

Analysis of Advantages and Disadvantages of Cross-Border E-Commerce in International Economy and Trade

Zhixu Liu^(⊠)

School of Finance, Southwestern University of Finance and Economics, Chengdu 611130, China 3480358388@gg.com

Abstract. Since the epidemic, cross-border e-commerce has become an important engine to support "external circulation". In 2021, China's cross-border e-commerce maintained a good momentum of development, with a market size of 14.2 trillion yuan, and a year-on-year increase of 13.6% compared with 12.5 trillion yuan in 2020. Cross border e-commerce can reduce cross-border transaction costs, improve employee's professional quality, strengthen consumer's rights protection and enrich foreign trade service system. However, it is also difficult to ensure network security, increase logistics costs and may cause imbalance of export product structure. Based on the above analysis, this paper gives the optimization directions of China's cross-border e-commerce, providing reference for relevant researchers.

Keywords: International economy and trade \cdot Cross-border e-commerce \cdot Advantages and disadvantages

1 Introduction

Cross border e-commerce mainly refers to the transaction and electronic payment settlement process in which various transaction subjects belonging to different countries reach relevant business through international e-commerce platforms [1]. They realize the delivery of goods through the logistics mode of cross-border e-commerce and remote warehousing, thus completing an international business activity of transnational transactions. Cyberspace is a new space relative to physical space, which is mainly composed of virtual elements such as web addresses and passwords, but also an objective virtual world. Cross border e-commerce has become the main driving force in economic development today when the real economy is gradually saturated. Faced with this situation, China should spare no effort to meet this challenge, turn the challenge into an opportunity, and use cross-border e-commerce to drive China's economic and social progress. The network is a digital virtual product. Through various media channels, the corresponding data, sound, and image materials are disseminated globally. These contents appear in the form of computer data code and belong to intangible materials, which are mainly transmitted through digitization. In this transaction mode, both tangible and

intangible products can be traded. For example, paper books and electronic books can be used for online transactions. In the operation mode of cross-border e-commerce, the specific trade forms show the characteristics of concealment. International trade starts to become more virtual and paperless. The increase of virtual transactions leads to less physical transactions. However, there are great risks in trade management, such as tax management, dispute handling, theft, and fraud in online shopping, which will bring more and greater risks to trade development. In addition, cross-border e-commerce is also characterized by anonymity, timeliness, paperless and rapid evolution. In a word, the development of cross-border e-commerce is greatly different from traditional trade methods, but as a technical basis for promoting economic globalization and trade integration, it is of strategic significance for the integration and development of the global economy [2].

2 Current Situation of Cross-Border E-Commerce of China

2.1 Trading Volume

In 2021, China's cross-border e-commerce will continue to grow rapidly. Since the epidemic, cross-border e-commerce has become an important engine to support "external circulation". The development of cross-border e-commerce has led to changes in the entire industrial chain. The digital transformation of trade represented by cross-border e-commerce may have a profound impact on the industry. In February 2022, the sixth batch of cross-border e-commerce comprehensive pilot zones was released. Up to now, 132 cross-border e-commerce comprehensive pilot zones have been set up in six batches nationwide. *China Cross border E-commerce Market Data Report of 2021* was officially released in April 2022. The report is compiled according to the e-commerce database of DATA.100EC. CN. In 2021, the scale of China's cross-border e-commerce market will be 14.2 trillion yuan, a year-on-year increase of 13.6% compared with 12.5 trillion yuan in 2020. The market size (growth rate) in 2017–2020 was 8.06 trillion yuan (20.29%), 9 trillion yuan (11.66%), 10.5 trillion yuan (16.66%) and 12.5 trillion yuan (19.04%), respectively. In recent years, China's cross-border e-commerce transaction volume and growth rate are shown in Fig. 1.

