

**RESEARCH ON THE RELATIONSHIP BETWEEN CHINA DIRECT INVESTMENT AND TRADE BETWEEN RUSSIA AND BOTH PARTIES****Huang Jin<sup>\*1</sup>**<sup>\*1</sup> Huang Jin (International business, Zhenjiang Jiangsu, China)

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**ABSTRACT**

With the acceleration of the globalization process, the pace of China's introduction is also accelerating. To expand its development of development, China has continuously increased investment and trade activities with countries around the world. China and Russia are adjacent to the region and have a deep historical source. This article mainly studies China's direct investment in Russia and explores the impact of China's direct investment in Russia on the trade activities of the two countries. Based on 2003 to 2020, Based on Sino-Russian OFDI and trade data, they analyzed the trade relations between China and Russia from the perspective of qualitative analysis and quantitative analysis, respectively, exploring China's trade effects and functional mechanisms of direct investment in Russia. Direct investment has a significant promotion effect on China's import trade and export trade. Finally, China put forward China's countermeasures for direct investment in Russia, to continue to deepen China's direct investment cooperation and trade cooperation in Russia, optimize the trade structure of the two countries, and promote the common economic development of the two countries.

**Keywords:**China Direct Investment to Russia, Sino-Russian trade, Import trade, Export trade

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**INTRODUCTION**

In the context of economic globalization, the connection between countries around the world is getting closer, and the economic development of a country is increasingly close to the extent of other countries. In the case of various international economic exchanges, foreign direct investment and international trade as the main means and the main forms of economic development have become particularly important. In recent years, it has made unprecedented development. China should continue to enhance the enthusiasm for direct investment in the outside world and obtain rich benefits through direct investment in other countries. The proportion of the target of China's foreign direct investment in the middle of the country is still increasing, and the pace of direct investment is also accelerating.

China and Russia are two developing countries with large land areas and strong economic strength in the world. At the same time, the two countries are adjacent to their adjacent advantages in geographical location. Therefore, direct investment and trade activities between China and Russia are more convenient. And the potential is huge. Russia is rich in resources such as minerals, petroleum, natural gas, and other resources. It is the world's recognized energy power, scientific and technological powers, military powers, and strong scientific research strength, but it is relatively backward in logistics facilities and finance. China is the world's largest processing base. Production Strong capabilities, the Internet finance, and logistics industries have developed rapidly, but the lack of resources and energy, and the demand for energy such as minerals and natural gas is great. It can be seen that there is a strong complementarity

between China and Russia's investment and trade. China and Russia's bilateral trade in 2010 reached 57.05 billion US dollars, an increase of 49.6% year-on-year. Since then, China has become the country with the largest trade with Russia. At the end of 2020, China's direct investment in foreign countries reached 2.58 trillion US dollars, second only to the United States (the US \$ 8.13 trillion) and the Netherlands (the US \$ 3.8 trillion). China's influence on global foreign direct investment has continued to expand, traffic accounts for more than 10% of the global proportion, and 20.2% in 2020; the stock accounts for 6.6%, an increase of 0.2 percentage points from the previous year. China's two-way investment in 2020 was basically flat, and the introduction came out to develop simultaneously.

As the largest economic power adjacent to China, Russia is of great significance to study China's relationship with Russia's investment and China-Russia trade in the future of China and Russia. Studying China's direct investment in Russia and the trade between China and Russia can provide a basis for the strategic transformation of China-Russia's future investment and trade cooperation, deepen the economic and trade cooperation between the two countries, and help the economic development of the two countries. The complementary effect of the two.

#### LITERATURE REVIEW

In the first developed western countries, the relationship between investment and trade has begun, and two theories of investment replacement trade and complementary investment trade have occurred, and the research objects are mainly developed countries such as Europe, the United States, and Japan. Since China's reform and opening up, with the continuous expansion of foreign investment and foreign trade scale, domestic economists have also begun to study the relationship between Chinese foreign investment and foreign trade, and draw similar conclusions. This article mainly sorts out existing literature on the effect of direct investment in economic growth, foreign direct investment in trade effects, and research on Sino-Russian economic and trade relations.

Trevor Campbell (2012) concluded through empirical analysis that when a country's enterprises make direct investments in other countries, the investment flow can drive the growth of the country's GDP, but the growth effect of GDP is not easy to be detected in a short time, and it needs long-term direct investment to be reflected <sup>[1]</sup>. Xiang Yin and Ying Wang (2006) studied the difference between the economic growth model of China and India and studied the relationship between GDP and direct investment in foreign directors. The results of empirical research show that China's economic growth is mainly from large-scale foreign direct investment. The larger the scale of foreign direct investment, the greater its role in promoting China's economic growth. But for India, even if the number of direct investments in the outside world is small, the economic growth role it brings to India is huge <sup>[2]</sup>. Based on calculating the 30 provincial economic growth quality index of the provincial regional economic growth quality index from 2004 to 2018, Jian Zhang and Bo Wang (2022) empirically analyzed the impact of OFDI on the quality of economic growth and its mechanism. Studies have found that in recent years, OFDI, which has developed vigorously in recent years, has significantly promoted the improvement of the quality of domestic economic growth, and it can significantly optimize the economic growth structure, promote the distribution of welfare and results, and improve the use of resource utilization and ecological environment <sup>[3]</sup>.

