# Association for Information Systems AIS Electronic Library (AISeL)

ICEB 2018 Proceedings

International Conference on Electronic Business (ICEB)

Winter 12-6-2018

## Research on Regional Imbalance of Cross-Border E-Commerce -- Take Fujian Free Trade Zone as an Example

Baoqin Yu

Chenxing Bai

Yuting Zhou

Follow this and additional works at: https://aisel.aisnet.org/iceb2018

Yu, B.Q., Bai, C.X. & Zhou, Y.T. (2018). Research on regional imbalance of cross-border e-commerce--Take Fujian Free Trade Zone as an example. In *Proceedings of The 18th International Conference on Electronic Business* (pp. 530-540). ICEB, Guilin, China, December 2-6.

# Research on Regional Imbalance of Cross-Border E-Commerce --Take Fujian Free Trade Zone as an Example

(Full Paper)

Baoqin Yu, Yango University, Fuzhou, China, yubaoqin@tjufe.edu.cn Chenxing Bai\*, Tianjin University of Finance and Economics & Tianjin Vocational Institute, Tianjin, China, baicx97@163.com

Yuting Zhou, Yango University, Fuzhou, China, zhouyuting@126.com

### **ABSTRACT**

This article takes the information data era, world trade, and the deep integration of the "Belt and Road" policy as the background. Using questionnaires and compare to analyze the cross-border e-commerce regional issues in Fujian Free Trade Area, based on the analysis of cross-border e-commerce differences between Fujian, Shanghai and Zhengzhou and the comparative analysis of cross-border e-commerce platforms, it establishes a cross-border e-commerce service quality gap model to further identify problems. This article points out the current development trend of cross-border e-commerce zone in Fujian Free Trade Area, and the problems and the development shortcomings. Utilizing the advantages of cross-border e-commerce and its platform in Shanghai and Zhengzhou Free Trade Area to improve the imbalance of cross-border e-commerce in the Fujian Free Trade Zone, It has come up with actions and recommendations for building a multi-level network, an open credit platform, and a service quality evaluation system.

Keywords: Cross-border e-commerce, free-trade area, Fujian, The Gaps Model of Service Quality, Recommendations.

As world trade has become more frequent, the establishment of free trade zones has become an inevitable trend. In 2015, the three pilot free trade zones in Guangdong, Tianjin and Fujian were approved by the central committee. China's free trade zone 1.0 era of Daigou was officially launched. It experienced the 2.0 overseas online shopping era and has developed into the 3.0 era of cross-border import. Cross-border e-commerce has become a new window for a new power of domestic economy, new business mode and reform.

Fujian was one of the first open cities along the southeast coast Across the strait from Taiwan. With the funding and the support of overseas Chinese and Taiwan compatriots, the local industry has been effectively promoted. As an important means to promote global economic and trade integration, cross-border e-commerce has obvious strategic significance. Fujian free trade zone is divided into Fuzhou area, Xiamen area and Pingtan area. At present, the development of the three regions still faces many difficulties, especially the increasingly obvious regional problems. Through in-depth exploration of the advantages and disadvantages of cross-border e-commerce in three regions, this paper knows the development imbalance among them. Comparing and contrasting Shanghai, Zhengzhou and cross-border platforms, the paper improves the short board of cross-border e-commerce regional development of Fujian free trade zone, and provide Suggestions on actions and policies for follow-up development.

### OVERVIEW OF DOMESTIC AND FOREIGN RESEARCH

The United Nations Conference on Trade and Development gave the definition of a free trade zone for the first time in 1984. It means that goods are not required to pass through the customs for an area within the territory of a country. In the "World Economics Dictionary", the free trade zone is defined as the free trade zone to implement trade, customs, investment, service and other liberalization measures in the country or customs territory, and reduce the administrative intervention area (Li, 2000). Western classical scientists Adam Smith and David Ricardo believe that the purpose of the free trade zone is to promote free trade by removing barriers and thereby improving welfare, and this view is also the original source of the free trade zone (Cui, 2016). Rodriguez (2014) focused on the establishment and development of the free trade zone, and clarified that in these processes, and the free trade zone plays a leading role in the surrounding areas. Gomez-Herrera, Martens & Turlea (2014) analyzed the cross-border e-commerce in the EU, and thought that cross-border e-commerce consumers in these countries or regions often do not influence their decision to purchase goods because of the distance, and now more consumption participate in cross-border shopping.

