

ANALYSIS ON THE SINO-RUSSIAN TRADE POTENTIAL UNDER THE BACKGROUND OF “THE BELT AND ROAD” INITIATIVE

Abstract. Since the fall of 2013 when the Chinese government proposed “the Belt and Road” Initiative, more and more countries have responded to the initiative and participated in its construction. In recent years, “the Belt and Road” Initiative has become one of the key topics in academic field at home and abroad. Under the background of “the Belt and Road” initiative, this paper attempts to analyze the Sino-Russian trade potential from theoretical and empirical aspects, to build a trade gravity model for assessing the trade prospects and direction of the two countries, and to supply a longitudinal and horizontal comparative analysis in the trade potential between the two countries. In the longitudinal analysis, with the relevant data from 2005 to 2015, this paper calculated potentiality of Sino-Russian trade and estimated trade potential for recent ten years, in a whole, the analysis conducted that Sino-Russian trade has a giant potentiality, bilateral trade potential is giant, and potentiality presents uprising tendency with time lapse; in the horizontal analysis, this paper selected major 15 countries along the line of “the belt and road”, calculated its comprehensive trade complementary index and trade potential index, and made a detailed analysis from national position and population, economic scale and economic development, resources endowment and comparative advantage, the analysis summed that China-Russia trade potentiality is 0.76 in 2015, which belongs to the type of giant potentiality, China-Russia trade potentiality is in the forefront along the line of “the belt and road”.

Keywords: the belt and road; trade complementarity; trade gravity model; the Sino-Russian trade potentiality.

Analysis of the Sino-Russian Trade Potential in the Framework of Gravity Model

As an important concept in the field of international trade, trade potential has been widely used by academic circles to reflect the prospects of bilateral trade between two countries. The Sino-Russian trade potential refers to the ideal trade value when there is no trade resistance between the two countries. Generally, the ideal value of export trade between the two countries is calculated on the basis of the constructed trade gravity model, and the difference between the ideal trade value and the actual trade value is regarded as the potential space for Sino-Russian trade.

This paper utilizes the trade gravity model to empirically analyze the Sino-Russian trade potential. The idea of trade gravity comes from the law of universal gravitation, which was introduced by Tinbergen (1962) and Poyhonen (1963) into the field of international trade, and was widely used in the analysis of bilateral trade flows. Basic idea of model: The bilateral trade volume between two countries or regions is directly proportional to the economic aggregate between the two, and inversely proportional to the spatial distance between the two. Theoretically speaking, the trade gravity model is a simplified form of the general equilibrium model of international trade. The incomes of the two countries represent their respective productive capacities and absorptive capacities. The distance between the two countries represents the cost of trade. Specifically, the size of a country's economy determines the degree of specialization of a country in the process of international trade. The greater the degree of specialization in the production of goods in a country, the more goods the country can utilize for international trade, and thus the greater the scale of international trade, and vice versa; The length of transportation distance affects the transportation cost of trade between the two countries. The farther the two countries are, the more transportation costs are required to carry out trade, and the greater the transportation risk, which hinders the development of bilateral trade, and thus the more significant the effect, and vice versa.

As a classic model for studying bilateral trade potential, gravity model of trade has a distinct economic significance, high explanatory degree and wide application range. However, in the empirical analysis, the rest of the export resistance factors are all attributed to the random error term except for the observable and quantifiable factors, which may lead to the estimation deviation. The mainstream method for solving the estimation deviation of trade gravity model is to add

explanatory variables and control variables based on the research needs, so as to build expanded gravity model of trade.

Establishment of China-Russia Gravity Model of Trade

The gravity model of trade is generally as follows:

$$T_{ij} = A \left(\frac{G_i G_j}{D_{ij}} \right)$$

Where T_{ij} is the volume of bilateral trade between i and j ; A is the constant of proportionality; Y_i and Y_j are economic scale of two countries respectively, generally expressed as GDP; D_{ij} is an obstructive factor, which indicates the haul distance between two countries. Generally conveyed as the distance between the capitals of two countries, it reflects the transportation costs between the countries.

In an empirical study, a gravity model of trade is generally converted into natural logarithms as follows:

$$\ln(T_{ij}) = \beta_0 + \beta_1 \ln(G_i G_j) + \beta_2 \ln(D_{ij}) + \mu$$

The gravity model of trade may be reckoned as ideal state of bilateral trade, and the volume of bilateral trade calculated by such a model may be seemed as potential trade volume between two countries. Scholars continue to improve the model. Based on the Walrasian equilibrium, Linnemann (1966) introduced two new independent variables for the first time: population and trade policy; Bergstrand (1989) expanded on the basis of the original trade gravitation model in which a number of variable indicators that could affect trade were introduced. Mccallum(1995) focused on studying the influence mechanism of space distance and raised the issue of "border effect".

