Research on the Influence of FDI on Hunan Economy

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Abstract: Since the reform and opening up, our country foreign direct investment and export trade have increased rapidly, which has promoted the economic development effectively. But Hunan compared with other provinces in China, export-oriented economic development is relatively backward. This paper selects Hunan Province as the research object, starts from the relationship between export trade and foreign direct investment, analyzes the current situation of export trade and FDI in Hunan province, and makes an empirical analysis of the relationship between export trade and FDI in Hunan Province, verifying the existence of a positive correlation between export trade and FDI. It can be seen from the results of stationarity test and co-integration test that, FDI in Hunan Province promotes the growth of export trade, but this influence has lag effect. Hunan Province should strengthen the introduction of foreign capital in order to drive export trade and promote the sustainable and healthy development of export-oriented economy. Finally, this paper puts forward some reasonable countermeasures and suggestions for the coordinated development of Hunan's export trade and FDI.

1. Introduction

For a long time, export trade and Foreign Direct Investments (FDI) have been regarded as the two most important international economic relations. With the rapid development of transnational corporations as the main body of foreign direct investment, people's research on the relationship between foreign direct investment and export trade is becoming increasingly in-depth.

The most representative theories about the relationship between foreign trade and FDI are the Substitution Theory proposed by Monet and the Complementarity Theory proposed by Small Island. Monet was the first to propose that there was a substitution relationship between investment and trade. He combined international trade and FDI flows and believed that the two had a substitution relationship[1]. Monet proposed that, under the condition of trade barriers, investors could completely substitute goods with higher efficiency of factor transformation costs in the host country[2-4]. That is, under the relevant tax conditions, the importing country levies tariffs on imported goods, which increases the price of imported goods, and the demand for capital in the

importing country expands. Foreign investors make direct investments in the importing country, and capital flows into the importing country, which expands the production of goods in the importing country[5,6]. The products produced in the importing country replace the products exported from the exporting country, so that the relationship between foreign direct investment and export trade is a substitution relationship. Small Island believes that direct investment is not only the flow of capital, but also the overall transfer of capital, technology and management knowledge. Under the model of two countries, two production factors and two products, he proposed that there is a complementarity between foreign direct investment and export trade. Small Island's research found that Japanese companies investing abroad are in departments that are at a disadvantage in Japan. In order to maintain the production scale of these companies, they need to go to countries that are still at a disadvantage. In the target country, industries with greater comparative advantages should be developed, which can not only optimize the domestic industrial structure, but also promote the increase of foreign trade. It can be seen that there is a certain degree of complementarity between foreign direct investment and export trade[7,8].

I believe that FDI has a promoting effect on export trade, which is mainly manifested in two aspects: direct effect and indirect effect. The direct effect is mainly realized through the foreign direct investment's own import and export. It is manifested in the introduction of foreign-funded enterprises, increased, increased quantity of exported products, and expanded export scale. The indirect effect is manifested in the foreign direct investment enterprises entering the host country, which owns advanced technology and management experience, intensifying the competition of the host country, prompting local enterprises to imitate and innovate, indirectly improving the technology content of exported products, improving the quality of exported products, and enhancing the international competitiveness of exported products. The export trade structure will also change, prompting the transformation of primary products with low export value-added to industrial finished products with high export value-added. In addition, export trade also has a promoting effect on FDI. When export trade grows, FDI also grows. The promotion effect of export trade on FDI can be explained from the demand and supply sides. From the demand side, with the development of export trade, especially the development of processing trade, China has become a world processing plant, processing products for many international corporations. In order to reduce costs and increase profits, international corporations will directly invest. From the supply side, with the increasingly fierce competition in the international market, competitors will reduce costs, improve product quality and improve capital utilization rate to improve corporate competitiveness and thus obtain more profits, thus promoting foreign direct investment.

