The Structure of China's Foreign Trade Imbalances and Coping Strategies

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Abstract

The imbalance in the structure of foreign trade, including its import trade and export trade with its main trade imbalances, but also including the development of foreign trade and the size of the dependence on foreign trade imbalances. It should be taken to actively expand domestic demand and further optimize the structure of import and export commodities, the efforts to expand trade in services, to promote the transformation and upgrading of processing trade, properly handle trade frictions and other measures to improve the structure of foreign trade imbalances and China's foreign trade structure of adjustment strategies.

Keywords: Structure of foreign trade; Imbalance; Model; Countermeasures

I. Introduction

In recent years, with the deepening of the opening to the outside world, especially since China's accession to the WTO, from the scale and structure, China has got rapid development, and become the important trading power. However, the overall development level is not high, many economic problems such as structure are relatively extruded. In view of the situation of China's foreign trade structure, some scholars propose many perspectives. Yin (2003) [1] believed China's export trade structure existed the uneven geographical distribution of export products, export market was too concentrated, and level of structure is low. The way of excessive dependence on export processing trade, export more uncertainty factors in the external environment, such as adverse impact on the transformation of economic structure; Zhang (2003) [2] analyzed by studying from foreign trade dependence, different properties between enterprises of import and export trade in China's foreign trade of structure imbalance, and put forward some measures to solve the unbalanced structure of China's foreign trade. Chen (2007)[3] though the empirical analysis showed that after the reform and opening up, China had been expanding its export, and export dependence increased significantly, trade commodity structure obtained improve quickly. But at the same time Chinese trade commodity in structure had changed, there were many contradictions and problems in such as the export commodity structure still present in low level, export structure changed by the low benefits and so on.

So the promotion of the competitiveness of Chinese foreign trade in structure rationalization is a real problem; Cui(2009)[4] used the perspective of financial crisis in creating opportunities for us, that China should vigorously transform traditional industries, give up high pollutions, high energy consumptions, low value-added products, at the same time, actively foster capital intensive, intensive and high value-added sunrise industries, and actively explore the international market to promote China's high-tech products exports. Zhang (2015) [5] from the perspective of the economics analyzed the factors of production in flow and the operating mechanism of economic globalization, international, and factors. Wang (2015)[6]analyzed the elements of Chinese-Japanese economic agglomeration and economic growth, pointed out that China and Japan were in pursuing economy, and this characteristic was showed through export-oriented trade strategies, which were relatively scarce resources in agglomeration effect and economic growth. He found that when analyzed the institutional policies, interest rate and exchange rate should be the priority in adjustment of price variables, unfavorable to the adjustment of economic structure in the short term, at the same time can make resources obtain effective configuration. On the basis of the above research results, this paper tries to find the development of foreign trade status for China's foreign trade structure through analysis and empirical research, thus put forward some of China's foreign trade structure of adjustment strategies.

II. The structure of imbalance status in China's foreign trade

A. Imbalances of total import and export trade

Total import and export trade in maintaining a rapid growth in 2012, meanwhile, the annual imports and exports volume was $ 3.87 trillion, and an increase of 6.2 percent over the previous year; exports of $ 2.05 trillion, an increase of 7.9 percent; imports of $ 1.82 trillion, an increase of 4.3 percent. The trade surplus was $ 231.1 billion, a decrease of $ 76.2 billion over the previous year. To compare Chinese trade in recent years, we intuitively draw the following figure:

Figure 1: total imports and exports in comparison of china in 2002-2012 (unit: 100 million U.S. Dollars)

Data sources: drawn by the bureau of statistics of china and the wto relevant statistics. As can be seen from Figure 1, the overall comparison from 2002 to 2012, China's exports has a larger volume than imports in the situation of trade surplus every year.

B. Unbalanced trade structure

In the total imports and exports of 2012, the imports and exports of general trade is $ 2.01 trillion, an increase of 4.43 percent, accounting for 51.98 percent of the total imports and exports volume increased by 6.2 percentage points over the previous year; imports and exports of processing trade of $ 1.34 trillion, an increase of 2.97 percent. Exports in general trade exports of $988.0 billion, an increase of 7.7 percent; processing trade exports of $ 862.8 billion, an increase of 3.3 percent. Imports in general trade of $1.02 trillion, an increase of 1.4 percent; processing trade imports of $ 481.2 billion, an increase of 2.4 percent.