Based on the fundamental setting of the trade gravity model, this paper expands the topic by the following increased explanatory variables: C_{ij} --- the comprehensive trade complementary index of two countries, S_{ij} --- two-valued variable, indicating whether the two country is neighbors (if so, the assignment is 1, otherwise, it is 0), I_{ij} --- bilateral investment between the two countries, P_{ij} ---two-valued variable, indicating whether the two countries have joined the WTO together (if so, the assignment is 1, otherwise it is 0), μ --- error term. The trade gravity model set in this paper is expressed as follows.

$$\ln(T_{ij}) = \beta_0 + \beta_1 \ln(G_i G_j) + \beta_2 \ln(D_{ij}) + \beta_3 (C_{ij}) + \beta_4 (I_{ij}) + \beta_5 (P_{ij}) + \beta_6 (S_{ij}) + \mu$$

Table 1. explanation of explanatory variables

Explanatory variables	Variable meaning	Variable description
G	China's nominal GDP (billions of US dollars)	Comprehensive reflection of China's import and export capabilities
G_j	Nominal GDP of other countries (us \$100 million)	Comprehensive reflection of the ability to import and export trading partners
D_{ij}	Straight line distance between the capital of China and the capital of trading partners	Reflection the transportation cost of trade between the two countries
C_{ij}	Comprehensive trade between China and its trading partners complementary index	Comprehensive reflection of the two countries trade basis
I_{ij}	Bilateral investment between China and trading partners	Reflecting the current trade tightness of trade in both countries
P_{ij}	Whether China and its trading partners have joined the WTO	Indicate whether the two country are free trade
S_{ij}	Whether China and its trading partners are neighboring countries	Indicate the transportation distance between the two countries and the tightness of their relation

Empirical Analysis on the Sino-Russian Trade Potential

As the sample, according to the all partners' intimacy with China regarding trade, this paper selects 20 countries including Japan, South Korea, the United States, Britain, Germany, Australia, Canada, Brazil, Vietnam, the Netherlands and so on, as well as 65 countries along "the one belt and one road" area including Russia, Malaysia, Singapore, Iran, India, Kazakhstan, Poland and so forth, and conducts the study with data selections from 2005 to 2015. In this paper, multiple regression analysis is conducted for the data obtained by the least square method with Stata12.0 software. The regression results are as follows:

Table 2 regression results

	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)
C	8.733*** (10.511)	11.5*** (42.559)	7.72*** (5.656)	12.297*** (2.329)	11.8*** (9.813)
lnG	0.333*** (7.488)	0.723*** (20.528)	0.792*** (10.596)	0.746*** (11.411)	0.716*** (7.157)
lnG_j	0.579*** (6.859)	0.277*** (75.73)	0.276** (2.392)	0.287** (2.559)	0.26** (2.392)
ln(D_{ij})	-0.545*** (-10.146)	-0.323*** (20.566)	-0.42*** (-7.453)	-0.327*** (-22.98)	0.334*** (3.199)
C_{ij}		0.275*** (76.118)	0.452*** (16.29)	0.49*** (13.59)	0.328*** (3.198)
I_{ij}			0.177*** (6.568)	0.186*** (5.768)	0.164*** (15.55)
P_{ij}				0.142* (1.768)	0.141* (1.878)
S_{ij}					0.108 (1.233)
R²	0.722	0.828	0.989	0.991	0.990
F-statistic	0.000	0.000	0.000	0.000	0.000

where, t statistics are shown in brackets, *, ** and *** respectively represent the significance level of 10%, 5% and 1%

In the view of regression results and various statistical inspection indexes, estimated value of various parameters is not zero, variable coefficient symbol is in consistent with that of prediction, except variable index of "whether two states are neighboring countries" is not significant, all of variables are significant. With participation of other explanation variables, every variable's symbol hasn't changed and fluctuation of coefficient value is small. This paper adopted regression results of model (5), goodness of fit of model (5) is $R^2 = 0.991$, its goodness of fit is favorable. $F = 18.713$, F statistic is significant, which indicated that the model can basically reflect influential effects of developing bilateral trade between China and other countries.

Regression equation is shown as follow:

$$\ln(T_{ij}) = 12.297 + 0.746\ln G + 0.287\ln G_j - 0.327\ln(D_{ij}) + 0.49(C_{ij}) + 0.186(I_{ij}) + 0.142(P_{ij}) + \mu$$

For the estimation of Sino-Russian trade potential, this paper compares the actual value with the theoretical value, that is:

$$\omega = \frac{T_r}{T_s}$$

In which, ω is the Sino Russian trade potential index; T_r is the actual value of bilateral trade between China and Russia. T_s is the theoretical value of the Sino Russian bilateral trade. For the

classification of trade potential index, this paper refers to the classification method of Liu Qingfeng et al. (2002), which are mainly divided into: The type of potential reshaping, potential expansion and huge potential, as shown in Table 3:

Table 3. The classification of trade potential index

Types	Range of value	Characteristics of the type
The type of potential reshaping	$\omega \geq 1.2$	The import and export trade volume between the two sides has basically reached saturation, and new trade points and economic innovation are needed to promote trade growth.
The type of potential expansion	$0.8 < \omega < 1.2$	The import and export trade volume between the two sides has not yet reached saturation, but the space for trade growth is limited.
The type of huge potential	$\omega \leq 0.8$	The import and export trade volume between the two sides is far from saturation and there is huge room for trade growth.

