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On the Influence of the Change of Export Tax Rebate Policy on China's Export Trade

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Abstract: *Since 1985, China began to implement the export tax rebate policy, mainly through adjusting the export tax rebate rate of goods to affect its profit rate, thus affecting the export scale of goods, and gradually regard the export tax rebate policy as one of the important measures of macroeconomic adjustment of economic operation, and make adjustments according to the actual situation of economic operation. Firstly, this paper reviews the history of some major adjustments of the export tax rebate policy, collects relevant data, reflects the great changes of China's total export and its commodity structure, makes in-depth analysis and summary of these changes, and finally puts forward relevant suggestions on the problems existing in the export tax rebate system.*

Keywords: *Tax refund policy;Export trade;Commodity structure;Defects and perfection*

1. Introduction

With the gradual development of global economy, trade among countries is very close. Export tax refund (Exemption) refers to the refund of value-added tax and consumption tax paid in the process of domestic production and circulation of export goods. This measure is mainly to balance the domestic tax burden, enhance the competitiveness of export commodities, and improve the export enthusiasm of enterprises, so as to promote export growth, increase national income, promote employment, and improve people's living standards.

It was in 1985 that China formally began to implement the export tax rebate policy. Three years later, the principle of "how much to levy, how much to refund, no refund and complete tax refund" was established. Since 1994, China has officially started the reform of export tax rebate system, which has undergone many major adjustments.

Table 1: Development of export tax rebate policy

2004	Reduce the export tax rebate rate of textiles and clothing.
2005	Reducing and canceling the export tax rebate rate of some "two high and one resource" products by stages and in batches.
2006	Increase the export tax rebate rate of some major technical equipment, it products and high-tech products.
2007	Reduce the export tax rebate rate of some products that are easy to cause trade friction.
2008	Increase the export tax rebate rate for textiles and other labor-intensive and some high-tech and high value-added commodities.
2009	Increase the export tax rebate rate of textiles and clothing.

Data source: collected by the General Administration of Customs of China

2. The Influence of Export Tax Rebate Policy on China's Export

We mainly discuss the impact of export tax rebate policy on export through the impact on export volume and export commodity structure.

2.1. Impact on Exports

With the adjustment of export tax rebate rate, the export tax rebate fluctuates in the same direction,

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which promotes the change of commodity export.The increase or decrease of the tax rebate rate will lead to the increase or decrease of the export volume of some commodities.

Table 2 China's export volume and export rebate 2005-2020 (unit: 100 million yuan)

year	Export volume	Export rebate	year	Export volume	Export rebate
2005	62648.09	4048.94	2013	137131.43	10518.85
2006	77597.89	4877.15	2014	143883.75	11356.46
2007	93627.14	5635.00	2015	141166.83	12867.19
2008	100394.94	5865.93	2016	138419.29	12154.48
2009	82029.69	6486.61	2017	153309.43	13870.37
2010	107022.84	7327.31	2018	164127.81	15913.93
2011	123240.56	9204.75	2019	172373.63	15740.00
2012	129359.25	10428.89	2020	179326.00	14549.00

Data sources: China Statistical Yearbook, China State Administration of Taxation

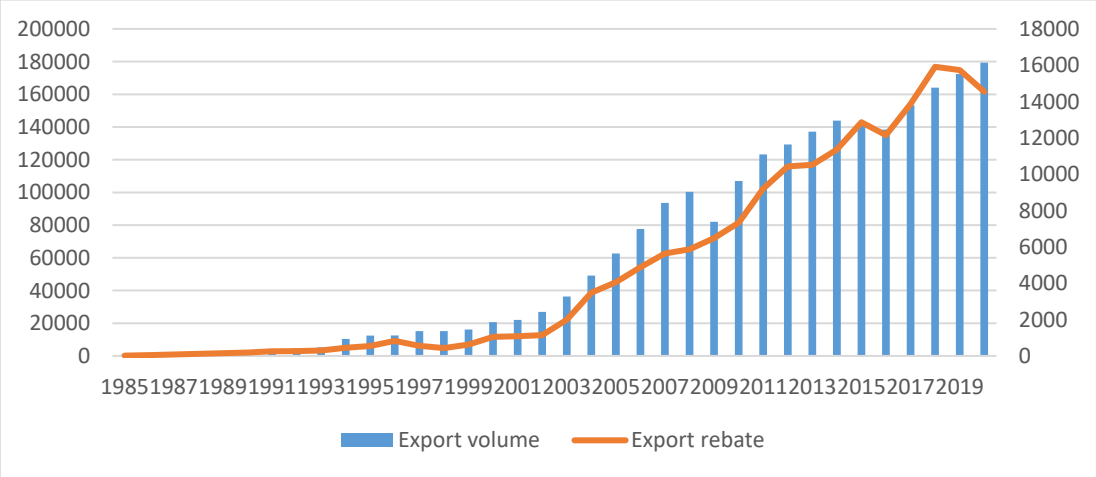

Figure 1 Comparison of export rebate and export volume (1985-2020) (unit: 100 million yuan)

