

The Impact of Export Tax Rebates on Industrial Upgrading: A Literature Review

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Abstract: As China's economy gradually shifts towards a stage of high-quality development, issues such as insufficient demand and overcapacity are becoming increasingly prominent. The development model of extensive economy is no longer sustainable, and the economic operation is facing huge risks and challenges. The adjustment and upgrading of industrial structure has become an inevitable choice. In this context, the export tax rebate policy, as one of the important means to promote foreign trade and industrial upgrading, not only has significant practical value for in-depth exploration and analysis, but also has profound significance for guiding future policy formulation and practice. This article aims to systematically integrate and extract existing research results, deepen the understanding of the mechanism and impact of China's export tax rebate policy in promoting industrial upgrading, and provide some research clues for further research by domestic and foreign scholars.

Keywords: Industrial upgrading, Export tax rebate, Differentiated export tax rebate.

1. Introduction

Since the reform and opening up, promoting industrial structure upgrading has been one of the key factors driving China's economic development. The Chinese government has been promoting industrial upgrading and technological innovation, and the export tax rebate policy, as an important means of macroeconomic regulation, has a significant impact on China's industrial structure upgrading. Through in-depth research on the relationship between export tax rebate policies and industrial upgrading, specific paths and mechanisms for policy adjustments to optimize industrial structure can be revealed, providing theoretical support and decision-making references for the government to formulate more scientific and reasonable export tax rebate policies. At the same time, it also helps enterprises better grasp policy guidance and market opportunities, accelerate technological innovation and industrial upgrading, and enhance international competitiveness. Reasonable adjustment of export tax rebates will have a positive impact on the relevant industrial structure, promote technological innovation and industrial upgrading of enterprises, and improve the overall quality and grade of exported products. Thus, promoting the development of industries towards high-end and intelligent directions, optimizing and improving China's product export structure, enhancing the country's overall export competitiveness and trade status, and promoting high-quality economic growth in China. Therefore, exploring the impact of export tax rebates on industrial structure is of great significance.

2. Literature Review

2.1. A review of Relevant Research on Export Tax Rebates

Different scholars analyze the impact of export tax rebates from multiple perspectives: Against the backdrop of the China US trade friction, the global supply chain industry chain is facing a deep restructuring, which is also a critical period for China to seek industrial structure upgrading and improve the international competitiveness of export products.

China has also made adjustments to export tax rebates (Chao, Yu, & Yu, 2006; Sharma, 2019; Du Li & Chen Fengmei, 2022). Some scholars have a positive impact on export tax rebates. Chen Ping and Huang Jianmei (2004) introduced the concept of real effective exchange rate to systematically explain the internal logic of how export tax rebates can enhance export profitability and expand export scale. At the same time, empirical analysis tools such as cointegration analysis and Panel Data analysis based on the EC M model were used to empirically test the actual effect of China's export tax rebate policy on promoting exports, supporting the view that export tax rebates have a positive effect. Based on this, forward-looking policy recommendations were proposed. Wang Wanlu (2022) believes that increasing the export tax rebate rate has a positive impact on overall foreign trade exports, but this effect has a relatively limited effect on improving export cost profit margins in specific industries such as textiles. Under the same framework of export tax rebate rates, there are significant heterogeneous reactions among different industries, trade models, or enterprise properties. Dou Haoran (2022) believes that increasing the export tax rebate rate can help improve the product quality of export enterprises. Li Jiyu et al. (2023) used instrumental variable method, double difference model and other methods to explore the impact of export tax rebates on the scale and quality of agricultural product exports, and proposed the viewpoint that increasing the export tax rebate rate is conducive to improving the "incremental quality enhancement" of agricultural products.

However, some scholars hold a negative view (Ma Xuezheng, 2012; Wang Bingxin, 2012), believing that export tax rebates will have adverse effects and that companies will engage in "tax fraud". Mao Yushi's (2001) research shows that export tax rebates carry the risk of price signal distortion, exacerbate the aging trend of industrial structure, and are not conducive to the continuous optimization and adjustment of domestic economic structure. Tang Qian (1996) believes that although export tax rebates can enhance international competitiveness through price advantages in the short term, from a long-term perspective, excessive reliance on price

competition may induce enterprises to neglect the construction of their internal core competitiveness, including the improvement of technological innovation capabilities and the continuous optimization of product quality. This viewpoint emphasizes the importance of balancing short-term benefits with long-term development strategies in policy-making.

