and academics can examine current and future prospects of the project for a variety of reasons. First, it may enhance the learning impact of infrastructure-led economic integration programs, as well as present positive moves by foreign investment in the local Chinese market (Du & Zhang, 2018). Second, the large-scale investment in infrastructure under B&R will improve the quality and availability of trade promotion from different perspectives like logistics facilities in countries along the B&R. This can facilitate international investment and flow to China (Du & Zhang, 2008). Third, a high level of international political cooperation among B&R member countries will reduce policy uncertainty in host countries and political risks for Chinese companies that invest in partner countries. Still, many others remain largely expected rather than realized (Du & Zhang, 2018). Finally, the practical implications of the study can be reviewed in the context of a guidance document for policymakers. Those at the government level will be responsible for analyzing and keeping B&R projects on track.

Fully excavating the policy implications implied by research conclusions will provide ideas and solutions for solving practical problems. It will also have important academic value. The information can serve as a complete method or plan. In addition, it can be a denial and questioning of the suggestions made by predecessors. This study can help set social development goals or aid in the creation of conditions for the realization of a certain goal. As such, economists and government officials are advised to pay attention to the theoretical and empirical results of this study.

DISCUSSION

This article encourages innovation and increases the added value of China’s exported products. According to the regression results, the GDP of China and the trading countries along the route positively correlates with the bilateral trade volume. The adjustment of the trade growth mode requires

China to increase the added value of exported products and increase the scientific and technological content.

China's economy is in a stage of structural adjustment and reform. The labor advantage is weakened; the competitiveness of labor-intensive products is declining. Therefore, China must adjust and optimize its industrial structure. Optimization occurs through vigorously developed capital-intensive, high-tech products. It requires a strengthening of innovative capabilities and encourages scientific and technological innovation. In addition, a focus should be on the cultivation of high-tech industries and brand image. The government should increase support for innovative enterprises, strive to build innovative industrial clusters, and promote the development of regional innovation systems by introducing high-quality talent and technological enterprises. To accelerate the establishment of innovation capabilities and an institutional mechanism for innovation-driven development, goals should include: (1) a cultivation of innovative enterprises and high-tech industries; (2) state-owned enterprises as leaders; and (3) simultaneous use of private enterprises.

Enterprise innovation is a key step in the development of China's industry as it works to enhance its progress as a nation. By strengthening its role in advanced manufacturing, China can play a lead role for high-tech industries as it supports the modern service industry. These efforts will encourage technological innovation, independent research, and product development. China can build national brands to enhance the export of its high-tech products. In addition, it is an efficient way to enhance China's image as a large country. Finally, investing in talent is an effective initiative.

Construction of transportation facilities between China and B&R countries is needed to strengthen cross-border exchange. According to the regression results, the geographical distance between trading countries is negatively correlated with the bilateral trade volume between two countries. In fact, geographical distance hinders trade between two countries. Transportation, therefore, plays an integral role in economic development. Improving the transportation infrastructure is a guarantee for sustainable development in B&R.

Strengthening cross-border exchange promotes the exchange of land and impacts cultural exchange. Central Asia, Central Europe, and Eastern Europe's religious beliefs and customs are completely different from China. To a certain extent, this creates ideological obstacles in trust regarding economic and trade exchange. The importance of interconnection lies not only in the integration of land infrastructure and construction. Interconnection also impacts the connection and integration of people and culture. The rich and colorful forms of exchange will help the people of two countries better understand each other's culture and origins. This, in turn, will result in the sharing of wonderful results.

Increasing total production is at the heart of bilateral trade development. To achieve the increase and a rapid, steady development of domestic economy, both China and its counterparts should pay attention to the transformation of the domestic industrial structure. China is still in the manufacturing power stage and should, therefore, develop its secondary and tertiary industries. This focus will promote the construction a "Created in China" initiative, introduce advanced technology and outstanding talents, and pursue the rapid development of total production. At the same time, it will improve the quality of and ensure a stable, efficient economic development. Therefore, high-level manufacturing is needed. At the same time, it gives full play to the advantages of China's high-level service industry.

Individuals can learn from corresponding countries, fostering strengths, avoiding weaknesses, promoting high- and deep-level cooperation in bilateral trade, and achieving a win-win situation. The level of bilateral trade products is low. In fact, most of the main products of bilateral trade have low-added values. Products' weak competitive advantage means they are easily replaced by similar products. Therefore, the trade level and quality of two countries are the same. Enterprises in both countries should promote the implementation of industrial upgrading and optimization policies to improve their independent innovation capabilities, learn advanced foreign technologies, and introduce outstanding professionals.

At the same time, the two sides should give full play to their advantageous industries. China should use its advantages as a strong manufacturing country to increase the production of high-demand products focused on quality and technology. China should continue to build high-tech development zones and characteristic industrial parks, accelerate the gathering of high-end elements, improve functional elements for production, produce technology- and capital-intensive products, enhance the high-tech content of bilateral trade, and increase the export of high-quality products.