2.2 Penetration

The report shows that in 2021, China's cross-border e-commerce transactions will account for 36.3% of China's total import and export value of goods trade of 39.1 trillion yuan. The penetration rate of cross-border e-commerce industry in 2017–2020 was 29%, 29.5%, 33.3%, 38.9% and 36.3% respectively. In 2021, the penetration rate of cross-border e-commerce industry will still exceed 35% against the background of the damage of many cross-border e-commerce enterprises and the 21.4% growth of China's import and export of goods. In the future, as the scale of the industry continues to grow, the penetration rate will also continue to increase. In recent years, the penetration rate of China's cross-border e-commerce industry is shown in Fig. 2.



Fig. 1. Trading volume and growth rate of cross-border e-commerce of China from 2017 to 2021 (figure credit: original)

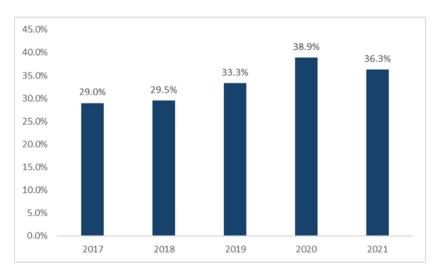


Fig. 2. Industry penetration of cross-border e-commerce of China from 2017 to 2021 (figure credit: original)

2.3 Proportion of Exports and Imports

In terms of the import and export structure of cross-border e-commerce, in 2021, the proportion of exports and imports of China's cross-border e-commerce will reach 77.5% and 22.5% respectively. At present, the import and export cross-border e-commerce market has initially matured with the help of policy incentives, tax incentives, etc. The

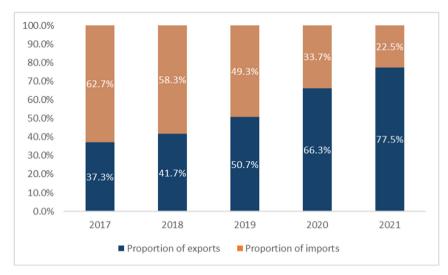


Fig. 3. Proportion of exports and imports of cross-border e-commerce of China from 2017 to 2021 (figure credit: original)

core driving force of the market is the demand and the leading role of the production end overseas. The goods exported from cross-border e-commerce mainly go to the United States, Britain, Malaysia, France, Germany, Japan, Spain and Russia [3]. The survey shows that the domestic platform's exports to Europe have decreased, while its exports to the member countries of the Regional Comprehensive Economic Partnership (RCEP) have increased. The imported goods mainly come from Japan, the United States and South Korea [4] (Fig. 3).

3 Advantages of Cross-Border E-Commerce in International Economy and Trade

3.1 Reduce Cross-Border Transaction Costs

At present, all walks of life in China are actively adopting the marketing model of cross-border e-commerce. From the perspective of the introduction of cross-border e-commerce channels, enterprises need to establish their own production and marketing channels for transactions, connect their suppliers, achieve close cooperation between the international economy and trade upstream and downstream, highlight the role of cross-border e-commerce platforms, and thus provide basic ideas for the innovation of transaction processes and sales channels. The optimization of transaction process and the expansion of sales channels can significantly reduce the transaction costs of enterprises, which has the effect of reducing costs for saving international economic and trade transactions [5]. At present, the transaction management of enterprises needs to take advantage of the cost advantage to change the traditional transaction mode in the past. Enterprises build their own transaction platform and use the transaction platform established by a third party. There are significant differences between the two platforms.

The cross-border e-commerce platform shortens the geographical distance of international trade, saves the trade costs of foreign trade enterprises, and enriches the choices of consumers. Whether it is cross-border e-commerce or traditional international trade, goods can only enter the customs territory and reach consumers through customs clearance. The transaction mode of the enterprise's self-built transaction platform is aimed at the enterprise's suppliers. This transaction mode is increasingly common in the transaction management process of enterprises, and the entire transaction management process needs to be transparent and open, so that the transaction process can be more efficient and cost less [6].

