

Analysis of the development and impact of digitalization of the economy on the trade system in China

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Abstract. With the globalisation of the economy and the rapid development of communication technology, the Internet is being developed and applied globally at an unimaginable speed. As a more advanced and sustainable form of economy, the rapid development of the digital economy and its great impetus to social development is of great significance in promoting technological transformation, accelerating industrial structure upgrading and leading regional economic development. Nowadays, Internet technology has become an important support for social and economic operations, and the digital economy has become an important force in promoting industrial upgrading, leading social development and participating in building a new pattern of international competition. The digitisation of trade methods has made it easier and more efficient to conduct international trade, lowering the cost of trade, and SMEs in developing countries will have more opportunities to export their goods to international markets, and the participation of these countries in These countries' participation in globalisation will be further enhanced. The digital economy has arrived.

Keywords: Digitalisation; Internet technology; Economic recovery; International trade.

1. Introduction

According to « Internet Development Report » compiled by China cyberspace in 2017, the global digital economy has reached US \$12.9 trillion [1]. The total amount of China's digital economy is 27.2 trillion yuan, ranking the second in the world after the United States. In addition, the contribution rate of China's digital economy to GDP growth has reached 55%, which has exceeded 50%. Digital economy has become the core force to promote industrial upgrading, lead social development, and participate in the construction of a new pattern of international competition. It is the most influential power source to promote the comprehensive rejuvenation of the world economy since the financial crisis.

The development of the digital economy, based on the spread of computer networks and communication technologies, is the product of a high degree of integration between social development and knowledge and information, and is a new form of economic development following the natural and industrial economies [2]. It has distinct characteristics of the times and advanced. Internet technology makes it possible to communicate without barriers. The extensive use of digital technologies such as digital payment, e-commerce and search engine makes the marginal cost of executing a complete transaction or adding a new user extremely low. Therefore, the Internet has not only become the main driving force for the development of international trade in goods and services, but also provides a broad platform and technical support for digital services and digital trade.

In the current process of economic development, information technology and its innovative application represented by big data, cloud computing processing, virtual reality, sensor communication, computer processing, mobile Internet are widely used, which not only promote the transformation of traditional industries and liberate productivity, but also create a large number of new industries, new models and new forms. The information technology revolution has gathered the wisdom of human beings and further promoted the continuous development of digital economy. Therefore, informatization, intelligence and networking have become the main pronouns of digital economy and the main driving force for the development of digital economy.

2. Literature Review

American scholar Tapscott (1996), who is known as "the father of digital economy", put forward the concept of digital economy for the first time. He systematically expounded the profound changes brought about by the development of social economy by network, and how to use new technology to create new enterprises and seek success under the background of new economy. In addition to technology networking, the networking effect is more critical for technology users, because the era of digital economy is not only the era of intelligent machines, but also the era in which people use the network as the carrier to gather wisdom, change the mode of production capacity development and promote social progress [2].

Since the beginning of the 21st century, Mesenbourg (2001) has reinterpreted the connotation of digital economy. He believes that digital economy can be divided into three levels. The lowest level is the infrastructure of digital transaction, including communication, hardware, software and network. The second level is the process of digital transaction, It mainly refers to the digital transaction process reached on the Internet, such as distance online education, video online conference, etc. the last level is e-commerce, which refers to the digital transaction of actual goods and production factors. The transaction scope covers the whole process of enterprises from purchasing raw materials to finally completing the transportation of goods [3].

Through literature review, this paper finds that the thinking and analysis of the relationship between the Internet and international trade are relatively scattered, and some existing researches either pay too much attention to empirical research, or focus on the analysis of the current situation, policies and future development bottlenecks. All kinds of views are scattered in the paper, and there is no special systematic dynamic support and Mechanism Analysis on the impact of the Internet on foreign trade. Therefore, it is innovative and pioneering to systematically sort out the work in this paper.

3. Research Method and Data Collection

This paper describes the impact of digital development on the Chinese trading system. The author summarizes the impact of digital technology on the development process of the trading system in terms of theoretical aspects of digital development, research methodology, analysis of the level of digitalization and development proposals.

Firstly, the paper compares the literature closely related to the selected topic from theoretical, empirical and structural perspectives. The paper then describes and analyses the development of the Internet and foreign trade in China in terms of the development process, policy research, the degree of integration of the two and the problems that exist. The paper then analyses the impact of the digital economy on China's trade development from the perspective of dynamic support and mechanisms. Finally, on the basis of summarizing the above main findings, the paper offers some suggestions and future prospects for the development of the Internet and foreign trade in China.

4. Analysis

In the past decade, the growth of the world economy had slowed down due to various factors, and even recorded negative growth in 2020 due to the COVID-19 pandemic. But fortunately, thanks to the development of digital technology, the global economy began to recover in 2021, and international trade had once again become the driving force for the recovery of global economic growth. Based on this thinking, comparing the first half of 2021 with 2019 (2020 is not representative due to the impact of the COVID-19 pandemic), the global GDP increased by only 1.1%. However, according to data from United Nations Conference on Trade and Development (UNCTAD), in 2021, the total import and export of global trade in goods grew rapidly, with a growth rate of 11.9% (\$21.0 trillion in the first half of 2021 and \$18.8 trillion in the first half of 2019) [4]. In addition, according to China Customs statistics, China's total foreign trade in 2021 amounted to 6.05 trillion U.S. dollars

[5], reached the highest level in history, up an increase of 21.4% over 2019, and saw 17.3% higher than the China's GDP growth rate of 16.2% in the same period (Figure 1). showed the gap between global trade and global GDP, China's foreign trade and China's GDP growth rate, which would indicated that international trade took the lead in recovering and became the driving force for global economic growth.