2.2. A Review of Research on The Impact of Export Tax Rebates on Industrial Structure

At present, most scholars have different perspectives and methods on the role of export tax rebates in regulating industrial structure. Based on whether different industries or sectors are used as examples for research, this article focuses on the impact of export tax rebates on industrial structure. Hao Shengnan (2022) proposed the concept of industrial upgrading indicators to explore the impact of export tax rebate policies on China's industrial structure upgrading from a holistic perspective, industrial perspective, different trade mode perspectives, and different regional perspectives. Benchmark regression, industrial difference test, trade mode difference test, and regional difference test methods were used to empirically test the benefits of export tax rebates for industrial structure upgrading. However, due to limitations in data and sample size, it is difficult to obtain explanatory and control variables in the model settings, which may lead to bias in experimental results. Yue Liang and Wencong Lu (2024) believe that export tax rebates have a significant positive impact on enterprise upgrading from the perspectives of technological maturity and product quality. Some scholars believe that export tax rebates are influenced by industrial upgrading and vary depending on the type of industry (Fan Qi, 2009; Liu Yingxi, 2014; Duan Dingqiang, Hu Fang, and Zhang Sanfeng, 2022). Based on the dual dimensions of global and regional structure, He Hui and Fan Yixuan (2018) analyzed the multiple impacts of export tax rebates on the total export trade volume, export commodity structure, and regional export trade differentiation performance, and proposed the idea of supporting the implementation of differentiated export tax rebate policies.

Some researchers use different industries or sectors as examples to explore the impact of export tax rebates on China's industrial structure. Yang Mengkai (2023) focused on exploring the impact of value-added tax system reform on the upgrading effect of manufacturing exports, and believed that the value-added tax transformation reform implemented in Northeast China in 2004 had a significant negative effect on the export upgrading process of the region's manufacturing industry. When a high degree of industry correlation is established between the manufacturing and service industries, the implementation of the "business tax to value-added tax" policy is more likely to create favorable conditions for the export upgrading of the manufacturing industry. Tan Tianjiao and Li Gen (2023) believe that the industrialization policy of differentiated export tax rebates in China has different intermediary effects in different industries. Qiu Yanting and Zhang Xinyuan (2016) argue that export tax rebate policies have a significant impact on the export of resource intensive, labor-intensive, and capital and technology intensive products based on differences in product factor intensity. Research and development export subsidies have shown a significant promoting effect on the export growth of capital and technology intensive products. Gan Xingqiong and Jiang

Bingwei (2017) took traditional labor-intensive industries as the research object and adopted an intervention model. They showed that simply increasing the export tax rebate rate for such industries did not effectively promote the process of industrial upgrading, but rather delayed the overall progress of China's industrial structure towards a higher level to a certain extent.

Overall, most scholars have studied the impact of export tax rebates on the export trade of a specific industry or on a regional industry, and have adopted different research perspectives and methods to propose a series of feasible policy recommendations for relative problems, which is innovative. However, there are few articles that provide a comprehensive analysis of this issue. Based on this, this article uses existing literature to comprehensively analyze the impact of export tax rebates on industrial structure.

3. Theoretical Mechanism of The Impact of Export Tax Rebates on Industrial Structure

In the upgrading trajectory of industrial structure towards high-end, the iteration and upgrading of industrial capacity have shown unprecedented acceleration, and efficient capital investment has become the core driving force in this process. The industrial research school has deeply analyzed the multiple impact paths of export tax rebate policies, covering four dimensions: cost regulation, intermediate goods price mechanism, resource reallocation, and close linkage with upstream and downstream industries.