Data sources: China Statistical Yearbook, China State Administration of Taxation

According to table 2 export amount and export rebate data, draw figure 1, from which we can see that there is a significant positive correlation between export rebate and export amount. The following is a statistical analysis of the two.

According to the data in table 2, Eviews is used for calculation. Firstly, variables are defined, y=export amount, x=export rebate; The regression equation is y = a + bx + e, where B is the correlation coefficient, e is the error term, and a is the constant term. The scatter figure 2 and regression analysis Figure 3 are obtained.

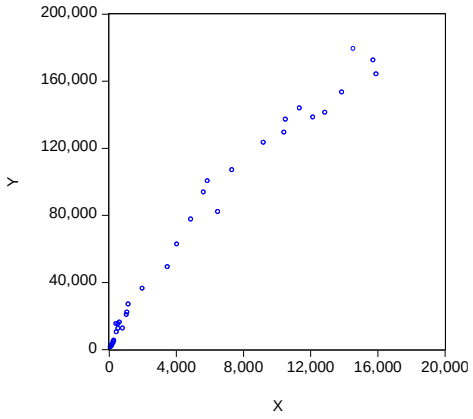

Figure 2 Scatter plot of export rebate and export volume

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Variable	Coefficient	Std. Error	t-Statistic	Prob.
X	11.23295	0.325273	34.53387	0.0000
C	8524.319	2347.859	3.630677	0.0009

R-squared	0.972281	Mean dependent var	62958.57
Adjusted R-squared	0.971466	S.D. dependent var	61806.54
S.E. of regression	10440.45	Akaike info criterion	21.39871
Sum squared resid	3.71E+09	Schwarz criterion	21.48669
Log likelihood	-383.1769	Hannan-Quinn criter.	21.42942
F-statistic	1192.588	Durbin-Watson stat	0.638821
Prob(F-statistic)	0.000000		

Figure 3 Eviews calculation results

As shown in the scatter distribution in figure 2 , we can see that there is a positive correlation between the two, and the export value shows an upward trend with the increase of export rebate.

As shown in figure 3 , a (i.e. C) = 8524.319, B = 11.23295, and the standard errors are 2347.859 and 0.325273 respectively.

So the relationship between export value and export rebate is

$$y = 8524.319 + 11.23295x \quad (1)$$

$$(3.630677)\ (34.53387)$$

From the result data, we can see that the correlation coefficient R2 = 0.972281, the value is close to 1, indicating that the higher the degree of linear dependence between the two variables, the linear relationship is established. F = 1192.588 (F is the ratio of variance and residual error of regression model, the larger f is, the smaller residual error is, and the higher accuracy of simulation is). The results show that F > F0.05, that is, it has passed the F test, which shows that the linear relationship between the export amount and the export rebate in the model is tenable, and the change trend of the two is roughly the same, showing a high degree of correlation. We can conclude that with the increase of export tax rebate, the export volume also shows a strong growth trend. This shows that increasing the export tax rebate rate can promote China's export. It is of positive significance for China to adopt the policy of increasing the export tax rebate rate. There is a close relationship between the export tax rebate policy and the export.

Of course, except for some special circumstances, such as the impact of the US subprime mortgage crisis in 2009, China's export trade in the international market is relatively weak, the trade scale is reduced, and the export volume is also reduced; In 2015, under the impact of the Asian financial crisis, the balance of the international market was broken and the external demand was low, which greatly restricted the development of China's import and export trade; In 2020, influenced by COVID-19, export volume and export tax rebate were affected to varying degrees. This also shows that the export tax rebate policy is an important factor, but not the only one.

2.2. The Impact on China's Export Structure

Export commodity structure refers to the proportion of a country's various export products in the total export volume in a certain period of time, which reflects a country's industrial and agricultural development level, resource status and foreign trade policy indicators. The structural adjustment of export rebate rate can encourage or inhibit the export of products, and then affect the change of export commodity structure. Export commodities include primary products, manufactured goods and a small part of unclassified miscellaneous goods. The following is a comparative analysis of the first two categories.

