

## Research on the Interactive Relationship between Cross-border E-commerce and Trade Growth in Shaanxi Province

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**Abstract:** With the continuous development and progress of China's economic system, cross-border e-commerce gradually rises, from the current situation, has become an indispensable part of China's economic and trade chain. As a new mode and means of international trade, cross-border e-commerce can not only reduce the cost effectively, but also improve the efficiency at the same time, and can concentrate on using to develop new marketing methods. It plays an important role in promoting the development and growth of foreign trade. The emergence and application of cross-border e-commerce has had a great impact on the economy and society, allowing enterprises engaged in foreign trade to obtain a considerable profit has made, which is of great benefit to the promotion of the national economy. The rise of cross-border e-commerce in Shaanxi Province plays an important role in promoting the economic level, brand competitiveness and the growth rate of trade. This is an interactive relationship between cross-border e-commerce and trade growth in Shaanxi Province.

### 1. Current Development of Cross-border E-commerce in Shaanxi Province

Although cross-border e-commerce started relatively late in Shaanxi Province, it has developed rapidly in recent years. From the rise of e-commerce in Shaanxi Province in 2008 to the present, 2014 is a turning point in the development of e-commerce, and its economic growth is relatively rapid. The upgrading of the level of information technology for scientific undertakings in Shaanxi Province provides a strong prerequisite for the development of cross-border e-commerce. People's demand for current consumption and logistics is getting higher and higher, and the traditional way of consumption and shopping has changed. Payment methods have become the mainstream trend of economic development. Consumer group and overseas purchasing agent group can realize cross-border e shopping and payment behavior with mobile phone computer as carrier and network information technology as medium. At present, cross-border e-commerce model has accepted by different levels of social groups in Shaanxi Province, and it should become the main component of trade growth in Shaanxi Province. With the rapid development of cross-border e-commerce in Shaanxi Province, although it has driven the economic development of Shaanxi Province and played a positive role in promoting the social development and progress of Shaanxi Province, there are also some problems. It is not conducive to the better development of cross-border e-commerce.

There are relatively few laws and regulations on cross-border e-commerce in Shaanxi Province, which is not conducive to the full protection of the legitimate rights and interests of foreign trade enterprises. E-commerce-based trade activities have the characteristics of invisibility, anonymity and so on, which make trade activities increase many security risks. If the lack of sound laws and regulations, it may have a negative impact on the tax system of Shaanxi Province and so on. Secondly, under cross-border e-commerce, the construction of logistics and other supporting facilities in Shaanxi Province is not perfect, and its delivery speed is relatively slow and its cost is higher, which is not conducive to the better and faster development of cross-border e-commerce in Shaanxi Province. Thirdly, the tax system needs to be further improved. With the rapid development of cross-border e-commerce although it has promoted the development and vitality of Shaanxi's foreign trade, it has increased the difficulty of taxation, so Shaanxi Province and other

relevant departments need to improve the tax system. The credit problem of cross-border e-commerce deserves attention. In the foreign trade activities, Shaanxi Province enterprises and foreign consumers have credit problems on cross-border e-commerce, such as the obvious phenomenon of drag and the inability to contact the other party in a timely manner, which to a certain extent increases the hidden dangers of settlement risks. Finally, there are relatively few cross-border e-commerce talents, and it is difficult to provide sufficient impetus for the better development of foreign trade.

## 2. An Analysis of the Interactive relationship between Cross-border E-commerce and Trade growth

There is a great internal relationship between the growth of trade and cross-border e-commerce. Statistics show that if Shaanxi Province has a high level of trade and rapid economic growth, then there will be very active cross-border e-commerce activities in the region. Similarly, if a region's foreign trade strength is weak and growth is relatively slow, there is relatively little cross-border e-commerce in the region. We can think that, on the one hand, cross-border e-commerce promotes the development of foreign trade; on the other hand, when foreign trade reaches a certain stage, the demand for cross-border e-commerce will greatly increase. Between trade growth and cross-border e-commerce A mutual promotion, mutual development of the relationship, showing a strong non-linear.