The first point of similar view for cross-border e-commerce in China is the "E-International Trade" proposed by Yao Zhonghua in the "International Trade E-Commerce Raiders". Fang Luo (2017) proposed the reform and opening-up strategy of the domestic free trade zone under the background of "the Belt and Road", which not only improved the level of domestic opening up, but also

<sup>\*</sup>Corresponding author

promoted the economic development of the central and western regions. Dayu Wei (2017) analyzed the causes and problems of the domestic cross-border e-commerce industry chain, and studied it from the aspects of policy, foundation, industrial chain and industrial competitive advantage. Xu & Chen (2016) discussed the mode of coordinated development of cross-border e-commerce in Fujian and Taiwan basing on the national strategy of peaceful reunification on both sides of the straits. Xu & Hong (2017) started with the basic characteristics of the three zones of Fujian free trade zone, in order to promote the reasonable division of labor among the three zones, discussing the development rules of the free trade zone of Fujian, and make active planning of the three zones of Fujian by referring to the planning experience of other free trade zones. Wang, Cai & Chen, (2015) deeply analyzed the current situation of cross-border e-commerce development in Fujian Free Trade Zone, and used the excellent experience of Shanghai and other places to put forward suggestions for improvement.

In summary, domestic and foreign research literature on free trade and cross-border e-commerce is a major driving force for this paper.

### AREA ANALYSIS OF CROSS-BORDER E-COMMERCE IN FUJIAN FREE TRADE ZONE

The Fujian Free Trade Zone is divided into Fuzhou District and Xiamen District and Pingtan Area. The following is an analysis of the current situation of the three districts.

As the provincial capital of Fujian Province, Fuzhou is the most important responsibility to promote cross-strait common development. Relying on the geographical environment of Fuzhou, It provides important overseas Chinese and Taiwan compatriots for cross-border e-commerce. Through maritime trade, the market is extended to Southeast Asia and Europe. It uses talents to expand local enterprises and uses Mawei Port to develop domestic and international logistics and cross-strait transportation. The E-Commerce Research Center showed that the cross-border platform import business has reached 640,000 votes, the sales amount was 210.41 million yuan, and the value of imported goods was 187.19 million yuan, Increased by 98.34% year-on-year in 2017.

As one of the special economic zones, Xiamen is a central city in the southeast coast. Utilizing its natural geographical advantages, port trade experience, and its position as a financial center in Fujian Province and a vast overseas market, it attracts foreign investment to develop cross-border e-commerce. According to the statistics of Xiamen Municipal Bureau of Commerce, the import of Xiamen Free Trade Zone was about 1.08 million cross-border and the value of goods is 180 million yuan in the first half of 2017.

The Pingtan area is mainly to build cross-strait homes and international tourist islands. Although it is still in a slow phase, its environmental value and economic potential are enormous because of the island closest to Taiwan in Fujian Province. Since the establishment of Pingtan, cross-border e-commerce has supplemented the short-board, coordinated and promoted cooperation. Whether it is the "human" type railway, the direct cross-strait "three links" or the Pingtan Port, it is constantly being established. The most important thing is that Fujian's first cross-border e-commerce comprehensive public service platform is Pingtan's cross-border e-commerce public service platform. Business Bureau statistics display that The value of cross-border e-commerce in the Pingtan Free Trade Zone is 216.29 million yuan, The value of goods in the area was 17,410,000 yuan, the total number of express documents was 395,838, and the value of goods was about 75.386 million yuan. The cross-border e-commerce and shipping business all showed a large-scale growth trend in 2017.

Ten pilot cities for cross-border e-commerce have been set up in China, and Fujian has two: Fuzhou and Pingtan. there is a qualification for bonded and stocking with the pilot. Overseas public warehousing on both sides of Pingtan, Taiwan is the first overseas warehouse established by the two sides of the strait. It has opened up a new channel for cross-strait cross-border e-commerce. Fuzhou District encourages enterprises to set up overseas warehouses. Lijia E-commerce has bonded warehouses and overseas warehouses in many places in Fujian. The rookie logistics landed in the Pingtan area, and the customs clearance, declaration, verification and release were completed in 58 seconds. The package was completed and sent out within 2 minutes, and a series of work was completed quickly and conveniently. Although the Fuzhou area holds the logistics advantages of the mainland's only water and land mail general contracting exchange bureau and Fuzhou to Taipei and then Fuzhou Post and Air, but the rookie logistics is also indispensable. The Xiamen area does not have the qualification to be bonded and stocked, many policies cannot be implemented, or the implementation of the policy is lagging behind. But there are many practitioners in Xiamen, and it has the scale effect and clusters are better; In terms of logistics, direct mail is also the main source. Direct mail is generally carried by air. The timeliness is high, and it is also in line with the way of modern consumer fragmentation shopping. The risk of purchasing goods is also small, and the inventory risk is also reduced. The fidelity is also better because of direct shipment from abroad. But the costs incurred in returning, after-sales, maintenance, long logistics time, and customs and other complex issues, among others, have caused poor consumer experience, so it is necessary to change the direct mail model.