Based on the trade gravity model derived from regression, this paper substitutes the parameters of China and Russia from 2005 to 2015 and obtains the bilateral trade simulation values of the corresponding years in China and Russia. This paper compares it with the actual bilateral trade volume between China and Russia. The potential value of Sino-Russian trade can be calculated to estimate the potential for Sino-Russian trade growth, as shown in Figure 1:

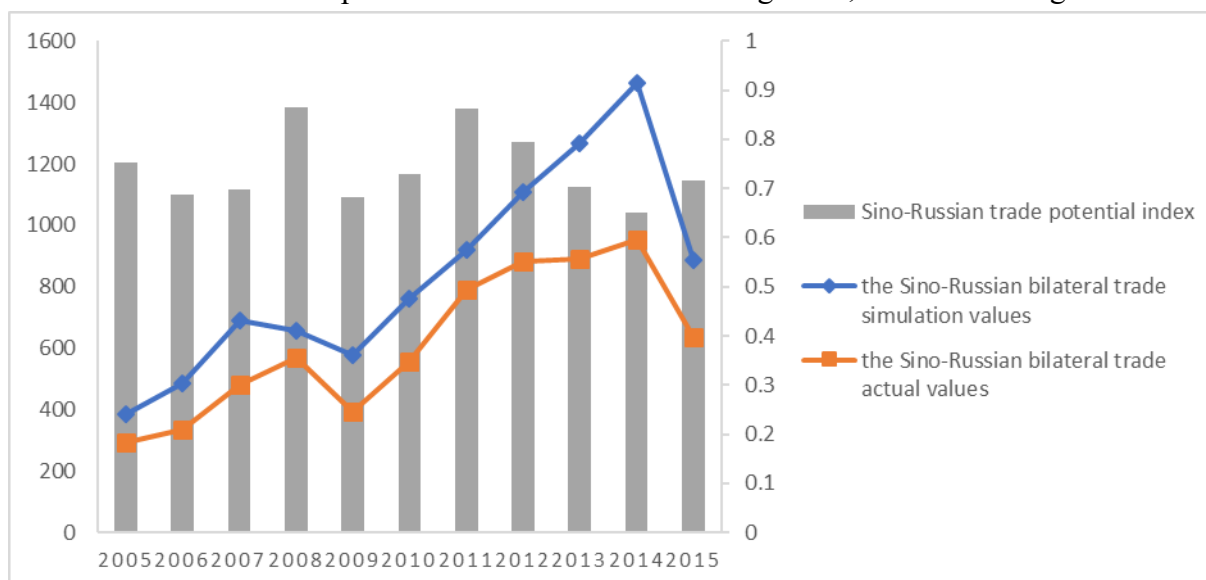


Figure 1. Sino-Russian trade potential space in 2005-2015

Data source: According to the United Nations Commodity Trade Database and the *International Statistical Yearbook*

As can be seen from the regression results and the figure above, (1) the comprehensive trade complementarity indexes have significant positive effects upon bilateral trade as shown in the regression model. This indicates that strong China-Russia trade complementarity is positive for growth of trade volume between these two countries and tends to increase. After analyzing the gravity model of trade, both China-Russia trade distance and countries' identity as members of WTO are kept unchanged as objective factors. The bilateral trade volume between China and Russia will increase with their trade complementarity in case of no major economic fluctuation, which means economy and investment scale are steady in both countries. With opportunistic prospects, China-Russia trade has potential for further improvement. (2) The regression model shows that the countries along "the Belt and Road" Initiative have a significant positive effect on bilateral trade, which indicates that the construction of "One Belt, One Road" has a positive effect on the growth of Sino-Russian trade volume. China and Russia attach importance to the construction of "the Belt and Road", which will promote the further growth of bilateral trade volume between China and Russia, and the prospects for China and Russia are optimistic. (3) It

can be seen from Figure 1 that the simulated values of bilateral trade between China and Russia in 2005-2015 are higher than the actual value, and the gap between the two has expanded in the past three years; Through the calculation of the Sino-Russian trade potential value, we find that the Sino-Russian trade potential value is basically lower than 0.8, which indicates that the Sino-Russian trade as a whole has a huge potential, that the trade space between the two sides is huge, and that bilateral trade can be further developed. In summary, the empirical research results show that Sino-Russian trade has great potential for development and optimistic development prospects.

Trading Potential Comparison of Major Countries along the Line of “the belt and road”

Trade potential of China and Russia has been longitudinally compared from the time perspective. Next, this paper will measure trade potential indexes of China and major countries along “the Belt and Road”, in order to longitudinally compare trade potential of China and Russia. Since the line of “the Belt and Road” is long, along which there are many countries, this paper conducts in-depth research on representative countries by comprehensively considering geographic location and China’s trade volume. The research is specifically performed as follows: First of all, 65 countries are divided into 10 major areas, including East Asia, North Asia, Central Asia, South Asia, Southeast Asia, Western Asia, Eastern Europe, Central Europe, Southern Europe and North Africa according to their geographic locations. Secondly, countries whose trade volume is half of China’s are chosen among these 10 major areas as representative countries. The ratio of trade volume is not fairly high between any country of Southeast Asia, Western Asia or Southern Europe and China. Several countries between whose sum of trade ratio reaches 50% are selected as representative countries of this area. To sum up, this paper selects 15 representative countries, including Russia, Mongolia, Kazakhstan, Saudi Arabia, the United Arab Emirates, India, Malaysia, Singapore, Thailand, Egypt, Ukraine, Poland, Czech, Romania and Slovenija. Based on built trade gravity model, this paper firstly measures the complementarity indexes in composite trade between China and 15 countries along “the Belt and Road”. Subsequently, it further calculates trade potential indexes of those 15 countries in 2015, in order to longitudinally compare China and Russia in terms of trade potential.