The method of solving the linear regression equation is as follows:

Table 1 Data sheet on cross-border e-commerce and trade growth in Shaanxi Province, 2013-2018

	2013	2014	2015	2016	2017	2018
Cross-border e-commerce transactions y (trillion US dollars)	3.5	3.8	4	6	6.5	7.2
Trade growth x (%)	40	40.5	42.8	50.2	57.4	60.6

(1) The average value of the variable x is calculated first, that is,  $\bar{x} = \frac{1}{n}(x_1 + x_2 + x_3 + \dots + x_n)$

(2) The y-average value of the variable, both  $\bar{y} = \frac{1}{n}(y_1 + y_2 + y_3 + \dots + y_n)$

(3) the coefficient of the variable x,  $\hat{b} = \frac{\sum_{i=1}^n (x_i - \bar{x})(y_i - \bar{y})}{\sum_{i=1}^n (x_i - \bar{x})^2}$

(4) Seeking Changshu , that is,,即  $\hat{a} = \bar{y} - \hat{b}\bar{x}$

The regression equations of y and x are obtained:

$$\bar{x} = \frac{1}{4}(0.4 + 0.405 + 0.425 + 0.502 + 0.574 + 0.606) = 0.728$$

$$\bar{y} = \frac{1}{6}(3.5 + 3.8 + 4 + 6 + 6.5 + 7.2) = 5.1$$

$$\hat{b} = 0.39$$

$$\hat{a} = 1.26$$

And the regression equation is:

$$y = 1.26x - 0.39$$

By  $\hat{a}$  Is greater than 0, can be seen cross-border e-commerce and trade growth is a positive relationship.

China's cross-border e-commerce transactions reached 2 trillion in the first half of 2015, up 42.8

percent from a year earlier, according to a China e-commerce market monitoring report released by the China Electronic Commerce Research Center. China's cross-border e-commerce import and export trade volume have reached 6.5 trillion yuan in 2016, according to the Ministry of Commerce. The continuous development of cross-border e-commerce has led to the growth of China's trade, and the growth of trade, to a certain extent, has promoted the better development of cross-border e-commerce. Because of the good interaction between them, they play an active role in promoting China's economic development and foreign trade. The rapid development of cross-border e-commerce It not only creates more economic benefits for Chinese enterprises, but also promotes the rapid growth of national economy. At present, although there are some problems in the development of cross-border e-commerce in our country, the problem can be solved effectively through the in-depth discussion of the related personnel.

From the above, it can be clear that cross-border e-commerce and trade growth are independent of each other and there is a certain correlation, the two can promote each other, collaborative development, and specific interaction mainly from two aspects of the analysis.

First, cross-border e-commerce promotes trade growth. Compared with the traditional mode of trade and economy, the application of cross-border e-commerce model can effectively reduce the cost of transaction trade. It can start from different aspects such as price comparison of trade, maintenance of trading market environment and search of transaction object, etc. As far as the relationship between economic benefit and cost is concerned, the decrease of economic and trade expenditure directly affects the growth of trade in Shaanxi Province, and there is a negative correlation between the two. The reduction of cost will definitely promote the economic and trade growth of Shaanxi Province. In addition, in general terms, cross-border e-commerce has changed the traditional basic the trade model, which gradually integrates the domestic trade model with the international trade model, effectively shortens the transaction time, transaction steps, and simplifies payment methods in the course of trade transactions, which largely controls the transaction cost of cross-border e-commerce. It is of great significance to improve the growth point of trade in Shaanxi Province. From the perspective of foreign trade enterprises, the cross-border e-commerce model provides an international market platform for the economic development of foreign trade enterprises, and foreign trade enterprises have innovated whether they are trading procedures, signing contracts or selling business models. For Shaanxi foreign trade enterprises, brand building and international market share competition play a certain role in promoting.