The Xiamen area truck flight was opened to deliver the goods from abroad to the consumers in the fastest time. It also realized the air-land transportation of Australia, Germany, the Netherlands to Guangzhou and then to Xiamen, with a new channel for more efficient and convenient logistics. The Pingtan area first opened the passenger and cargo routes and the "mini three links" route, and then opened the cargo route between Fujian and Taiwan (Taipei Fast Wheel) to provide a stable and fast green channel for

Fujian-Taiwan trade. The Fuzhou area will focus on creating four cross-border e-commerce supervision centers, achieving full coverage of "sea, land and air" cross-border transportation, and implementing transaction volume to expand the flow of goods. As a financial development center, Xiamen Area is far ahead of Fuzhou and Pingtan in attracting investment. According to statistics, there are now more than 5,000 large families joining the cross-border e-commerce in Xiamen. As the provincial capital of Fujian, the Fuzhou area has only more than 100, and Pingtan has fewer than 90. It can only be said that the strength is insufficient and the regulatory system is different in the face of such a situation. The Fuzhou area has formed a complete cross-border trinity logistics system through the construction of a customs supervision center and related supporting storage facilities. At the same time, the Fuzhou area's cross-border e-commerce convenience measures take the "one outstanding, two lists, three sets, four guarantees" work mode. The Xiamen area plans to build a cross-border e-commerce single-window customs clearance platform, focusing on expanding overseas warehouse operations and strengthening the construction of "one district and multiple parks". The Pingtan area is also actively promoting the establishment of a cross-strait system.

In summary, it can be seen that the development of the three districts is independent and less connected. In order to discover and analyze the problem better, this paper conducted a questionnaire survey on the cross-border regional issues of the Fujian Free Trade Zone using classmates, friends, family members and companies to fill in real-time. The questionnaires were real and effective. A total of 356 questionnaires were issued, 340 were returned, and 320 questionnaires were valid. Through research, it is found that although the development of the three districts is relatively good, the development is uneven. Xiamen is 2.14 at the top of the list and its development is very good; Followed by Fuzhou, it is 2.03, and the development is centered, finally Pingtan is 1.67. The current status of this region is mostly due to the economy of 62.25%, the industrial chain concentration of 47.61%, the environment of 44.23% and the talent of 41.41%, Coupled with other factors such as logistics and payment. The most important is that the national and even provincial policies are the cause of the regional imbalance problem.

### COMPARATIVE ANALYSIS OF CROSS-BORDER E-COMMERCE AND PLATFORMS IN FUJIAN, SHANGHAI AND ZHENGZHOU

After adding the parameters and the data from Tables 2 and 3 into the system dynamics flow diagram, we optionally chose a variable to open the editing window of that variable. Then we checked the model. If the result was, "the model has no problem," we presumed that the model is correct.

### Differences of Cross-Border E-Commerce in Fujian, Shanghai and Zhengzhou

The advantage over Taiwan is the highlight of cross-border e-commerce in Fujian free trade zone. Large Taiwan compatriots and overseas Chinese provide good capital, talents and resources for cross-border e-commerce in Fujian free trade zone. As a leading city in China, Shanghai's GDP is also far ahead in China. It is a famous financial center, playing a leading role in the development of cross-border e-commerce in free trade zones. As the capital of Henan Province, Zhengzhou is located in the central region. Although there is no sea transportation, it has a powerful comprehensive transportation hub irreplaceably in other regions. The most important one is the domestic commodity distribution center. The details are shown in Table 1.

Table 1: Comparison of basic situation of cross-border e-commerce in Fujian, Shanghai and Zhengzhou Free Trade Zone.

	Strategic	Geographic	Transportation	Cultural	Industry chain
	Positioning	location	logistics	heritage	
Fujian	Focusing on the	It is located on	Fujian has	The large group	International
	strategic	the southeast	formed a three-	of Taiwan	trade, sea
	requirements of	coast of China,	dimensional	compatriots	transport, air
	basing on the	adjacent to	integrated	who are	transport,
	two sides of the	Zhejiang	transportation	connected with	logistics,
	strait, serving	Province in the	system for	each other by	finance, tourism
	the country and	northeast,	seaports,	water, look at	and other
	facing the	bordering	highways,	each other on	services and
	world, the	Jiangxi	railways and	the ground,	manufacturing
	three-pointer	Province in the	modern	have the same	industries form
	will strengthen	northwest,	airports. It is	language, are	a new industrial
	its core position	Guangdong	one of the five	similar to each	chain, gathering
	and help the	Province in the	largest port	other and	development
	economic	southwest, and	groups in	provide good	platform and
	integration of	Taiwan across	China.	capital, talent	offshore
	the Taiwan	the Taiwan		and resource	economy to
	Strait.	Strait.		reserve for	form a new
				cross-border e-	form of
				commerce in	business.

