Empirical Study on Cross Border E-commerce Enterprise Logistics Model under the Background of Economic Globalization

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Abstract
Logistics in the cross-border electricity supplier industry chain is in a very critical position. In this paper, the author makes an empirical study on cross border e-commerce enterprise logistics model under the background of economic globalization. The logistics modes of cross-border e-commerce include international express, overseas warehousing, third party logistics mode, each logistics mode has its characteristics. Cross border e-commerce enterprises should take full account of their own comprehensive strength, the nature of the main goods, timeliness, logistics costs and other factors in the choice of suitable logistics mode.

Key words: Cross-border E-commerce, Logistics mode, Cargo warehousing, Transportation cost

1. INTRODUCTION

With the development of economic globalization and information globalization, more and more economic contacts and business activities among countries, especially in recent years, cross-border e-commerce development is particularly rapid. However, due to its own characteristics, the existing logistics model can not keep up with the development of cross-border e-commerce, and become the bottleneck restricting its development. People's daily life, more and more consumers choose to collect foreign high-quality products and services through the Internet, direct overseas shopping rather than by the new mode of foreign trade agent is gradually accepted by more and more people, consumer attitudes change and promote the development of cross-border e-commerce. And whether the goods can arrive on time, whether the safety is reached and whether the quality is guaranteed and so on are all very important factors that consumers need to consider when shopping, which also involves the e-commerce logistics. The current mainstream cross-border e-commerce supplier models are mainly B2B, B2C and C2C. In recent years, the growth of China's import and export trade has slowed down, especially in 2015. For the first time in more than a decade, negative growth has declined. However, the cross-border e-commerce supplier has shown a rapid growth trend, and has maintained a growth rate of more than 30% in recent years. Cross border e-commerce supplier is a new model of foreign trade development, is an effective way to expand overseas marketing channels, to achieve the transformation and upgrading of foreign trade. The development of cross-border e-commerce supplier is of great significance to China and even the world economy under the new stage. Cross border e-commerce supplier logistics is promoted under the development of cross-border e-commerce. It provides logistics and other related services for domestic and foreign cross-border sellers, which refers to the goods between different customs logistics. There are many difficulties in promoting the development of cross-border e-commerce, such as trade mechanism, customs supervision, inspection and quarantine, foreign exchange management, cultural differences, transportation, logistics and so on, to some extent, hinder the development of cross-border e-commerce supplier. As the cross-border e-commerce supplier platform continues to grow, and focus on doing segments of the small and medium cross-border e-commerce supplier continues to mature, accordingly, cross-border e-commerce supplier logistics has gradually differentiated, there has been a cross-border e-commerce supplier large platform self-built logistics and small and medium-sized platform third party integrated services logistics.

Cross-border e-commerce supplier logistics is accompanied by the development of cross-border e-commerce generated. With the development of cross-border e-commerce supplier, cross-border e-commerce supplier logistics has also grown rapidly. The cross-border e-commerce supplier logistics refers to that a business activity in which the trading entity in different countries or regions reaches an agreement through an e-commerce platform and then pays and liquidated the goods to serve the goods through cross-border logistics. Because the e-commerce supplier environment, people's transactions mainly rely on the network, as the main body under the line, logistics and distribution is very important, it is directly related to the successful completion of the e-commerce supplier transactions.

2. CROSS-BORDER E-COMMERCE SUPPLIER LOGISTICS

2.1. Cross border e-commerce logistics
The cross-border e-commerce refers to between the different customs territory of the transaction subject, through e-commerce platform deal, payment after delivery of goods through cross-border logistics, complete the
transaction business. Usually refers to cross-border e-commerce between different countries and regions of the transaction, through the mail or express delivery for customs clearance, specific performance for the amount of small, frequent, rapid speed of new international trade pattern. A form of international trade in which customs clearance is carried out through Internet mail or express delivery in different countries or regions. These definitions have the same place, that is, cross-border e-commerce refers to transactions between different countries and regions, by e-commerce platform, and to transport goods to the demand.

