

Status of Digital Trade in China and its Role in Promoting Chinese Modernization

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Abstract

Digital trade is the advanced stage of e-commerce, which plays an important role in promoting foreign trade and expanding opening up. Currently, digital trade is an important development opportunity for China, but there are also problems and challenges. This paper analyzes the current situation and trends of digital trade, explores the promotion of digital trade in China - style modernization, and puts forward corresponding countermeasures and suggestions to promote the high-quality development of digital trade in China and promote the realization of Chinese-style modernization.

Keywords

Digital Trade; China - Style Modernization; International Trade.

1. Introduction

Digital trade refers to the trade of goods and related services exchanged through digital technology media such as the Internet. Digital trade is an important embodiment of information technology, network and intelligence, is an important new form of international trade, and is an important part of the global digital economy. Digital trade will promote industrial transformation and change the world economic pattern. Therefore, digital trade has received wide attention around the world.

The article by Wu Zheng[1] (2022) analyzes the background, current situation and future development direction of the construction of "digital China" from a macro perspective. The digital economy has become a new engine for high-quality economic development in China, the article said, not only promoting the upgrading of the industrial structure, but also boosting employment and economic growth. The author emphasizes that policy guidance, technological innovation and talent training all play a vital role in the construction of "digital China".

The research by Chen and Xu[2](2021) focuses on the development of digital trade in China. This paper systematically sorts out the policy evolution, practical results and future prospects of China's digital trade. According to the study, the rapid development of China's digital trade benefits from the strong support of government policies, but also inseparable from technological innovation and the improvement of the international trade environment. However, the article also points out the problems existing in the development of digital trade, such as data security, intellectual property protection, etc., and puts forward corresponding policy suggestions.

The study of Liu and Wei[3] (2019) explores the application of digital trade facilitation mechanism in China's international trade from the micro level. This paper uses quantitative analysis method to study the impact of digital trade facilitation on China's export trade. The results show that the digital trade facilitation measures have significantly improved the scale and efficiency of China's export trade. In addition, the paper also analyzes the differences and characteristics of different industries and different regions in the process of digital trade facilitation.

The study by Wang and Li[4](2021) uses spatial econometrics to explore the impact of digital trade on China's economic growth. By constructing a spatial econometric model and using relevant data, they reached the conclusion that digital trade has a significant role in promoting China's economic growth. This study not only provides empirical evidence of the relationship between digital trade and economic growth, but also analyzes the differences and influence of digital trade between different regions from a spatial perspective. This study is an important reference value for understanding how digital trade drives China's economic growth.

Huang Xiaoyu and Gao Yang[5](2020) have studied their impact on China's economic growth from the perspective of e-commerce. By combing the development process, current situation and future trend of e-commerce, they analyzed the contribution of e-commerce to China's economic growth. The chapters of the book also discuss the positive role of e-commerce in promoting employment, improving productivity and promoting industrial upgrading. This study not only demonstrates the important position of e-commerce in China's economic development, but also puts forward policy suggestions to promote the sustainable development of e-commerce.

Digital trade has grown rapidly over the past few years. According to statistics, the scale of global digital trade reached 25.6 trillion US dollars in 2019, accounting for 31% of the total international trade in goods and services. It can be predicted that with the increasing development and popularization of digital technology, digital trade will become more and more important form of international trade, with great potential and space for development.

As the world's second largest economy, China is also playing an increasingly important role in digital trade. The Chinese government attaches great importance to the development of digital economy and integrates it into one of the main strategies of national scientific and technological innovation. In 2018, China's digital economy exceeded 31 trillion yuan, accounting for 34.8 percent of GDP. The rapid development of China's digital economy has provided strong support for the development of digital trade, and has also provided new opportunities and challenges for China's transformation and upgrading and the promotion of Chinese-style modernization. With the deepening of the global digital wave, digital trade has become an important force to promote economic development. Under this trend, China is also actively exploring a new path to develop the digital economy in order to realize the "Two Centenary Goals" and the Chinese dream of national rejuvenation.

2. Current Situation of Digital Trade in China

2.1. Background of the Development of China's Digital Economy

Digital economy is a new economic form based on information technology, with digitalization as the means, data as the core, and innovation as the driving force. The development and application of digital technology have brought great changes to various industries and promoted industrial upgrading and transformation development. In China, the digital economy has become an important part of the country's economic development.

According to the National Bureau of Statistics, China's digital economy reached 31.3 trillion yuan in 2019, accounting for 34.8 percent of the country's GDP, among which digital trade is an important part of the digital economy. With the increasing popularity of digital technology, China's digital economy will develop more rapidly.