2. Research Method and Research Design

Facing the complex economic situation at home and abroad and the arduous reform tasks, Hunan Province actively adapts to economic globalization and strives to develop an outward-oriented economy. In 2016, the total import and export of the province was 25.86 billion US dollars, a decrease of 2.1% compared with the previous year, of which exports were 17.489 billion US dollars, an increase of 1.5% compared with the previous year. The main export products were sold to the United States, the European Union and South Africa. Exports to the United States were 2.001 billion US dollars, an increase of 38.7%; to the European Union were 1.463 billion US dollars, a decrease of 4.7%; and to South Africa were 570 million US dollars, an increase of 58.3%. In 2016, the actual utilization of foreign direct investment in the province was 12.85 billion US dollars, an increase of 11.1% over the previous year. There were 21 foreign investment projects with actual capital of 300 million US dollars or more, and 988 domestic and provincial projects with capital of more than 100 million yuan. The total amount of new foreign contracted engineering, labor

cooperation and design consulting contracts signed by the province was 6.6 billion US dollars, an increase of 11.6% over the previous year; the turnover was 6.31 billion US dollars, an increase of 22.0%; and 96,000 labor services were sent abroad, an increase of 17.8%. The total amount of foreign contracted investment was 4.7 billion US dollars, an increase of 51.7%. Of which, the contracted investment of Chinese side was 3.35 billion US dollars, an increase of 20.6%. The actual foreign investment was 1.65 billion US dollars, an increase of 11.5%.

2.1. Analysis of Export Trade Situation in Hunan Province

Firstly, let's take a look at the total export volume from Hunan Province through Table 1.

Table 1: Changes in Total Export Trade Volume of Hunan Province from 2008 to 2016

	Export Trade (in billions of US dollars)	Year-on-year growth rate (%).	Export Dependency Ratio (%).
2008	84.1	22.43	5.02
2009	54.92	-53.13	2.90
2010	79.55	30.96	3.42
2011	98.97	19.62	3.47
2012	126.00	21.45	3.69
2013	148.21	15.00	4.15
2014	200.23	25.98	5.10
2015	172.67	-15.96	4.10
2016	174.89	1.5	3.8

Data Source: Hunan Statistical Information Network, http://www.hntj.gov.cn

From the above table 1, it can be seen that the export trade of Hunan Province is generally on the rise, but the annual growth rate of export trade has changed greatly, with the lowest growth rate of -53.13% in 2009 and the highest growth rate of 30.96% in 2010, and the annual growth rate fluctuates greatly without any regularity. The negative value of export growth rate in 2009 was mainly due to the impact of the financial crisis, the shrinkage of foreign markets corresponding to the outward-oriented economy, the decline in sales and the reduction of export volume. In 2015, the export trade volume was 17.267 billion US dollars, which was lower than that in 2014, mainly due to the increase of labor costs, the aggravation of population aging, and then the re-layout of manufacturing industry, especially the transfer of labor-intensive industries to Southeast Asia, resulting in a decrease of export orders of labor-intensive products to varying degrees. In 2016, the export trade increased by 1.5% compared with the previous year, the trade conditions gradually improved, the pace of foreign trade transformation and upgrading accelerated, and the export trade situation was good.

Secondly, from Table 2, we can see the structure of export commodities in Hunan Province.

From the table, it can be seen that from 2008 to 2015, the export value of mechanical and electrical products in Hunan Province increased year by year, from 2.536 billion US dollars in 2008 to 9.614 billion US dollars in 2015, and the proportion of each year exceeded 30%. In 2015, it reached a new historical high, with an export value of 9.614 billion US dollars, accounting for half of the export products. It can be seen that Hunan Province is mainly based on mechanical and electrical products in export trade. Compared with mechanical and electrical products, although the proportion of high-tech products is small, the export value of high-tech products continues to increase and the proportion is getting higher and higher, mainly due to Hunan Province's emphasis on the export of high-tech products. In 2016, both the exports of mechanical and electrical products and high-tech products declined, the latter more significantly. The export value of mechanical and

electrical products in 2016 decreased from 9.614 billion US dollars in 2015 to 8.202 billion US dollars, a decrease of 8.9%. The export value of high-tech products decreased from 3.294 billion US dollars in 2015 to 2.548 billion US dollars in 2016, a decrease of 22%.