3.2 Improve Employee's Professional Quality

Modern society is a society with highly developed economy and science and technology, which has greatly broken through the boundaries of the industry, showing the characteristics of diversification and integration. Comprehensive quality can directly reflect the work ability and quality of employees. Employees with high comprehensive quality are required by the enterprise, and also the needs of social development. The customers of cross-border e-commerce come from all over the world, with different languages and customs. The complexity and uncontrollability are greatly increased, and there are many risks, such as product quality, capital payment, network security, transaction subject credit, etc. [7]. Cross border e-commerce talents should guard against risks, be good at finding problems, learn to think and deal with problems, and meet challenges one after another. To ensure product quality, products that do not meet the quality standards will lead to customer complaints or even litigation, which will have a bad impact on the store. Employees should master international trade knowledge, be familiar with the latest policies, regulations, and practices of various countries on cross-border e-commerce, and understand the operation of various links of import and export business, such as payment for goods, receipt and shipment, customs supervision, tariff payment, and cargo insurance. Employees can describe the enterprise and product information in English, recommend new products to foreign guests, help guests choose products, write English emails in daily business activities, call back guests, and negotiate in English in transaction negotiations [8]. Understand the local conditions and customs of various countries, be good at analysing the types and personality characteristics of guests, and win the trust of guests through professional ability and communication skills. We should get familiar with their products, guide customers to place orders, properly handle disputes, and help customers solve product problems.

3.3 Strengthen Consumer's Rights Protection

Traditional consumption is face to face transaction with commodity buyers and sellers. Cross border power will be transferred to offline transaction. At the same time, consumers' choice vision will be expanded. However, the consumers can't see the physical goods, which also increases the possibility of the damage to consumers' rights and interests. The thing that the consumers buy fake goods in cross-border e-commerce will not only take a long time to return goods across borders, but also cost a lot of freight

and tariffs. In contrast, the domestic e-commerce seems to be more beneficial to consumers. In cross-border e-commerce, the quality of products purchased by consumers is sometimes not guaranteed. When consumers buy fake goods, their rights and interests are damaged. In cross-border situations, the customs clearance process is slow, the return time is long, and the freight handling and tariff costs limit the development of cross-border e-commerce [9]. Domestic e-commerce pays more attention to protecting consumers, so reducing the enthusiasm of cross-border consumption hinders the development of trade. In the context of the development of global trade, consumer protection agreements have been issued all over the world. At the same time, we should try our best to coordinate rights and interests and adjust domestic consumer protection laws. We should not only adapt to international rules to combat illegal and criminal acts, but also advocate the protection of consumers' rights and interests. Therefore, it reduces cross-border consumption and hinders the development of cross-border e-commerce. In the context of closer global ties, consumer protection agreements around the world have become more closely linked, adjusting domestic consumer protection laws, adapting to international rules, combating fraud and fraudulent business activities, and protecting consumers' rights and interests [10].

3.4 Enrich Foreign Trade Service System

The number of cross-border e-commerce users has increased, the order amount varies from low to high, and the package size varies. Small enterprises are difficult to bear high service costs due to unreasonable customs declaration management in the development, which is difficult to stimulate the vitality of domestic small enterprises. Only a few enterprises can bear such huge management costs [11]. The efficiency of China's crossborder commerce in customs declaration, tax collection, verification and tax refund are still lower than that of some countries, and the service cost increases instead. In this case, we need to solve the problems faced by the development of SMEs. The comprehensive foreign trade service platform can integrate the marketing service mode of small and medium-sized enterprises, and integrate the business content to improve the management efficiency of small and medium-sized enterprises and save costs. Small and mediumsized enterprises and private enterprises have more flexibility in developing foreign trade. However, compared with large state-owned enterprises, they have more difficulties, which are reflected in financing, customs clearance, tax refund and other aspects. They are not only limited by scale, but also constrained by talents and experience. Large state-owned foreign trade enterprises often have their own trading companies or teams, and small and medium-sized enterprises need a lot of investment to complete the entire trade chain. Comprehensive foreign trade services can help them solve this problem. The foreign trade service platform processes similar products in batches instead of reducing the cost, customs clearance, tax refund, etc. of foreign trade enterprises, integrating the development content while enjoying the treatment of large enterprises, and promoting the development of financial economy [12].

