The Trade Potential and Trade Efficiency of the "One Belt, One Road" Countries along the Border and Their Impact on China's Foreign Direct Investment: Based on the Stochastic Frontier Gravity Model

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Abstract: With the rapid development of big data economy, economic and trade cooperation between countries has been better studied for better development. This paper uses the "one belt, one road" countries data from the database, such as the world bank and other databases. And the paper is also to test the applicability of the model and to prove that the stochastic frontier gravity model should be used for the study. "One belt, one road" countries' GDP and the degree of integrity have significant impact on China's OFDI.

1 INTRODUCTION

After the outbreak of the financial crisis, the economies of various countries are gradually brewing recovery, the international situation is still in a state of instability, the phenomenon of development and differentiation between countries due to the existence of economic circles, the economic gap between countries is gradually widening, and the more backward countries are facing great challenges. Since 2019, the world has seen a new dilemma - the new crown pneumonia epidemic. The world economic growth rate has been at the lowest level since the 2008 financial crisis, trade between countries has slowed down significantly due to the epidemic restrictions and the economy has suffered a huge impact, but the outflow of outward direct investment has increased by 33.2% year-on-year after three consecutive years of decline. The pace of China's opening up to the outside world is still stable. And Chinese enterprises are also constantly "going out". In 2019, China's outward direct investment was US$1369.1, second only to Japan's, and China's outbound investment stock reached US$2.2 trillion, ranking third in the world. Second only to the United States and the Netherlands.

In today's context of both impetus and obstacles, the joint construction of the "Belt and Road" can conform to the current background of economic globalization and uphold the spirit of China's "opening up". In this context, the impact of the trade potential and trade efficiency of countries along the "Belt and Road" on China's outward direct investment is studied, and then the policy recommendations of China's outward direct investment under the background of the "Belt and Road" economic cooperation are given, which has a significant impact on the development of China's economy and trade. In the process of reading the literature, I found that many scholars have research directions related to the "Belt and Road", and some scholars have carried out the research direction of trade potential and trade efficiency on a certain industry, based on the importance of trade and OFDI, which has gradually been put on the agenda, coupled with the inseparable link between trade and OFDI, so this article discusses the literature on trade efficiency and trade potential for OFDI.

In recent years, due to the continuous advancement of the wave of economic globalization,

many scholars have conducted research on the trade potential and trade efficiency of the "Belt and Road" countries. First of all, in the development trend of trade efficiency and trade potential, scholars have reached inconsistent conclusions. Through the study of bilateral trade, he (Zhang, 2017) concluded that trade efficiency is now low, and gave suggestions on how to increase outward direct investment and sign free trade zones; The paper was used (Li, 2018) by a stochastic frontier model in the analysis and calculation of trade efficiency and trade potential of countries along the "Belt and Road" to conclude that although trade efficiency is declining, there is an overall upward trend; When calculating the trade potential of countries along the "Belt and Road" based on the stochastic frontier gravitational model, it is believed (Quan, 2019, Gao, 2019) that neither trade potential nor trade efficiency has reached a very high level, and there is still a high room for improvement. In the study on the development scope of trade efficiency and trade potential, the paper was used (Li, 2020, Ni, 2020) by the HT model to measure the countries along the "Belt and Road", and concluded that China's trade potential for Asian countries is small, while its trade potential for Central and Eastern European countries is large.