Figure 1. Cross-border E-commerce

Logistics in the cross-border electricity supplier industry chain is in a very critical position. The author first analyzes the characteristics of B2C cross-border e-commerce logistics, and through the B2C cross-border e-commerce logistics critical success factors, put forward the specific countermeasures of e-commerce enterprises B2C cross-border e-commerce logistics implementation. In the process of the development of e-commerce, the influence factors are different in different periods. In the initial stage, the biggest influence is the government's supportive policy, and when it develops rapidly, the legal environment will greatly affect the promotion of e-commerce. How to effectively establish the legal mechanism is of great significance for the promotion of e-commerce. At the same time, the author also verifies the impact of different legal conditions on e-commerce diffusion in various countries. Cross border trade e-commerce is a new type of cross-border trade model, and has forward-looking. It has just risen in China and will become the development trend of China's foreign trade.

Figure 2. Cross-border logistics

At the same time, it points out three aspects of the efficiency of customs clearance, logistics and electronic payment and refund restricts the development of cross-border e-commerce. In the background, Chinese foreign
trade enterprises in China World Trade Center in the new period to keep up with the tide, the development of cross-border e-commerce is particularly important. The article from the rise and the status quo of cross-border e-commerce in China, summed up the advantages of cross-border e-commerce development in China as well as the resulting problems, and put forward constructive suggestions. Overall, cross-border e-commerce is a hot research topic in recent years, due to the development and international trade, cross-border e-commerce will have a rapid development, but encountered constraints from logistics and other aspects in the process of its development, which is why we choose to choose from the perspective of cross-border logistics mode electronic commerce. The potential of cross-border e-commerce market will become the commanding point of competition in the future.

2.2. Logistics mode

The logistics mode of small cross-border e-commerce is summarized as follows: international parcel and international express, B2C foreign trade enterprise alliance set of goods or their own set of goods, warehousing, cargo international logistics company of foreign trade B2C e-commerce platform, overseas warehousing cargo warehousing. Each kind of logistics mode has its own characteristics, including international parcel and international express is the most simple and direct way of logistics enterprise alliance, B2C trade in goods collection or set their own goods, these two models can take advantage of economies of scale, reduce transportation cost, convenience has a high. In addition, the international logistics company cargo warehousing and storage cargo trade B2C business platform etc. essence belongs to the third party logistics mode, can make the enterprises focus on their core business, the other can link to the third party logistics to complete. Along with the rapid growth of cross-border B2C e-commerce, due to its own characteristics of cross-border electricity demands, the existing logistics distribution mode has no way to keep up with the needs of cross-border B2C business development, has become the main factors hindering the development of the. The results show that the third party logistics distribution has become the best mode of e-commerce logistics distribution, the use of the third party logistics model can bring great economic and social benefits.

3. ANALYSIS OF CHINA'S CROSS-BORDER E-COMMERCE SUPPLIER LOGISTICS MODEL

3.1. Analysis of logistics mode of export cross border e-commerce supplier

Up to now, the logistics mode of cross-border e-commerce is summed up as follows: International packet and international express, overseas warehousing, third party logistics mode. Each kind of logistics mode has its own characteristics, in which the international parcel and international express logistics is relatively simple and direct, is currently widely used by most of the small cross-border business enterprise; overseas warehousing can greatly shorten the time of arrival of the goods, to provide customers with more convenient services; the third party logistics model allows enterprises to focus on core business and other sectors were third party logistics to complete, can save social resources, bring better logistics services for customers. The characteristics of international express mode is the main international express companies have worldwide coverage of self built network, has a powerful IT system and global localization services, to bring customers rapid logistics experience. For example, sending parcels to the United States by UPS can arrive within 48 hours. However, such high quality services are often based on expensive prices. Generally speaking, Chinese merchants only choose to use international commercial express to deliver goods only when the customers put forward very strong timeliness.
Table 1. Comparison of export cross-border e-commerce supplier logistics model