Analysis of Overall Trade Complementarity between China and Main Countries along “the Belt and Road”

As shown in figure 2, the average value of complementary index in comprehensive trade between China and countries along “the one belt and one road” was 0.95 in 2015 from the perspective of China being a commodity exporter. On the whole, the trade complementarity between China and most countries is strong, and the trade foundation is relatively stable. Among them, China has the highest complementary index in comprehensive trade with Czech, Romania and Poland, while the trade complementarity between China and Russia is not prominent. Because China, as the “world factory”, is rich in labor resources, so that China’s labor-intensive industries have a comparative advantage in export. Correspondingly, the labor-intensive industries of other countries participating in international trade, especially the developed capitalist countries, do not have comparative advantages, so they are highly dependent on the Chinese market in terms of imported labor-intensive products. Therefore, the trade complementarity between China and countries along “the one belt and one road” is relatively high and at an average level.

As shown in Figure 3, from the perspective of China as a commodity importing country, there is great complementarity difference in the comprehensive trade between China and the countries along the line in 2015. Among those countries, the trade complementarity between Mongolia’s exports and China’s imports is the highest, reaching 2.62. In Sino-Russian trade, 90% of ore resources exported from Mongolia are transported to China. The trade complementarity between the exports of India and Singapore and China’s imports is relatively low. India is also a country with abundant labor resources, and its comparative advantage in international trade is similar to that of China’s. Therefore, the trade complementarity between India’s exports and China’s imports is relatively weak. However, the reason why the trade complementarity between

Egypt's exports and China's imports is low is that North Africa has limited resources and its economic development level is relatively low. The trade complementarity of Russia's exports to China ranks fourth among the 15 countries, reaching 1.08. The degree of complementarity is relatively high, which reflects that Russia's rich natural resources match China's growing economic developing demands to a higher degree, and the trade base is stable.

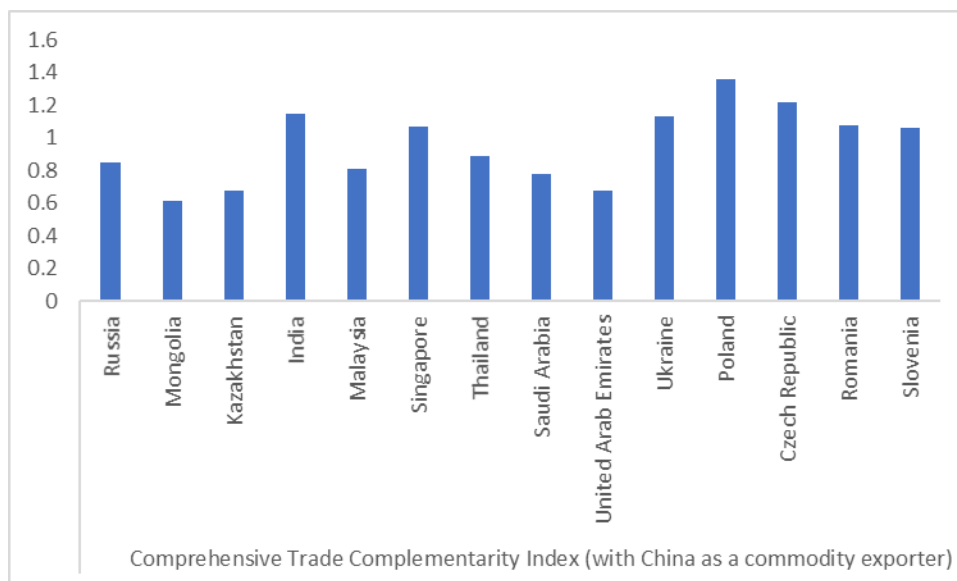


Figure 2. Comprehensive Trade Complementary Index between China and 15 Countries along "the Belt and Road" in 2015 (with China as the exporter)

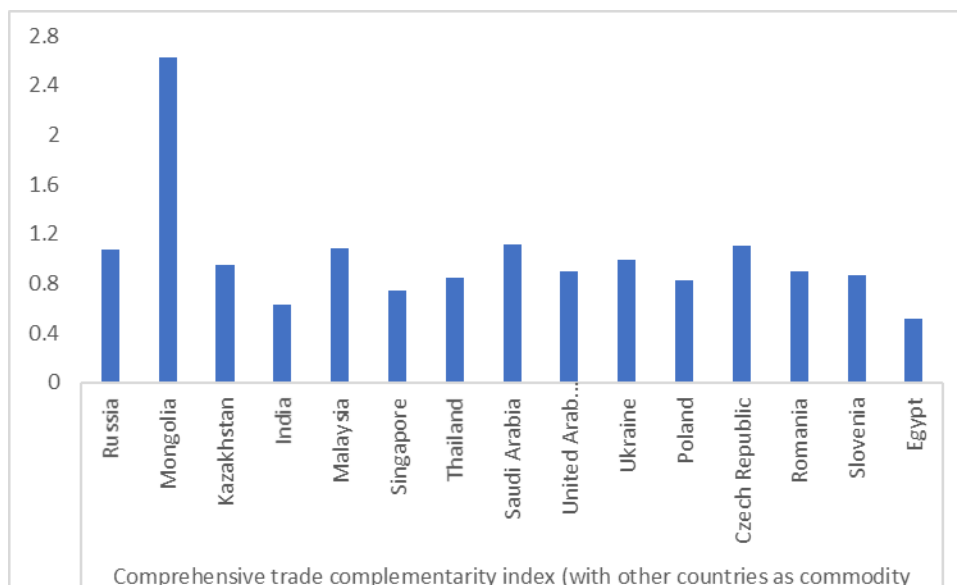


Figure 3 The comprehensive trade complementarity index of 15 countries along China's "the belt and road" in 2015 (Taking other countries as exporters)