In terms of the selection of explanatory variables, it is believed (Feng, 2019, CHEN, 2019) that some economic indices, the total number of countries, political systems, and preferential trade agreements are important factors when influencing trade efficiency and potential; Based on the study of stochastic frontier gravitational models and trade inefficiency models, it is concluded (Li, 2019, Lü, 2019) that signing free trade agreements and opening Confucius Institutes is conducive to China and the "Belt and Road" in improving financial freedom, infrastructure construction, cultural exchanges, etc. The improvement of trade efficiency in countries along the Belt and Road; Based on the study of trade potential based on the stochastic frontier gravitational model, it is concluded (Zhang, 2020, Zhang, 2020, Chen, 2020) that common language, trade freedom, political stability, trade facilitation degree, and the signing of free trade agreements can have a positive impact on trade efficiency and potential; Based on the stochastic frontier gravitational model, the study of global trade efficiency and trade potential was carried out (Chen, 2016, XIE, 2016, LIN, 2016), and the study showed that trade input, trade concentration, trade complementarity index positively correlated trade efficiency and trade potential, and the degree of trade diversification had a negative correlation with it, but the impact of trade diversification, trade concentration and trade complementarity index on trade was not obvious; Based on the stochastic frontier gravitational model and trade non-efficiency model, it is concluded (Li, 2020, Zhang, 2020, Chen, 2020) that the scale of economic development of countries and the import of final consumer goods by participating countries have a positive effect on trade, while differences in political systems and geographical distance have a restraining effect on trade; The paper was used (Li, 2021) by the stochastic frontier gravitational model draw the conclusion that the income level of countries along the "Belt and Road" has a very obvious role in promoting trade efficiency, and has a more obvious impact on trade efficiency in terms of geographical location at the same time. Trade freedom and tariff levels have a positive effect on trade efficiency.

In the study (Yang, 2019) of influencing factors, based on the stochastic frontier gravitational model and trade inefficiency model, the income level, population size, geographical distance and landlocked countries restrictions between China and the belt and road have a significant impact on trade potential, trade inefficiency is the main reason for the gap between the actual trade level and trade potential, and helps to improve trade efficiency by narrowing the gap between the democratic degree of government, improving trade freedom and signing regional trade agreements. The paper was used (Zhang, 2017) by the study of stochastic frontier gravitational model. It is concluded that there are still major problems in trade facilitation and government governance capacity of countries along the "Belt and Road" that inhibit trade efficiency between countries. In addition to enhancing the degree of convenience and government capacity, China can promote the negotiation of inter-state trade agreements and increase of outward direct investment to improve trade efficiency and trade potential; The paper (Li, 2021) was used by the stochastic frontier gravitational model. It is concluded that the per capita GDP, geographical distance, common border, WTO organization, trade freedom and other factors of the countries along the route have a greater impact on trade potential and trade efficiency, while the government integrity index, trade freedom, labor scale, final consumption expenditure, and exchange rate estimates have a significant effect on trade. The innovation of its research is to conclude that tariff levels are negatively correlated with trade and that the role of financial freedom and OFDI in trade efficiency is not a simple promotion, and this indicator does not play a large role in China's trade with countries along the route.

Due to the increasingly close ties between countries and the smooth operation of the strategy of "Belt and Road" proposed by China today, the topic of trade potential and trade efficiency has become more and more hot, and many scholars have done research in this regard. The study found (Tan, 2015, Zhou, 2015) that the trade efficiency of countries along the "Belt and Road" is improving, and there is still a wide range of improvements in trade potential; It is believed (Wang, 2016) that China's trade efficiency with Iran, Kyrgyzstan, Ukraine, Russia and other countries along the "Belt and Road" is relatively high, and it is also at a high level in terms of trade potential.

At the same time, it can also be found that scholars' research on trade efficiency and trade potential involves many different fields, including agricultural products, manufacturing, cultural products, and foreign exports. For example, the paper was measured (Chen, 2018, Xie, 2018, Liu, 2018) by the efficiency of cultural trade, etc., and used (Wang, 2019, CHEN, 2019, GAO, 2019) by complex network analysis method and combined with stochastic frontier models to study the topological characteristics of the "Belt and Road" trade network and its impact on China's import and export trade efficiency.

In a study of OFDI related to the research topic of this paper, it was argued (Zhang, 2017) that China's OUTWARD direct investment with countries along the "Belt and Road" will increase the volatility of the inefficient value of trade due to the strong volatility between China and the region itself. It was argued (Li, 2021) that foreign investment in inter-country trade dilutes the demand for import trade.