Secondly, trade growth promotes cross-border e-commerce. The above-mentioned discussion analyzes the effect of cross-border e-commerce development on the growth of trade in Shaanxi Province, but on the contrary, the growth of trade in Shaanxi Province is counterproductive to the development of cross-border e-commerce. Trade economy has become an important part of the economic growth of Shaanxi Province. To some extent, it has direct or indirect influence on the promotion of economic development level of Shaanxi Province, the competitiveness of international market and even the international position. Since 2009, the international community has gradually recognized the importance of RMB in cross-border e-commerce and international economic and trade activities. One of the currencies in which transactions are settled, which can be said to bring the trade transactions of domestic enterprises in Shaanxi Province into line with the international community and stimulate the development of foreign trade enterprises at different levels and in nature. For Shaanxi Province to develop cross-border, e-commerce provides unprecedented favorable conditions. At the same time, the growth of trade is the direct manifestation of international trade in Shaanxi Province, and the demand of domestic and foreign consumer groups is increasing. This kind of trading background environment promotes the development and progress of cross-border e-commerce in Shaanxi Province has become an inevitable trend.

### **3. Effective Countermeasures to promote the Development of Cross-border Electronic Commerce**

#### **3.1 Establishing and perfecting laws and regulations on cross-border e-commerce.**

The laws and regulations related to international trade in China are still not perfect. Under the impact of cross-border e-commerce, the relevant laws and regulations are no longer applicable to international trade under the mode of cross-border e-commerce. Therefore, it is necessary to establish and perfect the laws and laws and regulations in the course of transaction, to create a relatively free environment for foreign trade enterprises, can restrict regulations of cross-border e-commerce to ensure that cross-border e-commerce. Moreover, under the restriction of laws and regulations, cross-border e-commerce can avoid the appearance of unfair competition, protect the environment of cross-border e-commerce and promote the healthy development of economy.

#### **3.2 Improving the credit environment for cross-border e-commerce.**

At present, credit security is an important problem faced by cross-border e-commerce in the course of transaction. Credit, as an identity card of enterprises and individuals in the course of transaction, plays a very important role in transaction security. A good credit environment can promote the steady development of e-commerce. Therefore, the state should improve the credit environment of cross-border e-commerce by setting up credit rating certification data and credit scores for enterprises and individuals. To create a secure environment for cross-border e-commerce, to ensure the security of transactions between individuals and businesses,

#### **3.3 Strengthen infrastructure construction of cross-border e-commerce.**

The foundation of cross-border e-commerce is network and computer, so it is necessary to establish a perfect information infrastructure to effective promote the steady development of e-commerce. First, it is necessary to popularize the Internet and computers, to increase the use of network computers in large rural and remote areas, and to carry out extensive publicity. Secondly, to reduce the cost of broadband so that more people can use the Internet; and finally, strengthen the cooperation between express delivery and enterprises, effectively improve the speed of logistics distribution. The continuous strengthening of the infrastructure of e-commerce can create a good environment for cross-border e-commerce, and is conducive to promoting cross-border electricity in China. The development of sub-business promotes the growth of trade.

#### **3.4 Push forward the Innovation of Foreign Trade Enterprises.**

Cross-border e-commerce is developed on the basis of traditional transactions, is a new way of transaction, and there are more foreign trade enterprises involved in cross-border e-commerce, so it is necessary for enterprises to innovate constantly. Enterprises continue to innovate in technology and model, and form a supply chain based on e-commerce-supplier-consumer-service provider, which can effectively promote the development of cross-border e-commerce and promote the steady growth of foreign trade transactions.

#### **3.5 Train specialized talents.**

In the current fierce market competition, if enterprises want to remain invincible for a long time, they must attach importance to the cultivation of professional talents and teams. On the one hand, foreign trade enterprises can cooperate with colleges and universities, and not only can they increase their talent reserves. Also, can according to demand, college students in the process of practice to improve their own ability, effective improvement of comprehensive quality. On the other hand, the establishment of an equal competitive incentive mechanism, fully mobilizes the enthusiasm of employees, and linked to bonuses, performance, so that every employee's efforts will rewarded, while employees realize their own value, Promote the healthy development of enterprises.

#### 4. Summary

Under the tide of economic globalization, the development of cross-border e-commerce has an important impact on the level of foreign trade and economy of Shaanxi Province. Only by promoting the better and faster development of cross-border e-commerce can we fully promote the growth of trade in Shaanxi Province. In short, there is an interactive relationship between cross-border e-commerce and trade growth, both of which drive and promote each other. Therefore, in view of the problems existing in cross-border e-commerce at present, it is necessary for relevant personnel to put forward effective countermeasures and suggestions to promote the better and faster development of cross-border e-commerce from the point of view of the interaction between them.

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