<table>
<thead>
<tr>
<th>Mode</th>
<th>Summary</th>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postal packet</td>
<td>China’s cross-border e-commerce supplier exports 70% of the parcels are delivered through the postal system. Among them, China Post occupies about 50% of the share. Hongkong post, Singapore Post and so on, are China’s cross-border e-commerce supplier sellers commonly used.</td>
<td>The postal network basically covers the whole world and is wider than any other logistics channel. It is generally state-owned and has a state tax subsidy, so the price is very cheap.</td>
<td>It usually goes out of the country by private parcel, which is inconvenient for customs statistics. There is no normal export tax refund, long transportation time and high rate of packet loss.</td>
</tr>
<tr>
<td>International Express Service</td>
<td>Mainly refers to UPS, FedEx, DHL and TNT. High demand for information provision, collection and management, supported by global self built network and international information system.</td>
<td>Fast, good service, low packet loss, customer experience is good, especially for Europe and the United States developed countries, it is very convenient.</td>
<td>The price is expensive and the price varies greatly.</td>
</tr>
<tr>
<td>Domestic express multinational business</td>
<td>EMS relies on postal channel, its international business is relatively mature, can go directly to more than 60 countries all over the world. SF has also opened to the United States, Australia, South Korea, Singapore and other countries express service.</td>
<td>Faster, less expensive than the four major international express giants, EMS exit ability was strong in the territory of China.</td>
<td>Due to non-dedicated cross-border business, relatively lack of experience, the market to control ability to be improved, the market coverage is limited.</td>
</tr>
<tr>
<td>Cross-border special line logistics</td>
<td>Generally, the goods are transported abroad through the “air package” mode. It is also a popular form of logistics through the cooperation company.</td>
<td>Concentrate a large quantity of goods on the way to the destination, the scale effect can reduce costs, speed, packet.</td>
<td>Compared to the postal parcel, freight costs are higher, and in China, the scope of receiving is relatively limited.</td>
</tr>
</tbody>
</table>
for the domestic delivery of the country of destination. loss rate is lower, the price is lower than commercial Express

Overseas warehouse A one-stop control and management service for warehousing, sorting, packaging and delivery of goods provided by the seller of the network, foreign trade trading platform and logistics service providers independently or jointly. Sales occur in the mainland, which provides flexible and reliable exchange program, to improve overseas customer confidence, shorten the delivery cycle, speed up, and reduce cross-border defect transaction rate. Not any product is suitable for the use of overseas warehouses, it is better to stock fast turnover of single products, otherwise easy to pressure goods. At the same time, the seller put forward higher requirements in supply chain management, inventory control, operation management and so on

3.2. Cross border B2C Logistics

In the cross-border e-commerce supplier consumption industry chain, it is different from ordinary e-commerce supplier consumption, because the existence of customs clearance links and the inherent circulation channels are difficult to break, comprehensive logistics service providers bargaining power is relatively stronger. Logistics costs accounted for about 25%, it is learned that in 2015 the cross-border B2C logistics market size has exceeded 100 billion levels, reaching 119 billion 600 million, and it will maintain more than 35% in the next 2 years.

(1) Cross border B2C import logistics

Comparative analysis of cross-border B2C import logistics model is shown in table 2. Among them, the bonded model is also known as the “free trade model”, that is, after the entry of foreign goods in the temporary Free Trade Zone, consumers purchase goods clearance, parcels through the domestic logistics way to serve the domestic consumer. Bonded model is essentially relying on big data, accurate prediction of warehouse lead, so it has the speed, transparency and other features.

<table>
<thead>
<tr>
<th>Mode</th>
<th>Outline</th>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Direct mail</td>
<td>EMS has logistics channels</td>
<td>Do not hoard goods, suitable for non-standard products</td>
<td>Logistics efficiency is between bonded warehouse and goods collection, and the cost is the highest</td>
</tr>
<tr>
<td>Store goods</td>
<td>After shipment, the third parties overseas warehouse unified delivery</td>
<td>Shared logistics cost</td>
<td>Logistics efficiency is moderate, cost is moderate</td>
</tr>
<tr>
<td>Bonded</td>
<td>Hangzhou, Shanghai and other cross border pilot cities</td>
<td>The mode of stocking is high efficiency and suitable for marking</td>
<td>High warehousing costs</td>
</tr>
</tbody>
</table>

(2) Cross-border B2C export logistics

Compared with imports, cross-border export challenges are even more daunting. At present, there are three kinds of logistics modes of cross-border B2C export. Overseas line mainly for large demand, popular route, and real-time shipments will not bring product expired, over season and inventory backlog and other issues. Overseas trading refers to that the seller will ship goods to overseas storage centers by sea, air or express delivery, and through logistics carrier WMS issued storage, sorting, packaging, distribution and other instructions. It has the advantages of fast shopping, low price, wide category, low cost, relatively low customs clearance and seller's active control of logistics management chain.

