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Development of China's Digital Trade under the New Pattern of "Double Cycle"

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Abstract: With the rapid development of Internet technology, the penetration and integration between digital technology and international trade continue to deepen, prompting the rapid development of digital trade and increasingly becoming a new driving force for the economic growth of all countries in the world. The vigorous development of digital economy provides conditions for the rise and transformation of digital trade. Especially in the context of policy of the dual cycle between domestic and foreign, Chinese government pays much attention to the development of digital trade, and take measures to try to occupy a leading position in the field of digital trade. In this paper, the development status of China's digital trade was analyzed first. Then qualitative evidence based on the difficulties faced by digital trade under the policy of "double cycle" is presented. The results suggest that relevant officials should take measures in terms of adjusting the pattern of income distribution, ensuring the protection of personal privacy and data security and improving the level of openness.

Keywords: Digital trade, Domestic and International Double Cycle, Digital economy.

1. Introduction

With economic globalization and the development of digital technologies such as big data, cloud computing and the Internet of Things, traditional business models and trade methods have undergone profound changes. Especially during the pandemic in 2020, the continuous evolution of the global economic structure and the internal demand of China's sustained economic has been growth. Chinese government advocated the policy of dual domestic and foreign cycle to alleviate the economic development affected by the pandemic. They are actively laying out a new development pattern with the domestic cycle as the main body and the domestic and international double cycles promoting each other. This strategic concept is not only reflected in the national 14th Five-Year Plan and the outline of the 2035 vision, but also a deep insight into and active adaptation to the current international economic situation. Among them, strengthening the dominant position of the domestic market and promoting the construction of a trade power have become the important fulminant points under the double-cycle strategy. Therefore, China's digital trade will grow to be a significant component of global trade and a key driver of economic growth (Cong, 2023). In this context, digital trade, as the product of the combination of globalization and Internet technology innovation, is increasingly showing its core position in global trade. It not only breaks through the time and space limitations of traditional trade, but also realizes the efficient docking between producers and consumers through digital means, which greatly promotes the optimal allocation of global resources. Nowadays, digital trade is a concern for countries all over the world, which is because digital trade is no longer restricted by geography and time, especially under the influence of pandemic. The existing research focuses more on the micro-perspective like cross-border e-commerce, digital services, or digital trade rules while this paper contributes to provide a comprehensive analysis of China's digital trade development under the background of the dual cycle policy. In this paper, we examine and provide the direct facts and evidence about an overview of the development of China's digital trade, and dilemma faced in the context of dual cycle by a qualitative method. Then, outline the appropriate countermeasures to address those challenges to maximize the contribution of digital trade which merged as the most promising type to China's economic growth of trade.

The remainder of this paper is organized as follows. Section 2 focuses on the literature review of the explanation of digital trade, and the impacts on digital trade. Section 3 introduces an qualitative methodology to analyze the status quota of China's digital trade development and explains the difficulties faced, and targeted countermeasures proposed . Finally concludes.

2. Literature Review

2.1. The Concept of Digital Trade

Weber (2010) is the first person to specifically propose the concept of digital trade, and he defines digital trade as commercial transaction activities that use electronic means to carry out product or service transmission. Borga (2012) put forward that the digital trade is to empower the traditional trade industry on the basis of the international trade combined with the digital technology. Li Jun (2018) defines digital trade as cross-border trade activities that achieve online and offline delivery through information networks or other digital technologies. Both are emphasized that the transaction items involved in digital trade mainly include digital products and services, but such a definition will make the scope of digital trade objects narrow. Jia Huaiqin (2018) considered that the digital trade connects with the concept of the E-commerce closely. Therefore, the following definitions have expanded the scope of the subject matter of digital trade. These definitions no longer only take digital content products and services as the subject matter of digital trade, but also include physical goods exchanged through the Internet. In 2017, the US Trade Council redefined the meaning of digital trade, which is the trade of products and services delivered through wireless digital networks, and its trade subject includes tangible and intangible products.

