

Analysis of Problems in the Development of Cross-border E-commerce in China's Manufacturing Industry

Hao Zhang

Faculty of Economics, Shanghai University, Shanghai, China

zhanghao_Holly@163.com

Keywords: Traditional Manufacturing; Cross-border E-commerce; Transformation and Upgrading; Countermeasure Analysis

Abstract: Since the international financial crisis, the growth of international trade was slower than before. The number of orders received by traditional manufacturing companies has continuously decreased. With the increase of China's labor costs and the phenomenon of homogenization of commodities, the advantage of our manufacture industry with low-cost is gradually disappearing. It requires manufacturing companies to undergo structural transformation in order to seek new paths for further development. Under the current background of "Internet + Foreign trade", cross-border e-commerce is developing rapidly in China. Traditional manufacturing companies can transform their businesses through the cross-border e-commerce model in order to expand new markets, and achieve the growth of sales. However, there are still many problems in the integration of traditional manufacturing and cross-border e-commerce mode. For example, the cost of logistics is high, and payment security is difficult to guarantee. Under such circumstance, this thesis analyses the problems encountered in the development of cross-border e-commerce in manufacturing industry, and proposes solutions such as optimizing the logistics model, improving the credit system and training professionals to solve those problems.

1. Introduction

Cross-border e-commerce is an emerging type of international trade model with the rapid development of the Internet, which refers to traders belonging to different borders, using cross-border e-commerce platforms for inquiry, negotiation, payment, etc., and delivers the goods through international logistics to accomplish the transaction.

As the main part of China's economy, the manufacturing industry plays an important role in the economic growth of China and even the world. However, manufacturing industry in China has always been large but not strong. Restricted by labor costs, resources, environment and other factors, the development of manufacturing industry has fallen into a downturn in recent years. With the advent of the "Internet +" era, the mode of cross-border e-commerce has made rapid development, which is a new chance for the transformation and further development of traditional manufacturing companies. It can help them optimize their production structure and marketing channel, and promote them to upgrade and transformation [1].

2. Development Status

2.1. Development Status of Manufacturing Industry

As we all know, the development of manufacturing industry is crucial to economic development. The manufacturing output accounts for about 30.0% of China's GDP. However, China's manufacturing industry is dominated by labor-intensive low-end industries, with relatively low added value. According to the Smile Curve theory, the industrial chain is divided into three stages: R&D, manufacturing and brand marketing. Among them, the added value of R&D and marketing is high, while the manufacturing phase is low. A large part of manufacturing enterprises in China is large or medium-sized OEM factory, and the profit of the them is very low. What's worse, the

increase of labor costs in recent years also weakened the competitive advantage of China's manufacturing. Some Southeast Asian countries, such as Thailand and India, rely on lower labor and land costs; have promoted the development of low-end manufacturing, which is a great challenge to China's traditional manufacturing advantages. At the same time, the manufacturing industry is facing the problem of overcapacity. Under such circumstances, China's traditional manufacturing industry must find a new way for development.

Most manufacturing companies currently use the traditional B2B mode for export trade. This traditional model has a long transaction cycle, with large transaction amounts and cumbersome processes [2]. In today's increasingly severe export situation, the volume of many manufacturing companies' order has a sharp decrease. With the loss of the original competitive advantage, the difficulty of traditional international trade has increased. By contrast, cross-border e-commerce, a new trade model that transcends the complex intermediate links, significantly reduces the channel cost of transactions, which is a new development path for traditional manufacturing enterprises.

2.2. Development Status of Cross-Border E-Commerce in China

2.2.1. The Rapid Development of Cross-Border E-Commerce

According to the data released by the National Bureau of Statistics of China, in 2019, China's total annual import and export volume was 31.55 trillion yuan, which has increased by 3.4%. Exports were 17.23 trillion yuan, an increase of 5.0%, and imports were 14.32 trillion yuan, an increase of 1.6%. By contrast, cross-border e-commerce had a total transaction volume of 10.5 trillion yuan in 2019, an increase of 16.66%. Exports were 8.03 trillion yuan, an increase of 13.09%, and imports were 2.47 trillion yuan, an increase of 30%. This shows that the cross-border e-commerce model has become a growth point in the foreign trade field.