				fujian free trade zone.	
Shanghai	We will build an open and innovative comprehensive reform pilot zone, an economic risk stress test zone, and a government-led zone to drive the market.	It is located at the mouth of the Yangtze river, opposite Japan's kyushu island in the east China sea, close to hangzhou bay in the south, and connected with jiangsu and zhejiang provinces in the west.	Air transport, sea transport and land transport have a relatively complete rail transport pattern, airport port is more mature.	It is the first open coastal cities, the world's famous financial center, one of the world's largest metropolitan areas with the largest population and area, the first free trade zone in China.	Guided by five major industries of international trade, finance, shipping, professionalism and manufacturing, we will increase the proportion of tertiary industry in the region and accelerate the transformation and upgrading of traditional industries.
Zhengzhou	Zhengzhou is an international modernized comprehensive transportation hub, an important advanced manufacturing industry and a modern service industry base in the country, giving full play to the overlapping advantages of Zhengzhou's multiple national strategies, leading the development of the Central Plains urban agglomeration and supporting the rise of the central region.	As an inland city, Zhengzhou is an important central city in central China. It borders the Yellow River in the north, the Lushan Mountain in the west, and the vast Huanghuai Plain in the southeast.	Zhengzhou is a comprehensive transportation hub with roads, railways and aviation. Zheng Ou Ban Li is also the shortest time, the most cargo, and the most outbound ports.	Zhengzhou is a national historical and cultural city. It relies on the Silk Road Economic Belt and focuses on opening to Central and Western Asia and Europe. It is based on modern agriculture and coordinated development of the three industries.	It is a special feature of zhengzhou to realize the transformation from traditional agriculture as the economic subject to the new industrial economy with rich topography and unique climate promoting the agricultural development.

Only by introducing more major favorable policies, cross-border e-commerce in the free trade zone can produce satisfactory transcripts. Zhengzhou built a "three-in-one" platform, which is a platform built by the three centers of sea, business and property. The realization of "second pass" greatly improved the efficiency of customs clearance and saved unnecessary troubles. Zhengzhou builds a "smart national inspection" platform, initiates quality and safety traceability, and builds a multimodal transport service system and a credit visa; Shanghai implements "double random, one open" post-event supervision, "one-stop acceptance, online push, parallel approval, unified certification" efficient service model, which provides a good learning model for Fujian. Shanghai's strong economic foundation and preferential policies are a strong foundation for attracting foreign investment. Zhengzhou pre-investment attracts investment, absorbs leading enterprises, and cultivates e-commerce enterprises to enhance their comprehensive

strength. Fujian is not willing to show weakness in actively absorbing learning. As the country's first cross-border trade e-commerce model, Zhengzhou actively promotes the government and social capital cooperation model in the areas of infrastructure and public utilities, namely the PPP (Public-Private-Partnership) model. this PPP model can deal with the lack of government investment skills, management capabilities, and inefficiency, then social capital is dispatched to participate in the supply of public goods and public services through the government to purchase services. Shanghai is also actively implementing the PPP model to accelerate the implementation of a new cross-border model.

### Comparative Analysis of Cross-Border E-Commerce Platforms in Fujian, Shanghai and Zhengzhou

As shown in Figure 1, As a pioneer in cross-border e-commerce in China, Shanghai has a leading role and its trading scale is second to none. (Fujian cross-border e-commerce platform is Lijia e-commerce, Shanghai is Cross-border links, Zhengzhou is E-trade)

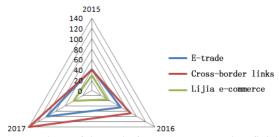


Figure 1: Comparison of three platforms (Source: author finishing).

The establishment of cross-border communication in 2013 upgraded the mode of direct mail, bonded stock and front store and back warehouse in the industry. It forms the full chain operation of bonded, duty-paid and duty-free, to create the integration of information, capital and logistics, and to monitor in real time. All data and information can be found, including data controllability, visualization and traceability in the transaction process. E-trade of Zhenzhou is as the cross-border e-commerce platform in central China, It has the first 1210 supervision mode, the supervision mode of customs clearance of e-commerce plus postal supervision plus bonded center, new second clearance mode and the establishment of O2O experience store. All set an excellent example for the e-commerce business of Fujian lijia. The products of Shanghai cross-border communication all have QR codes, which can quickly go through the green channel in shopping. The same is true for Zhengzhou E-trade, where goods have QR codes, and shopping only needs id verification, scanning QR codes, ordering, payment, customs clearance and logistics distribution through mobile phones. The Fujian Lijia e-commerce is just an offline experience, online shopping, the platform can learn the QR code to change the shopping model. The most important cross-border e-commerce platform is service and security. With the transaction guarantee service, the consumers' after-sales rights and interests are guaranteed. In addition, it actively builds cross-border warehousing and provides a strong foundation and resources for the platform. The three platforms exchanged learning and absorbed the advantages applied to the study of imbalances in Fujian. The details are shown in Table 2.