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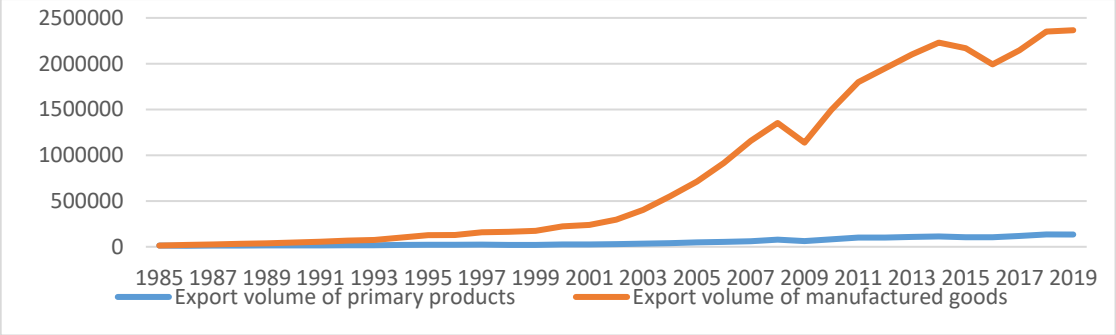

Figure 4 Comparison of export volume of primary products and manufactured products (1985-2019) (Unit: million US dollars)

Data sources: China Statistical Yearbook

It can be seen from figure 4 that the export volume of both shows an increasing trend. The export volume of industrial manufactured goods increases greatly, while that of primary products is far from it. We come to the conclusion that with the continuous development of China's economy and the continuous adjustment of export tax rebate rate, the export volume of China's primary products and manufactured goods trade has generally become a growing trend, but the development speed of manufactured goods is far faster than that of primary products.

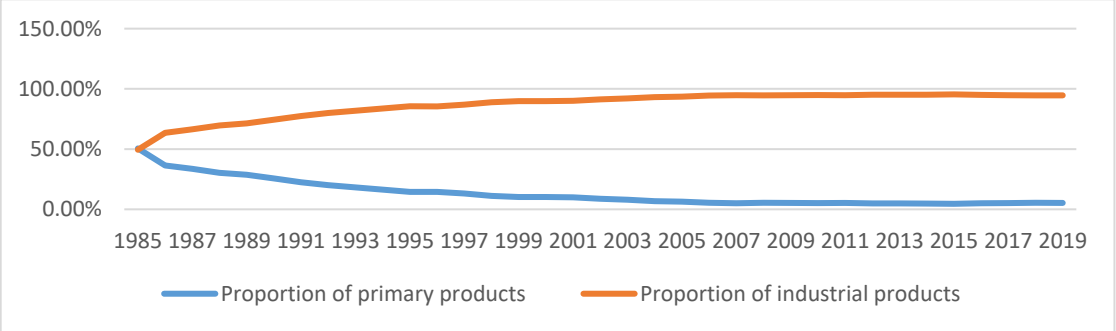

Figure 5 Proportion of primary products and manufactured products in total exports (1985-2019)

Data sources: China Statistical Yearbook

Although the export volume of both shows an upward trend, it can be seen from figure 5 that in the total export volume, the proportion of primary products has been on a downward trend, while the proportion of industrial manufactured goods has been rising, gradually occupying the dominant position of China's export trade.The specific changes of primary products and industrial manufactured products are analyzed below.

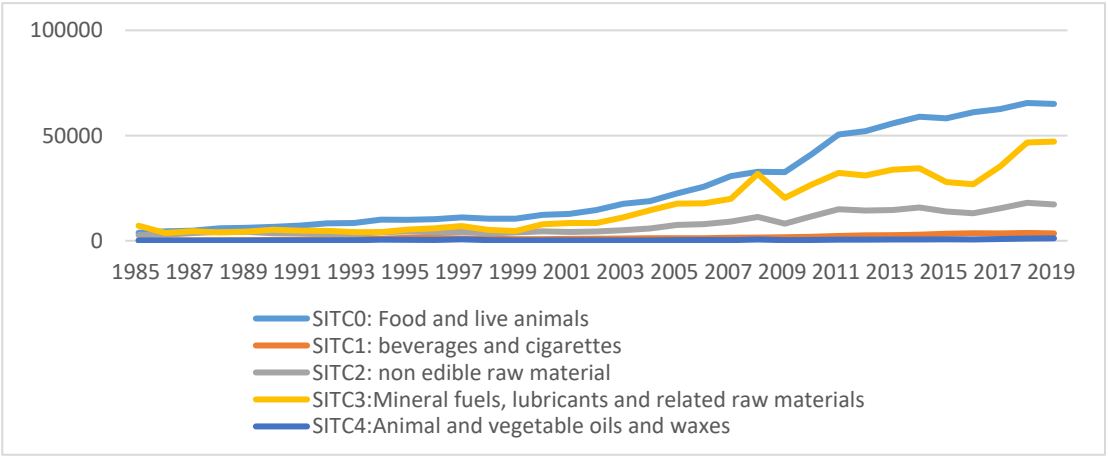

Figure 6 Export volume of various primary products(1985-2019) (Unit: million US dollars)