2.2. The Impact of Digital Trade

From the perspective of consumers, the development of digital trade makes the types of import and export products continue to be enriched and the scope continues to expand, which is conducive to improving the level of consumer welfare. Li Zhongmin (2014) found that the platformization and intellectualization of digital trade could greatly reduce the transaction fees. Li You (2015) studies that digital trade might be conducive to gain high-quality intermediate goods with cheap price and numerous varieties. Meltzer (2016) proposed that with the development of digital trade, the number of transactions of low-priced goods shows a significant increase, because the emergence of digital technology reduces transaction costs, and low-priced goods also begin to actively participate in international trade. LopezGonzalez and Jouanjean (2017) pointed out that the innovation of digital technology has led to new ways of commodity trade and production.

From the perspective of industry, after the use of digital technology and information and communication technology to innovate the trade mode, the speed of data transmission has been greatly improved, and the transaction cost in the trade process has also been reduced (Abeliansky and Hilbert, 2017). Li Zhongmin (2014) found that the platformization and intellectualization of digital trade could greatly reduce the transaction fees. Meltzer (2019) pointed out that the use of emerging information technologies such as big data and artificial intelligence has brought new trade means and improved trade efficiency.

From the state perspective, LinJones (2015) discovered that digital trade could promote economic growth, create employment, reduce trade costs, promote international trade and eliminate trade barriers. Fefer and RachelF (2017) reported that digital trade will increase the volume of international trade. Guo Siwei et al. (2018) pointed out that cross-border e-commerce is the primary form of digital trade, and its ways to promote the development of international trade include deepening international division of labor, innovating international trade means, and influencing international trade policies. Zhang Monan (2021) analyzed that the role of digital trade is not only that it may completely change the division of labor in the global value chain, reshape the global economic development pattern, but also make the competition between major powers become more intense.

3. Methodology

In this paper, the qualitative evidence as a pivotal tool will be used to analyze the current development status of China's digital trade. This analysis will be grounded in a robust datasets pertaining to the digital economy, spanning from 2019 to 2023. By examining trends, patterns, and key indicators within this datasets, the aim is to paint a comprehensive picture of China’s digital trade landscape, highlighting its achievements, challenges, and emerging trends. Furthermore, to gain a deeper understanding of the context in which China’s digital trade operates, the government work reports from the same period will be reviewed. By doing so, this paper will identify and propose some of the dilemmas that China’s digital trade is currently facing within the framework of the domestic and foreign double cycle. This double cycle refers to the interplay between China’s domestic market and its international trade relations, presenting unique challenges and opportunities for digital trade development. By delving into these reports, it will be able to contextualize our findings and provide insights into the broader economic and political landscape that shapes China’s digital trade landscape. Finally, drawing on the qualitative results obtained from our analysis of the digital economy data and government work reports, a set of targeted countermeasures and suggestions will be formulated which is aimed at addressing the identified dilemmas. These countermeasures and suggestions will be grounded in a thorough understanding of the current state of China’s digital trade and will be designed to foster sustainable growth, enhance competitiveness, and address emerging challenges. By offering concrete and actionable recommendations, this paper could contribute to the ongoing development and optimization of China’s digital trade sector.