Table 2: Comparison of Lijia e-commerce, Cross-border communication and E-trade.

	Business model	Warehousing	shopping	After sales service	Consumer protection
Lijia e- commerce	B2B distribution system, B2C mall, and O2O platform combined transport, establish the "Internet + inspection and certification" mode of customs clearance and inspection.	Fuzhou, pingtan, ningbo, chongqing, guangzhou, shenzhen are equipped with cross-border e- commerce bonded warehouses.	Offline experience, online purchase, selection of goods, bonded area, inspection and clearance, forwarding and express delivery.	The professional after-sales service team currently sells more than 5,000 merchants with 300 million docks online and offline.	Triple verification, genuine protection.

Cross-border communication	The B2B model implements online direct purchase import, online purchase bonded import and general export mode, forming a direct mail China and free trade earning model.	Pudong Airport Comprehensive Bonded Zone.	After verifying the unique 2D barcode on the "Cross-Border" products, it will arrange for a fast green channel.	Provide online transaction protection services to ensure payment security. The after-sales return service is provided domestically to protect the after-sales rights of consumers.	Overseas direct sales, original authentic, enterprises, merchants are all filed by the customs to avoid the risk of buying fake goods, and there is a service guarantee mechanism for the goods sold.
E-trade	supervision mode, O2O retail sales model; innovative "e- commerce + postal supervision + bonded center" supervision mode; second clearance mode.	There are bonded warehouses in Russia, Belgium, the United States, Hungary, Australia, Germany, and Henan Bonded Logistics Center.	The product has a QR code, and the consumer carries the ID card to scan the QR code, pay for the mobile phone, check the customs clearance, and deliver the goods to the home.	Real-time updates to protect consumer rights in real time.	Strict review system, genuine guarantee service.

### ANALYSIS BASED ON SERVICE QUALITY MODEL (5GAP)

In the mid-20th century, American scholar parasuraman *et al.* proposed Service Quality Model (5GAP). This model can lead managers to find service quality problems, find differences between managers and consumers in service concept, and use strategies to narrow gaps, ensure the consistency between expectations and reality, and improve consumers' satisfaction.

Through questionnaire survey on cross-border regional issues of Fujian free trade zone and analysis of the above tables, it is found that there are gaps in the cognition, understanding and service of consumers. In order to further analyze regional problems and make services better and more efficient, the service quality model of cross-border e-commerce is established as shown in figure 2.

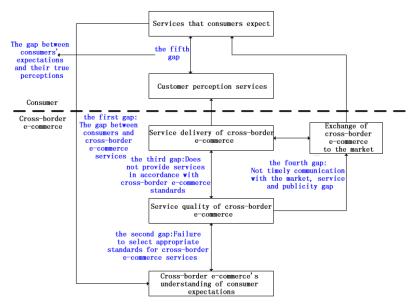


Figure 2: Cross-border e-commerce service quality model (Source: author collation).

In order to bridge the gap between consumer expectations of cross-border e-commerce and the gap between service delivery and external promotion, according to the questionnaire survey as shown in Figure 3, under the premise of understanding consumer expectations, 45.35% persons think that cross-border e-commerce describing the realism of goods is average, 29.58% think it is not true, 24.23% is true. So only one quarter of consumers think it is true, That is to say, cross-border e-commerce products are inconsistent with real goods. Cross-border e-commerce does not have a good understanding of consumers' expectations or a good interpretation of commodities. Therefore, social investigation, Internet investigation and telephone investigation should be stepped up to listen to consumers' wishes and remedy their expectations through field investigation; It must reduce the false description of goods, face the vast number of consumers with the true appearance, and improve the quality of cross-border e-commerce services.

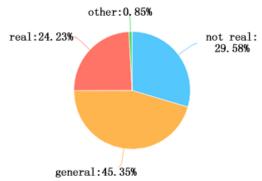


Figure 3: Cross-border e-commerce description of product realism (Source: Questionnaire).

In order to bridge the gap between consumers' choice of quality of cross-border e-commerce services and the gap between services provided by standards, the results of the questionnaire are shown in Figure 4. Consumers evaluate the quality of cross-border e-commerce services, tending to half of consumers. In general, 32.11% of consumers believe that service is enthusiasm, and 15.77% of consumers feel that service attitude needs to be improved. For this, From the perspective of consumers, we must actively understand cross-border e-commerce services, formulate cross-border service standards, standardize cross-border standard service actions, and then implement service evaluation, and collect a large number of consumer feedback information for consumers. We must work hard to bring a pleasant environment to consumers.

