

# Study on the Challenges and Measures of International Economic Trade in the Context of Digital Economy

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**Abstract:** Entering the era of digital economy, with the help of global advanced digital technology, the construction of international economy and trade pattern can help optimize the trade process, upgrade the trade structure and improve the trade mode. This paper analyzes the multiple challenges faced by international economic trade in the context of digital economy, including lagging trade rules and regulation, the urgent need to reshape the market competition pattern as well as the impact of digital divide on the quality of trade, the crisis of digital security and privacy and other dimensions of the proposed targeted strategies in the hope that it can provide reference and guidance for the international economic trade to move forward steadily in the torrent of the digital economy.

**Keywords:** Digital economy; International economic trade; Challenges; Responses

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## 1. Introduction

The current pace of development of digital technology is exceptionally rapid, including big data technology, cloud computing technology and artificial intelligence technology, which has penetrated all aspects of production, circulation and consumption, promoting the emergence of a new model of digital economy. In the field of international trade, the construction of cross-border e-commerce platforms has prompted global supply and demand matchmaking to become more efficient and convenient, and digital service trade has broken through geographical boundaries and achieved high growth targets, with the traditional trade model in urgent need of change. However, important opportunities are usually faced with challenges, and the research conducted in this paper on the challenges and measures of international economic trade in the context of the digital economy is a breakthrough.

## 2. Challenges to International Economic Trade in the Context of the Digital Economy

### (1) Lagging trade rules and regulations

While traditional trade agreements focus more on physical goods and are often accompanied by the

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management of tariff concessions and rules of origin, digital products have become an important part of trade in the era of the digital economy, and their intangibility and ease of reproduction make them capable of instantaneous cross-border transmission through the Internet, thus rendering the existing rules useless. There is a certain amount of controversy over the attribution of digital products, and there is no uniform international conclusion on whether to tax them as goods or as services with value-added tax (VAT), which has led to confusion over the rules and order of international economic trade. In addition, data itself is an important part of the development process of the digital economy, cross-border flow regulation is the focus of the countries according to industrial protection and national security and citizen privacy issues, the formulation of local data policy has more obvious differences, so in the process of transnational digital enterprise operation there will be compliance problems, regulatory fragmentation leads to seamless global digital trade obstacles to the coordination of international economic and trade rules more difficult. The fragmentation of regulation leads to obstacles to the seamless integration of global digital trade, making it more difficult to harmonize international economic and trade rules.

### **(2) Competitive landscape reshaping and imbalance in the marketplace**

In the process of the development of the digital economy, some technology giants, by virtue of their technological advantages and a large amount of data, users occupy an important position in the field, controlling e-commerce, social media and cloud services and other key tracks, they rely on algorithmic recommendations and platform banning and other strategies to consolidate the market, squeezing the survival of small and medium-sized enterprises, so that the vitality of the market is reduced, destroying the fair ecology of the market, these practices bring the phenomenon of digital giant monopoly leads to an imbalance in the pattern of market competition. The monopolization of digital giants brought about by these practices has led to an imbalance in the competitive landscape of the market. At the same time, the speed of development of the digital economy is not the same globally. In comparison, some developed economies will seize the frontier of digital technology research and development, have a more mature and perfect digital industry chain, and dominate the trade of high value-added digital services, thus reaping a huge digital trade surplus. Developing countries, on the other hand, are in the downstream of the digital industry chain, participating in more low value-added links, with a weak digital economic infrastructure and a shortage of technical talents, and these countries have a lower voice and status in the global economy and trade.

### **(3) The digital divide as an obstacle to trade inclusion**

In some remote areas, there are still problems of backward construction of communication base stations and unstable power supply, resulting in the limited application of the Internet by some people and enterprises, and the digital economy cannot be successfully promoted in these areas, which directly leads to the limited development of cross-border e-commerce in the local area, and the trade in digital services is unable to be promoted smoothly, and it is difficult to be in a forward position in the international economic and trade circuit. At the same time, even with access to the network system, there is also the problem of uneven distribution of educational resources. The people of less developed countries are not digitally literate and lack understanding and familiarity with the application of various digital economy technologies, coupled with their weaker digital transformation capabilities and less capital, they belong to the disadvantaged group in international economic trade because of the limitations in the process of broadening overseas markets.

### **(4) Data security and privacy protection dilemma**

The whole process of digital trade needs to rely on advanced data interaction technology, but this process is vulnerable to hacker attacks and malware infestation, etc. There is the problem of economic loss caused by data leakage, and in cross-border e-commerce platforms, users' information is frequently stolen, which jeopardizes the rights and interests of consumers, affects the development of enterprises, and moreover hinders the steady forward movement of international economic trade.