The data source: Commodity trade database of World Bank and United Nations

2. Analysis on the Trade Potential between China and the Major Countries along "the Belt and Road"

As shown in Figure 4, among the fifteen countries along "the Belt and Road", the trade potential index between each country in the bracket (Mongolia, Malaysia, and Saudi Arabia) and China far exceeds 1.2, which belongs to potential recreation, indicating that the trade volume between the two sides has almost reached the saturation, indicating those new trade sally port and economic innovations are needed to increase over the current amount. the trade potential index between each of the countries in the bracket (Kazakhstan, Singapore, United Arab Emirates,

Poland, Czech Republic and Slovenia) and China is from 0.8 to 1.2. This is the type of potential extension. The scope for trade growth is limited. The trade potential index between each country in the bracket (Russia, India, Thailand, Ukraine, and Romania) and China is below 0.8, which indicates great trade potential between these countries and China.

In 2015, the rank of trade potential among China and the 15 representative countries along the "One Belt and One Road" from large to small, Russia was in the third place. It is shown that compared with most countries along the "One Belt and One Road", China and Russia have huge trade potential and broad trade prospect. In the following, based on trade gravity model established in this paper, we will make comparative analysis from three aspects: country location and population, economic scale and economic development level, resource endowment and comparative advantage,

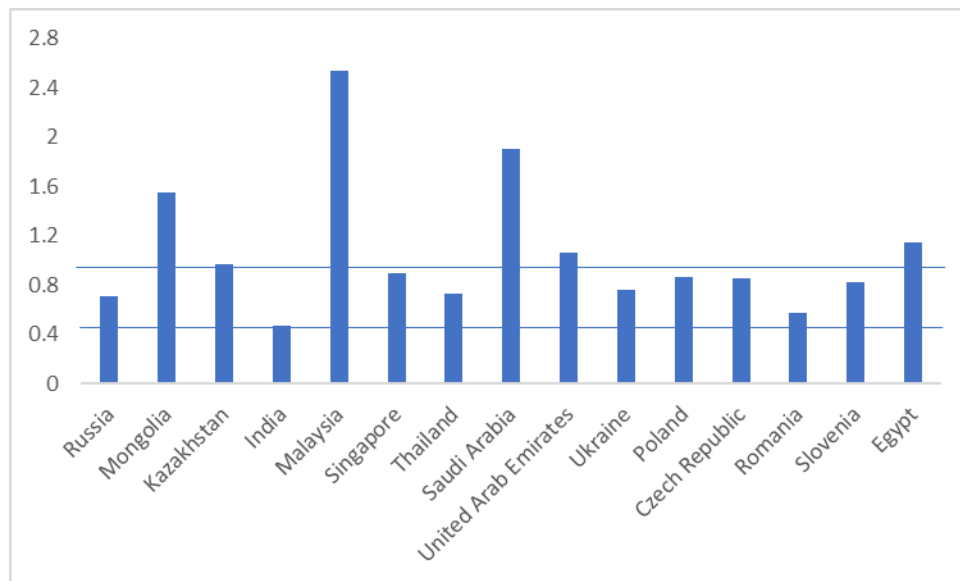


Figure 4: The index of trade potential between the 15 countries along “the Belt and Road” and China in 2015

Data sources: World Integrated Trade Solution and United Nations Commodity Trade Statistics Database

(1) Location and population

The location of the trading partner country reflects the level of transportation costs, and the size of the population affects the market size and labor structure of the trading partner countries. Generally speaking, the shorter the spatial distance between trading partners and China, the lower the transportation cost, the more favorable the bilateral trade activities, the larger the trade potential; The larger the population size, the more likely the industrial structure will be biased towards labor-intensive industries, and the weaker the trade complementarity with China. Therefore, the bilateral trade base may be weaker. However, the larger the population size, the wider the potential consumer market is, which is beneficial to the development of bilateral trade. Therefore, the impact of population size on trade potential should also be specifically judged by both the industrial structure and economic strength of trading partners.

As shown in Table 4, if comparing the distance between the capital of China and capitals of the fifteen countries along “the Belt and Road”, we find that the distance between the capital of China and the capital of Russia is in the middle place. The capitals of the two countries are far apart because both countries have large areas. In fact, the two countries are neighbors, bordering each other. The geographical advantage is very significant compared with other countries along the route, so it is very conducive to the development of the bilateral trade. For the population among the fifteen countries along the route, Russia is the second only to India, and it is the most developed capitalist country along “the Belt and Road”. The combination of demographic and economic characteristics is outstanding among the countries along the route. The large population

and the powerful economy make Russia a broad consumer market. As a developed capitalist country with strong industrial and trade structures, it is complementary with China, for it has a solid foundation in the trade with China.