Mundell (1957) first proposed that direct investment would have an impact on Trade and studied

the relationship between them. He believed that direct investment would reduce the trade between the two countries. The capital elements of the two countries will reduce their liquidity with the emergence of trade, and the expansion of direct investment will enhance the liquidity of the capital elements of the two countries, which also shows that direct investment will hinder the trade between the two countries, that is, direct investment and trade have the role of mutual substitution <sup>[4]</sup>. Cantwell and Tolentino (2002) pointed out that the production factors of a country will be re-distributed with direct investment in the country. This is because the production of the production factory in the host country is conducive to saving the production factors and raw materials of the parent country, and to a certain extent optimizing the commodity trade structure of the parent country <sup>[5]</sup>. Helpman et al. (2004) researched the company's external direct investment and exports and found that foreign direct investment will cause changes in the production factors and capital structures of the parent country, which further affects the trade structure of the mother country <sup>[6]</sup>. Benwu Xiang's (2006) empirical analysis of the relationship between foreign direct investment and China's trade effect on the basis of the gravitational model. As a result, although China's foreign direct investment promotes China's exports, China's export effect has increased significantly, but the right to the export effect is significantly increasing, but the right is right. The products of China's imports to the host country have brought adverse effects, and China's import trade from the host country has decreased <sup>[7]</sup>. Chuangwei Lin et al. (2019) Based on the gravitational equation and division models, the direct investment and trade data of China to ASEAN countries from 2003 to 2015 examined China's direct investment in ASEAN countries on its heterogeneity in its import and export trade and influence mechanism. Studies have found that China's direct investment in ASEAN countries has a significant trade creation effect <sup>[8]</sup>. Chao Yang et al. (2022) selected the gravitational model of OFDI and cargo trade data in China from 2007 to 2019 to discuss the impact of China's investment in ASEAN and EU's investment in the scale and structure of the cargo trade in the motherland. The results show that China's OFDI in ASEAN has led the exports of middle products and capital, as well as some consumer goods and middle products to return to the mother country; although OFDIs of the EU have replaced some exports to the EU, it helps China to obtain advanced technology and key Strategic assets such as equipment and significantly increased the scale of the medium and high-tech products from EU imports <sup>[9]</sup>.

Natalia B (2014) believes that in the current development trend of global economic integration, direct investment in foreign countries has become one of the indispensable ways for a country to participate in the international division of labor. Russia is China's largest neighbor and a strong country in the world. China and Russia have continuously strengthened direct investment cooperation in economy, science and technology, and military. Harmful. Therefore, China should seize all advantages, whether it is from the geographical advantages of China and Russia or the political advantage, reasonably distribute resources, and optimize the investment structure and investment scale of direct investment in Russia, to make the economic and trade relations between the two countries more firm <sup>[10]</sup>. The starting point of Jing Shang (2015) is based on the agricultural trade between China and Russia, calculated the specialized trade index of agricultural products between China and Russia, and analyzed the trade scale of the agricultural products of the two countries. Trade is complementary, and agricultural trade can improve the level of agricultural production in the two countries <sup>[11]</sup>. Qianying Chen and Tianyi Ban (2016) found by analyzing the data of Sino Russian trade scale and trade structure that the two countries' trade scale

in mechanical and electrical products, textiles, mineral products, and other aspects is huge, and Sino-Russian trade shows obvious differences and complementarities <sup>[12]</sup>. Suslov and Qiujie Chen (2019) pointed out that large state-owned enterprises in China and Russia have determined that most of the economic and trade cooperation between China and Russia. Russia's requirements for foreign investment products and services can be met in China's investment projects. On the other hand, it can also drive some of the infrastructure levels of Russia, which has created more attractive conditions for other foreign investors to enter Russia and improved Russia's direct investment environment to a certain extent <sup>[13]</sup>. Most foreign scholars are from the perspective of the mother country. It mainly studies the impact of foreign direct investment on the trade of the parent country and has less impact on the host country. At the same time, there are some shortcomings of domestic scholars, and from the perspective of the host country, there is a lack of international perspective. Although China has more references and materials in the field of direct investment in Russia, there are only a handful of references and data on the study of trade effects brought about by China's direct investment in Russia. This article will learn from the theoretical basis of foreign scholars and domestic scholars and adopt a combination of qualitative and quantitative research methods to study China's trade effect on direct investment in Russia, to deepen the direct investment scale and trade scale of China and Russia, and achieve a win-win situation. The situation.

## **THE CURRENT SITUATION OF DIRECT INVESTMENT AND TRADE BETWEEN CHINA AND RUSSIA**

### **China's direct investment in Russia**

In terms of investment, even with the impact and test of the financial crisis in 2008, the investment scale, investment level, and investment direction of China and Russia are carried out steadily and orderly. A smaller, too concentrated investment in the investment field.