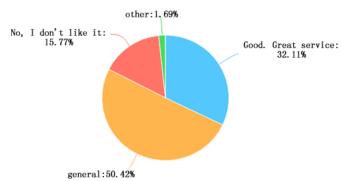


Figure 4: Cross-border e-commerce service quality evaluation (Source: Questionnaire).

In order to bridge the gap between consumers' expectations and consumers' actual feelings, as shown in Figure 5, consumers' satisfaction with cross-border e-commerce is 44.51%, and half of them are within the acceptance range, and 9.3% are far beyond cross-border e-commerce. Expectations, extremely satisfied, and a small number of dissatisfaction and inconsistency with their own imagination. All illustrate the distance between the consumer's expectations and the actual feelings of the consumer. In order to reduce this gap, we should seek truth from facts to understand the specific expectations and actual feelings of consumers, create communication channels, and improve satisfaction.

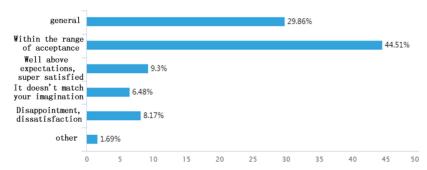


Figure 5: Cross-border e-commerce satisfaction (Source: Questionnaire).

As shown in Figure 6 for the overall evaluation of cross-border e-commerce services, 45.92% of consumers are basically satisfied, which means that most consumers are still acceptable for cross-border e-commerce services. Consumer satisfaction is the driving force behind the progress of cross-border e-commerce.

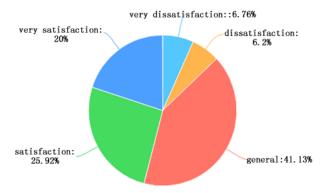


Figure 6: Cross-border e-commerce service evaluation (Source: Questionnaire).

## COUNTERMEASURES FOR REGIONAL DEVELOPMENT IMBALANCE OF CROSS-BORDER E-COMMERCE IN FUJIAN FREE TRADE ZONE

### Advantage Analysis from Shanghai and Zhengzhou

In the study of cross-border e-commerce in Shanghai and Zhengzhou Free Trade Zone, Fuzhou District promoted and copied Shanghai's five major reform pilots in the fields of finance, investment, trade and services, as well as after-the-fact supervision; The Xiamen area promoted and cloned 35 pilot experiences in Shanghai; The Pingtan area promoted the replication of 51 pilot projects in Shanghai. It can be said that Fujian is a continuation of Shanghai. Among them, Fujian Free Trade Zone cross-border e-commerce is also actively learning many excellent policies related to Zhengzhou, Shanghai, including the Shanghai government's 12 tasks, supporting cross-border service platforms, talents and cross-border Corporate preferential policies, etc. In addition, Shanghai has established a high-speed customs clearance mechanism on customs clearance. The maximum length will not exceed one day, that is, it will be passed within 24 hours, and the low-risk goods can also achieve second release. Zhengzhou actively builds a "smart country inspection" platform, launches the "Internet +" safety quality and traces its roots, and implements a one-stop, integrated customs clearance service, which is also known as "second pass customs", from the original 2 to 3 times per second, until now 100 per second, also applied a credit visa to reduce credit risk. In terms of capital operation, Zhengzhou Shanghai is actively applying the PPP model, especially Zhengzhou, which is the first to complete. Its PPP model optimizes the organic combination of central enterprises, state-owned enterprises and private capital, and has become an excellent sample of PPP operations nationwide.

The cross-border e-commerce enterprise platform of Fujian Free Trade Zone learn the Shanghai cross-border pre-store and post-library model, monitor the platform transaction information in real time, and ensure the transaction process is transparent and traceable. They learn from Zhengzhou E-trade for unified procurement, warehouse and distribution. In shopping, Shanghai and Zhengzhou commodity transactions have two-dimensional codes, which can be used to learn the two-dimensional code conveniently and quickly, and establish an online and offline O2O joint mode. In the face of consumers, they can use the service quality gap model to learn to bridge the five gaps, improve services, and improve efficiency. The three regions and the three regions are all parallel. So they can exchange and learn from each other, and apply the advantages to the imbalance of cross-border e-commerce in the Fujian Free Trade Zone.