Table 2: Distribution of Key Commodities in Hunan Province from 2008 to 2016

Year	Total Exports (Billion US Dollars)	Machinery and Electrical Products		High-tech Products	
		Export Amount (Billion US Dollars)	Weight Percentage (%)	Exports (in billions of US dollars)	Weight Percentage
2008	84.10	25.36	30.15	2.80	3.33
2009	54.92	12.64	30.30	2.97	5.41
2010	79.55	27.01	33.95	5.73	7.20
2011	98.97	35.67	36.04	7.92	8.00
2012	126.00	50.88	40.38	13.83	10.98
2013	148.20	57.10	38.53	16.60	11.20
2014	200.23	74.91	37.41	21.40	10.69
2015	172.67	96.14	55.68	32.94	19.08
2016	174.89	82.02	-8.9	25.48	-22

Data Source: Hunan Statistical Information Network, http://www.hntj.gov.cn

Again, from the perspective of Hunan Province's export trade model, see Table 3.

Table 3: Changes in Export Trade Modes in Hunan Province

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016
General Trade (in billions of US dollars)	75.55	47.66	65.80	80.22	86.48	101.1	125.72	103.93	128.12
Processing Trade (Billion US Dollars)	8.21	6.82	11.64	17.15	38.33	45	46.65	56.81	43.84

Data Source: Hunan Statistical Information Network, http://www.hntj.gov.cn

In recent years, Hunan Province has mainly exported through general trade, but processing trade has been increasing rapidly. In 2015, general trade exports amounted to 10.393 billion US dollars, accounting for 60.21% of total exports, and processing trade amounted to 5.681 billion US dollars, accounting for 32.91%, reflecting the dominant position of general trade and the rapid development of processing trade. The rapid growth of processing trade in Hunan Province is mainly due to the abundant labor resources and preferential policies in Hunan Province, as well as the key measures taken in 2015 to cultivate Changzhutan, create and introduce processing trade platform projects, and promote the development of processing trade in the special supervision area of customs. In 2016, general trade in Hunan Province increased by 21.3%, while processing trade decreased by 22.7%.

## 2.2. Analysis of FDI Situation in Hunan Province
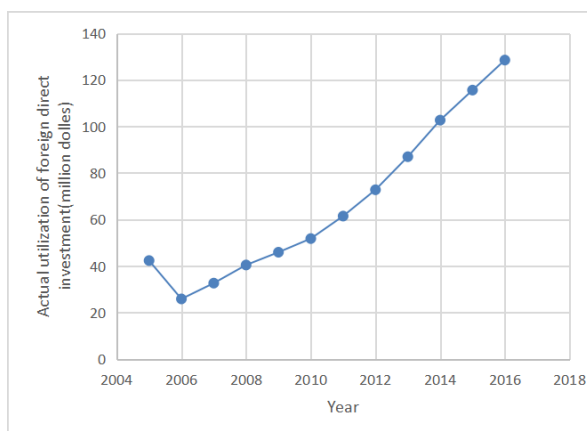
Data Source: Hunan Statistical Information Network, http://www.hntj.gov.cn

Figure 1: Utilized FDI in Hunan Province (Unit: Billion US Dollars) over the Years

From Figure 1, we can see the following content. The actual utilization of foreign direct investment in Hunan Province has increased from $4.24 billion in 2005 to $12.85 billion in 2016, with a rapid growth rate. From 2005 to 2007, the actual utilization of FDI grew slowly and the investment attraction entered a period of stable development. During the economic crisis in 2008-2010, Hunan Province still maintained the growth trend of actual utilization of foreign capital and the scale of investment attraction was expanding. After 2011, the actual utilization of foreign direct investment in Hunan Province grew rapidly, the investment attraction was obviously effective, and it entered a new stage.