Since the reform and opening up nearly 40 years, China's foreign investment has developed rapidly, the scale has continued to expand, and it has become one of the most important members of international investment at an amazing speed. In 2016, China's foreign direct investment scale reached a new high, and the investment traffic reached the second in the world, up to 196.15 billion U.S. dollars, an increase of 34.65%year-on-year, accounting for 13.5%of the global total investment flow. It reached the US \$ 1.36 trillion, an increase of 23.64%year-on-year, accounting for 5.2%of the global total investment stock. Although the scale of China's direct investment in Russia has maintained rapid growth, compared with China's investment in North America and the European Union, the scale of investment in North America and the European Union is large, and the investment structure is single and the investment field is mainly low-end industries. The economic strength does not match. The proportion of direct investment in Russia in some years is shown in Table 1.

*Table 1: 2003 ~2020 China's direct investment in Russia accounted for the proportion (100 million US dollars)*

years	China direct investment in Russia	China's direct investment in the United States	China's foreign direct investment traffic	China's investment in Russia accounts for proportion	China's direct investment in the United States accounts for proportion	China direct investment in Russia	China's foreign direct investment stock	China's investment in Russia's investment stock
2003	0.31	0.65	28.55	1.07%	2.28%	0.62	332.22	0.19%
2004	0.77	1.20	54.98	1.41%	2.18%	1.23	447.77	0.28%
2005	2.03	2.32	122.61	1.66%	1.89%	4.66	572.06	0.81%
2006	4.52	1.98	176.34	2.56%	1.12%	9.30	750.26	1.24%
2007	4.78	1.96	265.06	1.80%	0.74%	14.22	1179.11	1.21%
2008	3.95	4.62	559.07	0.71%	0.83%	18.38	1839.71	1.00%
2009	3.48	9.09	565.29	0.62%	1.61%	22.20	2457.55	0.90%
2010	5.68	13.08	688.11	0.83%	1.90%	27.88	3172.11	0.88%
2011	7.16	18.11	746.54	0.96%	2.43%	37.64	4247.81	0.89%
2012	7.85	40.48	878.04	0.89%	4.61%	48.88	5319.41	0.92%
2013	10.22	38.73	1078.44	0.95%	3.59%	75.82	6604.78	1.15%
2014	6.34	75.96	1231.20	0.51%	6.17%	86.95	8826.42	0.99%
2015	29.61	80.29	1456.67	2.03%	5.51%	140.20	10978.65	1.28%
2016	12.93	169.81	1961.49	0.66%	8.66%	129.80	13573.90	0.96%
2017	15.48	64.25	1582.88	0.98%	4.06%	138.72	18090.37	0.77%
2018	7.25	74.77	1430.37	0.51%	5.23%	142.08	19822.66	0.72%
2019	3.79	38.07	1369.08	0.28%	2.78%	128.04	21988.81	0.58%
2020	5.70	60.19	1537.10	0.37%	3.92%	120.71	25806.58	0.47%

According to Table 1, from 2003 to 2020, the proportion of Chinese direct investment in Russia was relatively small among China's total foreign investment, and there was no stable and large increase in growth, all hovering around 1%. From 2006 to 2020, China's direct investment in Russia accounted for about 1%, without much increase or decline. China's direct investment in Russia's invested stock and its

proportion pillar diagram and folding line diagram is shown in Figure 1, which is even more intuitive. As can be seen from Figure 1, China's direct investment in Russia is based on one million US dollars and China's foreign direct investment is invested in the units of USD 100 million. From this, we can see that from 2003 to 2014 and 2016, China's investment in Russia basically occupied 1% of China's foreign investments. And China's investment in Russia in 2015 increased. From 2017 to 2020, China's investment in Russia accounted for China's foreign investment gradually decreased, and by 2020 or less than 0.5%.