4. MARKET RESEARCH OF CROSS BORDER E-COMMERCE SUPPLIER LOGISTICS IN CHINA

4.1. Market size of cross-border e-commerce supplier logistics in China

At present, the main body of cross-border e-commerce supplier in China is B2B, the main mode of
international trade is still international freight forwarding, 80% of China’s import and export trade, cargo transportation and transit business, and 90% of international air cargo transportation business are completed through international freight forwarding enterprises. With the growth of GDP and foreign trade import and export, the cross-border B2B logistics market space with international freight forwarding as the core will increase. According to earlier statistics, in 2013, China’s import and export of goods gradually increased: import and export amounted to 25 trillion and 830 billion yuan ($4 trillion and 160 billion), growth of 7.6% in 2012; Market size exceeded 1 trillion, and it is estimated that 2018 will exceed 3 trillion, of which seaborne freight reaches 2 trillion and 320 billion, and the scale of growth is remarkable. And in the first 5 years of 2013, China’s international freight forwarding industry market growth rate of about 14%; the average annual growth rate of 2014~2018 is expected to exceed 20%.

According to China Customs statistics, in 2002~2014 years, China’s cross-border e-commerce supplier logistics grew by an average annual rate of 40%, in 2014 the total cross-border e-commerce supplier logistics reached 60 billion yuan. In 2015, Li Keqiang, vice premier of the State Council, first proposed that we will accelerate the development of “Internet plus” industry, and promote the development of big data, cloud computing, cross-border e-commerce and cross-border e-commerce supplier logistics industry. Subsequently, the government is actively introducing all kinds of relevant policies, and actively promotes the healthy and sustained development of cross-border e-commerce providers and logistics, which also increased the market demand and scale of cross-border e-commerce supplier logistics.

### Table 3. Comparison and analysis of cross-border B2C export logistics model

<table>
<thead>
<tr>
<th>Mode</th>
<th>Outline</th>
<th>Advantage</th>
<th>Disadvantage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overseas warehouse</td>
<td>Build warehouses in destination countries, mostly for cooperation</td>
<td>Improve logistics efficiency, provide return and other services, suitable for brands</td>
<td>Need to set up local team or cooperate with local third parties</td>
</tr>
<tr>
<td>Third party logistics</td>
<td>Provide overseas warehouse or commercial logistics by third parties</td>
<td>Saving human capital and providing the goods</td>
<td>Higher cost</td>
</tr>
<tr>
<td>Direct mail</td>
<td>Postal parcel, overseas special line and so on</td>
<td>Flexible logistics system</td>
<td>The country is numerous; the process is tedious</td>
</tr>
</tbody>
</table>

### 4.2. The current situation of cross-border e-commerce supplier logistics industry in China

For cross-border e-commerce supplier logistics, we need to connect domestic logistics and foreign logistics, but also to deal with the two countries customs, inspection and quarantine departments. At present, the overall competition status of the cross-border e-commerce supplier logistics in China has three characteristics: Competition is concentrated in the southeastern coastal areas, competition in the region or in a single industry is fierce; The competition among regions and industries is less, the service function is unitary, the value-added services are few, and the homogenization competition is more serious.

(1) Policy set sail, cross-border e-commerce supplier logistics ushered in a new opportunity

In China, National e-commerce logistics development special plan (2016~2020) determines the construction of “open sharing” cross-border logistics system, and explicitly proposes to build cross-border logistics projects, which is the first time that the e-commerce supplier logistics development will be upgraded to a strategic height. And pointed out that it will break the local blockade and trade monopoly, strengthen Customs declaration, inspection and other aspects of real-time supervision, cross-border logistics policy will be further standardized. Recently, China began to implement cross-border retail e-commerce supplier import tax policy, namely cross border e-commerce supplier retail import goods will no longer be levied postal tax on postal articles, but tariffs and import value-added tax and consumption tax on goods. This provides a clear development opportunity and space for the cross-border e-commerce supplier logistics to a large extent. This provides a clear development opportunity and space for the cross-border e-commerce supplier logistics to a large extent; for the bonded logistics, customs clearance speed determines the speed and efficiency of warehouse logistics, it focuses on B2B with relatively low frequency but high price, which is beneficial to improve the efficiency of logistics and reduce the cost of inventory management and information processing.