Foreign direct investment in Hunan is mainly divided into four types according to the enterprise subject: joint venture, cooperative venture, wholly foreign-owned enterprise and foreign-invested company. In the early stage, foreign direct investment in Hunan Province was mainly joint ventures and cooperative ventures. By the 1990s, the main mode of foreign direct investment in Hunan Province was joint venture. In the 20th century, with the globalization of economy and the improvement of China's opening-up, these factors enabled the rapid development of wholly foreign-owned enterprises and foreign-invested companies in Hunan Province.
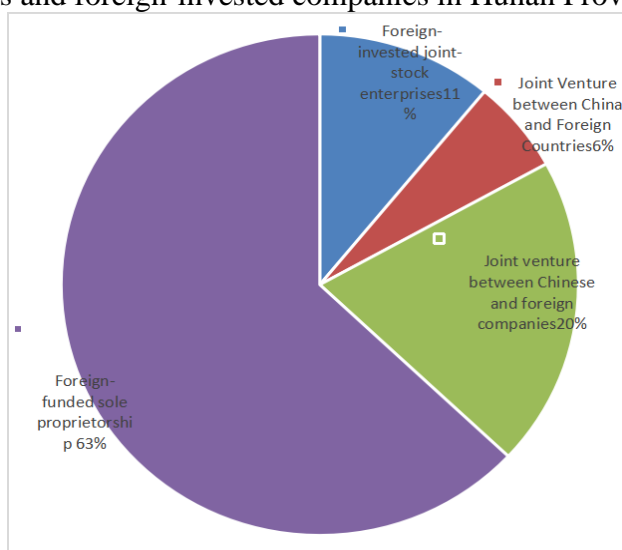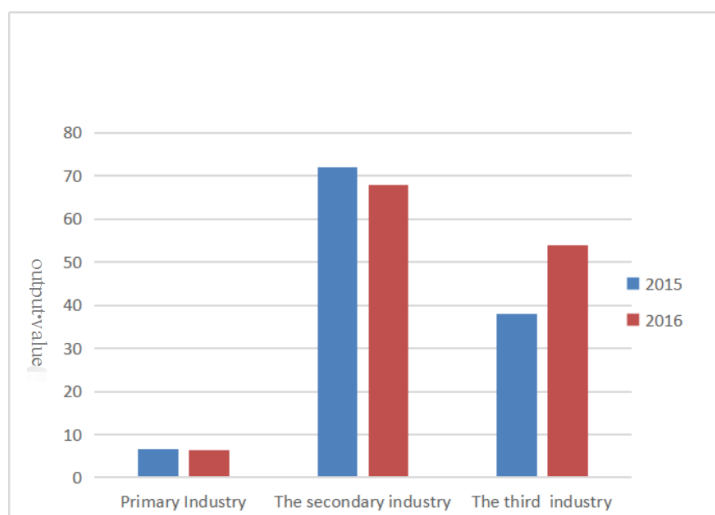

Data Source: Hunan Statistical Information Network, http://www.hntj.gov.cn

Figure 2: Distribution of Foreign Direct Investment in Hunan Province in 2016

From Figure 2, we can see the following content. In 2016, foreign direct investment in Hunan Province was dominated by foreign-invested enterprises. 392 newly established foreign-invested enterprises were set up, a decrease of 3.69% year-on-year, with actual foreign investment of US$7.31 billion, an increase of 13.07% year-on-year, accounting for 63.21% of the total in the province. There were 122 new Sino-foreign joint ventures, an increase of 18.45% year-on-year, with actual foreign investment of US$2.265 billion, a decrease of 17.38% year-on-year, accounting for 19.59% of the total in the province. There were 38 new Sino-foreign cooperative enterprises, an increase of 11.11% year-on-year, with actual foreign investment of US$697 million, an increase of 7.09% year-on-year, accounting for 6.03% of the total in the province. Foreign investment in the equity joint venture was US$1.292 billion, an increase of 3.15% year-on-year, accounting for 11.17% of the total in the province.

Looking at the industry structure of FDI, foreign investment in Hunan Province is mainly concentrated in the secondary industry, especially in the manufacturing industry. The tertiary industry follows, and it is increasing year by year, while the primary industry is the least.