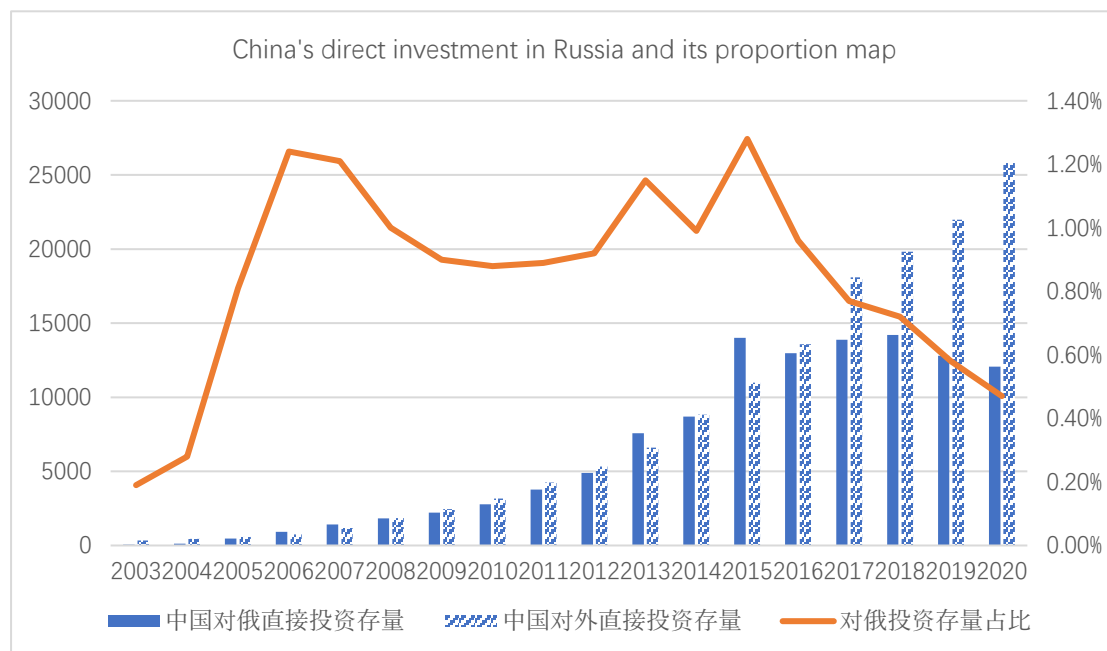


Fig. 1: 2003 ~2020 China direct investment in Russia and its proportion map

### The current situation of China-Russia trade

In terms of trade, since 2010, China has become Russia's largest trading partner for six consecutive years. It has become increasingly important in Russia's foreign trade, but the proportion of China-Russia trade in China's foreign trade is small. It has not increased much, and the trade structure is too single. Since the reform and opening up, China has concentrated on the trend of economic globalization and has actively launched foreign trade cooperation with countries around the world. After years of development, China has become the world's largest trading country. In 2017, China's export trade amount ranked first in the world. The forehead ranks second in the world. The Sino-Russian trade has not made great progress in the 1990s. It was not until 2000 that China-Russia trade entered a steady development stage. By 2010, China became Russia's first largest trading partner for the first time. It has always been the largest trading partner in Russia, but the scale of Sino-Russian trade has a small proportion of China's total foreign trade and does not increase much. product. China, Russia, and the United States are quite large powers. This compares the scale and proportion of the three countries' trade and its proportion, as shown in Table 2 and Table 3.

**Table 2: 2003 ~2020 Sino-Russian trade, Sino-US trade, and Russia-US trade (100 million US dollars)**

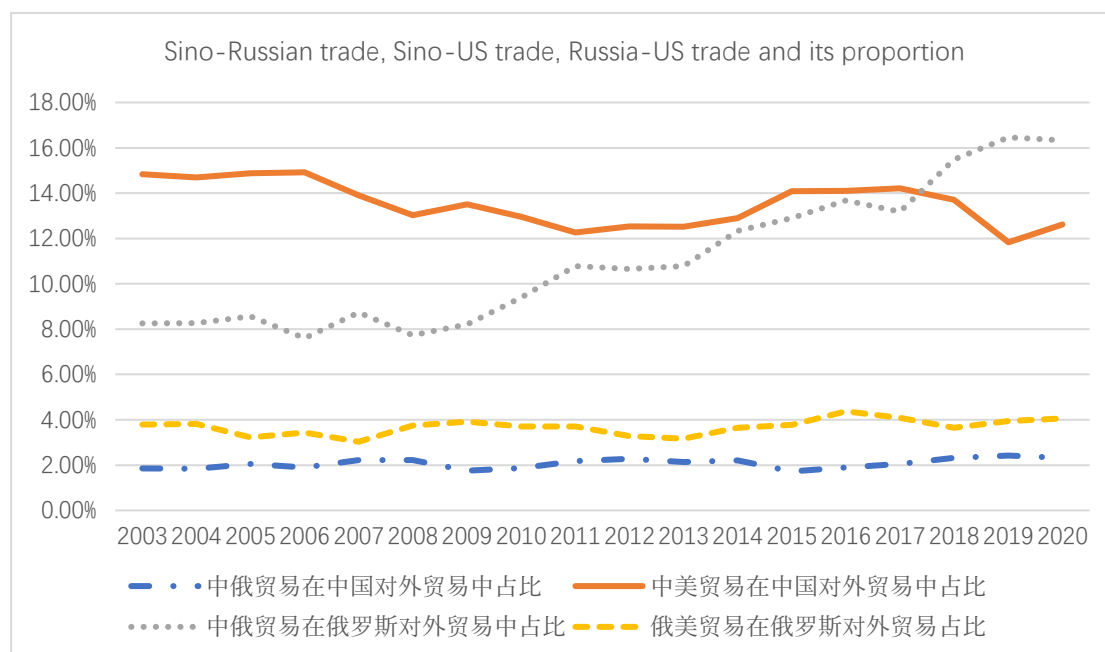
years	Sino-Russian trade scale	Sino-US trade scale	Russian-US trade scale	China's foreign trade scale	Russia's foreign trade scale
2003	157.61	1263.30	72.41	8512.07	1910.02
2004	212.32	1696.26	98.33	11547.92	2571.69
2005	291.02	2116.17	109.39	14220.72	3401.59
2006	333.87	2626.81	150.67	17606.86	4390.51
2007	481.65	3020.83	167.20	21738.33	5519.92
2008	568.31	3337.38	275.71	25616.32	7350.45
2009	387.97	2982.59	184.90	22072.19	4726.23
2010	554.49	3853.41	218.72	29727.61	5904.71
2011	792.49	4466.47	271.73	36420.58	7349.41
2012	881.58	4846.83	271.32	38667.60	8268.30
2013	892.13	5210.02	262.55	41603.08	8273.02
2014	952.85	5551.18	281.48	43030.37	7721.17
2015	680.16	5570.23	198.83	39530.33	5273.50
2016	696.16	5197.16	222.32	36855.57	5092.21
2017	842.21	5836.76	260.74	41071.64	6391.73
2018	1071.07	6335.19	252.60	46224.44	6917.21
2019	1109.40	5415.60	266.18	45778.91	6738.82
2020	1081.89	5869.80	269.25	46559.13	6627.05