It is equally important to study the relationship betwee trade and OFDI abroad. It was examined (Amour, 2017, WU, 2017) by the implementation of China's OFDI, surveying some theoretical and empirical literature on the motivations and determinants of CHINA's OFDI. In the past, most scholars have argued that strategic behavior and economic considerations seem to be the basic motivations for China's OFDI, but in fact, the main factors that determine the amount of Chinese FDI include market size variables, labor market conditions, institutional variables, macroeconomic policy variables, and the global supply of FDI, as well as GDP, market size, and trade freedom. The study also points out that China's offline foreign direct investment in the world is seeking markets and resources. It was concluded (Suresh, 2014, Bulbul, 2014, Vivek, 2014) that over the past decade, outward direct investment and economic growth have been inextricably linked, but the causality has been controversial. The article examines the multiple causal relationships between China's outward direct investment, economic growth, and foreign trade between China and India. The article found that the two countries presented opposite results in terms of the causal relationship between FDI and GDP. Foreign scholars not only study trade and OFDI on the current situation, but also give corresponding policy recommendations. The studies (Zhang, 2006) show that OFDI can reduce poverty by promoting economicgrowth and spreading growth. And OFDI is also an important source of China's economic growth. By leading programs and policies to improve the investment environment in poor provinces, government can reduce more poverty and attract more OFDI; The study (Li, 2011, Jin, 2011) points out that China is South Korea's largest exporter and largest importer. In terms of economic dependence and geographical location, South Korea cannot ignore the importance of China, which should take into account both countries, namely trade and investors, while increasing the volume of outward direct investment. By changing the way the economy depends on, South Korea should also increase its outward direct investment from China to keep trade and investment balanced between the two countries. The study notes (Makaranga, 2019) that the relationship between OFDI and trade growth has long been an area of concern for many policymakers, economists and academics. This is because OFDI can affect many macroeconomic factors in recipient countries. OFDI is a resource bundle for economic growth in developing countries, particularly in Africa. As a result, most African countries have expressed support by providing incentive policies to foreign companies related to OFDI. The article also draws false conclusions: the impact of FDI inflows on economic growth will certainly increase, thus achieving sustainable economic growth and development.

In summary, there have been in-depth studies on trade potential, trade efficiency and China's outward foreign direct investment, but there are few studies on China's outward direct investment from the perspective of common trade potential and trade efficiency, and there are few studies that combine trade potential, trade efficiency and China's outward direct investment in the context of the Belt and Road Initiative. Based on this, on the basis of China's analysis of the current situation of outward direct investment in the "Belt and Road" countries, the study empirically analyzes the trade potential of countries along the "Belt and Road" from the

perspectives of GDP, population size, distance from China, whether there is a common border, government integrity, trade freedom, monetary freedom, financial freedom, whether to sign a free trade agreement, whether to join the WTO, etc., through the establishment of a random frontier gravitational model.

2 ANALYSIS OF THE SITUATION

2.1 The Size of China's Outbound Direct Investment

Current between countries are closely linked, is undergoing dramatic changes, after the outbreak of the financial crisis, the economy is gradually making recovery, the international situation is still in a state of flux, between countries due to the existence of the economic circle, the phenomenon of the development of differentiation, gradually widening economic gap between countries, relatively backward countries facing a great challenge. Since 2019, the world and a new dilemma - COVID - 19 outbreak, the world's economic growth to its lowest level since the financial crisis in 2008, trade between countries restricted by epidemic appeared significantly slower.Economy suffered a huge impact.However, foreign direct investment flow after falling for three years rose 33.2%, China is still opening up steadily, and Chinese companies are also going global. In 2019, China's outbound direct investment reached us $1,369.1, second only to That of Japan. China's outbound investment stock reached $2.2 trillion, ranking third in the world. Only the United States and the Netherlands.

According to Figure 1, the proportion of net outflow of OFDI in GDP was 0.381% at the beginning of this century in 2000, and increased to 0.925% ten years later in 2010. Due to the impact of Covid19 at the end of 2019, import and export trade at home and abroad will have strong fluctuations, and the scale of OFDI will also be greatly impacted. However, before that, the data in 2018 had increased to 1.029%. As can be seen from the trend line shown in the figure, the proportion of China's net outflow of OFDI in GDP showed an overall upward trend.