2.2. The Current Situation of China's Digital Trade

With the continuous development of digital economy, digital trade has become one of the new forms and drivers of China's foreign trade. Here is the state of China's digital trade:

2.2.1. The Total Scale of China's Digital Trade Grew Rapidly.

Since 2011, the average annual growth rate of China's digital trade transactions has exceeded 40%, reaching 48.4 trillion yuan in 2020, accounting for 28.4% of the global digital trade transactions. The proportion of digital trade transaction scale and traditional trade scale increases year by year. In 2020, the export volume of digital trade accounted for 9.3%, and the import volume accounted for 35.5%.

Table 1. China's digital trade transaction scale from 2011 to 2020

Year	Total digital trade transaction volume (in one trillion yuan)
2011	0.8
2012	1.5
2013	2.8
2014	5.0
2015	8.8
2016	13.2
2017	19.8
2018	29.2
2019	38.8
2020	48.4

2.2.2. Digital Trade Structure Mainly based on Trade in Services

In the digital trade import and export, the service trade accounts for a relatively large proportion. In 2020, China's digital trade in import and export, service trade accounted for 43.7%, which is consistent with the core concept of digital economy development strategy -- "people-oriented". With the development of the Internet, China's digital service trade will increasingly appear in the form of cross-border services, including education, tourism, culture and entertainment and other service products, which will be conducive to the development of China's digital trade.

Table 2. Proportion and Growth of China's Digital Trade Export and Import Volume in 2020
(unit: US \$1 billion)

class	Export amount	Imports amount	Export proportion	Import proportion	Export growth rate	Import growth rate
commodity	489.8	1,032.1	32.2%	68.8%	31.1%	18.7%
service	220.9	284.8	43.7%	56.3%	10.7%	9.7%

2.2.3. Cross-border E-commerce Platforms Continue to Increase

With the continuous expansion of China's cross-border e-commerce market, more and more cross-border e-commerce platforms have flooded into the market, such as Taobao Global, Tmall International, JD Global Shopping, Amazon China and so on. These platforms help Chinese companies expand their overseas markets by integrating domestic and foreign resources and providing marketing planning and technical support. China's leading digital economy is highly concentrated. In 2020, Alibaba and Tencent Holdings had a market capitalization of \$63.48 billion and \$63.45 billion, respectively, both ranking among the top two in China's digital economy. In addition, the number of unicorns in China's digital economy is mainly distributed in Beijing, Shanghai, Hangzhou, Shenzhen, Guangzhou and other cities. These cities have made greater investment and innovation in the field of digital economy, and also have strong advantages in digital trade.

Table 3. Top Five Companies in the Market Capitalization of Internet Enterprises in China's Digital Economy in 2020

ranking	the name of firm	Market value (in \$ US billion)
1	Alibaba Group	634.8
2	Tencent Holdings	634.5
3	Meituan review	221.4
4	east of Beijing	118.9
5	Pinduoduo	100.7

Table 4. Top Five Cities in the Number of Unicorns in China's Digital Economy in 2020

ranking	city	Number of unicorns
1	Beijing	60
2	Shanghai	27
3	Hangzhou	23
4	Shenzhen	19
5	Guangzhou	13

2.2.4. The Rapid Rise of New Digital Trade Forms

With the continuous innovation of digital technology, new forms of digital trade continue to emerge. For example, the rapid development of e-commerce live streaming, social e-commerce, sharing economy and other business forms on the short video platforms has provided a new impetus for the development of China's digital trade.

To sum up, the scale of China's digital trade is constantly expanding, service trade plays an important role in digital trade, cross-border e-commerce platforms are also continuing to increase, and new forms of digital trade are rising rapidly. However, in the process of digital trade development, there are still problems such as intellectual property protection and international standard certification that need to be further solved.

3. The Role of Digital Trade in Promoting Chinese Modernization

3.1. Digital Trade has Promoted China's Economic Transformation and Upgrading

With the advent of the digital age, the traditional industries are facing great challenges, and the digital economy has become a new growth point. The development of digital trade can promote the transformation of China's traditional industries to digital, and improve the added value and competitiveness of industries. The rapid growth of digital trade has made profound changes in China's economic structure, from traditional manufacturing to digital services, which has promoted the rise of "new economy". Data show that the scale of China's digital economy reached 35.8 trillion yuan in 2019, accounting for about 34.8 percent of GDP. Among them, digital trade is an important part of the development of digital economy, and the digital trade transaction volume accounts for more than 60% of the total cross-border e-commerce. The rise of digital trade has promoted the digital transformation of Chinese enterprises, promoted the upgrading of traditional industries, and improved the economic benefits and core competitiveness. At the same time, digital cross-border trade has also promoted the structural upgrading of China's imports. The imported products are no longer traditional raw materials and intermediate products, but high-end products and services with more added value, which has promoted China's consumption upgrading and industrial upgrading. Digital trade has also brought more job opportunities and fiscal revenue to China, and has become one of the important engines of China's economic transformation and upgrading.