Table 1: comparison china's general trade with processing trade in nearly 12 years

(Unit: 100 million U.S. Dollars)

Years	General Trade				Processing Trade			
	Exports	Increase over the previous year (percent)	Imports	Increase over the previous year (percent)	Exports	Increase over the previous year (percent)	Imports	Increase over the previous year (percent)
2001	1118.81	/	1134.6	/	1474.3	/	939.74	/
2002	1361.87	21.72	1291.1	13.80	1799.3	22.04	1222	30.04
2003	1820.34	33.66	1876.5	45.34	2418.5	34.42	1629	33.31
2004	2436.06	33.82	2481.5	32.24	3279.7	35.61	2216.9	36.09
2005	3150.63	29.33	2796.3	12.69	4164.7	26.98	2740.1	23.60
2006	4162.00	32.10	3330.7	19.11	5103.6	22.54	3214.7	17.32
2007	5384.57	29.37	4286.1	28.68	6175.6	21.01	3684.8	14.62
2008	6628.62	23.10	5720.9	33.48	6751.1	9.32	3783.8	2.69
2009	5298.00	-20.07	5339.0	-6.68	5870.0	-13.05	3223.0	-14.82
2010	7207.00	36.03	7680.0	43.85	7403.0	26.12	4174.0	29.51
2011	9171.00	27.25	10075.0	31.18	8354.0	12.85	4698.0	12.55
2012	9880.00	7.73	10218.0	1.42	8628.0	3.28	4812	2.43

C. Trade degree of dependence and imbalance in the development of foreign trade

In the late 2012, China's foreign exchange reserves amounted to $3.12 trillion had become the superpower of foreign exchange reserves. The huge foreign exchange in reserves forms a large number of China's foreign trade surplus of trade, which will naturally cause trade frictions. As a result, the imbalance status of China's foreign trade structure has emerged. Trade degree of dependence of a country or region's total foreign trade in a certain period of time is equivalent to the proportion of the country's gross national product, it is a measure of a basic indicator of the openness in a country, but also reflects the ruler of a country's degree of contact with the international market. The average of the world's dependence on foreign trade in 2012 was nearly 45 percent, contrast the situation of China, as shown below: 2006 had reached 65 percent, and 46 percent in 2012.

Table 2: Trade degree of dependence on china in recent decades

Years	The total import and export trade (one hundred million yuan)	GNP (one hundred million yuan)	Trade degree of dependence percent (the total import and export volume/GNP)
2002	51378.2	119095.7	43.14
2003	70483.5	135174.0	52.14
2004	95539.1	159586.8	59.87
2005	116921.8	183618.5	63.68
2006	140974.0	215883.9	65.30
2007	166863.7	266411.0	62.63
2008	179921.5	315274.7	57.07
2009	150648.1	341401.5	44.13
2010	201722.1	403260.0	50.02
2011	236736.5	471564.0	50.20
2012	239741.6	519322.0	46.16

Data sources: according to the national bureau of statistics data

Seen from China's dependence on foreign trade, and compared with the same period in the world's average level of excessive growth, it is more than the world average. Generally, more economically developed a country, smaller range of changes in the degree of dependence on foreign trade. The high dependence on foreign trade not only impacts the development of related industries in China, and will further increase the difficulty of China's macro-economic regulation and control.

D. The imbalance of trade between the growth in the import and export trade of industries

(I) Goods trade In 2012, the annual import and export of goods amounted to $ 3.64 trillion, was an increase of 22.5 percent over the previous year, which exports $ 1.90 trillion, an increase of 20.3 percent; imports of $ 1.74 trillion, an increase of 24.9 percent, the trade balance (exports minus imports) of $155.1 billion. General trade increased by 27.3 percent; processing trade grew by 12.9 percent. To some extent this reflects the structural optimization trend of China's trade in goods; there is still a high proportion of the exports of primary products. (II)Service trade The current status of China's service trade in a deficit state in general, which only is a few sectors such as tourism, construction services, computer and information services in a surplus position in the vast majority of the industry are in a trade deficit position. The development of China's service trade and the market were too concentrated and uneven, mainly in tourism, transportation, and other business services together accounted for 65 percent of the total trade in services revenue and expenditure in 2012, its balance of payments, transportation, storage and postal industry grew 42.2 percent, leasing and business services, an increase of 17.6 percent. Full year in non-financial overseas is direct investment of $ 60.1 billion, which is an increase of 1.8 percent over the previous year. This is due to the pattern of the development of trade in services is not enough diversification, uneven distribution of projects and areas of trade in service transactions, the formation of a low overall level in China's service trade of development, the short term is difficult to achieve a breakthrough.