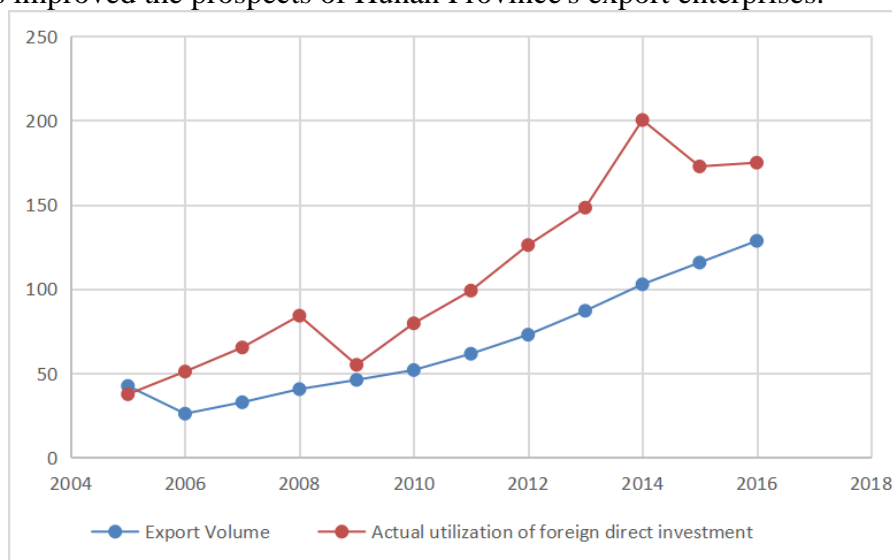Data Source: Hunan Statistical Information Network, http://www.hntj.gov.cn

Figure 3: Distribution of Foreign Direct Investment Industries in Hunan Province in 2015 and 2016

From Figure 3, we can see the following content. An analysis of the distribution of foreign investment in the industrial sector of Hunan Province in the past two years shows that the actual utilization of foreign direct investment in Hunan Province in 2016 reached 12.85 billion US dollars, an increase of 11.1% compared with the previous year. The foreign direct investment of the primary industry was 620 million US dollars, down 0.4%, and the foreign direct investment of the secondary industry in 2016 reached 6.86 billion US dollars, down 4% compared with 7.14 billion US dollars in 2015. The third industry was 537 million US dollars in 2016 and 379 million US dollars in 2015, an increase of 41.5%, the fastest growing rate. The increasing foreign investment in the third industry of Hunan Province will be conducive to transforming the economic development mode and improving the industrial structure.

2.3. The Relationship between Export Trade and FDI in Hunan Province

FDI in Hunan Province mainly promotes the growth of export trade through three channels. First, FDI promotes the growth of exports through technology transfer and its spillover effects. Foreign direct investment brings in advanced technologies and management experiences. Hunan Province uses the new technologies brought in by foreign direct investment to transform technical equipment,

making products more updated and improving the international competitiveness of exported products, thus expanding the scale of exports. Second, FDI promotes the growth of export trade through the deepening of division of labor effects. Opening up and absorbing FDI has enabled Hunan Province to enter the international division of labor system, thus optimizing the export structure. Third, FDI promotes the growth of export trade through the spillover effect of market entry. Foreign direct investment has enabled Hunan Province enterprises to export products to other countries' markets, which has brought convenience and reduced trade barriers. Foreign direct investment has improved the prospects of Hunan Province's export enterprises.

Data Source: Hunan Statistical Information Network, http://www.hntj.gov.cn

Figure 4: Exports and Actual Utilization of FDI in Hunan Province from 2000 to 2015 (in billions of US dollars)

From Figure 4, we can see the following content, it can be seen that the growth trend of export value of Hunan Province is roughly the same as that of foreign direct investment actually utilized. The increase was basically the same from 2000 to 2008, and the two lines are parallel. In 2008-2010, FDI continued to show a growth trend and the development momentum was good, while the export value gradually decreased after 2008, and dropped to a new low in 2009. In 2009, the export value rebounded and showed a gradual growth trend. In 2010-2015, FDI continued to grow at a faster rate, and export value grew exponentially after 2010. In 2015, the export value decreased to 17.267 billion US dollars, down 2.9% from the previous year. Therefore, the growth trend of foreign direct investment is roughly the same as that of export value, with deviations in some years, which shows that foreign direct investment has a certain lag effect on export trade.

3. An Empirical Analysis of the Relationship between Export Trade and FDI in Hunan Province

Analysis of the relationship between export trade and foreign direct investment from Hunan Province shows that there is a certain correlation between the two, but further clarification of the relationship between the two needs to be done through empirical analysis, using unit root test, cointegration analysis, and error correction test to draw conclusions.

