

Analysis of the Impact of Carbon Tariffs on China's Trade

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Abstract: As the impact of the financial crisis deepened, on March 17, 2009, US Energy Secretary Steven Chu prepared to impose carbon tariffs on imported goods to avoid unfair competition in the US manufacturing industry. Meanwhile, in recent years, some developed countries or regions, such as the United States and the European Union, have proposed punitive tariffs on imported products from developing countries such as China and India based on carbon content under the pretext of addressing climate change. This measure has sparked widespread international discussion. Therefore, this article takes carbon tariffs as the research object and analyzes the impact of China's carbon emissions on its export trade and the impact of international emission reduction regulations and measures on China's export trade through qualitative and quantitative analysis methods. The paper is divided into 7 chapters. Chapters 1, 2, and 3 provide explanations on the relevant concepts and development trends of carbon tariffs. Carbon tariffs are essentially border tax regulatory measures with trade protectionism attributes. Chapters 4 and 5 analyze the impact of carbon tariff policies. Chapters 6 and 7 propose corresponding strategies and suggestions based on the previous analysis.

Keywords: Carbon Tariffs, Export Trade, Trade Protectionism, International Emission Reduction Regulations

1. Introduction

As the impact of the financial crisis deepened, on March 17, 2009, US Energy Secretary Steven Chu prepared to impose carbon tariffs on imported goods to avoid unfair competition in the US manufacturing industry. Preparing to implement carbon tariffs has sparked widespread discussion, posing both a crisis and a challenge for the largest developing country. This article briefly introduces the connotation, origin, and development process of carbon tariffs by reviewing the Clean Energy and Security Act (CESA) and a series of measures imposed by the United States on the import and export products of countries, including China, that do not implement carbon reduction quotas. Analyze the impact of current carbon tariffs on China's trade (which may include obstacles to exports, impacts on domestic industrial structure, and tests on existing import and export policies). Finally, propose corresponding strategies (which may include actively participating in the formulation of international carbon tariff standards, promoting carbon tariff negotiations between developed and developing countries, optimizing and upgrading domestic industrial structure, etc.) [1]. By 2007, China had become the world's largest emitter of greenhouse gases, using the country as the statistical unit. If This paper looks at the total export volume, China became the world's largest exporter in 2009.

However, according to the United Nations Framework Convention on Climate Change, as a developing country, China should not assume emission reduction obligations. The proposal for carbon tariffs is based on the above background. Given the current high dependence of China's export market on the United States and the European Union and the relatively high carbon intensity of exported products, the imposition of carbon tariffs will have a huge impact on China's export trade. How to take effective countermeasures in the complex and dynamic international carbon tariff game under dual pressures both domestically and internationally, to maintain China's emission space and development rights, enhance national competitiveness, and compete for rule-making and discourse power in international climate cooperation, has become a thorny issue facing China. Therefore, research on carbon tariff issues has important theoretical value and practical significance. As the impact of the financial crisis deepened, on March 17, 2009, US Secretary of Energy Steven Chu announced at a meeting of the US House of Representatives Science Group that to avoid unfair imported goods. Triggered global controversies over carbon tariffs. Meanwhile, according to the United Nations Framework Convention on Climate Change, as a developing country, China does not assume the obligation of quantitative emission reduction [2]. Given the current high dependence of China's export market on the United States and the European Union and the relatively high carbon intensity of exported products, the imposition of carbon tariffs will have a huge impact on China's export trade. From the perspective of environmental protection, carbon tariffs have a certain effect on suppressing carbon dioxide emissions. In the long run, if carbon tariffs are truly imposed, they will play a promoting role in adjusting the structure of the entire industry and promoting technological innovation to a certain extent. However, as a new trade barrier, does the harm of carbon tariffs outweigh the benefits it can bring. For China, will the implementation of carbon tariffs have a significant impact on trade activities, especially export trade. These are all issues that China's economic development must face at present. Based on this background, this article quantitatively analyzes the impact of carbon tariffs on China's export trade, which is of great significance for China's transition from a high-carbon economy to a low-carbon economy [3].

2. The Origin and Development of Carbon Tariffs

Carbon tariffs, first proposed by France, refer to developed countries imposing additional carbon dioxide emission tariffs on high imported products. The main motivation for imposing carbon tariffs is to weaken the competitiveness of competitors.

Implement trade protectionism. Carbon tariffs, as a trade policy in the international trade process, are not simply aimed at addressing trade issues. In a certain sense, it is also a political call and diplomatic offensive aimed at seizing law.