If only consider the relevant data of foreign direct investment, although it can be seen that the development trend, It can be easily affected by other aspects. When GDP also maintains rapid rising trend, the economic environment is optimistic and the economy of every composition lead toward the development of the whole .And we are through the

foreign direct investment outflows as a share of GDP,Then we can know the relative changes of foreign direct investment. If OFDI is compared to a boat in the downstream, then the proportion data is equivalent to the relative speed of the boat and the current. Thus, it can be concluded that the importance of OFDI for China's economy has been growing, which is also the root of our research. Under the current background of both driving forces and obstacles, the Belt and Road Initiative can adapt to the current background of economic globalization and uphold the spirit of China's "opening-up".
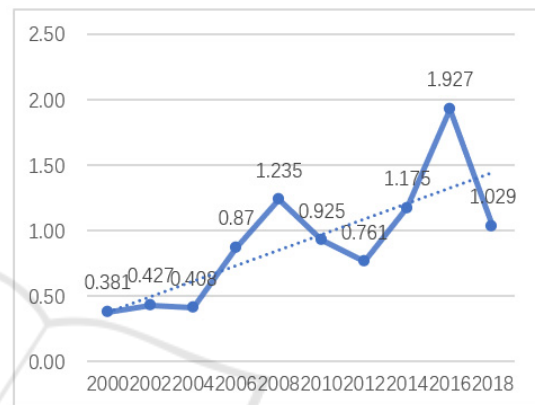

Figure 1: Net outward direct investment outflow (share of GDP).

2.2 OFDI between China and Other Belt and Road Countries

In recent years, many developing and emerging countries have undergone dramatic changes from isolationist, import-substitution policies to open market policies aimed at increasing outward direct investment. Foreign investment plays an increasingly important role in a country's economic growth, and all countries begin to attach importance to foreign investment and increase foreign investment, while encouraging foreign investment in their own country. The study of foreign direct investment is of great significance and guiding role in the development of economic globalization.

China has high hopes for trade with countries along the belt and Road, and has set ambitious trade growth targets with ASEAN, India and other countries, and actively removed barriers to trade development. On this basis, the paper studies the trade potential and trade efficiency of countries along the "Belt and Road", the factors influencing trade potential and trade efficiency, and the actual impact of trade potential and trade efficiency on China's foreign investment. The study of these problems has

important theoretical value and practical significance for enriching and improving China's OFDI.As the spread of COVID-19 has brought great uncertainties to the economy, OFDI has changed greatly under the influence of policies of various countries, so our data are mainly analyzed based on 2019. According to figure 2 can see, in the year 2019, China's "neighbourhood" net foreign investment up to Singapore and other countries as much as $52.63656 billion, the second contact in foreign direct investment in China is closely followed by Indonesia, Malaysia, Thailand, Vietnam, kazakhstan, Pakistan, Israel, India, etc., However, these countries are far behind Singapore, but they have great potential for future development. Therefore, China can provide appropriate policy support to these countries in the future construction of the "Belt and Road", so as to facilitate the steady and efficient development of regional economy.

While some countries are opposite bigger and the Chineseon the net foreign investment is not high, the reason may be that some political factors. In order to better economic regional exchange in the future, China also need to maintain good diplomatic image, with other countries to establish friendly and close relationship between foreign trade, promote the development of health, coordination between economy and effectively.
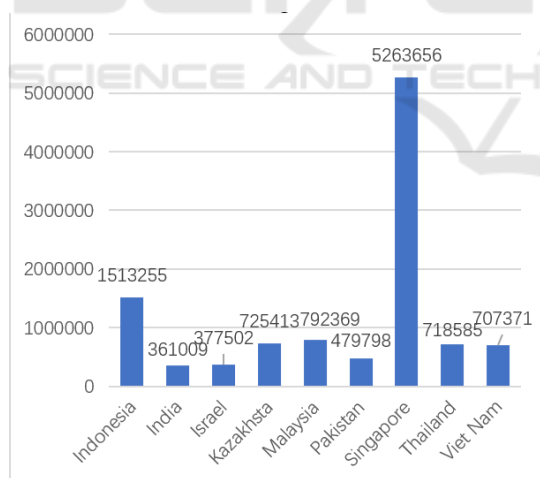

Figure2 China's Net Outbound Investment to Other Countries (2019).

2.3 The Influence of Trade

Potential and Trade Efficiency on China's Foreign Direct Investment

In the study of trade efficiency and trade potential, it can be found that although they contain two different aspects, there are still many similarities. The total population, GDP, infrastructure construction, logistics and transportation among countries will all have an impact on trade efficiency. For trade potential, in addition to some hard indicators, "software", such as technology and experience, these can also have a great impact. In general, some countries that do not have hard indicators tend to have the advantage of being a late mover. Therefore, in the context of "One Belt and One Road", there are many factors that need to be considered when studying trade efficiency and trade potential. They are not only the superficial positive correlation, but also some other interfering factors.