Figure 1 below shows China's total volume of imports and exports of goods and the scale of cross-border e-commerce transactions from 2013 to 2019. We can see that the scale of cross-border e-commerce in China has been growing fast in recent years, and the proportion of cross-border e-commerce in the total import and export volume has been increasing, from 12.4% to 33.2% in 2019.

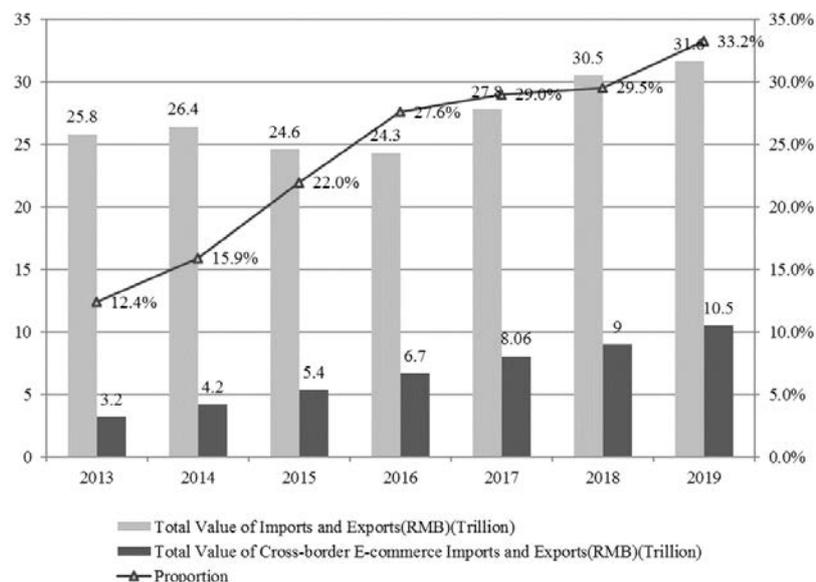


Figure 1. Total Value of Imports and Exports, and Cross-border E-commerce transaction

Figure 2 shows that the proportion of cross-border e-commerce export scale in total exports is increasing, and the growth rate is significantly higher than the growth rate of total exports. It is expected that further growth and development will be achieved.

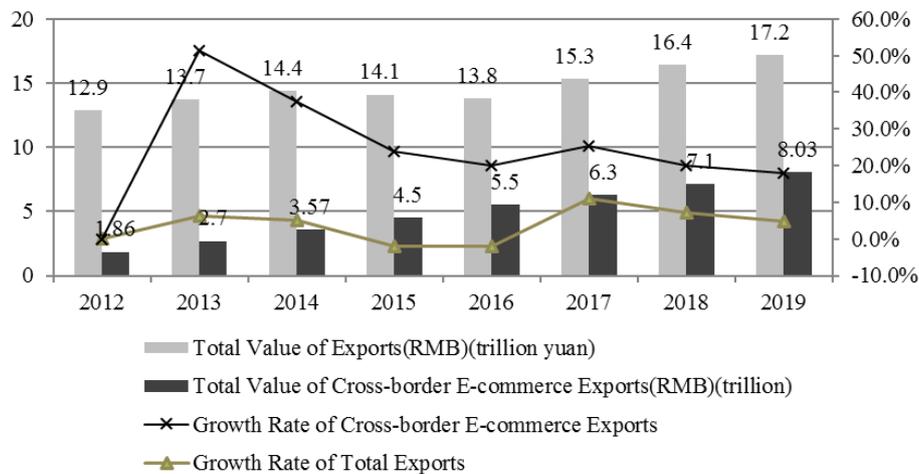


Figure 2. Total Value of Exports and Cross-border E-commerce Exports

2.2.2 Support Provided By External Macro Policies

Under the national strategies of "Internet +" and "Belt and Road", as a combination of "Internet + foreign trade", cross-border e-commerce has achieved rapid development. Relevant government departments also attach great importance to it. Since 2013, a number of relevant policies and documents have been issued. The policy-making departments include the State Council, the Ministry of Commerce, the General Administration of Customs, and the Ministry of Finance. Most of the policies aim to reduce the obstacles and problems in transaction, including payment, customs declaration, logistics, etc. These supporting policies will help China's cross-border e-commerce develop rapidly and promote the development, transformation and upgrading of traditional manufacturing.

