

The Impact of Free Trade Zones on the International Competitiveness of Cross-Border E-Commerce Companies

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Abstract. As international e-commerce expands so quickly, cross-border e-commerce (CBEC) is becoming more and more important to China's exports. This study attempts to investigate the effect of free trade zones (FTZs) on the global competitiveness based on the FTZ. A thorough analysis of the ideas surrounding FTZs and CBEC allows for the clarification of the fundamental research framework and the application of both qualitative and quantitative research methods. The development strategy of CBEC is finally presented. After a review of the advantages of FTZ policies (such as expediting the customs clearance process, lowering trade barriers, improving logistics efficiency, etc.) and the disadvantages of CBEC policies (such as increasing market competition, diversifying the international market), and unpredictable regulatory policies: formulate and improve the relevant policies, strengthen the construction of the CBEC service platform, expand the scope of the CBEC comprehensive pilot zone, improve the financial service system, and cultivate the interdisciplinary talents needed for CBEC.

Keywords: Free trade zones; cross-border e-commerce; international competitiveness.

1. Introduction

In the current international economic environment, cross-border e-commerce (CBEC) has become an essential channel that companies can use to strengthen their competitiveness and expand their international markets. Moreover, the creation of free trade zones (FTZs) has greatly increased the growth potential of the CBEC. Since the Shanghai FTZ's establishment in 2013, it has attracted a significant number of businesses interested in CBEC. The China (Shanghai) Pilot Free Trade Zone Administration reported that 84,000 companies had entered the Shanghai FTZ between 2013 and 2022. The FTZ has implemented a number of initiatives, such as simplifying administrative clearances, to help businesses gain essential qualifications and certificates quicker, thereby allowing them to begin their CBEC operation.

The rapid advancement of FTZs greatly benefited CBEC businesses in FTZs due to a variety of advantageous guidelines, particularly in terms of operating expenses, logistical efficiency, market expansion ability, and innovation capability. This paper thoroughly examines the research literature on FTZs and CBEC, combined with a special focus on the influence of FTZs on cross-border e-commerce businesses. It would be helpful for politicians to know more about the relationship between FTZs and the global competitiveness of CBEC. Therefore, this would enable them to craft more effective standards that would foster the robust expansion of CBEC. In addition, the paper would assist businesses in making more strategic decisions, enabling them to capitalize on the advantages of FTZs and enhance their competitiveness in the market.

2. Literature Review and Analysis of Influencing Factors

2.1. Features and Policy Advantages of FTZs

Free Trade Zones play vital instruments in facilitating international commerce and boosting economic growth. Alansary gathered numerous studies on FTZs from scholars and institutions and eventually determined that FTZs are the regions that are exempt from specific rules and taxes aim to

improve the economy and trade [1]. Its main features are policy privileges (e.g., reduced governmental restrictions, elimination of traditional tariffs and quotas), as well as a specific geographic scope with the goal of attracting business and foreign direct investment (FDI), promoting industrial development, and increasing employment opportunities. According to research, CBEC enterprises in FTZs are highly competitive on a worldwide scale. For example, Liu et al.'s (2021) comprehensive literature review demonstrates that the development of FTZs greatly lowers the barrier for businesses to enter foreign markets, making CBEC more accessible [2]. FTZs are usually located at or major transportation hubs (by sea, rail, or road). Countries in North America, Europe, Asia, and other continents have set up FTZs in their developed areas, such as the FTZ 49 in the United States, the Liverpool FTZ in the United Kingdom, and the Guangdong FTZ in China.

2.2. Elements of International Competitiveness of Cross-Border E-Commerce

Before examining the influence regarding FTZs on the international competitiveness of CBEC, it is essential to comprehend the concept and theoretical basis of international competitiveness. International competitiveness is defined as the productivity performance of companies in the same industry across different nations in a global market, as shown by product and service sales. Numerous scholars used Michael Porter's diamond model to assess the global rivalry of a variety of industries, laying the foundation for international competitiveness research [3-5]. This model evaluates an industry's competitiveness by examining six aspects: production factors, demand conditions, associated and auxiliary industries, company structure and competition, government policies, and opportunities [5]. These competitiveness elements are evident in CBEC companies' product quality, cost profit, market share, and logistics and distribution efficiency.