Some of China's traditional industries have a comparative advantage in the international market is close to saturation. But with the incoming of the economic globalization, the financial crisis is emerging, which makes China's export growth have a downward trend. The research of foreign direct investment can effectively avoid the country setting up for China of tariff and non-tariff barriers to facilitate the export of China's domestic advantage products, And in the information can be more transparent and reduce the export process of trial and error and blindness.

3 MODEL CONSTUCTION AND DATA SOURCE

3.1 Theoretical Analysis

The purpose of the stochastic frontier gravity model is to combine the stochastic frontier theory with the gravity model to analyze the technical efficiency in the production function. The model decomposes the stochastic disturbance term into two parts: Trade non efficiency and random error term.

The model form can be expressed as

$$Y_{it} = f(x_{it}, \ \beta)\exp(\theta_{it})\exp(-\mu_{it}), \mu_{it} \geq 0 \quad (1)$$

or

Take logarithms on both sides and get

$$\ln Y_{it} = \ln f(x_{it}, \ \beta) + \theta_{it} - \mu_{it}, \mu_{it} \geq 0 \quad (2)$$

In formula (2): Y_{it} refers to the investment amount of China to country i in period t. x_{it} is the main factor affecting the actual investment amount, generally natural factors, such as economic scale, population, distance, etc; β is the parameter to be estimated of the explanatory variable; θ_{it} is a random disturbance term and follows a normal distribution with a mean value of 0; u_{it} is a trade non efficiency term, which refers to the factors

affecting the efficiency of bilateral trade. Generally, it is human factors that cause the variables in the trade group, such as government integrity, trade freedom, financial freedom, etc., which are independent of θ_{it}. It is usually assumed that they obey normal distribution or tail normal distribution; The expression of the model is as follows:

$$\mu_{it} = h(Z_{it}, a) + \varepsilon_{it} \qquad (3)$$

In formula (3): Z_{it} is the influencing factor of trade non efficiency term, γ is the parameter to be estimated and ε_{it} is the random disturbance term. In this study, battese and coelli (1995) proposed to substitute the trade inefficiency model into the stochastic frontier gravity model. It means to substitute equation (3) into equation (2), and obtained:

$$\ln Y_{it} = \ln f(x_{it}, \ \beta) + \theta_{it} - \left[h(Z_{it}, a) + \varepsilon_{it} \right] \quad (4)$$

If equation (4) is regressed, the stochastic frontier gravity model and trade inefficiency model can be estimated at the same time.

3.2 Empirical Model

3.2.1 Stochastic Frontier Gravity Model

Combined with the analysis of previous scholars, generally, important objective factors that will not occur significantly in the short term, such as total GDP, population, geographical distance, whether it is China's border country and other variables, are placed in the stochastic frontier gravity model. The variables such as government integrity, currency freedom, trade freedom, financial freedom, whether there is a trade agreement or whether to join the trade organization are uniformly placed in the trade non efficiency item. Build a specific stochastic frontier gravity model.

$$\ln OFDI_{it} = \beta_0 + \beta_1 \ln GDP_{it} + \beta_2 \ln CAP_{it} + \beta_3 \ln DIS_{it} + \beta_4 \ln BO_i + \theta_{it} - \mu_{it}, \mu_{it} \geq 0$$
$$(5)$$

In (5): $OFDI_{it}$ represents the total stock of China's direct investment in country i in period t; GDP_{it}、 CAP_{it} respectively represent the economic scale and population of country i in period t; DIS_{it} indicates the geographical distance from Beijing, China to the capital of country i ; BO_i indicates whether country I and China have a common border. A dummy variable is used here. If two countries have a border for child labor, the variable is set to 1, otherwise it is 0. θ_{it} is a random disturbance term and u_{it} is a trade non efficiency term.