The global power in the era of carbon economy forcibly binds the economies of other countries with those of a few developed countries through climate issues. From the definition, it can be seen that the imposition of carbon tariffs is aimed at imported products [4].

products mainly include glass, steel, and so on. So far, countries around the world have not started imposing carbon tariffs. However, some countries such as Denmark and Italy have decided to include the international aviation industry in the EU's emissions trading system. According to EU regulations, multiple airlines around the world, including Chinese airlines, will have to pay carbon emissions fees for flights taking off and landing at European airports. The collection of carbon emission tax in the aviation industry indicates that carbon tariffs are getting closer and closer to us. Starting from the great development of industry, economic growth is directly proportional to the continuous growth of mineral fuels, coal, oil, and natural gas. It can be seen that carbon dioxide emissions have become the largest source of greenhouse gases, increasing the danger index of global warming. The extent to which human economic activities can change the Earth's climate has not been clearly defined. However, this paper can detect climate micro-changes from some that have occurred. The World

Meteorological Organization has announced that the year This paper has just passed has been the warmest decade on record.

3. The Meaning and Essence of Carbon Tariffs

Carbon tariffs are unilateral trade restrictions imposed on imported goods and services from countries that have not implemented carbon pricing. Essentially, it is a border regulation measure. Carbon tariffs are carbon dioxide emission tariffs specifically imposed on high imported products. The main purpose of discussing the implementation of carbon tariff policies between the United States and the European Union is to compensate for the loss of international competitiveness of domestically produced products due to carbon dioxide reduction. The carbon tariff is well-known to the domestic public due to the passage of the 2009 US Clean Energy Security Act by the US House of Representatives on June 26, 2009. In addition to setting domestic carbon dioxide reduction targets, the bill also involves a "border adjustment tax" clause called a "carbon tariff", which proposes to impose punitive carbon tariffs on developing countries such as China, India, and Brazil that have not yet met their carbon reduction targets in the future, has raised serious concerns domestically that carbon tariffs may China's industrial exports [5]. In fact, in the literature on the economic impact of greenhouse gas emissions reduction, the discussion and debate on carbon tariffs and closely related issues such as carbon leakage and the international competitiveness of products have a long history.

4. The Positive Impact of Carbon Tariffs on China's Foreign Trade

Overall, carbon tariffs are a double-edged sword, with both positive and negative impacts on China's export trade. In the long run, the positive impact outweighs the negative impact, mainly from the perspective of promoting the transformation of economic development mode and improving the quality of economic growth. Carbon tariffs may promote the optimization and upgrading of China's industrial structure, and promote the transformation of economic development mode. In the short term, the negative impact on China's export trade is greater, mainly reflected in the obstacles to China's export trade. Blocked exports will bring a series of adverse chain effects, such as a slowdown in economic development, industrial chain rupture, intensified employment pressure, and the domino effect of trade friction with China [6]. From a departmental perspective, carbon tariffs may have a significant impact on industries. The following text will analyze these two aspects separately.

Carbon tariffs are essentially a new form of green trade protectionism. If carbon tariffs are truly implemented, developing a low-carbon economy is necessary. On the one hand, it is necessary to actively assume environmental protection responsibilities and meet the requirements of national energy conservation and consumption reduction targets. On the other hand, it is necessary to adjust the economic structure, improve energy utilization efficiency, develop emerging industries, and build an ecological civilization. This is a practical way to abandon the previous development model of pollution first and then treatment, low-end first and then high-end, extensive first and then intensive, and is an inevitable choice to achieve a win-win situation between economic development and resource and environmental protection [7]. To support the development of low-carbon economy, it can be imagined that technological innovation in China's high carbon industry is imperative. Therefore, in the long run, it can be affirmed that the implementation of carbon tariffs can promote technological progress in China's high carbon industry. The positive significance of carbon tariffs on China's export trade is reflected in promoting the accelerated transformation of China's economic development mode. Currently, China's traditional economic development model is facing a series of challenges. Carbon tariffs have sounded the alarm for China, and it is necessary to abandon the previous development model of exchanging high energy, resource consumption, and environmental pollution for economic growth. This paper cannot exchange cheap resources or export tax rebates for

GDP, and use GDP as the only indicator of economic development. The carbon tariffs and trade barriers imposed by developed Western countries are, to some extent, an external driving force that creates a "reverse pressure" mechanism for China, prompting it to accelerate economic structural adjustment and transformation of economic development models, thereby providing opportunities for China to achieve green development. Just as the 15th Central Committee of the Communist Party of China decided that China's accession to the WTO is not a surrender or surrender to Western countries, but rather an excellent opportunity for China to participate in international cooperation and exchange, improve international competitiveness, and bring long-term benefits of opening up to the outside world and globalization to China [8].