Table 4: Location and population of fifteen countries along “the Belt and Road”

country	Distance between the two capitals (km)	Population (ten thousand)
Russia	5784.75	14398.98
Mongolia	1166.22	307.56
Kazakhstan	3651.13	1820.45
India	3779.98	133918.01
Malaysia	4346.93	3162.43
Singapore	4479.02	570.88
Thailand	3297.28	6903.75
Saudi Arabia	6594.74	3293.82
United Arab Emirates	5960.9	940.01
Ukraine	6448.8	4422.29
Poland	6937.43	3817.07
Czech Republic	7452.6	1061.83
Romania	7057.81	1967.93
Slovenia	7711.18	207.99
Egypt	7564	9755.32

Data source: world bank statistics

(2) Economic Scale and Level of Economic Development

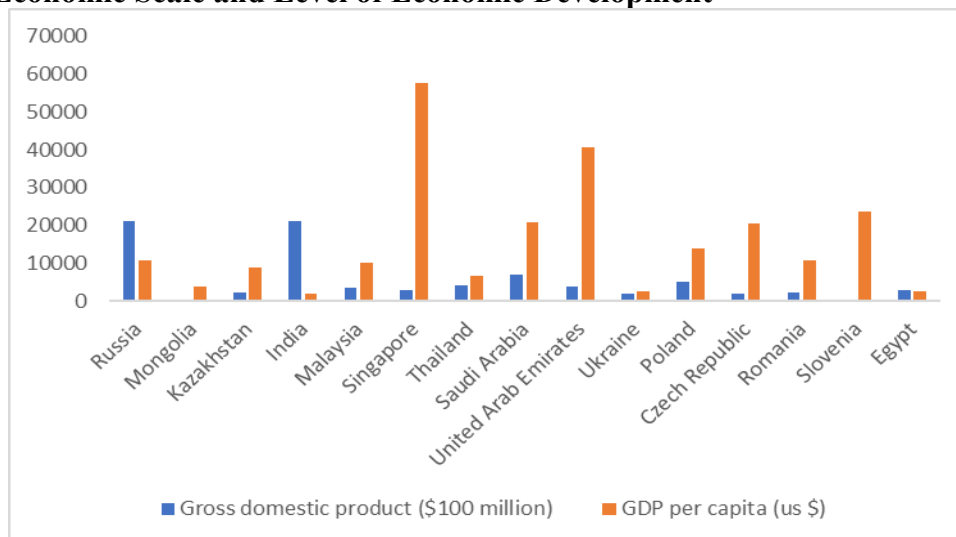


Figure 5. Total GDP and GDP per Capita of China and 15 Countries along “the Belt and Road” in 2015. Data source: database of the World Bank

As shown in Figure 5, trade partners’ economic scale and level of economic development comprehensively reflect their import and export capabilities. To measure the economic scale, absolute and relative scale shall be measured. The former is measured by GDP, while the latter is measured by GDP per capita. Trade partners with greater economic scale show stronger import and export capabilities as well as broader consumer market and greater trade potential. Furthermore, it is more favorable for these partners to conduct bilateral trade. Apart from reflecting relative economic scale, GDP per capita also demonstrates the extent to which a country’s economy develops. In general, higher GDP per capita is associated with more developed economy,

greater potential trade complementarity with China and greater trade potential.

Russian economic aggregate is in second place along the line of “the belt and road, its ability of export and import is strong and laid a solid economic foundation for growth of trading volume between China and Russia. Meanwhile, Russia as a capitalist developed economy, its industrial structure is subject to capital-intensive and technology-intensive, Chinese and Russian trade complementarity is strong and very benefited to development of bilateral trade. Russian giant economic scale and developed economic standard improved upper limit of Chinese and Russian trade potentiality.

(3) Resource Endowment and Comparative Advantage

In terms of resource endowment, Russia ranks first in the countries along “the one belt and one road”, even in the world. Forestry wood deposits of Russia at present is 80.7 billion cubic meters, and the proven reserves of oil is 8.2 billion tons and the proved natural gas reserves is 48 trillion cubic meters. In addition, Russia also is rich in natural resources such as coal, iron, manganese, copper, at the same time, with the rapid development of China's economy, China needs to import a large amount of natural resources, Russia's rich natural resources has created excellent conditions for the development of trade between China and Russia. Resources endowment advantage in Russia is very significant among the countries along “the belt and road”, which plays a great role in promoting the development of bilateral trade between China and Russia, and greatly increases the trade potential between China and Russia.

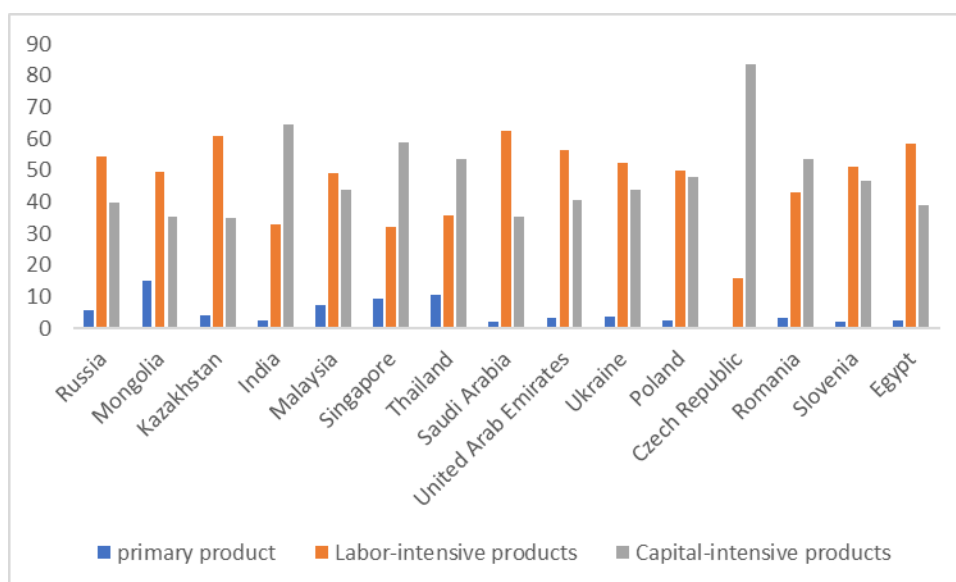


Figure 6 :The commodity structure of China's exports to 15 countries along the "the belt and road" (Unit: %)

Date source: They are calculated based on data from the United Nations commodity trade database and Customs General Administration.