3.2.2 Trade Inefficiency Model

By referring to the previous literature, this paper uses the variables of government integrity, currency freedom, trade freedom, financial freedom, whether there is a trade agreement, whether to join the trade organization and so on to construct the trade inefficiency index system. The specific measurement model is as follows:

$$\mu_{it} = \gamma_0 + \gamma_1 \ln GOV_{it} + \gamma_2 \ln CUR_{it} + \gamma_3 \ln GRA_{it} + \gamma_4 \ln FIN_{it} + \gamma_5 \ln AGR_{it} + \gamma_6 \ln ORG_{it} + \varepsilon_{it}$$
$$(6)$$

In equation (6): GOV_{it} refers to the government integrity of country i in period t. CUR_{it}、 GRA_{it}、 FIN_{it} represents the monetary freedom, trade freedom and financial freedom of country i respectively; AGR_{it} indicates whether China has signed a free trade agreement with country i; ORG_{it} is whether country i is a member of WTO; ε_{it} is a random perturbation term.

3.3 Sample Selection and Data Source

The strategy of "One belt, one road" was put forward in 2013. Some countries were excluded because of a serious lack of data. The data from the remaining 2013-2019 were selected from the year of 2013. The data were analyzed by Frontier 4.1 soft. The explanation of each variable, data source, expectation and impact on dependent variables can be shown from table 1.

3.4 Empirical Test and Result Analysis

3.4.1 Applicability Test of Model

In this study, the maximum likelihood ratio LR statistic $LR = -2(ln H_0 - ln H_1)$ is used to judge the effectiveness of the stochastic frontier gravity model and the specific form of the model setting. Assuming the original hypothesis $H_0: \gamma = 0$, we could compare the calculated LR statistics with the segment critical value at the 1% significance level, so as to judge whether to reject or accept the original hypothesis. γ can be expressed as $\gamma = \delta_\mu^2 / (\delta_\mu^2 + \delta_\theta^2)$. Among them, between 0 and 1, if the original hypothesis is accepted, the model can be estimated directly by ordinary least square method; If it approaches 1, it indicates that the random frontier gravity model should be used for estimation.

Table 1: The explanation of each variable, data source, expectation and impact on dependent variables.

Variable	Meaning	Expected Symbol	Data Sources	Theoretical Description
$\ln GDP_{it}$	GDP of country i / USD	+	World Bank Database	The larger the economic scale of the invested country, the Greater China's direct investment in the country
$\ln CAP_{it}$	Population of country i / person	+	World Bank Database	The larger the population of the invested country, the Greater China's direct investment in the country
$\ln DIS_{it}$	Distance between China and country i / km	-	French CEPII database	The closer China is to a country, the Greater China's direct investment in that country
$\ln BO_i$	Whether China and country i have a common border	+	French CEPII database	If the invested country has a common border with China, China's direct investment in the country will be greater
$\ln GOV_{it}$	government integrity	-	American Heritage Foundation Database	The more honest the government of the invested country is, the less resistance China has to direct investment in the country
$\ln CUR_{it}$	Degree of monetary freedom in country i	-	American Heritage Foundation Database	The higher the degree of monetary freedom of the invested country, the smaller the resistance of China's direct investment in the country
$\ln GRA_{it}$	Degree of trade freedom of country i	-	American Heritage Foundation Database	The higher the degree of trade freedom of the invested country, the smaller the resistance of China to direct investment in the country
$\ln FIN_{it}$	Degree of financial freedom in country I	-	American Heritage Foundation Database	The higher the degree of financial freedom of the invested country, the smaller the resistance of China to direct investment in the country
$\ln AGR_{it}$	Whether China signed a free trade agreement with country i	-	China Free Trade Zone Service Network	If a bilateral free trade agreement is signed, the less resistance China has to direct investment in the country
$\ln ORG_{it}$	Whether country i is a member of the world trade organization	-	Official website of the World Trade Organization	If the invested country is a member of the world trade organization, the less resistance China has to direct investment in that country

3.4.2 Analysis of Model Regression Results

As can be shown from table 2, in the estimation of trade potential and trade efficiency, the GDP of countries along the line has a positive correlation and significant effect on China's foreign investment, which shows that the higher the economic development level of countries along the line, the more can promote China's foreign direct investment, which is consistent with the expected theory. Population is also an influencing factor of trade potential and trade efficiency, which has a negative inhibitory effect on China's foreign direct investment, and the results are significant, which is obviously

inconsistent with the expected theory. China's "one belt, one road", is mostly a small country in developing countries and a small country in developed countries. This is also the reason why the results are not consistent with the theoretical expectations, according to the estimated results. The leamer's non trade equilibrium interpretation applies only to developed countries such as the United States. The distance between the countries along the line and China is negatively correlated, indicating that the farther the countries along the line are from China, the higher the cost, and the more unfavorable it is for China's foreign direct investment. Whether there is a common border between the countries along the line