### Recommendations for Regional Development Imbalance of Cross-Border E-Commerce in Fujian Free Trade Zone

### Suggestions based on the development of free trade zones

- (1) Depending on local conditions, make the best use of it. The three major regions of cross-border e-commerce in Fuzhou Free Trade Zone are independent, and the three districts should be promoted to use their respective advantages to cooperate to avoid homogenization competition. For example, Pingtan is closer to Taiwan, and has established overseas public warehousing in Taiwan, which can share resources. Xiamen's economic background attracts powerful enterprises to recommend to Fuzhou and Pingtan. In addition, Fuzhou and Pingtan are cross-border e-commerce pilots. The current strategic policies are all paving the way for Xiamen. We also actively build regional brands and local specialty products to promote the manufacturing of the three districts and even Fujian. The three major areas should narrow the gap, improve the imbalance, remove impurities, retain the essence, and coordinate development.
- (2) Establish a multi-level network and pay attention to cross-border dynamics. It can create a multi-level network that covers the global cross-border e-commerce area and implement a "hierarchical layout" network. The first level is the cross-border e-commerce collection network in Fuzhou, Xiamen and Pingtan. The second level is the cross-border e-commerce alliance network in the Fujian Free Trade Zone. The third level is a nationwide cross-border e-commerce customs clearance service network. The fourth level is the world cross-border e-commerce data sharing network.
- (3) The port of the three districts is united and docked to Taiwan. The three ports of Fuzhou, Xiamen and Pingtan jumped together to connect Taiwan and help Fujian and Taiwan to cooperate. The three districts are complementary to each other, regardless of input or output, promoting cross-border e-commerce in the Fujian Free Trade Zone to emerge from the characteristic road.
- (4) Promote the application of artificial intelligence. In the process of cross-border e-commerce operation of the free trade zone, regular operations such as goods inventory, security clearance in the park, matching of warehouses, and personnel audit records were conducted. For these, we can Increase investment in artificial intelligence, such as robots, drones, AR and VR glasses, can reduce costs, shorten time, improve efficiency and optimize resources in the three regions.

### Policy recommendations based on government

- (1) Improve customs clearance efficiency and establish a new model. We should learn to imitate Zhengzhou "second pass" mode, 100 singles per second. We must improve customs clearance efficiency, build a smart national inspection, and expand overseas warehousing. Study Zhengzhou Shanghai, actively establish a PPP model, and achieve an organic combination of government and social capital.
- (2) Establish a three-zone management organization. The three-zone management organization can make One-on-one supervision of cross-border undertakings, face-to-face control, and division of labor in the three districts to complete traces afterwards. As the supervisor of Fujian free trade zone, the government should pay close attention to the coordination of the departments in the three regions, and properly handle the relations between countries and regions. he government should change the cross-border strategic approach according to the cross-border situation, and achieve the goal of consistent development. The establishment of the management organization of the three districts will add to the cross-border e-commerce in the Fujian free trade zone.
- (3) Deepen investment promotion and strengthen the investment team. It should learn the gathering effect of Shanghai and Zhengzhou, and actively introduce strong enterprises, use policy rewards and mechanisms to track and track the company's work in real time. The government has strengthened the construction of the investment promotion team, strengthened the training of investment promotion personnel, and built an efficient team.
- (4) Introduce, select and cultivate professional talents to help cross-border development. It should cooperate with the government and major universities to actively select and train cross-border professionals. Cross-border e-commerce training centers should be established in three districts of Fuzhou, Xiamen and Pingtan to provide professional professionals with cross-border services. Cross-border e-commerce meetings and cross-border e-commerce exchanges can be organized regularly to enhance cross-border knowledge. Assistance in technology, services, etc. It should establish a talent guarantee system, protect the team and backbone, and introduce senior talents and teams from around the world to learn from the world's advanced technology and management. In addition, we must strengthen the cultivation of innovative talents, focus on improving the employment and entrepreneurial environment, create a good atmosphere conducive to retaining talents, and implement preferential policy subsidies for innovative talents (Wang & Ding, 2016).

### Recommendations based on cross-border e-commerce platform

(1) Open credit platform, updated in real time. In order to better regulate the operation of cross-border enterprises and make consumers more secure, Fujian Free Trade Zone cross-border e-commerce enterprises register credit files, issue credit visas, and conduct strict management. The state and the government can evaluate it and strengthen the credit rating of the enterprise based on the analysis of the evaluation data. The higher the credit, the higher the cooperation guarantee. The three districts regularly update

and revise cross-border enterprises to ensure that consumers understand the situation at the first time, establish a black and white list, conduct cross-border enterprise spot checks from time to time, and improve the sense of integrity of cross-border enterprises.