These elements combine with the industrial complementarity of key countries and the division of labor in the global value chain. Efforts can cultivate leading industries and open industries to improve the efficiency of factor allocation and create export-oriented advantageous industries for key countries and regions along the route. Trade should be used to drive investment and production capacity cooperation among key countries along the route, expand the proportion of product exports, and consolidate exports of automobiles, electronics, and other products. Efforts will strengthen equipment manufacturing and large-scale complete sets of automobiles, rail transit, communications equipment, construction machinery, and environmental protection equipment.

The comprehensive competitive advantage of equipment export will expand the export of investment commodities. In addition, it will encourage advanced technologies, key equipment, and spare parts while expanding the import of daily necessities and resource products. China-Europe freight trains and air freight can carry out rapid cargo disassembly and consolidation businesses, cultivate advantages in foreign trade competition, increase the scale of foreign trade exports to key countries along the route, strengthen trade complementarity, optimize the structure of import and export commodities, and improve export products.

Technological content will be promoted through the construction of demonstration sites for the undertaking and transfer of processing trade. This will advance the rise of the service trade to the mid- to high-end of the value chain, strengthen online trade expansion, and promote innovative development like cross-border e-commerce, digital trade, and cross-border settlement.

LIMITATIONS AND FUTURE RESEARCH

It is natural to encounter limitations when conducting research, especially in the social sciences. This article uses quantitative analysis methods to establish relationships between variables. The results, which come from data analysis feedback, do not involve significant ideological and behavioral insight. Therefore, it is impossible to verify the ins and outs of respondents' choices. Future research should be conducted from the perspective of an exploratory qualitative analysis. The current research is conducted through econometric analysis, especially panel data methods. However, most panel data analysis techniques target short panels. Future research should use econometric time series analysis to determine China's trade, export, and import demands.

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APPENDIX A – ADDITIONAL INFORMATION

One Belt One Road member countries:

Singapore, Malaysia, Indonesia, Thailand, Cambodia, Vietnam, Philippines, India, Pakistan, Bangladesh, Sri Lanka, Maldives, Cyprus, Greece, Italy, Malta, Portugal, Spain, New Zealand, Australia, Papua New Guinea, Lebanon, Yemen, Oman, Qatar, Kuwait, Bahrain, Kazakhstan, Uzbekistan, Turkmenistan, Tajikistan, Kyrgyzstan, Russia, Ukraine, Belarus, Georgia, Azerbaijan, Armenia, Moldova, Mongolia, Austria, Belgium, Bulgaria, Croatia, Czech Republic, Denmark, Finland, France, Germany, Hungary, Ireland, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Romania, Slovakia, Slovenia, Sweden, United Kingdom, Iran, Turkey, Syria, Jordan, Israel, Saudi Arabia, and China.

Countries without Belt and Road:

Aruba, Afghanistan, Angola, Albania, Andorra, United Arab Emirates, Argentina, Antigua and Barbuda, Burundi, Benin, Burkina Faso, Bahamas, The, Bosnia and Herzegovina, Belize, Bolivia, Brazil, Barbados, Brunei Darussalam, Bhutan, Botswana, Central African Republic, Canada, Switzerland, Chile, Cote d'Ivoire, Cameroon, Congo, Dem. Rep., Congo, Rep., Comoros, Cabo Verde, Costa Rica, Cuba, Djibouti, Dominica, Dominican Republic, Algeria, Ecuador, Eritrea, Estonia, Ethiopia, Fiji, Micronesia, Fed. Sts., Gabon, Ghana, Guinea, Gambia, The, Guinea-Bissau, Equatorial Guinea, Grenada, Greenland, Guatemala, Guyana, Honduras, Haiti, Iraq, Iceland, Jamaica, Japan, Kenya, Kiribati, St. Kitts and Nevis, Korea, Rep., Liberia, Libya, St. Lucia, Lesotho, Morocco, Madagascar, Mexico, Marshall Islands, North Macedonia, Mali, Myanmar, Montenegro, Mozambique, Mauritania, Mauritius, Malawi, Namibia, Niger, Nigeria, Nicaragua, Norway, Nepal, Nauru, Panama, Peru, Palau, Korea, Dem. People's Rep., Paraguay, Rwanda, Sudan, Senegal, Solomon Islands, Sierra Leone, El Salvador, Somalia, Serbia, Sao Tome and Principe, Suriname, Seychelles, Chad, Togo, Timor-Leste, Tonga, Trinidad and Tobago, Tunisia, Tuvalu, Tanzania, Uganda, Uruguay, United States, St. Vincent and the Grenadines, Venezuela, RB, Vanuatu, Samoa, South Africa, Zambia, and Zimbabwe.