Table 2: Model regression results.

variable	coefficient	t-ratio
	0.157	4.41096
$\ln GDP_{it}$	0.342	1.0809741
$\ln CAP_{it}$	-0.687	-1.0875752
$\ln DIS_{it}$	-0.179	-4.0355547
$\ln BO_i$	-0.329	-1.2719382
$\ln GOV_{it}$	-0.423	
$\ln CUR_{it}$	-0.108	
$\ln GRA_{it}$	-0.107	
$\ln FIN_{it}$	-0.192	
$\ln AGR_{it}$	-0.892	
$\ln ORG_{it}$	-0.805	
gamma	0.53	

and China has a significant impact, indicating that bordering with China will promote foreign direct investment. The trade potential and trade efficiency measured by the level of government integrity are significantly negatively correlated, indicating that the more perfect the government system is, the greater the amount of foreign direct investment is, which is obviously consistent with the expectation. The improvement of government system shows that the political risk is small, which is conducive to China's investment, which is also an important reason to include it into the variables of trade potential and trade efficiency. Different from previous studies, this paper adds monetary freedom as a variable of trade potential and trade efficiency. The results show that this variable has a greater impact on trade potential and trade efficiency, which means that the higher the monetary freedom, the greater the amount of China's foreign direct investment. A country's trade freedom refers to the country's non-tariff barriers. It controls the trade freedom by restricting imports directly and indirectly. If the government reduces the trade freedom, it will inevitably inhibit imports and affect China's foreign direct investment. The degree of financial freedom of a country includes the degree of distribution of credit funds, the degree of government service and regulation of financial institutions, and the difficulty of financial services to the real economy. If the degree of government regulation of financial institutions is increased, it will inevitably inhibit imports. Therefore, the improvement of financial freedom will promote trade potential and trade efficiency. Other variables, such as whether the two sides have signed a free trade agreement and whether the countries along the line have joined the free trade organization, are consistent with the theoretical expectation.

4 CONCLUSION AND ADVICE

Based on the above research conclusions, the paper puts forward the following countermeasures and suggestions: first, make full use of the Asian infrastructure investment bank and the Silk Road Fund, improve the overall trade facilitation level of the region, and constantly explore the trade potential and realize the common prosperity of the countries along the line; Second, on the factors affecting trade efficiency, targeted measures should be formulated to improve China's export trade efficiency with countries along the economic corridor of the new Eurasian Continental Bridge. China's one belt, one road, along with its economic development, will enhance its efficiency in the export of trade, such as strengthening bilateral and multi field cooperation, improving customs clearance efficiency, improving the quality of infrastructure, facilitating trade and transport efficiency, and improving the quality of logistics services. Third, upgrade green financial services. As the saying goes, "economy is the body, finance is the blood, and the two coexist and prosper". China's "one belt, one road" and other countries will be able to trade with the improved financial supporting services. Mr. Chen Yulu, vice president of the central bank, believes that the most important thing in China's current financial reform is to establish a world-class green financial evaluation standard system. The development of green finance is one of the biggest highlights of China's financial reform in recent years and an important thrust for the financial industry to better serve China's real economy and help supply side structural reform. In addition, Mr. Yi Gang, governor of the central bank, believes that stable monetary policy and active fiscal policy are the most important and best policies in the short term, at most in the medium term, and also the second best choice to make up for China's GDP growth gap; Fourth, deepen China's strategy of the "one belt, one road", the financial cooperation of the countries along the border, enhance the degree of

financial freedom, strengthen the government's supervision over financial institutions, and increase the scale of credit capital allocation.

REFERENCES

CHEN Chuang-Lian, XIE Xue-zhen, LIN Yu-Ting. Analysis of global trade efficiency and trade potential and its influencing factors[J]. International Trade Issues, 2016(07):27-39.