Table 5. Scale and Proportion of China's Digital Economy in GDP from 2011 to 2020

Year	Scale of Digital Economy (unit: one trillion yuan)	GDP proportion
2011	6.0	7.2%
2012	7.6	8.3%
2013	9.3	9.3%
2014	11.3	10.6%
2015	13.9	11.7%
2016	16.8	12.2%
2017	19.8	12.9%
2018	23.0	13.6%
2019	26.4	14.1%
2020	30.2	14.6%

3.2. Digital Trade has Promoted the Internationalization of the Chinese Market

Digital trade eliminates the barriers between the Chinese market and the international market, and provides a broader space for Chinese enterprises to explore the international market. At the same time, the rapid development of digital trade also provides more opportunities for foreign enterprises to enter the Chinese market. According to China's General Administration of Customs, the main sources of China's cross-border e-commerce imports in 2020 are Japan, the United States, South Korea, Germany and Australia. Goods from these countries and regions can directly enter the Chinese market through digital channels, which promotes the internationalization of the Chinese market.

Table 6. Top five countries and regions in China's digital trade volume in 2020

Country / region	Digital trade volume (unit: one billion yuan)
America	1,319.0
Britain	214.6
Germany	191.8
Japan	165.3
Korea	123.3

Through the development of digital trade, Chinese enterprises are better able to integrate into the global value chain, improve their core competitiveness, and actively participate in the formulation of international rules and standards, which strengthens China's voice on the international stage. The development of digital trade has enabled Chinese enterprises to further integrate into the global value chain, strengthened their economic ties with major trading partners, and promoted mutual benefit and win-win results in international trade. At the same time, digital trade has also brought more opportunities for open cooperation, which is of great significance to promoting the business cooperation between China and countries along the Belt and Road Belt and Road and strengthening regional economic integration.

4. Challenges and Coping Strategies for Digital Trade

The rapid development of digital trade also faces many challenges, such as cyber security issues, intellectual property protection, trade barriers and so on. In order to better promote the development of digital trade, it is necessary to strengthen international cooperation and the construction of relevant laws and regulations to promote the healthy and orderly development of digital trade.

4.1. Strengthen the Network Security Construction to Ensure the Security and Stability of Digital Trade.

With the rapid development of digital trade, the problem of network security is becoming increasingly prominent. Digital trade involves many links, such as cross-border payment, data transmission and logistics, in which there are potential network security risks. Therefore, strengthening the construction of network security and ensuring the security and stability of digital trade is an important issue that must be paid attention to in the current development of digital trade.

First of all, the government should increase the investment in network security and improve the technical level and management ability of network security. Government departments can formulate relevant laws, regulations, policies and measures to regulate the digital trade market, clarify the rights and obligations of digital trade participants, as well as the corresponding responsibilities and ways of assuming network security. At the same time, the government can also strengthen the supervision and management of the digital trade market to improve the security and credibility of the digital trade.

Secondly, enterprises should pay attention to the construction of enterprise internal network security and employee safety awareness cultivation. Enterprises can take a variety of measures, such as strengthening the maintenance and update of the network system, encryption and backup of important information, and carrying out regular network security drills and training, to improve the network security defense ability of enterprises. At the same time, it is also necessary to strengthen the network security awareness of employees, so that employees understand the importance of network security and matters needing attention, and reduce the potential risks caused by internal personnel to the enterprise network security.

Finally, digital trade participants should also pay attention to their own information security protection. When conducting digital trade transactions, consumers should choose a reputable and reliable e-commerce platform, avoid clicking on suspicious links or downloading software from unknown sources, and prevent personal information from being stolen and leaked. Enterprises should also strengthen the control of the supply chain and logistics links to ensure the security and stability of the data transmission and logistics process.

4.2. Promote the Protection of Intellectual Property Rights and Maintain a Level Playing Field for Digital Trade.

Intellectual property protection is an important issue that cannot be ignored in the development of digital trade. It is related to the protection of innovation achievements and the transformation of technological achievements. In digital trade, intellectual property rights involve trademarks, patents, copyright and other fields. Its protection can not only promote scientific and technological innovation and cultural creation, but also maintain a level playing field for digital trade.