(III)Three major industries

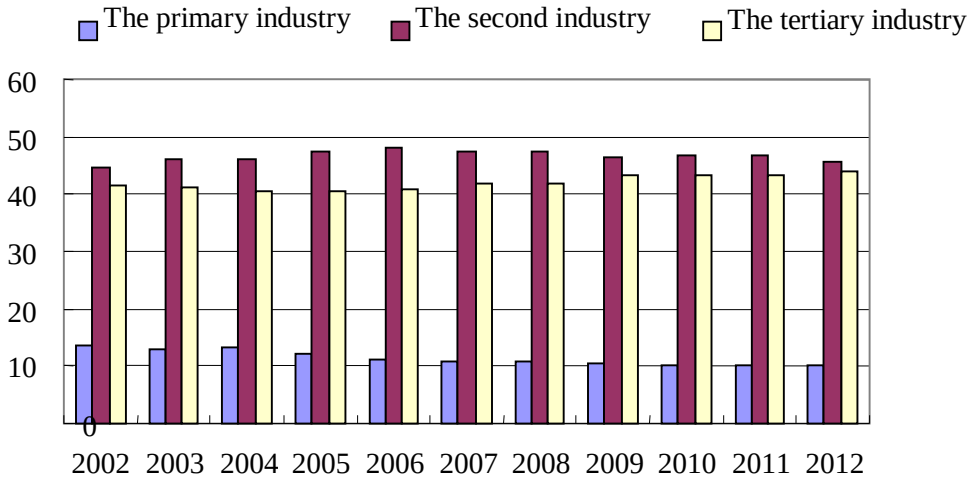

Figure 2: china's three major industries in comparison（%） Data sources: according to the website of the national bureau of statistics and the ministry of commerce data

The composition of the three major industries in China is the primary industry: agriculture (including farming, forestry, animal husbandry and fishery); the second industry: industry (including mining, manufacturing, power, gas and water production and supply industry, construction); the third industry: in addition to the first, the second industry outside of the other industries. Among them, the first and second industry have shown a declining trend, the third industry has shown an increasing trend. The first industry was 4.77 trillion yuan in 2012, an increase of 4.5 percent; the secondary industry was 22.06 trillion yuan, an increase of 10.6 percent; the tertiary industry was 20.326 trillion yuan, an increase of 8.9 percent. The first industry to the gross domestic product accounted for 10.1 percent, the secondary industry accounted for 46.8 percent, and the tertiary industry accounted for 43.1 percent. The growth of the primary industry, secondary and tertiary industries is relatively faster.

I I I. Factors Affecting China's Foreign Trade Structure

A. Exchange rate changes directly in affecting trade Since July 21, 2005, the central bank has announced the launch of practice based on market supply and demand with reference to a basket of currencies regulation, a managed floating exchange rate in system against the dollars has presented by rising trend. Till December 15, 2012, 1 dollar was equivalent to 6.25 RMB. This transfers to the world of the signal is the national comprehensive strength enhancement, which is beneficial to enhance investors' confidence. The past has been to rely on cheap conquer in new territories is a common image of the majority of Chinese products in the international market, but low-price competition is not only likely lead to trade friction, and product margins are thin, the RMB appreciation will rely solely on the price competitiveness of labor-intensive type enterprises facing greater challenges. Moreover, certain points of view, good value for money should not be the advantage of Chinese goods, but the sorrow of the Chinese enterprises. Competition means we must adjust to shift to non-price competition from price competition, which is the only way for the Chinese enterprises.

Table 3: RM appreciation rates for 12 years

Year	RMB (Yuan)	U.S. dollars	Appreciation rates per thousand
2000	827.84	100	0.0121
2001	827.70	100	0.1691
2002	827.70	100	0.0000
2003	827.70	100	0.0000
2004	827.68	100	0.0242
2005	819.17	100	10.2818
2006	797.18	100	26.8442
2007	760.40	100	46.1376
2008	694.51	100	86.6518
2009	683.10	100	16.4288
2010	676.95	100	9.0031
2011	624.62	100	77.3026
2012	628.55	100	-0.6292