3.1. Data and Variables

In order to make the results more representative, the export volume and foreign direct investment

in Hunan Province from 2005 to 2016 were selected, create Table 4 and the data were mainly from Hunan Statistical Yearbook, Hunan Statistical Bulletin and China Statistical Yearbook. Foreign direct investment as an explanatory variable is represented by X, while export volume as an explained variable is represented by Y. Eviews 5 software was used as a tool to qualitatively analyze the export and foreign direct investment in Hunan Province.

Table 4: Variable Sample Data (Unit: Billion US Dollars)

Year	Actual utilization of foreign direct investment.	Export volume
2005	42.4	37.47
2006	25.93	50.94
2007	32.71	65.23
2008	40.5	84.1
2009	45.98	54.92
2010	51.84	79.55
2011	61.5	98.97
2012	72.8	126
2013	87	148.2
2014	102.7	200.23
2015	115.6	172.67
2016	128.5	174.89

Data Source: Hunan Statistical Information Network, http://www.hntj.gov.cn

3.2. Stability Test

In order to avoid spurious regression, it is necessary to test the stationarity of the FDI and export trade sequences, as both are time series data. The results of the stationarity test for FDI are as follows: $lnFDI = Log(FDI)$

Null Hypothesis: $D(x,2)$ has a unit root
Exogenous: Constant
Lag Length: 2(Fixed)

Table 5: The stationarity test of the FDI

			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-2.357669	0.1730
Test critical values		1% level	-4.200056	
		5% level	-3.175352	
		10% level	-2.728985	

*Mackinnon (1996) one-sided p-values

According to the Table 5 test results, the critical values of the unit root test at the 1%, 5% and 10% significance levels are -4.000056, -3.175352 and -2.728985 respectively, and the t statistic value is -2.357669, which is greater than the corresponding critical value, indicating that the FDI sequence has a unit root and is a non-stationary sequence.

In order to obtain the single-index stage of FDI, take the logarithm of FDI, i.e. $lnFDI = Log(FDI)$, thus obtaining the estimated results as follows:

Null Hypothesis: $D(LNX,2)$ has a unit root
Exogenous: Constant

Lag Length: 2(*Fixed*)

Table 6: Single whole of FDI

			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.293618	0.0004	
Test critical values	1% level	-4.121990		
	5% level	-3.144920		
	10% level	-2.713751		

*Mackinnon (1996) one-sided p-values

From the Table 6 test results, it can be seen that at the significance levels of 1%, 5%, and 10%, the critical values of the unit root test are -4.121990, -3.144920, and -2.713751, respectively, and the value of the t-test statistic is -6.293618, which is less than the critical value, indicating that the difference sequence of lnFDI does not have a unit root and is a stationary sequence. That is, the lnFDI sequence is second-order integrated.

The same method can be used to test the stability of exports. Taking the logarithm of exports, i.e. $Lny = \log(y)$, the test results are as follows:

Null Hypothesis: $D(LNY, 2)$ has a unit root

Exogenous: Constant

Lag Length: 2(*Fixed*)

Table 7: The stability of the mouth trade

			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.127708	0.0003	
Test critical values	1% level	-4.057910		
	5% level	-3.119910		
	10% level	-2.701103		

*Mackinnon (1996) one-sided p-values

From the Table 7 test results, the difference sequence of the logarithm of the export volume does not have a unit root, is a stationary sequence, and is also a second-order single integer. After taking the logarithm of FDI and export volume, both of them meet the prerequisite conditions for cointegration test, and further cointegration test can be done.