4 Disadvantages of Cross-Border E-Commerce in International Economy and Trade

4.1 Difficult to Ensure Network Security

In the era of big data, data is a resource, and consumers' personal information is also a part of the data. The disclosure of consumers' personal information not only brings troubles to consumers, but also may affect national security. In addition to UnionPay, Alipay and other domestic payment enterprises, Apple payment, Visa and other payment methods will also be launched in China. The coexistence of multiple payment methods is more likely to lead to information leakage. At present, the cross-border collection process of foreign trade enterprises is still cumbersome, and the payment for goods must go through such intermediate links as circulation, transaction, compliance, settlement and risk control between multiple financial organizations and banks, which lengthens the return cycle of foreign trade enterprises' payment for goods, reduces the capital turnover rate, and increases the business risk. Therefore, in the case of irreversible international trends, all countries should strengthen network security protection and strengthen policy cooperation in terms of network security threats and network security capabilities. The settlement charge items of third-party payment institutions mainly include handling fees and exchange losses. Some payment platforms also set up annual fees, arrival fees and other items, increasing the collection costs of foreign trade enterprises [13].

4.2 Increase Logistics Costs

With the increase of cross-border e-commerce trade in China, the number of orders has been rising, and the countries that sell are all over the world. The rapid development of cross-border e-commerce in China has promoted the rapid development of the logistics industry, but at the same time, it is also facing huge pressure from import and export logistics [14]. The traditional form of foreign trade logistics can no longer meet the requirements of cross-border e-commerce for timeliness, efficiency, convenience, and security. At present, the cost of cross-border e-commerce logistics is still high, which makes many businesses miserable. Therefore, reducing the cost of international logistics is one of the things that need to be done to increase the profit space of stores, and also indirectly reduce the price of goods. Transnational import and export trade often involves many links such as international settlement, customs clearance at home and abroad, logistics transfer and international transport capacity resource allocation, among which logistics is the biggest problem restricting the development of the industry. The logistics cost of cross-border e-commerce accounts for 20%-30% of the total cost. At the same time, among the current domestic logistics enterprises, third-party service providers that can provide standardized and customized logistics services for crossborder e-commerce consumers are unable to meet the market demand. At the same time, due to the increase of transportation costs, the international logistics costs are high, and the transportation costs of small batch orders are too high. At the same time, due to the rapid rise of transportation costs, the logistics problems caused by costs have hindered the development of cross-border e-commerce to a certain extent.

4.3 Cause Imbalance of Export Product Structure

According to the current situation of China's cross-border e-commerce export products, the proportion of 3C digital products is 37.7%, followed by clothing decoration, which accounts for 10.2%. This is mainly because China's cross-border e-commerce exports mainly flow to the low-end consumer groups abroad. Although the production scale and standardization degree of China's 3C products are relatively high, the high proportion is not conducive to the adjustment of China's export commodity category structure. Export products are concentrated in the fields of electronic products and light industry, while the proportion of the tertiary industry is too high. This easily leads to the polarization of the export industry, and even the Matthew effect. This growth is conducive to expanding cross-border trade, expanding e-commerce trade, and rapidly developing related industries in the short term, but in the long run, it will lead to an imbalance in the structure of export products.