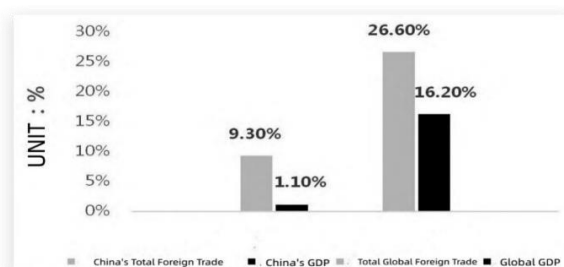


Figure 1. Comparison of Global and Chinese trade and GDP growth rates

Note-source: United Nations Conference on Trade and Development (UNCTAD), Ministry of Commerce of China

At the same time, the rapid growth of foreign trade has also played a very good role in promoting the development of the national economy. China has become the world's largest trading country, the world's largest export trading country and the second largest import trading country.

Previously, China's digital economy has maintained a rapid growth rate. According to statistics from the "white paper Digital Economy Development in China (2021)", which released by the China Academy of Information and Communication Technology (CAICT), stated that the added value of the digital economy in 47 countries in the world had reached US\$32.6 trillion, the nominal growth rate compared to 2019 was increased of 3.0%, accounted for 43.7% of GDP in 2020 (figure 2).

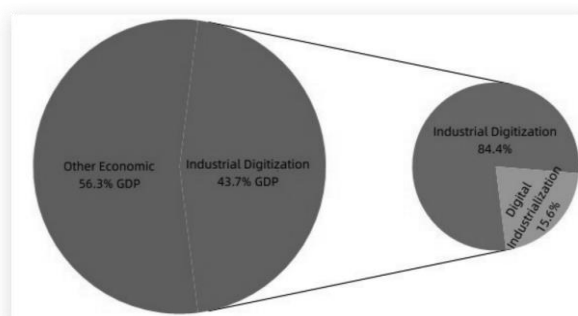


Figure 2. The proportion of internal structure of global GDP in 2020

Data source: United Nations Conference on Trade and Development (UNCTAD), Ministry of Commerce of China.

In summary, against the backdrop of the booming digital economy, the rapid development of digital trade has contributed tremendous value to the Chinese economy and has become a key driver of stable economic growth in China.

5. Analysis and Conclusion

The above information shows that the popularity and application of digital technology, represented by the Internet, is one of the key manifestations of the development of the digital economy, providing new transaction methods, means of payment and directions for the development of China's economic and foreign trade system. This not only represents the development of China's digital economy, but also shows that digital platforms not only bring potential trade buyers and sellers from around the world closer together, saving transaction costs for both buyers and sellers in export trade and promoting trade exchanges and economic development.

The author believes that the digital economy, as a mode of economic development that relies primarily on advanced Internet information technology, the rapid development of the wide set and its enormous impetus to social development, is of great significance in promoting technological transformation, accelerating industrial structure upgrading and leading regional economic development.

The development of digital technologies can lead to the existence and continued widening of a digital divide, which can lead to a more unequal distribution of the benefits of the digital economy and have a negative impact on the quality development of trade in services. For groups that have difficulty accessing or mastering the latest digital technologies, they are unable to realise the expansion of social capital and are often excluded from the digital dividend distribution system or only receive a very small part of it. In contrast, those categories of subjects who are familiar with and can quickly master digital technologies are able to use their digital advantage to extend and expand their social networks and turn them into their own economic resource advantage, thus gaining an absolute advantage in the process of dividing the digital dividend. In particular, as the new epidemic has become a global pandemic, the development of digital businesses such as online shopping and online offices has created more favourable conditions for the development of the digital economy, but the inequalities caused by the digital divide have also gradually emerged. Therefore, bridging the digital divide and ensuring that the digital dividend is available to all citizens has become an important issue for quality economic development.

Firstly, further improve digital hardware facilities. The government can support the construction of broadband networks and mobile communication base stations in backward and remote areas through fund allocation and technical assistance, and ensure stable speed-up of internet access in remote areas such as the central and western regions by accelerating the deployment of the global low-orbit broadband internet constellation system.

Second, strengthen the construction of a digital talent pool. Cultivate China's digital talents through public assignment and selection of outstanding talents in the digital economy, online training and cross-regional exchanges, use professionals as a bridge and link for the dissemination of digital technology, and introduce and absorb advanced experience in the application of digital technology in developed countries and regions.

Again, build a multi-level and distinctive digital literacy training system. Widely involve diverse subjects such as government agencies, educational institutions and social forces in this system, set multi-level, multi-disciplinary and multi-component cultivation goals, and use the diversified training system to improve the country's ability to maintain digital security, collect and identify digital resources, and create and export digital content.

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