**Table 3: 2003 ~2020 Sino-Russian trade, Sino-US trade, and Russia-US trade proportion**

years	China-Russia trade accounts for the proportion of foreign trade in China	The proportion of Sino-US trade in China's foreign trade	Sino-Russian trade accounts for the proportion of foreign trade in Russia	Russia-US trade in Russia's foreign trade proportion
2003	1.85%	14.84%	8.25%	3.79%
2004	1.84%	14.69%	8.26%	3.82%
2005	2.05%	14.88%	8.56%	3.22%
2006	1.90%	14.92%	7.60%	3.43%
2007	2.22%	13.90%	8.73%	3.03%
2008	2.22%	13.03%	7.73%	3.75%
2009	1.76%	13.51%	8.21%	3.91%
2010	1.87%	12.96%	9.39%	3.70%
2011	2.18%	12.26%	10.78%	3.70%

<b>2012</b>	2.28%	12.53%	10.66%	3.28%
<b>2013</b>	2.14%	12.52%	10.78%	3.17%
<b>2014</b>	2.21%	12.90%	12.34%	3.65%
<b>2015</b>	1.72%	14.09%	12.90%	3.77%
<b>2016</b>	1.89%	14.10%	13.67%	4.37%
<b>2017</b>	2.05%	14.21%	13.18%	4.08%
<b>2018</b>	2.32%	13.71%	15.48%	3.65%
<b>2019</b>	2.42%	11.83%	16.46%	3.95%
<b>2020</b>	2.32%	12.61%	16.33%	4.06%

According to Table 2 and Table 3, the proportion of the Sino-Russian trade scale and Sino-US trade scale in China from 2003 to 2020 can be seen in the proportion of the foreign trade scale in China. Within 2.5%, the rise and falling are unstable; the proportion of Sino-US trade volume in China's foreign trade is maintained at a high level of 12%to 14%, and the overall show a slight decline to a slight rise; the amount of Sino-Russian trade amount is at the proportion of Russia's foreign trade scale has shown an upward trend as a whole. It can be seen that the scale of Sino-Russian trade and the scale of Sino-US trade in China's foreign trade is large. Specifically, from 2006 to 2020, the scale of Sino-US trade was basically about 6 to 8 times the scale of Sino-Russian trade. The scale of Sino-Russian trade in Russia's foreign trade is much larger than that of Russia-US trade. The proportion of trade in China, the United States, China, Russia, and Russia is more intuitive and clear, as shown in Figure 2.



**Fig. 2: 2003 ~2020 Sino-Russian trade, Sino-US trade, Russian and US trade and its proportion of discounts**



### CHINA'S EMPIRICAL ANALYSIS OF RUSSIA'S DIRECT INVESTMENT AND TRADE EFFECT

#### Model Construction

The theme of this article is the relationship between China's direct investment in Russia and China-Russia. To study the relationship between its export and imports. The impact of foreign direct investment on one country has a lagging effect. The various effects generated by the direct investment of one country in another country will not be displayed immediately. Essence The meaning of each indicator and variable:

EX: China's export trade amount to Russia;

IM: China's import trade with Russia;

FDI: China's direct investment flow to Russia's year, that is, the total direct investment that China has occurred in Russia during the period (usually 1 year); China

FDIC: China's direct investment in Russia's previous year, that is, the cumulative direct investment of foreign direct investment as of a set time point (usually a few years) reflects China's cumulative direct investment for Russia as of a certain point.

Based on the above conditions and assumptions, the establishment of the data model between China's direct investment in Russia and the relationship between China and Russia is:

$$LNEX = aLNFDI + bLNFDIC + c \quad (\text{Model 1})$$

$$LNIM = aLNFDI + bLNFDIC + c \quad (\text{Model 2})$$

This article adopts the empirical research method of time sequence, which intercepts various data from 2006 to 2020 for a total of 15 years of data for empirical analysis. To eliminate the different differences, the obtained data is obtained. The data for this article comes from the EPS world macroeconomic database. China's direct investment in Russia's direct investment and stock data are compiled from 2003 to 2020 "China Foreign Direct Investment Statistics". For specific data, see Table 4 and Table 5.

