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# The foreign trade competitiveness research of Korea

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# ABSTRACT

This article selects four first-level indicators, the number of foreign trade growth, the quality of foreign trade growth, foreign trade growth benefits, the potential of foreign trade growth, and sixteen affiliated second-level indicators, selects 1995-2011 year Korea's foreign trade data of IMD, uses SPSS statistical analysis software to conduct a factor analysis on trade competitiveness of Korean. Finally, we get the four main factors influencing the Korea's foreign trade exports, the growth of exports, export business services, the growth of business services. It is visible that the export of goods and services can ultimately reflect the trade competitiveness of a country. Only to advance the export capacity preferentially, can we enhance the international trade competitiveness.

# **KEYWORDS**

Trade competitiveness; Factor analysis; Korea.

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# INDICATORSSELECTION AND DATA SOURCES OF FOREIGN TRADE COMPETITIVENESS

The foreign trade competitiveness, is the ability of a country or an area to participate in international competition and the international division in the form of product output, it reflects the status and potential of economic development of a country or an area during a certain period of time. It has an important effect and significance for the measurement and evaluation of the comprehensive competitiveness of a country<sup>[1]</sup>.

This paper refers the competitiveness evaluation system and data inIMD world competitiveness yearbook, selects four first-level indicators, the number of foreign trade growth, the quality of foreign trade growth, the benefits of foreign trade growth, the potential of foreign trade growth, and sixteen affiliated second-level indicators, finally, it constructs the foreign trade competitiveness evaluation system.

TABLE 1: Trade competitiveness evaluation system

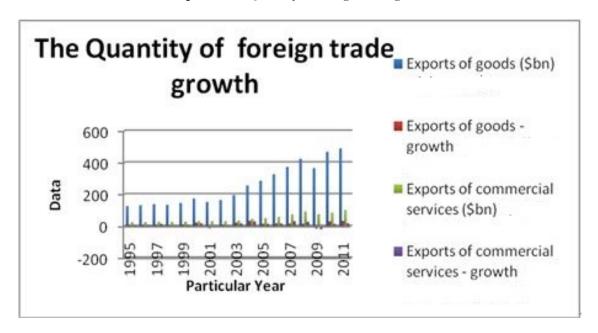
	1.Exports of goods		9.The contribution of GDP
Analysis of the Quantity of foreign trade growth	<ul><li>2.The growth Exports of good</li><li>3,Exports of business services</li><li>4.The growth of exports of business services</li><li>5.Terms of trade index</li></ul>	Analysis of foreign trade growth benefits	10.Comprehensive productivity 11.Exportindustrial structure 12.Foreign direct investment 13.Population
Analysis of the quality of	6.Trade balance 7.The current account	Analysis of foreign trade	14.Trade GDP ratio
foreign trade growth	balance 8.Service trade balance	growth potential	15.Per capita GDP  15.Infrastructure configuration

# AN EMPIRICAL ANALYSIS OF THE SOUTH KOREAN TRADE COMPETITIVENESS

An empirical analysis of the South Korean trade competitiveness

The Quantity of foreign trade growth

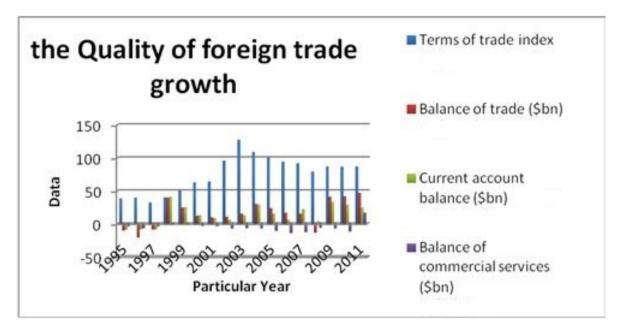
Graph 1: The Quantity of foreign trade growth



The goods exports and business services exports run all the way from 1995 to 2011, which fall down a little in 2009 and 2011, and ushered in a new round of growth in  $2010^{[2]}$ .