3. The Significance of the Integration of Manufacturing and Cross-Border E-Commerce Mode

3.1. Promote the Transformation and Upgrading Of Traditional Manufacturing Enterprises

At present, most manufacturing enterprises are implementing low-cost large-scale production. However, with the multi-level, personalized and diversified trends of consumer demand, traditional production and sale methods cannot meet consumers' personalized customization needs. Therefore, while improving product quality, companies must cultivate awareness of innovation, strengthen product R&D to meet changes in consumer demand. Cross-border e-commerce model is conducive for enterprises to grasp the changes of market demand in time, so as to timely adjust the product structure and adapt to the market demand. Through the Internet information technology, including cloud computing, big data, etc., companies could understand the changes in consumer demand in time and realize customized manufacturing [3]. With the support of Internet technology, enterprises can efficiently and accurately provide consumers with personalized products and promote the optimal allocation of resources.

3.2. Shorten Trade Process and Reduce Channel Costs

Most manufacturing enterprises in China adopt the traditional B2B sales model, in which importers and exporters trade large quantities of goods, and then middlemen distribute the goods at multiple levels, and finally reach consumers. The whole process is complex and cumbersome. The transaction is based on wholesale in large quantities, and the multi-stage middlemen increase the

channel cost, so the profit is relatively low.

The mode of cross-border e-commerce, by contrast, is significantly shortened the commodity supply chain and simplify the procedure of trading. With the help of e-commerce platform, foreign consumers and factories could connect with each other directly, beyond the middlemen such as wholesalers and retailers. The original intermediate channel cost is converted into profits for producers, price concessions for overseas end consumers and commissions for e-commerce platforms. This is conducive to maintaining the price advantage of commodities, improving the profitability of export-oriented manufacturing enterprises, and improving the product competitiveness.

3.3. Accelerate the Brand Building of Manufacturing Companies

A brand is the main basis for the customer to distinguish the characteristics and advantages of different enterprises in the market. In China, a large number of manufacturing companies are OEM enterprises with few independent brands, which means that enterprises will encounter great obstacles in growth and upgrading [4]. In the past, manufacturing enterprises could gain competitiveness in the market only by price advantage. But now, the phenomenon of commodity homogenization is serious. Without the independent brands and product loyalty, it will be difficult for manufacturing enterprises to survive in the fierce competition [5]. Therefore, traditional manufacturing enterprises must accelerate brand building. In the case where the product itself cannot be significantly differentiated from similar products, the brand can magnify the differences in the competition of similar products [6], thereby helping the enterprise to get rid of the product homogenization competition and obtain a higher brand bonus.

4. Problems in the Development of Cross-Border E-Commerce

4.1. High Cost and Low Efficiency of Logistics

Cross-border e-commerce logistics generally goes through the following process:

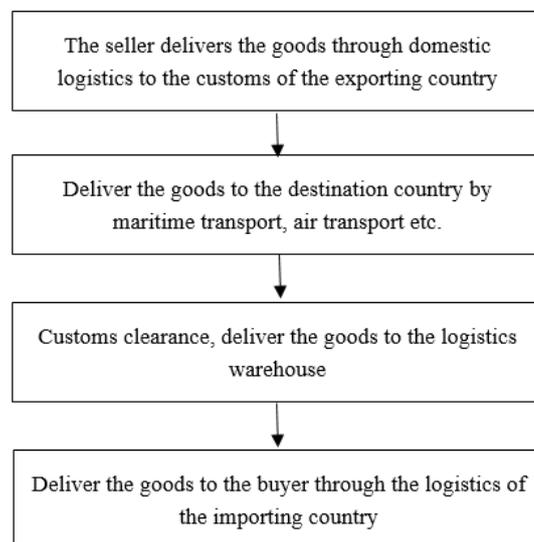


Figure 3. Basic Process of Cross-border logistics

As shown above, the whole process is complex and tedious. In addition to some transfer processes, the delivery time ranges from one or two weeks to more than a month. Compared with domestic logistics, the delivery cycle is longer. What's more, under the B2C model, e-commerce orders are mainly in small batches, which require faster transportation methods. Therefore, air transportation is often adopted, which increase logistics will cost. It is a problem for both buyers and sellers.

The cost, speed, and security of logistics all need to be considered for a company when choosing a logistics method. On the one hand, if they pursue low cost, logistics time will be extended, and consumer satisfaction will decline. On the other hand, if they focus on improving the quality and efficiency of logistics, manufacturing companies will face high logistics transportation cost, which is not conducive to the sale of goods [7]. There is no doubt that the development of cross-border e-commerce in manufacturing is closely related to the efficiency of international logistics. Therefore, it is urgent to solve the problem of logistics so as to improve the comprehensive level of manufacturing enterprises in developing cross-border e-commerce model.