5 Optimization Directions of Cross-Border E-Commerce in International Economy and Trade

5.1 Improve Cross-Border Logistics System

Support large domestic logistics enterprises to develop cross-border logistics business, encourage them to use big data, Internet of Things, cloud computing and other technologies to improve the informatization, intelligence and digitalization level of cross-border logistics. We will guide large enterprises to actively arrange overseas warehouses, shorten the delivery time of goods, reduce logistics operation costs, and realize overseas localization sales. Strengthen the construction of airport, port, railway, and other logistics infrastructure, and form an international logistics channel that connects the river to the sea and radiates the world. When enterprises carry out international trade based on crossborder e-commerce, it is critical and important to choose logistics. Scientific selection of logistics schemes can reduce unnecessary expenses [15]. In this process, enterprises should clarify their basic needs, fully understand the capabilities and qualifications of suppliers, sort out the commodity categories, and formulate different logistics plans for different goods. At present, the cross-border logistics available mainly include crossborder logistics special lines, international express companies, overseas warehouses, postal logistics, etc. When choosing logistics, no matter which one you choose, you should understand its customs clearance ability, know the specific certification level of the customs declaration enterprise, and grasp whether it can enjoy the customs declaration preferences. In addition, due to the long distance and complex environment during transportation, it is necessary to consider the price factor and try to choose a compliant company to make the freight price more reasonable.

5.2 Unblock Payment and Settlement System

Promote financial institutions to establish a special comprehensive service platform to provide cross-border e-commerce enterprises with cross-border direct remittance, overseas virtual account, overseas collection, and other full cycle financial services. We will

improve the credit qualification certification mechanism for cross-border e-commerce enterprises, ensure the true compliance of transaction behaviour, and reduce the risk of cross-border e-commerce enterprises' capital freezing. Optimize and integrate the payment and settlement channels between cross-border e-commerce enterprises, banks, and third-party platforms, establish an all-round and full process risk prevention and early warning mechanism, and improve the risk governance level and risk control ability. In the information environment, it is very important to build personal credit information and enterprise credit information system. At present, the number of dishonest enterprises and dishonest personnel across the country has increased significantly, which will have a great negative impact on the construction of a credit society, and it is difficult to make cross-border e-commerce transactions obtain a good environment. Therefore, it is necessary to promote the continuous improvement of the credit reporting system and step up the introduction of basic credit reporting management methods, so that law enforcement departments can obtain legal basis when conducting management and supervision. The improvement of the credit reporting system can further ensure the orderliness and standardization of Internet finance and promote the healthy development of cross-border e-commerce market. At the same time, the state needs to strengthen the overall protection of personal information and improve the personal information database. In addition, the state should actively carry out network security publicity and skills training, enhance the safety responsibility awareness of enterprises, and improve the safety awareness of the masses. Enterprises need to pay attention to security management and technological innovation to ensure personal information security.

5.3 Develop Industry Supervision System

China's clearance policy of cross-border e-commerce customs needs to be improved. For example, the lack of supervision on gray customs clearance results in gray customs cleared of many small goods. The gray customs clearance does not have a customs clearance certificate, and the after-sales service such as return and exchange of goods cannot be carried out normally. We must strengthen the inspection of gray customs clearance to promote the healthy development of cross-border e-commerce. Establish a cross-border e-commerce regulatory platform covering different functional departments, clarify the functional scope of each department and institution, prevent ultra vires supervision and regulatory vacuum, and form a multi-level, cross sectoral, and normalized regulatory information sharing, coordination, and mutual assistance mechanism. Formulate and issue operable and practical laws and regulations, implement differentiated supervision measures for different types of cross-border commodities, and do a good job in the supervision and management of cross-border commodities at the strict regulatory level. At the same time, we will vigorously develop third-party certification structures, industry associations and other social organizations, conduct qualification certification for cross-border e-commerce enterprises and individuals through third-party institutions, and support industry associations to issue industry production specifications, commodity quality standards, after-sales service terms, etc. We will establish a cross-border commodity traceability regulatory mechanism, strictly investigate and deal with counterfeit and shoddy products, and issue consumer risk warnings in a timely manner, so as to effectively protect consumers' rights and interests and the industry's ecological

environment. The reduction of orders due to the distrust of buyers will increase the sales cost of the whole industry and reduce the surplus of producers of all cross-border e-commerce, which will not only damage the interests of other cross-border e-commerce. If the reduction of producer surplus in the whole industry is greater than the increase of its own producer surplus, it is also unfavourable for them. China's customs policy on cross-border e-commerce has been continuously improved and customs supervision has been strengthened. We will build a better environment for cross-border e-commerce by rectifying such illegal acts.