Chen Lin, Xie Xuezhen, Liu Lin. Trade Efficiency and Trade Potential of China's Exports: 1980-2015[J].

Feng Gen-yao, CHEN Xiao. Trade efficiency and export potential of cultural products between China and the fulcrum countries along the "Belt and Road"——Estimation based on stochastic frontier gravitational model[J]. Journal of Shaoxing University of Arts and Sciences (Humanities and Social Sciences), 2019,39(06):64-72.

HABYARIMANA Jean D'Amour, WU Xiang Feng. Motives and Determinants of China's Foreign Direct Investment in Rwanda[J]. International Journal of Economic Behavior and Organization, 2017, 5 (2).

International Economic and Trade Exploration,2018,34 (1): 33-50.

International Trade Issues (2): 3-12.

Juma Makaranga. Foreign Direct Investment (FDI), Quality of Institutions and Economic Growth: Evidence from African Economies[D]. University of International Business and Economics,2019.

Kevin Honglin Zhang. Does International Investment Help Poverty Reduction in China? [J]. Chinese Economy,2006,39(3).

Li Cuiping." Research on China's Foreign Trade Efficiency under the Background of the Belt and Road Initiative: Based on the Empirical Data of the New Eurasian Land Bridge of 19 Countries[J]. Research on Technology Economics and Management, 2021(02):112-117.

Li Haiwei, Ni Sha. Research on the Trade Environment and Potential between China and Countries along the "Belt and Road": An Empirical Test Based on HT Model[J]. Journal of Shanxi University: Philosophy and Social Sciences Edition, 2020(3):73-85.

Li Helu, Jin Meizhen. FDI Environment and Promotion Policy for China Money in Korea[J]. The Journal of Korea Research Society for Customs,2011,12(4).

LI Ping. Trade potential and trade efficiency between China and countries along the "Belt and Road" and its determinants: An empirical study based on the stochastic frontier gravitational model[J]. International Business Research,2018,39(5):5-16.

Li Xiao, Zhang Yuxuan, Chen Xiaoxin. A Study on China's Trade Potential with The Belt and Road Participating Countries: A Case Study of Final Consumer Goods Imports[J]. Nankai Economic Research, 2020(01):45-69.

Li Xiaozhong, Lü Peipei. Research on the Export Trade Potential and Trade Efficiency of China's Equipment Manufacturing Products: An Empirical Study Based on the "Belt and Road" Countries[J]. International Trade Issues, 2019(01):80-92.

Liang Wang and Yuanyuan Wu, (2016), "The Trade Potential of the Silk Road Economic Belt: An Analysis Based on the 'Natural Trading Partner' Hypothesis and the Stochastic Frontier Gravitational Model," The Economist, Vol. 4, pp. 33-41.

Quan Yi, Gao Junxing." The Belt and Road Initiative and the New Strategy for The Development of China's Coastal Opening-up[J]. Fujian Forum (Humanities and Social Sciences Edition), 2019(12):106-114.

Suresh K. Chadha, Bulbul Singh, Vivek S. Natarajan. Interaction among foreign direct investment, economic growth and foreign trade: evidence from India and China[J]. Int. J. of Process Management and Benchmarking,2014,4(2).

Tan Xiujie, Zhou Maorong. 2015. Trade Potential and Influencing Factors of the Maritime Silk Road in the 21st Century: An Empirical Study Based on Stochastic Frontier Gravitational Model[J].

WANG Yan-fang, CHEN Shu-mei, GAO Jia-hui." The Impact of the Belt and Road Trade Network on China's Trade Efficiency: A Comparison with TPP, TTIP, and RCEP[J]. Asia-Pacific Economics, 2019(1):49-55.

Yang Yiting. An Empirical Analysis of China's Trade Potential and Trade Efficiency with the Belt and Road Countries[J]. Monthly Price, 2019(05):47-54.

Zhang Huiqing. Research on the trade potential between China and regions along the "Belt and Road"[J]. International Trade Issues,2017(07):85-95.

Zhang Yuling, Zhang Xia, Chen Meng. Research on trade potential, efficiency and influencing factors between China and countries along the Maritime Silk Road: An Empirical Analysis Based on Stochastic Frontier Gravitational Model[J]. Journal of Yili Normal University (Social Science Edition), 2020,38(02):56-65.