2.3. The Impact of FTZs on the Operating Expenses of Cross-Border E-Commerce

Many free trade zones offer tax incentives for CBEC such as tariff exemptions, making it significantly less costly for businesses in the FTZs to manufacture their goods. Companies may obtain higher profit margins on the price of goods they buy and decrease the cost of selling products in non-local markets because import and export taxes and fees are exempt in FTZs. For instance, China's free trade zones mandate that when a manufacturer imports raw materials and also uses domestic raw materials, customs calculates the tariffs on the completed product (if sold in the domestic market) according to the imported supplies tax rate, not the finished product rate, and does not impose any tariffs on locally sourced materials [6].

In addition, FTZs typically streamline trade procedures, reducing cumbersome approval processes and documentation requirements, which in turn saves cross-border e-commerce time and expense. Most U.S. FTZs provide interregional transfer preferences, allowing suppliers to transfer goods to the purchasing company's FTZ without incurring import tariffs; there are no tariffs on domestic parts, materials, labor, or profits when manufacturing operations take place within the FTZ [6].

2.4. The Impact of FTZs on the Logistical Efficiency of Cross-Border E-Commerce

Free trade zones are vital for enhancing the effectiveness of CBEC logistics, which necessitates an efficient logistics infrastructure. FTZs aim to augment the efficiency of goods transportation, loading and offloading, and storage through developing port, airport, and warehousing facilities. For instance, the Shanghai government built the Shanghai Northwest Logistics Park Baoshui Logistics Center in the same year as the introduction of the Shanghai FTZ. This center was equipped with modern loading and unloading equipment and warehouse management systems, facilitating the rapid flow and precise storage of goods. This assistance was critical to the CBEC's trade in goods and services. According to CSMAR, the logistics center's monthly import and export value increased from US\$88,000 to US\$188,083,000 over the last decade, between December 2014 and July 2024.

On this basis, the unique policy and location advantages of FTZs have attracted a significant number of logistics enterprises and established a successful logistics industry cluster. Industrial clusters not only promote enterprise cooperation and competition, but they also improve the

productivity of logistics services. China's well-known logistics company SF Express has established its East China regional headquarters in Hangzhou FTZ. It takes full advantage of the Free Trade Zone's convenient conditions. SF Express maximizes utilization of logistics resources and lowers operating costs by sharing logistics facilities, information platforms, and transportation channels. Simultaneously, the logistics industry cluster attracts the entry of related supporting enterprises, such as packaging companies and freight forwarders. It improves the logistics industry chain and increases the overall synergies and efficiency of the logistics ecosystem. This clustering effect and infrastructure improvement complement each other, promoting continuous improvement in CBEC logistics efficiency.

2.5. The Impact of FTZs on the Market Expansion Ability of Cross-Border E-Commerce

FTZs have a significant impact on the expansion of the CBEC market. Thanks to the emergence of international consumer demand and the comparatively lax market regulations, the scale of China's CBEC market has grown rapidly, and enterprises can gain greater autonomy in reform through the fiscal, tax, and financial policies provided by free trade zones [7]. Service trade and digital trade rules aim to fully align with international high standards for trade and economics to achieve a higher level of freedom and convenience, optimize the business environment, and deepen reforms to promote domestic reform and development in key areas, but there are also some challenges. Insufficient perception of market changes, such as changes in consumer demand, may make it difficult for CBEC to grasp the changes in consumer preferences in real time. Under different cultural and market backgrounds, supply and demand imbalances are very likely to occur, and the lack of perception of upstream raw material price changes and other information caused by supply chain fluctuations may directly affect product pricing and profits. With the introduction of government regulatory policies and technical supervision of channel retail prices, the growth trend of cross-border retail may become more rational. To sum up, by providing preferential policies, convenient customs clearance, and a mature service platform, the FTZ has significantly promoted the expansion of the CBEC market and provided enterprises with more development opportunities and a broader market space [8].

2.6. The Impact of FTZs on the Innovation Capability of Cross-Border E-Commerce

Free trade zones have positive impact on CBEC technological innovation. In terms of data resources, FTZs provide CBEC enterprises with extremely rich data resources, which cover market demand, consumer behavior, transaction records, and other information, and provide strong support for innovative applications such as precision marketing and personalized recommendation. For example, by working closely with logistics and customs institutions, CBEC companies can obtain a large amount of accurate transaction data. Based on these data, enterprises can deeply analyze consumer preferences and needs, so as to accurately locate target customer groups, implement precise marketing strategies, and improve marketing effectiveness and conversion rates.