Figure 6 shows that China's exports to the countries along " the belt and road" line are mainly labor-intensive and capital-intensive merchandise, among which, labor-intensive products have the largest proportion in imports of the most countries, which accords with China's comparative advantage. At the same time, it shows that China's industrial structure is optimized ceaselessly and is gradually moving from a mainly labor-intensive to a mainly capital-intensive industrial structure. China's exports to developing countries such as India are major capital-intensive products, which is primarily because India have the same comparative advantages as China. China's exports to Singapore and Czech Republic are mainly machinery and transport equipment, which shows that there are higher demands of transport equipment for the higher economic

development level of the two countries. For Russia, China's export structure to Russia is very in line with China's comparative advantage, which shows that the trade foundation between China and Russia is very solid and the trade prospect is very broad.

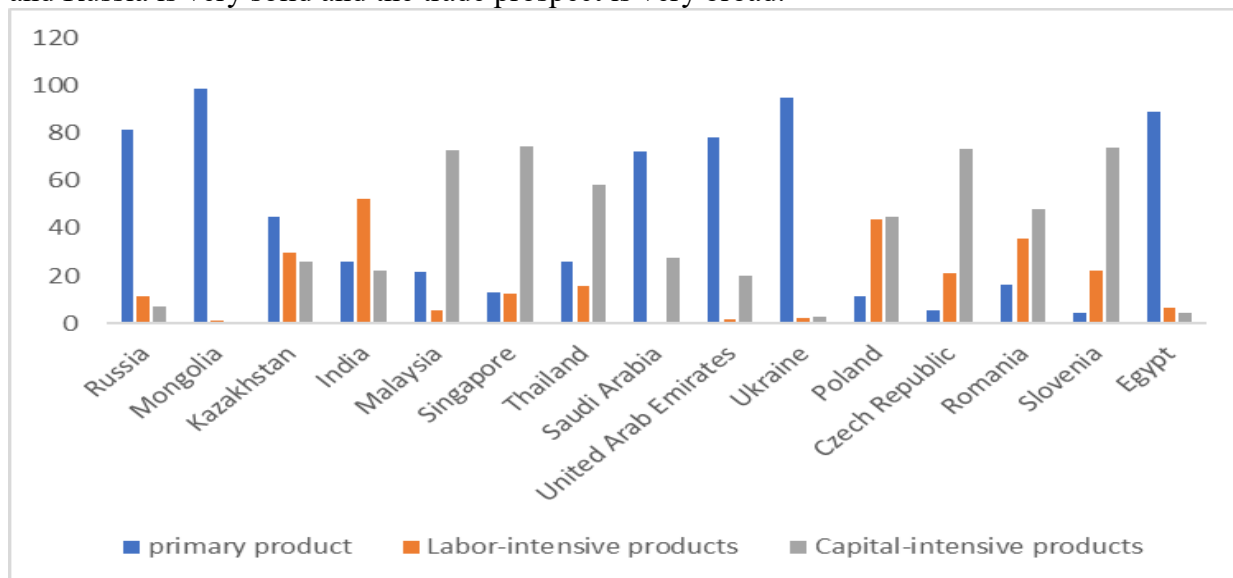


Figure 7: structure of Chinese imported commodity from 15 countries along the line of “the belt and road” in 2015 (unit: %)

Data source: conducted by calculating United Nations commodity trade database and general customs data

Figure 7 shows that Chinese imported products from 15 countries along the line of “the belt and road” is extremely fit with resources advantages and comparative advantages of trading partners, major imported products are different according to different countries. Among them, the imported products from Russia, Mongolia, Saudi Arabia, United Arab Emirates, Ukraine, Egypt centralizes on primary commodities, which is confirmed with resources advantages of trading partners. The imported products from developed capitalist states is subject to capital-intensive products, such as Malaysia, Singapore, Czech, Romania, which is decided by comparative advantages of capital-intensive and technology-intensive of developed capitalist states. The imported products from India is subject to labor-intensive, which is because India’s comparative advantage is subject to labor-intensive products. From the aspect of Russia, its natural resources advantage is significant and accounts a high proportion in Chinese middle and primary products import, which is confirmed with demand of Chinese current rapid economic development. Meanwhile, Russia as a capitalist country has a strong capital and developed scientific technology, whose history is not profound, capital-intensive products export is also confirmed with the demand of Chinese current economic transformation. Therefore, Russia’s complementarity with China among the countries along the line is extremely high, as a developed capitalist country with rich resources, the trade foundation between China and Russian is stable and consolidated, so their trading potential is giant.