**Table 4: 2003 ~2020 China's import and export trade, direct investment flow and stock on Russia (100 million US dollars)**

years	EX	IM	FDI	FDIC
2003	60.35	97.26	0.31	0.62
2004	91.03	121.29	0.77	1.23
2005	132.11	158.91	2.03	4.66
2006	158.32	175.54	4.52	9.30
2007	284.88	196.77	4.78	14.22
2008	330.05	238.25	3.95	18.38
2009	175.14	212.83	3.48	22.20
2010	296.13	258.36	5.68	27.88
2011	389.04	403.45	7.16	37.64
2012	440.58	441.01	7.85	48.88
2013	495.95	396.18	10.22	75.82
2014	416.07	536.78	6.34	86.95

2015	347.57	332.59	29.61	140.20
2016	373.56	322.60	12.93	129.80
2017	428.31	413.90	15.48	138.72
2018	479.65	591.42	7.25	142.08
2019	497.48	611.92	3.79	128.04
2020	505.04	576.85	5.70	120.71

*Table 5: 2003~2020 China's imports and exports to Russia, receiving investment flows, and stocks of the stock*

years	LNEX	LNIM	LNFDI	LNFDIC
2003	4.1001	4.5774	-1.1835	-0.4839
2004	4.5111	4.7982	-0.2573	0.2109
2005	4.8837	5.0683	0.7097	1.5381
2006	5.0646	5.1679	1.5088	2.2298
2007	5.6521	5.2820	1.5636	2.6543
2008	5.7993	5.4733	1.3743	2.9114
2009	5.1656	5.3605	1.2477	3.1003
2010	5.6908	5.5544	1.7365	3.3278
2011	5.9637	6.0001	1.9682	3.6280
2012	6.0881	6.0891	2.0600	3.8895
2013	6.2065	5.9819	2.3246	4.3283
2014	6.0309	6.2856	1.8462	4.4653
2015	5.8510	5.8069	3.3881	4.9430
2016	5.9231	5.7764	2.5596	4.8660
2017	6.0598	6.0256	2.7398	4.9324
2018	6.1731	6.3825	1.9813	4.9564
2019	6.2096	6.4166	1.3330	4.8523
2020	6.2246	6.3576	1.7410	4.7934

### Stability test

Select EViews Software to check the ADF unit root inspection of the number of data in Table 5. Due to the export trade amount (LNEX), the import trade amount (LNIM), the China direct investment flow of Russia (LNFDI), and China directly to Russia the ADF inspection results of the investment stock (LNFDIC) are unstable sequences, so the first-order difference is tested again, respectively as LNEX', LNIM', LNFDI', LNFDIC'). The result is shown in Table 6. Based on the long-term stable sequence, all variables can further studied the relationship between these variables.

*Table 6: ADF unit root test results*

variable	ADF test	ADF critical value			P value	Stable
		1%	5%	10%		

<b>LNEX</b>	-2.621591	-4.616209	-3.710482	-3.297799	0.2760	unstable
<b>LNEX'</b>	-3.878362	-4.728363	-3.759743	-3.324976	0.0412	5% stable
<b>LNIM</b>	-2.465771	-4.616209	-3.710482	-3.297799	0.3379	unstable
<b>LNIM'</b>	-4.010232	-4.667883	-3.733200	-3.310349	0.0312	5% stable
<b>LNFDI</b>	-2.449955	-4.616209	-3.710482	-3.297799	0.3446	unstable
<b>LNFDI'</b>	-5.249835	-4.667883	-3.733200	-3.310349	0.0037	5% stable
<b>LNFDIC</b>	-2.118762	-4.616209	-3.710482	-3.297799	0.5001	unstable
<b>LNFDIC'</b>	-8.273701	-4.728363	-3.759743	-3.324976	0.0001	1% stable

### Coordination analysis

Variables may lead to pseudo-regression phenomena. For example, most economic phenomena, in reality, have a long-term upward trend, and they often estimated that they are often have better fitting advantages and high significance. To solve such problems, the cooperative analysis method is also widely used in time sequence analysis. This article uses Johansen to co-test.

First test the coexistence relationship between LNEX and LNFDI and LNFDIC. The results are shown in Table 7.

**Table 7: LNEX and LNFDI, LNFDIC co-inspection results**

	Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
<b>LNEX and LNFDI</b>	None *	0.523237	16.92820	15.49471	0.0302
	At most 1 *	0.271871	5.076432	3.841465	0.0242
<b>LNEX and LNFDIC</b>	None *	0.627262	24.27816	15.49471	0.0019
	At most 1 *	0.411693	8.488107	3.841465	0.0036

It can be seen from Table 7 that under the conditions of 5% significant levels, the test value of LNEX and LNFDI is 16.92820, which is greater than the critical value of 15.49471, so the original assumptions are rejected, indicating that there is a coordination relationship between the two variables. In the same way, under the 5% significant level, the test value of LNEX and LNFDIC is 24.27816, which is greater than the critical value of 15.49471, so the original assumptions are rejected, indicating that there is a coordination relationship between the two variables.

Let's test the coexistence relationship between LNIM and LNFDI and LNFDIC, and the results are shown in Table 8.

**Table 8: LNIM and LNFDI, LNFDIC co-inspection results**

	Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
<b>LNEX and LNFDI</b>	None *	0.606893	20.78874	15.49471	0.0072
	At most 1 *	0.485963	8.650989	3.841465	0.0033
<b>LNEX and LNFDIC</b>	None *	0.630586	21.91470	15.49471	0.0047
	At most 1 *	0.311908	5.981318	3.841465	0.0145

It can be seen from Table 8 that under the conditions of 5% significant levels, the test value of LNIM and LNFDI is 20.78874, which is greater than the critical value of 15.49471. In the same way, under the 5% significant level, the test value of LNIM and LNFDIC was 21.91470, which was greater than the critical value of 15.49471, so the original assumptions were rejected, indicating that there was a coordination relationship between the two variables.