6 Conclusions

Cross border e-commerce has become an important focus for China to innovate its trade model and enrich its trade content. It plays an important role in improving the level of opening up to the outside world and building a new development pattern of domestic and international double circulation. It plays an important role in comprehensively improving the level of opening and building a new development pattern of domestic and international double circulation and mutual promotion. In particular, it was proposed in the "Fourteenth Five Year Plan" that China will adhere to the wider scope, wider areas and deeper level of opening up, the new forms and models of trade represented by cross-border e-commerce will usher in a significant period of opportunity. This paper deeply analyses the advantages and disadvantages of cross-border e-commerce in international economy and trade, and gives corresponding improvement plans. In the future, the development of China's cross-border e-commerce needs to be studied from a more diversified and holistic perspective.

References

- 1. Elia S, Giuffrida M, Mariani M M, et al. Resources and digital export: An RBV perspective on the role of digital technologies and capabilities in cross-border e-commerce[J]. Journal of Business Research, 2021, 132: 158-169.
- Zhu W, Mou J, Benyoucef M. Exploring purchase intention in cross-border E-commerce: A three stage model[J]. Journal of Retailing and Consumer Services, 2019, 51: 320-330.
- 3. Wang Y, Jia F, Schoenherr T, et al. Cross-border e-commerce firms as supply chain integrators: The management of three flows[J]. Industrial Marketing Management, 2020, 89: 72-88.
- Abudureheman A, Nilupaer A. Optimization model design of cross-border e-commerce transportation path under the background of prevention and control of COVID-19 pneumonia[J]. Soft Computing, 2021, 25(18): 12007-12015.
- 5. Taherdoost H, Madanchian M. Empirical modeling of customer satisfaction for E-services in cross-border E-commerce[J]. Electronics, 2021, 10(13): 1547-1549.
- Li G, Li N. Customs classification for cross-border e-commerce based on text-image adaptive convolutional neural network[J]. Electronic Commerce Research, 2019, 19(4): 779-800.
- Giuffrida M, Jiang H, Mangiaracina R. Investigating the relationships between uncertainty types and risk management strategies in cross-border e-commerce logistics[J]. The International Journal of Logistics Management, 2021, 32(4): 1406-1433.
- 8. Yang Y, Yang L, Chen H, et al. Risk factors of consumer switching behaviour for cross-border e-commerce mobile platform[J]. International Journal of Mobile Communications, 2020, 18(6): 641-664.

- Valarezo Á, Pérez-Amaral T, Garín-Muñoz T, et al. Drivers and barriers to cross-border ecommerce: Evidence from Spanish individual behavior[J]. Telecommunications Policy, 2018, 42(6): 464-473.
- Wang X, Xie J, Fan Z P. B2C cross-border E-commerce logistics mode selection considering product returns[J]. International Journal of Production Research, 2021, 59(13): 3841-3860.
- 11. Sun L, Lyu G, Yu Y, et al. Cross-border e-commerce data set: Choosing the right fulfillment option[J]. Manufacturing & Service Operations Management, 2021, 23(5): 1297-1313.
- 12. Niu B, Wang J, Lee C K M, et al. "Product+ logistics" bundling sale and co-delivery in cross-border e-commerce[J]. Electronic Commerce Research, 2019, 19(4): 915-941.
- 13. Hazarika B B, Mousavi R. Review of cross-border e-commerce and directions for future research[J]. Journal of Global Information Management (JGIM), 2021, 30(2): 1-18.
- 14. Teng S. Route planning method for cross-border e-commerce logistics of agricultural products based on recurrent neural network[J]. Soft Computing, 2021, 25(18): 12107-12116.
- 15. Wang F, Yang Y, Tso G K F, et al. Analysis of launch strategy in cross-border e-Commerce market via topic modeling of consumer reviews[J]. Electronic Commerce Research, 2019, 19(4): 863-884.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (http://creativecommons.org/licenses/by-nc/4.0/), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