3.3. Co-integration Test

To analyze whether there is a cointegration relationship between lnx and lny, with lnx as the explanatory variable and lny as the explained variable, a regression between the two variables must first be done and then the stationarity of the regression residuals must be tested. The OLS regression method is used to estimate the regression model as follows:

Dependent Variable: LNY

Method: Least Squares

Date: 11/29/16 Time: 22:39

Sample (adjusted): 2000 2015

Included observations: 16

Table 8: OLS regression

Variable	Coefficiet	Std.Error	T-Statistic	Prob
C	0.904136	0.167428	5.400140	0.0001
LNX	0.906030	0.047001	19.27702	0.0000
R-squared	0.963693	Mean dependent var		4.030156
Adjusted R-squared	0.961100	S.D.dependent var		0.844861
S.E.of regression	0.166633	Akaike info criterion		-0.629580
Sum squared resid	0.388731	Schwarz criterion		-0.533006
Log likelihood	7.036637	F-Statistic		371.6037
Durbin-Watson stat	1.905871	Prob(F-statistic)		0.000000

The estimated regression model is

$$Lny_t = 0.904136 + 0.906030 lnx_t + e_t$$

$$t = (5.400140)(19.27702)$$

$$R^2 = 0.963693 \quad DW = 1.905871 \tag{1}$$

From the Table 8 test results, in order to test the stationarity of the regression residuals, a unit root test was conducted on the residual sequence obtained from the OLS regression, and the estimation results were as follows:

Null Hypothesis: ET has a unit root
Exogenous: Constant
Lag Length: $0(Fixed)$

Table 9: Unit root test

			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-3.819815	0.0009
Test critical values		1% level	-2.728252	
		5% level	-1.966270	
		10%level	-1.605026	

*Mackinnon (1996) one-sided p-values

From the Table 9 test results, at the significant levels of 1%, 5%, and 10%, the t-statistic value of -3.819815 is less than the corresponding critical value, thus it can be concluded that the residual sequence does not have a unit root and is a stationary sequence, that is, there is a cointegration relationship between lnx and lny. The cointegration relationship between lnx and lny indicates that there is a long-term equilibrium relationship between the two. However, in the short term, there may be an imbalance. In order to enhance the accuracy of the model, a error correction model can be established to link the short-term behavior of lny with the long-term changes. The error correction model is as follows: $\Delta \ln y_t = \alpha + \beta \Delta \ln x_t + \gamma e_{t-1} + \varepsilon_t$

Differential sequence:

$$D\ln y_t = \Delta \ln y_t = \ln y_t - \ln y_{t-1} \tag{2}$$

$$D\ln x_t = \Delta \ln x_t = \ln x_t - \ln x_{t-1} \tag{3}$$

The estimated regression model with $D\ln e_{t-1} y_t$ as the dependent variable and $D\ln x_t$ and e_{t-1} as the explanatory variables is as follows:

Dependent Variable: *LNY*1

Method: Least Squares
Date: 11/30/16 Time: 12:04
Sample (adjusted): 2000 2015
Included observations: 14 after adjustments

Table 10: Regression model

Variable	Coefficiet	Std.Error	T-Statistic	Prob
C	0.154032	0.127940	1.203936	0.2539
LNX	0.184519	0.597118	0.141544	0.8900
ECM	-0.309123	0.314995	-0.981360	0.3475
R-squared	0.480528	Mean dependent var		0.163391
Adjusted R-squared	-0.086648	S.D.dependent var		0.217216
S.E.of regression	0.226434	Akaike info criterion		0.054679
Sum squared resid	0.563994	Schwarz criterion		0.191620
Log likelihood	2.617248	F-Statistic		0.481696
Durbin-Watson stat	1.957025	Prob(F-statistic)		0.630175

The results of the final error correction model are:

$$\Delta \ln y_t = 0.154032 + 0.184519_t - 0.309123e_{t-1}$$

$$t = (1.203936)(0.141544)(-0.981360)$$

$$R^2 = 0.480528 \, DW = 1.957025 \tag{4}$$

From the Table 10 test results, the above results show that the change of $\ln y$ is not only dependent on the change of $\ln x$, but also on the deviation of $\ln y$ from the equilibrium level in the previous year. The coefficient of the estimated error term -0.309123 reflects the correction for the deviation, the greater the deviation from the previous year, the greater the correction this year. The estimated coefficient of $\ln x_t$ is 0.184519, which indicates that for every one percentage point increase in $\ln x$, $\ln x$ will increase by 0.184519 percentage points. The coefficient of determination $R^2 = 0.480528$ indicates that the correction model fits the sample data well as a whole.