In summary, there is a coordination relationship between the variables of each group, which can continue the following regression analysis and study the specific impact relationship between variables.

### Regression analysis

Based on the above-mentioned stable testing and co-analysis, the EVIEWS11 software is used to regain analysis of the above two models, and the results of Table 9 and Table 10 are obtained.

**Table 9: The export effect of China direct investment in Russia**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNFDI	-0.034468	0.113922	-0.302563	0.7664
LNFDIC	0.379905	0.072303	5.254358	0.0001
C	4.408669	0.130061	33.89704	0.0000
<b>R-squared</b>		0.887343	<b>Mean dependent var</b>	5.644303
<b>Adjusted R-squared</b>		0.872322	<b>S.D. dependent</b>	0.633945
<b>S.E. of regression</b>		0.226522	<b>Akaike info criterion</b>	0.019058
<b>Sum squared resid</b>		0.769680	<b>Schwarz criterion</b>	0.167454
<b>Log likelihood</b>		2.828474	<b>Hannan-Quinn criter.</b>	0.039520
<b>F-statistic</b>		59.07385	<b>Durbin-Watson stat</b>	1.502846
<b>Prob(F-statistic)</b>		0.000000		

From the data above, we can see that it is 0.887343, and the adjustment is 0.872322, which indicates that the fitting of the model is better:

$$LNEX = -0.034468LNFDI + 0.379905LNFDIC + 4.408669$$

The coefficients of direct investment traffic and direct investment stocks are positive, indicating that the increasing increase in China's direct investment traffic and direct investment in Russia, it will also drive China's import trade and export trade to Russia. For every direct investment in Russia to increase Russia, China's exports to Russia will decrease by 0.034,4688 units. For each unit of direct investment in Russia, its export will increase by 0.379905 units.

**Table 10: The import effect of China's direct investment in Russia**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNFDI	-0.296256	0.087376	-3.390575	0.0040
LNFDIC	0.478268	0.055455	8.624377	0.0000
C	4.535924	0.099755	45.47079	0.0000
<b>R-squared</b>		0.914809	<b>Mean dependent var</b>	5.689125
<b>Adjusted R-squared</b>		0.903450	<b>S.D. dependent</b>	0.559141

<b>S.E. of regression</b>	0.173739	<b>Akaike info criterion</b>	-0.511515
<b>Sum squared resid</b>	0.452778	<b>Schwarz criterion</b>	-0.363119
<b>Log likelihood</b>	7.603631	<b>Hannan-Quinn criter.</b>	-0.491053
<b>F-statistic</b>	80.53748	<b>Durbin-Watson stat</b>	1.281631
<b>Prob(F-statistic)</b>	0.000000		

Among the import effects of direct investment in Russia in China,  $R^2$  is 0.914809, and the adjusted  $R^2$  is 0.903450, indicating that the fitting effect of the model is good, so it can be formulated:

$$LNIM = -0.296256LNFDI + 0.478268LNFDIC + 4.535924$$

It can be seen from the P-value that the P-value of China's direct investment in Russia is smaller than that of China's P-value of direct investment in Russia, indicating that the coefficient of direct investment stock is better than the coefficient of direct investment flow. The coefficient of investment stock is positive, and the coefficient of investment flow is negative, indicating that China direct investment in Russia's direct investment in Russia has a more significant impact on China's import trade in Russia. The coefficient of investment flow is not significant. In a short period, China's import effect on Russia is not strong. For every unit of direct investment in Russia, China's imports of Russia to Russia will decrease by 0.296,256 units. For each unit of direct investment in Russia, its exports will increase by 0.478,268 units. In other words, although China's import trade with direct investment in Russia has not been promoted significantly in a short time, it may even reduce import trade. But from a long-term perspective, China has a slow promotion effect on Russia's direct investment in Russia's imports in Russia.

## SUGGESTIONS

### Government level

Thanks to the convenient conditions of geographical location, the conditions for the development of the Russian Far East in Northeast China are unique. The development of the Far East is a long-term system project. Northeast China participated in the development advantage of the development of the Far East of Russia. In the short term, the two regions need to learn and understand the policy conditions of both countries, and carefully consider the choice of direct investment projects. Within the medium term, China needs to build an effort to the infrastructure construction of the border areas of both sides. With long-term cooperation, China must learn to use the advantages of the market and maximize the role of the market. For those investment projects with large capital demand and a long construction cycle, China should actively cooperate with local financial institutions to strive to achieve financing support and keep up with the development of the project together. In the border trade between the two parties, the main method of RMB settlement continues to expand the scale of the settlement of the local currency. In the end, the two regions should condense their strengths, use their efforts to develop the international market together, and enhance international influence and international competitiveness. According to the resource endowment conditions and industrial structure characteristics between the two regions, actively explore the cooperation point between the two regions.