3.1. Taking the Path of Reducing Enterprise Costs

The export tax rebate mechanism can effectively reduce the production costs of enterprises, thereby improving their profitability, production scale, and employment rate, enhancing the overall competitiveness of the export industry, and promoting the expansion and upgrading of the export industry (Liu Yi, 1998; Liu Xiaojun, 1999; Jin Xingjian, 2002; Wen Sizhe, 2017; Tan Tianjiao and Li Gen, 2023; Qian Xuefeng et al., 2015). In the process of industrial structure moving towards high-end, the iterative upgrading of industrial capacity has shown unprecedented acceleration, and the effective investment of capital has been given more critical strategic significance. The country has adopted a series of tax rebate preferential mechanisms aimed at returning the indirect tax burden borne by enterprises in the domestic production and circulation process, significantly reducing the tax burden and production and operation costs of enterprises, injecting working capital into enterprises, effectively alleviating the pressure on the capital chain, providing broad market expansion space and resource allocation capabilities, and laying a solid foundation for their strategic development goals of scale and intensification, thereby occupying a favorable competitive position in the increasingly fierce market competition environment. At the same time, this series of chain reactions can stimulate the inherent vitality of the industry, promote the optimization and upgrading of the industrial structure, and lay a solid foundation for achieving high-quality economic development.

3.2. Intermediate Price Mechanism

Export tax rebates can have a significant positive impact on the export industries of countries with trade protection,

especially the manufacturing industry. Specifically, the export tax rebate mechanism endows these industries with the ability to obtain imported components based on international market prices, significantly enhancing the competitiveness of their exported products in the global market and promoting the sustained growth and expansion of the export industry. One of the core principles of the booming development of the manufacturing industry is to build an efficient and smooth international procurement channel for the export sector, ensuring that the required imported components can be quickly and cost effectively obtained. In this context, the export tax rebate policy, as an innovative institutional arrangement, cleverly maintains domestic import protection policies while opening up an effective way for the export industry to obtain import resources at international market prices. This policy design not only alleviates the market distortions that may arise from domestic trade protection policies, but also greatly stimulates the vitality and creativity of the export industry. Therefore, the export tax rebate policy has become an important strategic tool, which not only helps domestic enterprises overcome trade protection barriers, but also wins a more favorable trade position and order in the international market by encouraging exports and optimizing resource allocation. This process not only promoted the rapid development of the export industry, but also provided strong support for the optimization and upgrading of the overall economic structure of the country (Robert Wade, 1991; Olivier Cadot, 2003; Cadot et al., 2000; Elena Ianchovichina, 2003; Jai S. Mah, 2007; John Weiss, 2005).

3.3. Promote Resource Reallocation

Export tax rebates can trigger the redistribution of production factors within the industry, guiding enterprise decision-makers to shift their resource allocation focus towards product lines that enjoy higher tax rebate rates, thereby improving the efficiency of resource reallocation and promoting the development of the export tax rebate industry (Gan Xingqiong, Jiang Bingwei, 2017; Liu Yi, 1998; Liu Yuejiao, 2013). By providing higher tax rebate rates for supported industries, the government not only directly increases the profit margins of related export enterprises, but also stimulates the reallocation of resources between industries, guiding resources from low profit industries to more promising high profit industries, thus achieving strategic adjustment of industrial structure. On the other hand, for industries where the government restricts exports or is prone to international trade frictions, the government takes measures to reduce or cancel tax rebate rates as an economic lever, guiding export enterprises to reduce the production of such products, thereby controlling export scale, optimizing export product structure, reducing international trade disputes, and safeguarding national economic security and interests.

3.4. Expansion of Upstream and Downstream Industries

The adjustment of export tax rebate rates can trigger dynamic changes in the equilibrium prices of factors such as labor, capital, and intermediate products, thereby promoting the expansion and prosperity of upstream and downstream industries closely connected to the export tax rebate industry, forming a broader industrial chain effect (Chi Chur Chao et al., 2001). Elena Ianchovichina (2004) pointed out that export tax rebate policies can enhance the competitiveness of intermediate product processing enterprises and improve the

strength of related industries upstream and downstream of intermediate products. Therefore, the application scope of export tax rebate policy is far beyond the support of a single industry. Its deeper significance lies in the effective allocation of resources and the automatic adjustment of the market, which realizes the vertical expansion and horizontal integration of the industrial chain, and promotes the gradual formation and growth of industrial clusters.