Data sources: drawn according to the chinese statistics yearbook data

B. Concentration of labor-intensive products Generally speaking, if a relatively backward country is using its comparative advantages to participate in international trade, and so that it will not be able to benefit a lot from trade, in order to be able to narrow the gap with developed countries in the long-term growth. For developed countries, due to their comparative advantage in terms of capital and technologies, the more they promote technological progress, the more they can strengthen and take advantage of their comparative advantage, so they may take advantage of the comparative advantages in promoting technological progress that is generally not contradictory. Relative backwardness of the developing countries, the comparative advantages of the general are still be in the natural resources or simple unskilled labor aspects, and therefore make full use of existing comparative advantage may come into conflict with the technological advances. Of the population in a developing country, is very rich in labor resources, labor-intensive products have come to dominate in the structure of import and export trade, capital-intensive products in recent years, with the continuous development of China's economy, the percentage of the import and export trade increased every year. According to the development and changes in the law of trade structure in the developed world, technological progress is the escalation of China's trade structure optimized final choices. International competitive advantages in China's export commodities are mainly from the international competitiveness of labor-intensive industries, technology and capital-intensive products which are still low. Intra-industry trade index can only analyze the trade patterns of the degree of horizontal division of labor, but does not explain the impact of the horizontal division of labor changes in the level of competitive and comparative advantages.

C. The export tax rebate is the lifeline of China's foreign trade for enterprises Since China's accession to the WTO in 2001, Chinese trade strategies began to gradually shift to adjust the direction of the trade structure and balance of trade, especially large-scale adjustment of export tax rebate system in 2006 and 2007respectively, and cancel a number of high energy consumption, high pollution and resource products of export tax rebates, reduces the many easily lead to trade friction, the export tax rebate rate, which would make those low value-added and high pollutions. The lack of competitive products in order to obtain profit has innovative technologies in improving China's export products in the export of high-tech products, and reducing the export of low value-added products.

Iv. Empirical Analysis of the Impact of China's Foreign Trade Structure

A. Establishing the model We assume that the processing trade and RMB affect the import and export structure, so we have established a logarithmic form the model: $\log(y)=\beta 0+\beta 1\log(x1)+\beta 2\log(x2)+u$. Among them: explained variable y = total value of import and export, explanatory variable x1 = processing trade exports, explanatory variable x2= RMB exchange rate, $\beta 0$ = equation intercept, u = effects of other factors.

Table 4: Regression analysis of the variables used in

Years	Total import and export (Unit: hundred million dollars)	Total exports of processing trade (Unit: hundred million dollars)	RMB exchange rate
2002	6207.7	1799.3	8.277
2003	8509.9	2418.5	8.277
2004	11545.5	3279.7	8.277
2005	13231.8	4164.7	8.192
2006	17604.4	5103.6	7.972
2007	21765.8	6175.6	7.604
2008	25632.6	6751.1	6.945
2009	22075.3	5870.0	6.831
2010	29739.9	7403.0	6.770
2011	36421.0	8354.0	6.246
2012	38668.0	8628.0	6.286

Data sources: from 2002 to 2012 in chinese statistical yearbook

B. Results in empirical research and analysis of measurement

(I)The sequence in stationary test In the time series analysis of variables must be smooth, otherwise will produce spurious regression and lead to the conclusion to be null and void, so the time series of economic variables regression analysis is necessary to test its stability, to verify whether the variable has a unit root, such as ADF tests are as follows:

Table 5: Stationary Test of Each Variable

Variables	The critical value（1%）	The critical value（5%）	The critical value（10%）	P-Value
GDP	-2.73	-1.97	-1.61	0.04
X_1	-2.70	-1.96	-1.61	0.01
X_2	-2.69	-1.96	-1.61	0.00

Sequence can be seen from the table, all show the characteristic of smooth, so they may be a co integration relationship, and meet the requirements of for co integration. (II) Co integration test of the model ADF test results show that the variables have stability, and have the requirement of structure co-integration relationship, therefore, further inspection in using Johansen co integration test, the results are as follows:

Table 6: Cointegration Test

	The critical value（1%）	The critical value（5%）	The critical value（10%）	P value	Null hypothesis
（GDP, X_1, X_2）	-3.81	-3.02	-2.65	0.06	Exists cointegration relationship

Using Eviews software in measurement for linear regression analysis, we get the following information:

Table 7: Measurement Result

	β_0	X_1	X_2
Coefficient	3.96	0.93	-1.04
T statistic	5.15	21.08	-4.89
P value	0.00	0.00	0.00
R_2	0.98		
Adjusted R_2	0.97		