China and Russia have a large difference in resource endowment and production factors. China and Russia have been mainly based on the trade of resource products and primary products in the past for a long time, and the added value of trade products is low. Since the beginning of the economy, China has

developed its economy in a high energy-consuming manner. Therefore, its demand for natural resources, energy, and raw materials is strong, so China has imported primary products from Russia. The development level of China's manufacturing industry is world-famous. China has rich labor resources. Therefore, China mainly exports labor-intensive products. Export trade to Russia mainly involves light industrial products such as clothing, shoes, and textiles. Therefore, no matter of import trade or export trade with Russia, China's trade structure should not be so solidified. China should increase its efforts to improve the trade structure with Russia and improve the investment industry structure to promote the development of the two parties. Unreasonable trade industry structures between China and Russia may lead to the generation of alternative effects. Therefore, China should increase direct investment in products with high value-added products in Russia, thereby driving trade with high value for technology. In high-tech fields such as aviation and finance, there is still a lot of room for development in China and Russia. China's direct investment in Russia's tertiary industry can not only conduct technical exchanges with Russia but also improve China's production technology level. China's trade technology with Russia is worthy of improvement, and the direct investment structure of both parties can be optimized to a certain extent.

In the context of global economic integration, China and Russia establishing a free trade zone is an inevitable choice. On the one hand, this can make the trade between China and Russia more convenient, the product structure of the two countries is gradually optimizing, and the cooperation policies and systems of the two countries are also increasingly improved. On the other hand, the establishment of the free trade zone will make China facilitate the direct investment in Russia, which provides a good channel for China's understanding of the Russian market, which is conducive to China's understanding and learning of Russian policies and regulations, thereby promoting China's direct investment in Russia Fast process. Therefore, to promote China's direct investment in Russia and trade between the two parties, the Chinese government and the Russian government should use the high-level meeting mechanism to reach a basic consensus on the establishment of the China-Russia Free Trade Zone. The Chinese government should actively communicate with the Russian government so that the Russian government understands the economic benefits of the construction of the China-Russia Free Trade Zone for the two parties. At the same time, the establishment of the China-Russia Free Trade Zone can reduce the trade barriers between the two countries, reduce tariffs between the two countries, expand China's market size in Russia, expand the development of China's industry in Russia, optimize the trade structure of both parties Essence. Therefore, China should attach importance to the construction of the free trade zone, actively conduct negotiations with the construction of the free trade zone with Russia, promote the construction process of the free trade zone, achieve complementary advantages for both parties, strengthen the disadvantages of both parties, and promote the common development of the two sides.

#### **Enterprise level**

China's foreign direct investment is more diversified, which needs to be compared horizontally in conjunction with the national conditions and policy status of direct investment in the host country and the specific situation of direct investment enterprises. From this choose the most suitable direct investment method. China's direct investment in Russia tends to be a traditional green land investment. Although Chinese companies conduct green space investments in Russia, they can make Chinese

companies have more sovereignty, and they can determine the risk of the scale, business scope, and control projects of the enterprise by their wishes. However, the Russian government's control over foreign-funded enterprises has always been quite strict, and there are various policy conditions, which is very unfavorable for Chinese companies. On the other hand, the construction cycle of Greenland investment is long, the speed is slow, and the risks that need to be undertaken are also a challenge to the amount and management experience of Chinese companies. In comparison, the risk of multinational mergers and acquisitions is much smaller. The implementation of corporate mergers and acquisitions is fast, can enter the Russian market faster and better, establish the brand image of Chinese companies, and seize the opportunity of the Russian market. At the same time, Chinese companies can obtain valuable strategic assets and intangible assets from Russia's acquired companies. Chinese companies have low acquisitions for Russian companies and their procedures are simple. They can effectively reduce the cost of enterprise acquisitions and bring more economic benefits to Chinese companies. In addition, the participation and establishment of a fund are also a good choice for Chinese companies to conduct direct investment activities in Russia.

When Chinese companies make direct investments in Russia, they should pay close attention to Russia's policies and legal renewal and continue to learn. Because Russia's policy environment is changing, Chinese companies must investigate the local tax policy and legal environment in advance when conducting direct investment. Under normal circumstances, Russia will not discuss the update of tax laws publicly, which will spend a long time for Chinese investors to learn about learning. However, these messages will be discussed on tax-related platforms and forums, but only some taxpayers will know this news. Therefore, Chinese investment companies should pay close attention to these websites and forums, learn to understand the content updated by the tax law, and accurately determine what impacts these changes will bring to China's direct investment in Russia. If investors can pay attention to changes in Russian tax laws in time and continue to pay attention to the occurrence of adverse situations. For some time before the legislation takes effect, investors should respond to the regulations that are about to take effect and propose countermeasures. Therefore, Chinese investors should pay attention to factors such as taxes in Russia's direct investment to smoothly expand their business in Russia.

From the total trade effect between China and Russia, China's direct investment in Russia can effectively increase the total trade volume between the two countries. On the whole, it is not only conducive to promoting China's export trade with Russia but also conducive to promoting China's to Russia to Russia. Import trade and the promotion of export trade are significantly greater than imported trade to Russia. In summary, China's direct investment in Russia is conducive to the trade development of the two countries, bringing a good trade effect to China.

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