The FTZs have brought substantial investment in scientific research facilities. It has actively established advanced research and development centers, which have improved the conditions for scientific research in CBEC companies. These facilities are supplied with modern technology and equipment. Furthermore, they provide the platform for technological innovation within businesses by attracting a large number of talented experts. Shi and Yu observed that the FTZs significantly boosted the research and development capabilities of enterprises [9]. The number of patents registered by corporations in that area was far greater compared to those of firms in other regions [9, 10]. This implies that free trade zones provide a beneficial setting and resources for innovation. As a result, enterprises are encouraged to strengthen their technological capabilities, increase their research and development investment, and establish a competitive edge in the market.

3. Challenges and Response Strategies

3.1. Potential Problems of Cross-Border E-Commerce in FTZs

Although FTZs offer numerous benefits to CBEC, they may also have certain drawbacks. The potential for excessive competition is one of the most significant drawbacks. On the one hand, the market may become overly competitive due to the significant increase in the number of businesses attracted by preferential policies and convenient conditions of FTZs. In such situations, businesses might turn to price wars and other negative competitive strategies to compete for market share. This ultimately lowers the industry's profit margin and hinders the long-term growth of businesses. On the other hand, the concentration of a significant number of businesses may lead to an unbalanced distribution of resources, which can make it challenging for certain small and medium-sized enterprises (SMEs) to get sufficient resource support. This can result in a competitive disadvantage or even the risk of elimination.

3.2. Workable Solution

The following measures can be applied to mitigate the major potential drawbacks of FTZs for CBEC: First, the government should improve macro-control, establish reasonable industry development plans and competition regulations, and provide businesses with guidance to promote healthy competition. The regulation of the market system ensures the industry's steady growth by preventing price wars and other undesirable competitive behaviors. Second, the government can create an effective support system for SMEs. The relevant departments may offer financial support, technical training, and other policies in FTZs to assist SMEs in strengthening their competitiveness and development opportunities. Third, companies should develop industrial partnerships to promote resource sharing, enhance cooperation, and capitalize on complementary advantages. This method enables them to collaborate to manage the pressure of market competition and fosters long-term growth of the CBEC industry within the FTZs.

4. Conclusion

After a thorough examination of the effects of FTZs on CBEC, this paper draws the following conclusions: First of all, the establishment of the FTZ has had a significant positive impact on CBEC. 1. Trade facilitation: Regional Comprehensive Economic Partnership promotes the simplification and standardization of customs procedures, reduces the time and cost of import and export, and improves the operation efficiency of export enterprises. 2. Market diversification: CBEC can enter new market areas through the platform of the FTZ, which can attract customers from many regions, reduce the dependence on the single market, and thus expand the sales scope and increase the source of income. 3. Increase the enthusiasm for innovation: the various advantages of the FTZ itself provide a good environment for the majority of enterprises to innovate; it can encourage enterprises to increase research and development investment so as to promote the progress of technology and the innovation of various business models. However, the impact of the FTZ on CBEC is not all positive, and there are also some challenges (differences in regulatory policies increase operational risks, market competition becomes increasingly fierce, enterprises are under increasing pressure, etc.).

Drawing from the aforementioned conclusions, this study proposes the following recommendations. First, the government should further optimize the policy environment of the FTZ and unify regulatory standards so as to reduce the compliance costs of enterprises. Second, cross-border e-commerce enterprises should make full use of the various advantages of the free trade area, strengthen risk management, and flexibly respond to changes in the international market so as to enhance their competitiveness and adaptability. Third, enterprises and the government should strengthen cooperation to jointly promote the training of CBEC talents to meet their needs. Finally, looking to the future, with the continuous optimization of the FTZ policy and the refined development of the CBEC industry, it is expected that the positive impact of the FTZ on CBEC will be further

enhanced. But at the same time, companies also need to constantly adapt to policy changes and the diversification of international markets to achieve sustainable development.

Authors Contribution

All the authors contributed equally and their names were listed in alphabetical order.

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