Analyzed low-carbon economic growth model (value in parentheses is the standard error):

$$\widehat{\log(y)}=3.959451+0.933040\widehat{\log(x1)}-1.042637\widehat{\log(x2)},\quad n=10$$

Therefore, the regression of equation coefficient in the significance level of 5 percent is significant; On the other hand, R2 = 0.98 illustrates function fitting degree is also very good, so the equation is of practical significance. Through this model we can know, with the degree of processing trade in unceasing deepening, the total import and export volume of foreign trade volume is increased. So, China's trade structure in optimization for China's economic and trade have positive significance.

V. Countermeasures and Suggestions of Optimize the Structure in Foreign Trade

A. Adjustment of China's Foreign Trade in Commodity Structure

(I)Improve the structure of import and export commodities, and improve the export competitiveness of enterprises Commodities are an important foundation of enterprise in survival and development, and in order to improve product quality, enhance the comprehensive competitiveness of export products.

First, labor-intensive industries, on the one hand, continue to expand domestic demand and improve the performance in the domestic market in terms of quantity and quality, to establish a brand name strategies to fully tap the stimulating potential of domestic demand growth in the industry; much more important aspects, to further enhance the industry's core competitiveness, improve the export value-added products, and increase technology renovation, and promote industrial upgrading and enhance its competitiveness in the international market. Meanwhile, continue to consolidate traditional exports, vigorously develop to foster international market demand, high growth, technology advances faster, the material consumption is low, effect of high-tech in industry association export much.

(II)Reduce dependence on foreign trade, so that foreign investments and domestic markets can achieve by expanding domestic demand China is to rely on domestic demand to promote economic growth in the country, to meet the growing demand of the domestic consumer market, is conducive to China's export trade so that exports accounted for an important position in the production of labor-intensive products, in order to achieve balanced trade scale to ease trade pressure in purpose to avoid and to reduce trade friction. However, in the import trade constantly takes into account the domestic market's ability to digest, note that the protection of domestic industries, as well as the support of some important domestic industries, and the introduction of the necessary technologies, so it is important to the absorption and utilization of technology. China's export trade should upgrade export structure and the commodity in structure optimization in the purpose of the science and technology trade. Domestic commodities needs to continue to develop high-tech industries, and look for profits in the higher areas, striving for advantages, and to gain a place in the international trade.

B. The Way of Adjustment in China's Foreign Trade Structure

(I) Changes In Trade Growth Mode, and Solve the Structural Imbalance of Trade Growth

While increasing the number of quality should also simultaneously enhance the export commodities structure in more optimization to further increase exports of high value-added, high-tech and independent product efforts. In the service trade, China's service industry in the world paying attention to speed up the injection of foreign capital and the injection of private capital, the introduction of orderly competition mechanism, break the monopoly, and enhance the innovation capacity of the service industry. As well as external competitiveness, ultimately achieve coordinated development of trade in services and trade in goods imports to meet the needs of the national economy, energy, resources and technology to achieve a basic balance among the level of trade in goods.

(II) Improve the Level of Processing Trade Industry

In order to improve the level of processing trade industry in China, we should take the following measures: one is the country should put out relative macroeconomic regulations and control policies and measures, the growing scale of processing trade shall be controlled, and protect domestic industries by the impact of foreign trade, and reduce friction and support the development of general trade. Second is to increase the added value of processing trade, and to enhance the processing trade of foreign exchange in earning capacity. The last one is to transfer the country of origin, and to reduce the foreign trade frictions. Larger problem for China, the United States and European Union's trade surplus, we can consider that properly transfer to the countries and regions which are lower than the level of economic development in China engaged in labor-intensive processing trade enterprises in China.

(III) Promote Diversification Strategies in the Foreign Trade Market

Promote diversification strategies in the foreign trade market, including the following: first, increase the propaganda of diversified market strategy, and enable enterprises to truly appreciate the importance of this issue to raise the enthusiasm of enterprises, and to explore overseas markets and conscientiousness. Second, take advantage of the tax and other economic levers to encourage enterprises to independently develop the international market, the enterprises in the trade with new markets, for example, can be imposed tariff reductions or other preferential policies. Third, as much as possible for the enterprise, provide the latest information about the international market, and avoid to corporate opportunity lost due to incomplete information which will not dare to take actions.

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