4. Conclusion

Through the co-integration test, it can be seen that the coefficient of $\ln x_t$ is positive, which is equal to 0.184519, indicating that there is a positive correlation between foreign direct investment and the total export of Hunan province, that is, foreign direct investment has a promoting effect on the export of Hunan province. The inflow of FDI has boosted the development of export trade. Therefore, Hunan province should provide policy support for the introduction of foreign capital, so that the export-oriented economy of Hunan province develops sustainably and healthily.

The regression results show that there is a unique co-integration relationship between export and foreign direct investment in Hunan province, and the economic significance indicates a long-term dynamic equilibrium relationship between export and FDI. Export is affected by foreign direct investment, that is, the growth of foreign direct investment, export will be affected to a certain extent, but this impact has a lag effect, which is reflected in the growth of foreign direct investment in this year, while export may increase in the next year.

It can be seen from the error correction model that in the short term, the export trade and foreign direct investment will deviate from their long-term equilibrium relationship, but this short-term deviation will be adjusted to the long-term equilibrium. It can be seen from the regression results

that the correction degree of short-term deviation to long-term equilibrium adjustment to the unbalanced deviation of the previous year is 9.81% every year. It can be seen that the scale of foreign direct investment in Hunan province is small and the quality is not very high.

However, in the long run, the foreign direct investment in Hunan province has driven the export trade. Expanding investment attraction in Hunan province is of great significance to the growth of export trade in Hunan province. But so far, Hunan province still has some shortcomings in the introduction of foreign direct investment. On the macro aspect, it is reflected that the cooperation has not yet been advantages with many other developing countries, and the investment share of high-tech industries in foreign-invested industries is relatively small. In the micro aspect, the foreign direct investment in Hunan province is mainly reflected in the unclear development strategic planning and the lack of industrial supporting facilities.

4.1 Suggestions on the Coordinated Development of Export Trade and FDI in Hunan Province

4.1.1 Steady Export Growth, Optimizing Industrial Structure, and Enhancing Corporate Competitiveness

Hunan Province should give policy preferences to high-tech and electromechanical industries, and provide stable export support for advantageous products to ensure market share. As one of Hunan Province's advantageous export industries, agricultural products should continuously improve the market circulation system and actively expand agricultural product exports. In order to improve the competitiveness of enterprises in Hunan Province, it is necessary to increase the value-added of products, increase investment in product research and development, keep up with the forefront of industry technology development, carry out technological innovation on products, and improve the quality and grade of exported products. Pay attention to the scientific and technological content of exported products, so that the primary products with low export value-added can be transformed into industrial finished products with high export value-added, so as to promote the upgrading of industrial structure.

4.1.2 Deepen Cooperation, Expand Opening up, and Enhance Utilization of Foreign Capital

Foreign direct investment has a promoting effect on export trade. Hunan Province should increase its reform efforts to promote foreign investment and create a good environment for the development of transnational companies in Hunan Province. First, new policies should be formulated to stabilize foreign investment, such as further creating a stable and transparent policy environment, encouraging transnational companies to set up functional institutions such as research and development centers, procurement centers, and financial management centers in Hunan Province. Second, foreign-invested enterprises should be encouraged to cooperate in various forms, innovate the use of foreign investment, and encourage and guide foreign venture capital institutions and venture capital institutions in the province to increase cooperation and promote the orderly opening up of the capital market. Third, the investment strategy should be shifted to the introduction of funds and technologies from developed countries. Make full use of the technology spillover effect of foreign investment to promote the technological level of enterprises and improve the competitiveness of their export products in the international market.

4.1.3 Establish and Improve the Foreign Trade Mechanism to Promote the Facilitation of Investment and Trade

Hunan Province should earnestly implement and carry out all policies and measures related to

foreign economic and trade, increase the development of new markets on the basis of existing international markets, and strengthen the export support for enterprises, especially small and medium-sized enterprises. In terms of export trade, accelerate the construction of export trade ports and improve the efficiency of customs clearance. Improve the management of foreign exchange methods and means, so as to improve the speed of capital turnover. Hunan Province should also improve the pre-emptive system for trade frictions, strengthen the establishment of foreign investors' complaint, mediation and arbitration mechanisms, so as to make foreign investors full of confidence in investment.

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