The quality of foreign trade growth

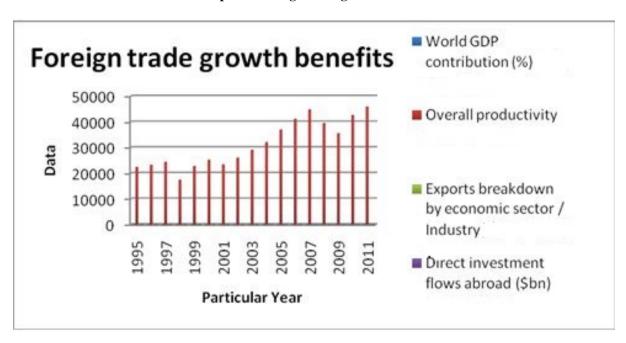
Graph 2: The Quantity of foreign trade growth



The Index terms of trade of Korea hit the bottom, and the lowest data appears in 2003. The trade balance is negative, that is to say, there are trade deficit in foreign trade, namely, imports is more than exports, after 1998, the situation of imports was more than exports in Korea only appears in 2008. However, trade in services has been negative growth, until 2011 to reverse.

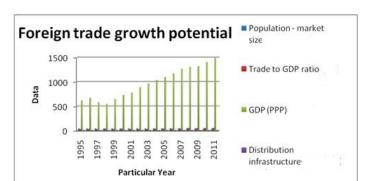
Foreign trade growth benefits

**Graph 3: Foreign trade growth benefits** 



From Graph3, the overall growth trend of Korea comprehensive productivity keeps increasing, although dropped slightly in 2001, but the overall growth trend is obvious, affected by the financial tsunami in 2008, the Figure falls a little in 2007 and 2009 compared to the data before. Comprehensive productivity keeps increasing, further emphasizes the important role of human capital and technology in the trade in the production, but also Korea also confirms the position as a powerhouse in the foreign trade of electronic products.

# Foreign trade growth potential



**Graph 4 : Foreign trade growth potential** 

GDP per capita is an important indicator to measure a country's foreign trade growth potential, the increase of GDP of average per capita quantity, can fully reflects the economic strength of the country, from the Asian financial crisis, Korea show "East Asian Tigers" impressive strength in the economic recovery process. GDP per capita has maintained strong growth, even in the face of the global financial crisis in 2008, the economic growth momentum remains strong.

# Comprehensive evaluation of the Korea trade competitiveness

According to the trade competitiveness evaluation system and data, useSPSS statistical analysis software to conduct the factor analysis and dimension reduction. Do linear combination of the four first-class indexes and sixteen second-class indexes which affect the trade competitiveness, find out a few factors representing the sixteen variables, for further study on the influence of trade competitiveness. sixteen variables were numbered to 1-16. The following is the results of factor analysis. Because the page is limited, some results are shown in the appendix.

# KMO test and Bartlett test of sphericity

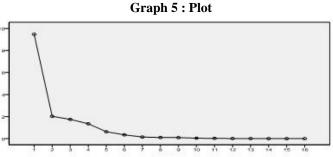
TABLE 2: KMO test and Bartlett test of sphericity

Sampling enough degree of Kaiser-Meyer- Olkin metric605				
The sphericity test Bartlett	Approximate chi square	443.148		
	df	120		
	Sig.	.000		

TABLE 2 is the results of KMO test and Bartlett test of sphericity, the KMO test was used for partial correlation coefficient test between variables, partial correlation coefficient is to calculate the correlation coefficient between the variables in eliminating the influence of other variables. If the KMO is greater than 0.5, then it is allowed to conduct the factor analysis, from the TABLE 2, we can see that the KMO test results is 0.65, which is to say, it is allowed to conduct factor analysis on the sixteen indexes in the system.

# The main components and extraction factor results

(1)Plot



Graph5 is a plot that is scattered by eigenvalue arrangement diagram, the ordinate is the eigenvalue, the abscissa is the factors. In addition to the first four visible outside, other features of principal component factor roots are very low, not representative.