First of all, the government should strengthen the construction and law enforcement of intellectual property laws and regulations, and improve the efficiency and level of intellectual property protection. The government can improve the intellectual property protection mechanism and regulatory measures to severely crack down on intellectual property infringement and protect the legitimate rights and interests of digital trade participants and the protection of innovative achievements. At the same time, the government can also strengthen the publicity and education of intellectual property protection in the field of digital trade, so that the majority of digital trade participants can understand the importance and necessity of intellectual property protection, and form an atmosphere and awareness for the whole society to jointly safeguard intellectual property protection.

Second, digital trade participants should also pay attention to their own intellectual property rights protection. When conducting digital trade transactions, enterprises should pay attention to the protection of their own patents, trademarks and Copyrights, avoid infringing on others' intellectual property rights, and actively safeguard their legitimate rights and interests of intellectual property rights. Consumers should also choose legitimate goods and services when conducting digital trade transactions to avoid buying fake and shoddy products or unauthorized digital content.

Finally, international cooperation is an important way to promote IPR protection. The government can strengthen cooperation with other countries and regions in intellectual property protection, promote the formulation of international rules and standards in the field of intellectual property, and realize the globalization and win-win development of intellectual property protection.

4.3. Break Down Trade Barriers and Promote the Liberalization and Facilitation of Digital Trade.

Trade barriers are an important issue in the development of digital trade, and its existence will affect the liberalization and facilitation of digital trade. Breaking down trade barriers and promoting the liberalization and facilitation of digital trade can enable digital trade participants to better enjoy the benefits and opportunities brought by the digital economy.

First, the government should strengthen the open cooperation in the field of digital trade. The government can promote the liberalization and facilitation of digital trade by formulating more open, transparent and fair digital trade policies and regulations. At the same time, the government can also actively participate in the international negotiations and consultations related to digital trade, promote the coordinated development of digital trade in the global scope, and promote the new multilateralism of digital trade.

Secondly, digital trade participants should also pay attention to the openness and convenience of their own trade environment. Enterprises can actively expand overseas markets, increase the investment and development of cross-border e-commerce, and improve the service level and supply chain efficiency of digital trade. Consumers can choose a reputable and reliable digital trading platform to achieve a convenient and safe consumption experience.

Finally, international cooperation is an important way to promote trade liberalization and facilitation. The government can strengthen the digital trade cooperation with other countries and regions, promote the formulation and consultation of digital trade rules and standards, and jointly safeguard the liberalization and facilitation of digital trade.

4.4. Strengthen International Cooperation and Promote the Coordinated Development of Digital Trade Worldwide.

Digital trade is an important part of global economic development, and the digital era has accelerated the ties and cooperation among countries in the world. In order to promote the coordinated development of digital trade in the world, we need to strengthen international cooperation and establish a more open, transparent and fair digital trade system.

First, the government should strengthen international cooperation in the field of digital trade. By deepening multilateralism cooperation related to digital trade, the government can promote the formulation and consultation of digital trade rules and standards, and enhance the sustainability and inclusiveness of digital trade. In addition, governments can actively participate in international cooperation on digital infrastructure construction and digital technology innovation, and promote the connectivity and cross-border circulation of digital trade on a global scale.

Secondly, enterprises should also strengthen international cooperation and expand the market and resources of digital trade. Enterprises can actively participate in international exhibitions

and exchange activities related to digital trade, understand the international market and industry trends, and improve their international competitiveness. At the same time, enterprises can also establish strategic partnerships with foreign enterprises to jointly develop digital trade markets and services.

Finally, consumers should also pay attention to international cooperation to achieve more convenient and secure digital consumption. Consumers can choose a reputable and reliable international digital trading platform to understand the situation of cross-border payment and data transmission, and avoid misunderstandings and risks caused by language and culture.

5. Conclusion

Digital trade is an important driving force in China's modernisation process. The development of digital trade has promoted the transformation and upgrading of China's economy and the internationalization process, but it also faces some challenges. In order to promote the healthy development of digital trade, China needs to adopt a series of policy measures and technical means to strengthen the supervision and management of digital trade, improve the research and development and application of digital technology, and ensure the smooth and security of digital trade. Looking into the future, with the further deepening of digitalization and the continuous development of cross-border trade, digital trade will become an important support and driving force for China's modernization process. It is expected that by 2025, China's digital trade trade scale will reach 44.8 trillion yuan, and digital trade will become an important growth point of China's economy. At the same time, digital trade will promote China's industrial upgrading and innovative development, promote China's economic restructuring and optimization, and promote China's transformation to high-quality development.

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