Data sources: China Statistical Yearbook

It can be seen from figure 6 that from 1985 to 2019, the export volume of all kinds of export

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commodities in primary products shows an overall growth trend, of which the export growth of SITC0, SITC2 and SITC3 is relatively large, while the export growth of SITC1 and SITC4 is relatively small.

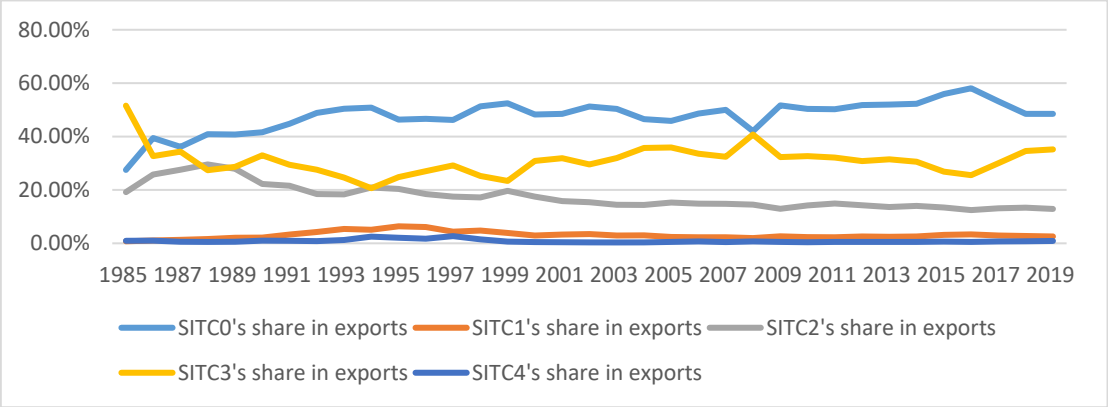

Figure 7 Proportion of various products in export volume of primary products (1985-2019)

Data sources: China Statistical Yearbook

As shown in Figure 7, in 1985, the export proportion of sitc3 in primary products was the highest, reaching more than 50%, which was the largest export product among primary products. This shows that China's primary products export was mainly resource intensive products at that time. Sitc0 is on the rise. For example, in 2004, the state canceled the export tax rebate rate for some resource intensive products such as logs, crude oil and concentrates. In 2005, the state lowered the export tax rebate rate of coal, oil and other products. The results show that the proportion of export volume of resource intensive products in the total export volume of primary products gradually decreases. At the same time, the adjustment of export tax rebate policy affects the corresponding export volume.

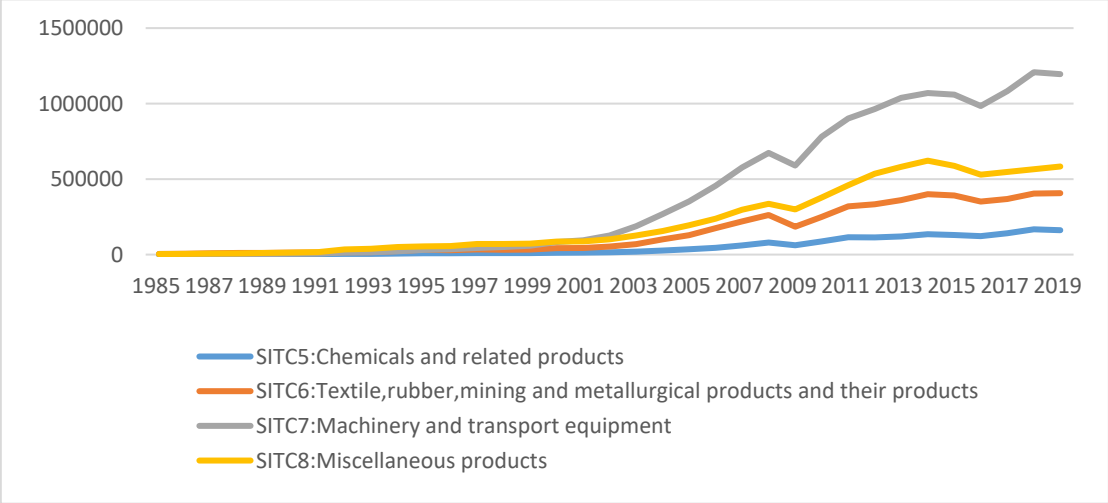

Figure 8 Export volume of various products in manufactured goods (1985-2019)