The main analysis results

**TABLE 3: The main components** 

Components -	Initial eigenvalue			Extraction of square and load			
	Total	The percent of variance%	Cumulative percent%	Total	The percent of variance%	Cumulative percent%	
1	9.473	59.206	59.206	9.473	59.206	59.206	
2	2.027	12.668	71.875	2.027	12.668	71.875	
3	1.746	10.911	82.786	1.746	10.911	82.786	
4	1.350	8.439	91.225	1.350	8.439	91.225	
5	.627	3.921	95.145				
6	.344	2.150	97.296				
7	.149	.933	98.229				
8	.102	.640	98.869				
9	.094	.590	99.458				
10	.040	.253	99.711				
11	.026	.164	99.875				
12	.012	.076	99.951				
13	.006	.037	99.988				
14	.002	.010	99.998				
15	.000	.001	100.000				
16	7.000E- 5	.000	100.000				

TABLE 3 lists all the principal components and the characteristic value, according to the extraction conditions: the eigenvalue is greater than 1, select four factors. According to the factor score covariance matrix (TABLE 4), the four factors related degree is 0, so they are not related to each other, factor analysis was established.

**TABLE 4: Factor score covariance matrix** 

Components	1	2	3	4
1	1.000	.000	.000	.000
2	.000	1.000	.000	.000
3	.000	.000	1.000	.000
4	.000	.000	.000	1.000

To sum up, in the sixteen index of trade competitiveness, four of which are the main representative, these indicators are: 1.exports of goods; 2.export growth; 3.export of commercial services; 4.export of commercial services growth. A country's trade competitivenessis ultimately reflected by exports of goods and services, to promote international trade competitiveness, need to give priority to enhance export capacity.

# THE IMPLICATIONS AND RECOMMENDATIONS TO CHINA

# The implications to China

Through the analysis of the Korea trade data, exports are the main factors in the impact of trade competitiveness of the variables. To enhance the export capacity, means enhance a country's foreign trade competitive power fundamentally<sup>[3]</sup>.

At the same time, raw material affects a country's commodity production and trade, For the relative lack of natural resources or some economies which is relatively lack of resources, foreign trade process to ensure a stable, adequate supply of raw materials. Such as Korea, although the shipbuilding industry and iron and steel, automobile industry has strong international competitiveness, but the lack of natural resources, iron ore, is heavily dependent on oil imports. So an economy should actively explore, cultivate new trade growth points, try to get rid of a particular resource dependent demand<sup>[4]</sup>.

To create superior products, also has practical significance for promoting the trade competitiveness in the international market. The shipbuilding industry is the absolute leader in Korea, the ship exports every year brings a lot of foreign trade income.

### The suggestions to enhance trade competitiveness of China

# Cultivate new trade growth points to build your own advantage products

Face to the increasingly fierce competition, the advantage of quantities can not have long-term development potential, only to increase efforts to develop their own advantages products, in order to change the "China manufacturing" low-end trade competition, culture science and technology, quality products in foreign trade.

# Make rational planning of strategic resources

The trade and economic development cannot be without resources, especially the national strategic resources which is important tostability of the state. In the development process of foreign trade, ensure there are enough resource reserves, at the same time, possiblyminimize dependence on foreign trade for resources, reduce the adverse factors restricting foreign trade fundamentally

# Optimize foreign trade import and export structure

There are many uncertain factors in the current international economic environment, the foreign trade of our country should ensure the export keeps growing, at the same time, appropriately increase imports, further adjust the balance of trade balance, reduce trade friction, and pursuit "win-win" situation at last<sup>[5]</sup>.

# Further deepen regional cooperation

Mentioned in the preceding paragraph, there has a huge market and potential under the "ASEAN 10+3" framework. In the face of the world financial crisis, the European debt crisis, foreign trade growth driven by huge market of emerging and developing countries is even more powerful. Strengthen trade cooperation with East Asia, Southeast Asia, can effectively change the geopolitical advantage into a trade advantage.

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