In addition, due to different trade methods for export tax rebates, enterprises may also choose other trade methods in order to obtain long-term stable development space. Some enterprises tend to choose the "no levy, no refund" processing trade mode to avoid the direct impact of national macroeconomic regulation policies. The export tax rebate policy significantly reduces the export costs of enterprises and enhances the international price competitiveness of their products. However, this policy advantage is also excessively utilized by some enterprises, who regard tax rebate funds as the main or even the only source to maintain their operations, rather than actively investing in technological innovation and product added value enhancement, resulting in a distorted development path. This behavior not only limits the growth potential and core competitiveness of the enterprise itself, but may also pose a threat to the healthy development of the entire industrial chain, hindering the optimization and upgrading process of China's industrial structure.

The deficiencies in the tax refund management system have further exacerbated the complexity of the problem. Due to the imperfect legal framework and the disconnection of regulatory mechanisms at the enforcement level, there is room for illegal enterprises to engage in tax fraud activities, especially the frequent occurrence of "fake exports, real tax refunds". These enterprises illegally obtain tax refund funds by forging export records, issuing false invoices, and other means, causing significant losses to the national finance, as well as disrupting the fair competition market environment and damaging the rights and interests of legitimate enterprises.

4. Conclusion

After the reform and opening up, China's industrial structure gradually improved, and the implementation of export tax rebate policies has a wide coverage and strong guidance, making it flexible to a certain extent. This article analyzes the theoretical mechanism of export tax rebates on industrial structure. The country implements export tax rebate policies and implements a series of tax rebate preferential measures. Export tax rebates can reduce production costs for enterprises, enhance the competitiveness of the export industry, and promote the development of the export industry. By summarizing and sorting out existing research literature in related fields, a large number of scholars have found through empirical analysis that export tax rebates do indeed have an impact on industrial structure. Currently, there are different perspectives and methods for studying the role of export tax rebates in regulating industrial structure. Most scholars have analyzed from different perspectives, and have also conducted research using different industries or industries as examples.

To effectively address the above issues, it is urgent to take comprehensive measures from multiple dimensions:

5. Policy Suggestions

5.1. Implement Differentiated Export Tax Rebate Policies to Promote Industrial Structure Upgrading

According to a large number of previous scholars' empirical analysis, implementing export tax rebates can help upgrade China's industrial structure. Therefore, the government should continue to implement differentiated export tax rebate policies based on the characteristics of different industries, in order to achieve the goal of upgrading the industrial structure.

5.2. Adjusting Export Tax Rebate Policies to Promote Balanced Development of Industries

The government should not blindly pursue economic growth when formulating export tax rebate policies, but also pay attention to the transformation and upgrading of industrial structure and the balanced development of regional industries. Due to the uneven economic development between the eastern and central western regions of China, the government should formulate export tax rebate policies according to local conditions and promote coordinated economic development in conjunction with other policies.

5.3. Optimize the Export Tax Rebate Process for Enterprises

When formulating export tax rebate policies, the government should optimize the enterprise tax rebate process as much as possible, reduce unnecessary tax rebate procedures, shorten the time for enterprise export tax rebates, achieve convenient tax rebates, and alleviate the pressure on enterprise capital turnover.

5.4. Improve the System and Regulations of Export Tax Rebate Policies

We should accelerate the improvement of the relevant legal and regulatory system, enhance regulatory efficiency, and increase the fairness, transparency, and standardization of export tax rebates. Fill in loopholes, try to avoid the occurrence of "tax evasion" in enterprise export tax rebates, prevent enterprises from relying solely on export tax rebate policies for production, and ensure the legality and effectiveness of the use of tax rebate funds. At the same time, we will crack down on tax fraud and establish a favorable external environment for enterprise export tax refunds. Thus, promoting the optimal allocation of resources and playing a driving role in adjusting the industrial structure.

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