- (2) Support local enterprises and build leading e-commerce. It should develop local enterprises, create a new model for the development of three-region tourism + cross-border e-commerce enterprises, and create a cooperative approach of e-commerce, network operators, logistics providers and service providers. We must actively promote the establishment of the O2O online and offline experience hall, learn cross-border communication, and conduct E-trade to implement green channel scan code shopping; We must increase the intensity of activities and promote the visibility of cross-border enterprises. We must play the leading role of the leading Lijia e-commerce in Fujian, the first-level multi-level and multi-level development.
- (3) Listening to the voices of cross-strait cross-border enterprises and promoting cross-strait development. The country's guiding trend is to cooperate with Fujian and Taiwan to deepen the cross-strait sentiments and listen to the voices of Taiwan's cross-border enterprises. Cross-strait enterprises exchanged in depth, exchanged opinions, seized the opportunity, and supported the opening of trade in the free trade zone to Taiwanese capital, which had a ripple effect on Taiwan and boosted the development of cross-border enterprises in Taiwan, thus inspiring the cross-border enterprises in the three districts and Taiwan to flourish.
- (4) Cross-border basic guarantee of enterprises. Cross-border transactions are becoming more frequent today, and there are often false cross-border trades that use domestic products as overseas products. Fujian cross-border enterprises should guarantee the supply of goods, 100% foreign original authentic, 100% foreign merchants, domestic and international authentic identification; They should guarantee transaction security, ensure that information is not exposed, after-sales service optimization, fast return and exchange of rights.

#### Advice based on consumer

- (1) Create a service quality evaluation system to improve satisfaction. Focusing on the needs of consumers' needs, we will build a cross-border e-commerce service quality evaluation system for Fujian Free Trade Zone, establish cross-border service evaluation standards, and evaluate one-stage and one-time assessments to achieve fairness and openness. We will conduct regular research to implement consumer cross-border expectations into each area, and widely accept consumers' cross-border evaluations, complaints, complaints and many other issues. We must actively solve problems, reduce complaints, shorten gaps, and improve satisfaction.
- (2) Establish an exchange platform. Cross-border services are professional and diversified, and consumer expectations are also personalized and diversified. Establishing a three-region exchange platform in Fujian, consumers and cross-border e-commerce can talk freely on the above, and then collect and summarize the three districts. Achieve consumer demand expectations and improve service quality.
- (3) Cross-border entity visits. Because the main body of cross-border e-commerce comes from different countries in different regions, the culture, language, and habits are different, and the needs of categories are also different. Organizing cross-border entity visits can enable consumers to understand each other's cross-border e-commerce in the Fujian Free Trade Zone, feel cross-border realism, reduce the gap with consumers, and reduce the gap between the three regions and promote balanced development.

#### **ACKNOWLEDGMENT**

This work was supported by the humanities and Social Sciences project of the Ministry of Education [NO. 17YJC630097], China.

### REFERENCES

- [1] Cui, H. (2016). Public policy research on promoting the construction of Fujian free trade zone, Jimei University.
- [2] Fang, X.F., Bao, Q., Lai, M.Y. (2004). International technology spillover: An empirical research based on the import oriented mechanism. China Soft Science, 42(7), 58-64.
- [3] Gomez-Herrera, E., Martens, B. and Turlea, G. (2014). The drivers and impediments for cross-border e-commerce in the EU. *Information Economics and Policy*, 28(1), 83-96.
- [4] Li, C. (2000). Dictionary of world economics, Beijing: Economic Science Press.
- [5] Luo, F. (2017). Analysis on "The Belt and Road" and the Opening Up of Chinese FTZ, Northeast Asia Economic Research, 1(1), 57-71.
- [6] Rodriguez, J.M.M. (2014). Tax Obstacles for the Development of an Effective Euro-Mediterranean Free-Trade Area: An IFTA model for the European Union?, SERMED Conference Papers, 48(2), 58-65.
- [7] Wei, D.Y. (2017). Problems in the development of cross-border e-commerce industry chain in China and optimization countermeasures, Journal of Regional Financial Research, 3(11), 81-85.
- [8] Wang, J.W., Cai, Y.Z., Chen, X.(2015). Research on the Countermeasures of Cross-border E-commerce Development in Fujian Pilot Free Trade Zone, Journal of Fujian Party School, (12), 44-50.

- [9] Wang, X.L., Ding, Y. (2016). An Analysis of the Status Quo, Causes and Countermeasures of China's Foreign Trade Regional Imbalance-From the Perspective of Heterogeneous Export Enterprises, Prices Monthly, 473(2), 49-53.
- [10] Xu, Z.Y., Chen, B.G. (2016). Some Thoughts on The Development of Cross-border E-commerce-Take FuJian free trade zone as an example, Journal of Changsha University, 30(3), 20-23.
- [11] Xu, G., Hong, C. (2017). Exploring the Basic Features and Development of the Fujian Free Trade Zone, Journal of Fujian Jiangxia University, 7(6),11-25.