To sum up, this paper compares the Sino-Russian trade with that of the countries along “the Belt and Road”. The result shows as follows: (1) From the perspective of comprehensive and complementary trade, with China as a commodity exporting country, the complementary index of the comprehensive trade between China and the countries along “the Belt and Road” is generally high averagely, and with China as a commodity importer, the complementary index of comprehensive trade between China and Russia is 1.08, ranking the fourth among the countries along the route. On the whole, the complementary index of Sino-Russian comprehensive trade ranks high among the top countries along “the Belt and Road”, which indicates that China and Russia have a solid trade foundation and large trade potential. (2) From the perspective of trade potential value, the potential value of the bilateral trade between China and Russia is 0.76 in 2015, indicating huge potential. Among the countries along “the Belt and Road”, the Sino-Russian trade

potential is in the forefront. The specific analysis is as follows: First, Russia and China, as the two largest countries, are neighboring each other. Russia has a large population and the advanced economy. Compared with other countries along the route, the transportation cost is low and the consumer market is broad while the industrial structure is complementary to that of China. Second, the Russia ranks the second with a high degree in economic development among the countries along the route. The huge and developed economy raises the upper limit for Sino-Russian trade potential. Third, Russia's advantage in natural resources is very significant among the countries along the route, even in the world. The bilateral trade between China and Russia is in line with the resource endowments and comparative advantages of the two countries. As a developed economy with rich resources, Russia can greatly promote the development and optimization of Sino-Russian trade. So there are huge trade potential between China and Russia.

Research conclusions and policy recommendations

As the two major economies in "the Belt and Road" economic belt, China and Russia have unique geographical advantages. In addition, since the Ukrainian crisis, the shift in the direction of Russia's economic development has created opportunities for the two countries to strengthen cooperation. Starting from the new background of "Belt and Road" initiative, this paper constructs a trade gravity model and estimates the trade potential space between China and Russia. The following research conclusions are obtained and policy recommendations are given:

1. Research conclusions

(1) In the view of longitudinal comparison of China-Russia trade potentiality, analog values of bilateral trade between China and Russia from 2005 to 2015 are higher than practical values. China-Russia trade potentiality is lower than 0.8, China-Russia trade belongs to the type of giant potential in a whole, the bilateral trade has a giant space and can develop bilateral trade further. What is worth noticing is that comprehensive trade complementarities index plays a positive role in China-Russia bilateral trade, which indicates that the high complementarity of China-Russia trade plays a positive role in Sino-Russian trade volume ; construction of "the belt and road" plays significant and positive role in bilateral trade, which shows that the relationship between Sino-Russian trade development and construction of "the belt and road" is mutually promoted and commonly developing. Building "the belt and road" is destined to bring a better bonding point for Sino-Russian trade and embody two countries' trade comparative advantage, realizing win-win cooperation and common prosperity.

(2) From the perspective of the horizontal comparison of China-Russia trade potential, China-Russia trade potential index in 2015 is 0.76, which belongs to the type of huge potential. China-Russia trade potential ranks forefront among the countries along "the Belt and Road". Firstly, Russia and China are the biggest neighboring countries to each other. Russia is developed capitalist countries with large population, and its transportation cost is lower than that of other countries along "the belt and road". Secondly, the size of Russian economy is the second largest among the countries along "the belt and road", and its economy is highly developed, which have raised the upper limit of China-Russia trade potential. Thirdly, Russia's natural resource advantage is significant among countries along "the belt and road", the bilateral trade between China and Russia conforms to each other's resource endowment and comparative advantage. China-Russia bilateral trade has huge potential

2. Policy Suggestions

(1) Firstly, China and Russia should seize the opportunity to build "the Belt and Road" and comprehensively promote the strategic cooperation between the two countries. China and Russia should strive to build an environment and platform for friendly cooperation and enhance mutual trust, thereby enhancing the stability, mutual trust, and mutual benefit of trade cooperation. In addition, China and Russia should also make full use of the infrastructure construction projects such as "Silk Road Fund" and "New Development Bank" to promote interconnection, and prepare for broadening economic sphere and trade cooperation and improving the quality of economic and trade cooperation. At the same time, China and Russia should pay attention to improving the

market risk prevention system.

(2) China and Russia should explore trade potential of two countries to identify new areas for trade growth. First, China is a manufacturing powerhouse. For its exports to Russia, products of manufacturing industries occupy a considerable proportion and are mostly low-end products. To further explore trade potential of China and Russia, on the one hand, China has to speed up its innovations and to promote development of high-end manufacturing industries and export of products from these industries; on the other hand, it is necessary to drive vigorous development of modern service industries and promote their development into new fields for growth of China-Russia trade. For instance, efforts may be made to facilitate China-Russia economic and trade cooperation in finance, information and cultures and so on. Second, on the Russian side, at present, China and Russia mainly trade with each other in energy and raw materials. However, there is still substantial space for promoting trade between these two countries in high-tech fields, civil industries and modern service industries. Besides, Russia, with a relatively solid foundation in sciences and technologies, has met the conditions for development of these fields. Therefore, Russia is supposed to impel development of industries such as hi-tech industries, civil industries and modern service industries. Meanwhile, exports of these fields shall be expanded in the trade between China and Russia.

(3) To narrow the gap between China and Russia in "trade shortage" and to strive to eliminate the unfavorable factors in Sino-Russian trade. China and Russia have to negotiate actively to break down tariff and non-tariff barriers and promote the liberalization and facilitation of Sino-Russian trade. Both of sides should standardize trade order, and Russia should strengthen legislation and supervision, properly solve the problem of "Gray Customs Clearance", and provide a normative and orderly trade environment for the two countries; China and Russia should strengthen mutual direct investment. The empirical results show that the scale of direct investment has a positive effect on the increase of bilateral trade between the two countries. Increasing the intensity of Sino-Russian direct investment can help strengthen the tightness of Sino-Russian trade, expand Sino-Russian trade scale, improve the quality of Sino-Russian trade, and narrow the gap between China and Russia.

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