4.2. Incomplete Credit Mechanism

Cross-border e-commerce is based on the virtual Internet, so there is a lot of credit uncertainty in the transaction. The information on both sides of the transaction is asymmetric, and it is difficult to determine and verify the credit: it is difficult for sellers to judge customers' consumption ability and credit status; for the online e-commerce platform to check the identity of each participant, especially the identity of overseas customers, which will make the transaction more difficult and risky [8].

Payment methods of cross-border e-commerce in China can be divided into offline and online. Offline payment is usually completed through commercial banks or a remittance company, and online payment is realized through a third-party payment platform in China or abroad. The cost of payment through third-party platforms is low and the operation is convenient, so it is currently the preferred method of payment. Under such circumstances, the security of the third-party payment platform has become a crucial factor which will affect cross-border transactions: it related to whether the buyer of the transaction can receive the goods on time after payment, and whether the seller can receive foreign exchange in time after delivery. In addition, the exchange rate fluctuations also make cross-border payments more complicated. However, China does not have a unified and complete management standard system in this field, nor does it pay enough attention to supervision, which brings potential trouble in cross-border transactions. Therefore, standardized and unified credit and payment mechanisms are needed to promote the sound development of cross-border e-commerce.

4.3. Shortage of Compound Talents

Different from traditional domestic e-commerce, cross-border e-commerce involves a wider range of professional knowledge. Therefore, it is more urgent for interdisciplinary talents who are proficient in foreign language skills, and familiar with foreign trade knowledge and e-commerce platform operation mode [9]. Compound talents engaged in this area need to have the following three qualities: First, basic language communication skills. The main body of the transaction belongs to different countries, so smooth communication is necessary and of great importance. Second, the ability to develop and expand overseas markets, and be familiar with the cultural background, consumption habits, and demand preferences of consumers in different target markets. Third, understand the major cross-border e-commerce trading platforms, including the access requirements, transaction rules, etc.

However, current foreign trade practitioners in the manufacturing industry, on the one hand, are experienced foreign trade personnel, may have an established idea of the trading pattern, lack of understanding and acceptance of the e-commerce model. On the other hand, young employees those who are familiar with the cross-border e-commerce model may have insufficient knowledge and experience in overseas market expansion and consumer preferences. This phenomenon will affect the efficiency of traditional manufacturing enterprises in developing e-commerce mode.

5. The Countermeasure Analysis

5.1. Optimize International Logistics Model and Improve Transportation Efficiency

With the rapid development of cross-border e-commerce, there are higher requirements for the

logistics system and related supporting facilities. For logistics enterprises, it is necessary to innovate the distribution model and use a more advanced network information system to realize the synchronous tracking of goods [1]. At the same time, handle the connection of receipt, transportation, warehousing, distribution and other links, and ensure the efficient and safe operation of goods by adding distribution centers, optimizing distribution routes and transportation methods.

5.1.1 Construct and Upgrade Overseas Warehouses

Overseas warehouse refers to a distribution mode that establishes warehouses in countries or regions in overseas target markets, transports goods to overseas warehouses, and directly ships from local warehouses according to order requirements. The establishment of overseas warehouses can provide consumers with a consumption experience consistent with local sales, help the sellers deal with overseas orders in a timely manner, greatly shorten the logistics time of cross-border transactions, and improve product competitiveness and customer satisfaction in the target market.

Manufacturing companies can ship goods to overseas warehouses in large quantities according to the business volume of the local market. Outputting large quantities of goods at once can reduce the freight of unit products. When products are in demand overseas, they can ship goods directly from overseas warehouses. In addition, overseas warehouses can also help companies efficiently deal with the problem of return and replacement of goods, avoid the time and logistics costs caused by secondary customs clearance, and reduce the profit loss caused by returns and exchanges.

5.1.2 Open up New Logistics Channels

In recent years, China has focused on building maritime and land "Silk Roads", which also provide new opportunities for cross-border logistics. Driven by the "Belt and Road" strategy, China is gradually developing railway construction between second-tier cities. Therefore, for manufacturing companies, in addition to the traditional modes of shipping and air transportation, the choice of railway transportation mode can also be used to diversify the logistics methods to ensure efficient transactions.