(Unit: million US dollars)

Data sources: China Statistical Yearbook

It can be seen from figure 8 that from 1985 to 1993, the export volume of various commodities of manufactured goods grew slowly. Since 1994, the export volume of all kinds of commodities has shown a significant growth trend, of which SITC7 has the fastest growth rate. In 1998, the export tax rebate rate of seven types of mechanical and electrical products was increased. In 2006, the export tax rebate rate of some high-tech products and information technology products will be increased.

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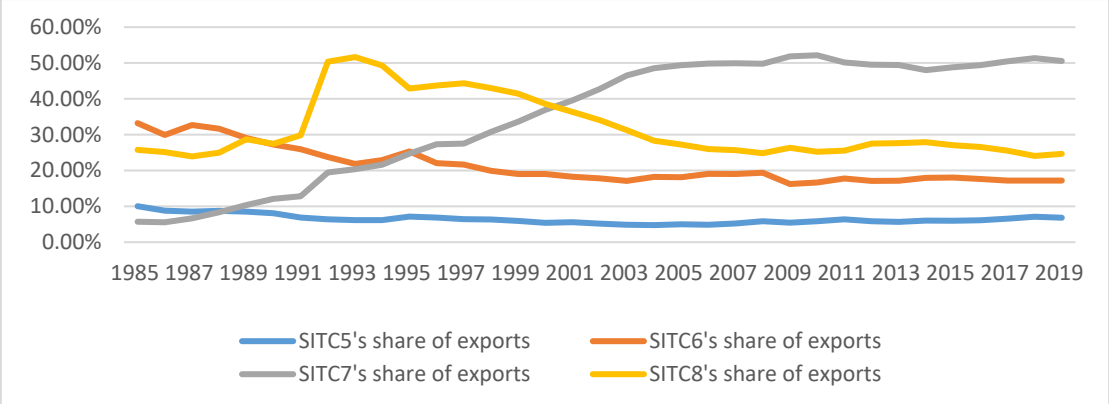

Figure 9 Proportion of various products in the export volume of manufactured goods (1985-2019)

Date source: China Statistical Yearbook

It can be seen from figure 9 that in 1996, the capital intensive products represented by SITC7 exceeded the labor-intensive products represented by sitc6 for the first time. In 2007, the export tax rebate rate of some products (mainly SITC6) that are prone to trade friction was reduced. In 2009, the export tax rebate rate of textiles and clothing was increased. By observing the changes of the images before and after 2007 and 2009, it further shows that the adjustment of export rebate rate has the same impact on the export of goods. Industrial products have gradually changed from labor-intensive products to capital and technology intensive products, realizing a qualitative leap in China's export commodity structure.

3. Summary

3.1. The Impact of Export Tax Rebate Policy on the Total Export Volume

The trend of China's export tax rebate is roughly the same, and the correlation analysis results also show a high degree of correlation, indicating that China's export tax rebate policy has a positive role in promoting export growth.

3.2. The Impact of Export Tax Rebate Policy on Export Commodity Structure

The impact of China's export tax rebate policy is reflected in the export volume and export commodity structure. First of all, the promotion effect on the export volume is very obvious. Secondly, the industrial products in the export commodity structure gradually shift from labor-intensive products to capital and technology intensive products.

In a word, by comparing the changes of export tax rebate with export volume and the proportion of China's main export industrial structure in recent years, we can directly reflect that the adjustment of China's export tax rebate policy has played a very important role in the export volume and the optimization of export commodity structure.

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References

[1] Wu Rina.Analysis of the impact of export tax rebate on China's export trade[D].Inner Mongolia Agricultural University,2011.
[2] Li Na.Analysis of the impact of export tax rebate on China's export trade[D].Shanxi University of Finance and economics,2010.
[3] Zhou Peiying.Research on the impact of export tax rebate on China's export trade[D].Xiangtan University, 2014.
[4] Jiao Yang.Analysis on the trade effect of China's export tax rebate policy[J].Mall modernization,

ISSN 2616-5902 Vol. 3, Issue 9: 87-93, DOI: 10.25236/AJBM.2021.030917

2021,(4):61-62.

[5] Chen Zhengdang, Song Jinrui.Analysis on the trade effect of China's export tax rebate policy[J]. Foreign trade and economic cooperation,2020,(8):19-20.