5. The Adverse Effects of Carbon Tariffs on China's Foreign Trade

Since joining the WTO in 2001, China's export trade has experienced rapid development. The export volume has increased from 2202.44 billion yuan in 2001 to 1070.228 billion yuan in 2010, an increase of nearly four times, with an average annual growth rate maintained between 20% -35%. In 2008 and 2009, due to the impact of the international financial crisis, the growth rate significantly decreased, reaching 7.3% and -18.3% respectively. In 2010, with the global economic recovery, China's export trade situation improved, with a growth rate of 30.5% compared to the same period in 2009, and the export value increased to 1070.228 billion yuan. Overall, China's export trade has grown rapidly and on a large scale [9]. In addition, due to China's high dependence on exports, it is susceptible to fluctuations in the international market.

Firstly, if carbon tariffs are implemented, export trade will be impacted, and related enterprises will face difficulties in survival and development. If developed countries in Europe and America impose carbon tariffs based on product categories, on the one hand, for a small number of enterprises capable of meeting standards, due to the increase in investment in energy-saving and technologies and equipment, product prices will rise, weakening the original price advantage and reducing export volume; On the other hand, for most enterprises, due to financial and technological constraints, product carbon emissions cannot meet standards, and the imposition of carbon tariffs means the closure of the export market of a certain country or region [10]. If levied based on country, the role of carbon tariffs in hindering China's exports to developed country markets will be more difficult to estimate. The United States is China's largest export market, and the products imported by the United States from China are mostly labor-intensive, and have high energy consumption, and products. Therefore, once the United States implements a carbon tariff policy against China, the result will inevitably be that China loses some market share of products in the United States, and even withdraws from the US market. Secondly, if the industrial chain breaks, China's manufacturing industry will be impacted. to the existing carbon tariff plans of the European Union and the United States, only products such as fertilizers, cement, steel, and paper belong to the scope of carbon tariff collection; However, in the future, more industries may be involved, with an increasing impact [11].

Moreover, on the one hand, the implementation of carbon tariffs leads to an increase in product costs, and the addition of environmental factors will improve product quality, indicating that products can pollute the environment less or less in various stages of their lifecycle. Considering the sustainable use of resources, this is conducive to improving product competitiveness. On the other hand, the addition of environmental factors will inevitably increase the cost of products, increase their prices, and correspondingly reduce their competitiveness.

6. Conclusion

Measures that China should take in the face of carbon tariff policies, China should actively engage in "environmental diplomacy", Using "environmental diplomacy" as a favorable tool to strengthen

China and the international community's focus on current issues Carbon tariffs, communication, active participation in discussions on environmental provisions in international multilateral agreements, and the formulation of new rules that are conducive to win-win situations. These new rules mainly involve establishing reasonable compensation mechanisms for emission reduction costs in developed countries, using historically accumulated emissions as the standard for confirming greenhouse gas liability, using per-capital emissions as the standard for determining the sharing of emission reduction costs, and resolutely opposing development Developing countries impose carbon tariffs on imported products from developing countries, and use these newly established win-win rules to safeguard the interests of their industries, thus becoming the main participants in the carbon tariff rules. Secondly, the domestic market structure should be optimized. The first point is to optimize the carbon-intensive industrial structure in China. The second point is to establish a green policy and regulatory system, which can consider levying a carbon tax domestically. The third point is that domestic enterprises must strengthen the research and development of low-carbon technologies.

Suggestions for China's Response to Carbon Tariffs and Enhancing Export Competitiveness. As a developing country, China started relatively late and has always been at a disadvantage in terms of industrial structure compared to developed countries. Therefore, it is currently required that China not only bear the obligation of emission reduction but also the risk of economic contraction, which is extremely unfair to China. Therefore, in the face of this difficulty, China should promote the adjustment and optimization of industrial structure. China should no longer pursue economic scale expansion unilaterally, but also focus on improving the quality of economic operation, this paper must allow for a slowdown in economic growth, accelerate the shift towards green, low-carbon, service-oriented, and innovative directions, and enhance China's international competitiveness. Specifically, this paper should continue to promote agricultural development, play its fundamental role, and vigorously develop the service industry. This paper should make strategic emerging industries an important focus of industrial structure adjustment. To promote the integration of informatization and industrialization, to fundamentally promote changes in the development mode.

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