5.2. Improve the Credit System

The establishment of the credit system requires each relevant party to take measures to guarantee:

5.2.1 Seller and Buyer of the Transaction

For both parties to the transaction, it is necessary to choose a formal third-party trading platform, which has relatively mature and fair rules in operation. At the same time, the buyer and seller must take measures to identify the other party's information and credit status. For example, the seller could analyze the buyer's purchase behavior and purchasing ability through the data provided by the platform. The buyer could know and inquire the seller's reputation through the information provided by the e-commerce platform.

5.2.2. Third-Party Platforms

For trading platforms and third-party payment institutions, big data information on the Internet should be used to accurately verify the true identity and credit status of both parties of the transaction to ensure that the identity of the participants is true and legal [4]. In addition, formulating access standards and increasing the punishment of traders for dishonesty are also of great importance. At the same time, third-party institutions for payment should cooperate with banks, judge the credit status of users and monitor their payment behavior to protect the interests of participants in the transaction.

5.2.3. Relevant Government Departments

The relevant government should take measures to improve the credit guarantee system for cross-border transaction, such as issuing relevant laws and regulations to provide legal protection for payment security, using technical means to supervise payment systems and ensure the security

of transaction payments, establishing a "blacklist" for the faithless, etc [10]. In addition, relevant regulatory authorities can unite to share information, comprehensively monitor trading platforms and third-party payment platforms, establish unified payment standards, constantly standardize their operation process, and maintain the sound development of third-party platforms [11].

5.3. Cultivate Professional Talents

As cross-border e-commerce is a new concept appeared in recent years, there are not sufficient talent reserves. It is recommended that all localities explore effective personnel training mechanisms. For example, through the guidance of the government's policy, integrate the teaching resources of major universities, especially vocational colleges in international economics and trade, e-commerce, and foreign languages, set up specialized major to train relevant talents, and formulate reasonable discipline construction standards. In terms of practical training teaching, colleges can cooperate with enterprises, establish an e-commerce practice base to help students combine business theory and practical operation, applies knowledge to practice. In this way, compound talents can be cultivated according to the need of market and enterprises when developing cross-border e-commerce.

References

- [1] Zhengchu He, Hongyu Pan. Problems and countermeasures for the development of cross-border e-commerce in China's manufacturing industry[J]. Seeker, 2017(06):129-135.
- [2] Lijuan Cai. Research on the Development of Cross-border E-commerce in Traditional Foreign Trade Manufacturing Industry under the Context of "Mobile Internet +" [J]. Journal of Commercial Economics, 2016(16):140-143.
- [3] Boxu Zhang, Hui Li. Promoting the deep integration of Internet and manufacturing industry -- mechanism and path based on "Internet +" innovation [J]. Research on Economics and Management, 2017, 38(02):87-96.
- [4] Liping Wei, Wenxiang Xing. Research on the Impact of Cross-border E-commerce Export on Brand Internationalization in China [J]. Intertrade, 2019(12):19-26.
- [5] Qing Sun. Research on Brand Strategy of Chinese Manufacturing Groups based on Cross-border E-commerce [D]. Zhejiang University, 2017.
- [6] Zhitian Zhao. Mechanism Construction and Inspection of integrated Development of Cross-border E-commerce and Manufacturing industry [J]. China Business and Market, 2018, 32(09):49-57.
- [7] Yafei Guo. Analysis of the dilemma and countermeasures of cross-border e-commerce logistics in China [J]. Logistics engineering and management, 2015, 37(09):153-154
- [8] Xueqing Lv, Meihua Zhou. Problems and Paths in the development of Cross-border E-commerce platforms in China [J]. Economic Review, 2016(03): 81-84.
- [9] Xiaoxue Xu. How to develop cross-border e-commerce healthily and rapidly? [J]. People's Tribune, 2019(05):86-87.
- [10] Weinian Zhang, Xiaojing Lu, Menghua Li. Research on the Influencing Factors of the Development of Cross-border E-commerce in China[J]. Humanities & Social Sciences Journal of Hainan University, 2019, 37(03):57-63.
- [11] Lishi He, Hongpeng Wang. Countermeasures analysis of cross-border E-commerce Supervision [J]. People's Tribune, 2019(20):80-81