### **3. Measures to Address the Challenges of International Economic Trade in the Digital Economy**

#### **(1) Improving trade rules and coordinated regulation**

Within the framework of the World Trade Organization, it is necessary to actively promote the development of e-commerce negotiations, and all countries in the world should gather consensus, conduct in-depth discussions and analysis on the characteristics of digital products and the rules of cross-border flow of data, as well as on key topics such as the levy of digital taxes, take into account the interests of all parties in a comprehensive manner and follow the principle of inclusiveness, so as to give the promotion and development of global digital trade a more solid basis of reference and more precise rules. At the same time, from a regional perspective, countries can combine their own conditions, close and economic ties, sign agreements on digital trade, realize cross-border e-commerce regulation, electronic authentication and data sharing rules, accumulate rules and practical experience, and regulatory authorities of various countries need to build a regular data regulatory cooperation process to strengthen the management of cross-border data and achieve the goal of collaborative regulation.

#### **(2) Optimizing market competition and balancing trade structures**

At the level of international economy and trade, antitrust agencies of various countries need to update their regulatory tools and ideas in a timely manner, monitor and evaluate the monopolistic behavior of the market with the help of advanced algorithms and big data technology, and strictly punish the abuse of digital market dominance and restriction of competition in mergers and acquisitions, which are illegal practices, so as to maintain the stability of the market, and also to provide a stable development space and innovation prospects for micro, small, and medium-sized enterprises (MSMEs) in the international economy and trade. The market will be stabilized, providing MSMEs with a stable space for development and innovative prospects in the international economy and trade. At the same time, the advanced and developed economies in the world need to fulfill their international responsibility to help developing countries narrow the digital divide through technical support, financial support, talent support, etc., while developing countries need to formulate a digital economy development strategy that better matches their own national conditions, increase investment in science and technology in economic development on a sustained basis, cultivate leading digital industries with local characteristics, and achieve rapid upgrading and optimization of digital industries, so that the international economy will be able to achieve a stable development space and innovation prospects. The developing countries, on the other hand, need to formulate a digital economy development strategy that better matches their national conditions, continuously increase investment in science and technology in economic development, cultivate leading digital industries with local characteristics, achieve rapid upgrading and optimization of the digital industry, and improve the structure of the international economic trade.

#### **(3) Bridging the digital divide**

In international economic trade, international organizations and developed countries should increase their assistance to the slightly backward countries, mainly through public-private partnerships and low-interest loans, to help them further improve their network infrastructure, especially the laying of high-speed broadband and the construction of data centers, and the popularization of mobile Internet equipment, so as to make the digital access in these countries more convenient and comprehensive, and to enhance the role of the people and enterprises in the digital trade system. The role of people and enterprises in the digital trade system should be strengthened. At the same time, international cooperation on digital skills training should be carried out, and through the close integration of online and offline, many practical courses such as e-commerce operation, digital marketing and programming basics should be provided for laborers and enterprises in slightly backward regions, and multinational digital enterprises and local institutions should be encouraged to cooperate with each other and share some of the available technologies and professional experience in the process of the development of the digital economy, so

as to significantly increase the level of digital literacy and application of economically backward regions, and make them better equipped for digital trade. This will enable economically disadvantaged regions to significantly increase their digital literacy and application levels and become more capable of participating in the international economy and trade.

#### **(4) Building defenses for data security and privacy protection**

International economic and trade needs to be based on national conditions to improve the digital security regulatory system, to clearly define the scope of the rights and responsibilities of each part of the data subject as well as the processor, to do a good job in all aspects of data collection, storage, use and other normative work, the establishment of an independent regulatory body, to strengthen the day-to-day supervision of law enforcement, and to crack down on illegal and criminal behavior of data, to ensure that the data to achieve the flow of the data in an orderly manner. At the same time, the international level needs to always follow the principle of equality, mutual assistance and mutual trust, and jointly build a platform for coordinating data security laws and regulations, so that the laws and regulations of various countries tend to converge, and bilateral or multilateral data protection agreements can be signed between multiple countries to recognize the various regulatory measures, and digital enterprises need to strengthen their internal data management in the international economy and trade, and use more professional and advanced encryption technology and intrusion detection systems to enhance data security and improve emergency response capabilities. The digital enterprises need to strengthen internal data management in international economic trade, use more professional and advanced encryption technology and intrusion detection system to enhance data security, improve emergency response capability, maintain consumer trust, and maintain the stability of international economic trade.

#### **4. Conclusion**

In the context of the current digital economy, the international economic and trade environment has become more complex, mainly facing the challenges of chaotic trade order, disordered competition and data divide, as well as data risks, etc. All over the world, there is a need for countries to open up cooperation and exchange and sharing, to make good rules and regulations, and to make efforts to bridge the divide and to strengthen data governance in order to shape a more fair, just and inclusive new international economic and trade order, and to promote the global economy under the context of the digital era and the rapid development of the global economy. Only in this way can we shape a new international economic and trade order that is more fair, just and inclusive, and promote the rapid development of the global economy in the context of the digital era.

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