(2) Enterprises are actively preparing for cross-border e-commerce supplier logistics market

Since last year, Ali began to build cross-border logistics system with its rookie network, to support Tmall international direct purchase service, consumers are expected to receive sea Amoy parcels within a day. Jingdong has adopted a way of cooperation with the international third party large logistics companies, its cross-border e-commerce supplier business logistics capacity has covered more than 50 countries and regions worldwide. The United States, shop No. 1 also uses self or cooperation way to solve the problem of cross-border e-commerce supplier logistics, and actively cooperate with Shanghai, Hangzhou and other places to the bonded
area, bonded cross-border mode, to ensure to provide users with more stable logistics services. “The Belt and Road” cross-border cooperation in Logistics Alliance sponsored by 58 cities, societies, logistics enterprises and local governments was established in Lanzhou last year. It will promote the application of new technologies and equipment of urban logistics along the line, and promote the exchange, cooperation and training of logistics technology and talents in the region.

4.3. Suggestions on the development of cross-border e-commerce supplier logistics in China

The cross-border e-commerce supplier logistics need to break the time, space and cost constraints, to build a global cross-border warehousing management, independent transportation and distribution, as well as supporting supply chain management system, so as to realize the logistics era big data era.

(1) Establish cross-border e-commerce supplier logistics integrated information system

Information system is the necessary basis of supply chain management, but it does not mean that supply chain reform can be realized only by this. The most significant difference between China’s informatization development path and that of developed countries lies in the enterprise informatization construction ideology behind the deployment of the implementation, is much stronger than the internal external pulling force change. The synergy between enterprises has been insufficient, so it is urgent to upgrade from the partial process optimization to the whole process reengineering.

(2) Relax the relevant legal environment and increase policy support

It mainly lies in customs operation, export tax refund and so on, as well as the management reform in the whole application of internet. Accelerating the pace of trade and promote cross-border e-commerce supplier structure optimization to enhance China's position in the global value chain. Adhere to market operations, government guidance, so as to make the market play a decisive role in the allocation of resources and better play the role of the government. Strengthen the market dominant position of the enterprise, and give full play to the guiding role of the government in strategy, planning, policy and standards. In accordance with the decentralization, deepening the administrative examination and approval system reform requirements, establish fair and transparent market access standards, and further relax the logistics enterprise qualification administrative licensing and approval conditions. Encourage financial institutions for logistics enterprises to promote product innovation, development of new financing methods.

(3) Accelerate the integration of cross-border e-commerce supplier and cross-border e-commerce supplier logistics

Realizing the integration of cross-border e-commerce and logistics is the only way to solve the bottleneck of cross-border e-commerce logistics. With the development of the logistics industry cross-border collaboration and mutual integration and development in multi-level business, it can not only take full advantage of the resources, capital, brand and management advantages, but also enhance mutual influence. Therefore, we need to do a good job of cross-border e-commerce supplier and postal, domestic and foreign express and freight services integration. Secondly, under the guidance of the third party enterprises, we carry out platform integration of cross-border e-commerce providers and logistics; optimize the process and attach importance to business innovation. Through the establishment of mutual trust and benefit mechanism, the coordinated development between the two network platforms can be realized and the best benefit can be achieved.

(4) Improve cross-border e-commerce supplier logistics platform combined with big data technology

The rapid development of the Internet leads to the rapid emergence of e-commerce, and created a new business model of e-commerce suppliers. As the "Internet +" development of big data technology integration, big data achieve all kinds of data aggregation, mining and blending, is to promote the business model innovation business initiative; With the aid of the Internet, a zero distance channel can be built directly to each consumer; With large data, from the product design, production to sales, distribution of the entire process of recording, analysis and disclosure, to achieve rapid adjustment of marketing strategy. Data platform construction has become the highlight of competition. The Jingdong has ho throw 4 billion investment to build two cloud computing data center, Ali believes that cloud computing is the most important business of the group. “Big data” is the new trend of e-commerce industry: In the big data environment, it is conducive to the integration of cross-border e-commerce and cross-border e-commerce supplier logistics platform, information sharing, and to promote the sustained and healthy development, so as to improve the user experience, get the best benefits; With the “big data”, cross border e-commerce supplier logistics can carry out overseas warehouse organization system design according to the relevant data and information.

5. CONCLUSION

Faced with the obvious decline in China's foreign trade, China’s cross-border e-commerce supplier is in a state of constant innovation. The government issued a series of related policies, the Chinese enterprises build cross-border e-commerce supplier and logistics platform, including online platforms and overseas cooperation channels, which will be convenient for SMEs worldwide to participate in international trade. Cross border
e-commerce supplier has become a new development direction of foreign trade innovation, and the follow-up development of cross-border e-commerce supplier logistics will also better promote the development of cross-border e-commerce supplier.

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**References**