4. The Development Status of China’s Digital Trade

4.1. The Steadily Increasing Scale of China’s Digital Trade

China’s digital trade has been experiencing robust growth in recent years, emerging as a significant driver of international trade and economic development. This new form of trade, characterized by data as a key production factor, digital services as its core, and data ordering and delivery as its primary features, has become an integral part of the digital economy. According to the Figure 1 below, the chart depicts the significant fluctuations and overall growth trend of China’s import and export volume of digitally deliverable services over the past few years. From 2019 to 2023, both the import and export volume have shown a generally upward trajectory, albeit with some variations in the rate of increase. In terms of the import and export volume combined , it started at around 2500 billions of dollars in 2019 and gradually increased to reach nearly 4000 billions of dollars by 2023. This represents a substantial growth, indicating a strong demand and supply for digitally deliverable services in China and internationally.When examining the export volume specifically, it follows a similar upward trend, starting lower than the combined import and export volume but catching up and even surpassing the import volume in later years. This suggests that China’s exports of digitally deliverable services have been gaining momentum and becoming increasingly competitive in the global market. Conversely, the import volume appears to have started at a higher level in 2019 but has since grown at a slower pace compared to the export volume. However, it still remains significant, indicating that China continues to import a considerable amount of digitally deliverable services to meet domestic demand. The growth rate of imports and exports shows a mix of positive and negative figures. This reflects the volatile nature of the digital services trade, which can be affected by various factors such as changes in global economic conditions, technological advancements, and policy shifts. Nevertheless, the overall trend indicates that China’s digitally deliverable services sector has been expanding, albeit with some periodic contractions.

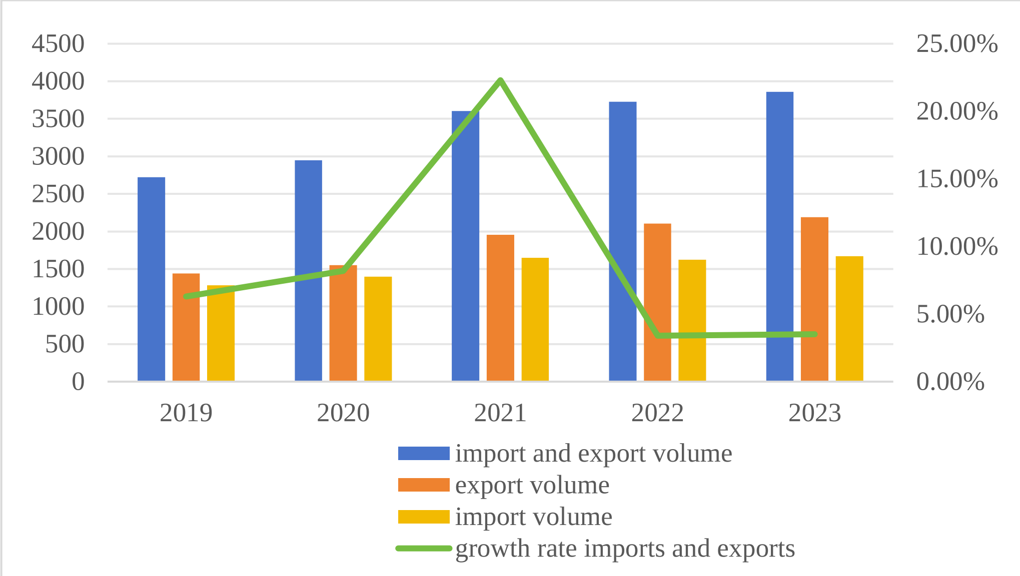

Figure 1. Scale and growth rate of import and export of digitally deliverable services in China from 2019 to 2023. (Billions of Dollars)
Data Source: Ministry of Commerce

The development speed of digital economy accelerates the digital trade in our country, and the scale of digital trade is also showing an expanding trend. From the perspective of trade digitization, China is the only developing country among the top ten e-commerce countries and regions. At the same time, China also has outstanding performance in the field of cross-border e-commerce in the world, whether it is retail export volume or retail sales (B2C), China ranks first in the world. Data from the National Bureau of Statistics showed that the country's online retail sales were 15.4 trillion yuan, up 11.0 percent year-on-year. Among them, physical goods online retail sales reached 13.0 trillion yuan, an increase of 8.4%, accounting for 27.6% of the total retail sales of consumer goods. In 2023, the scale of domestic cross-border e-commerce market reached 16.85 trillion yuan, up 7.32% year-on-year from 15.7 trillion yuan in 2022.

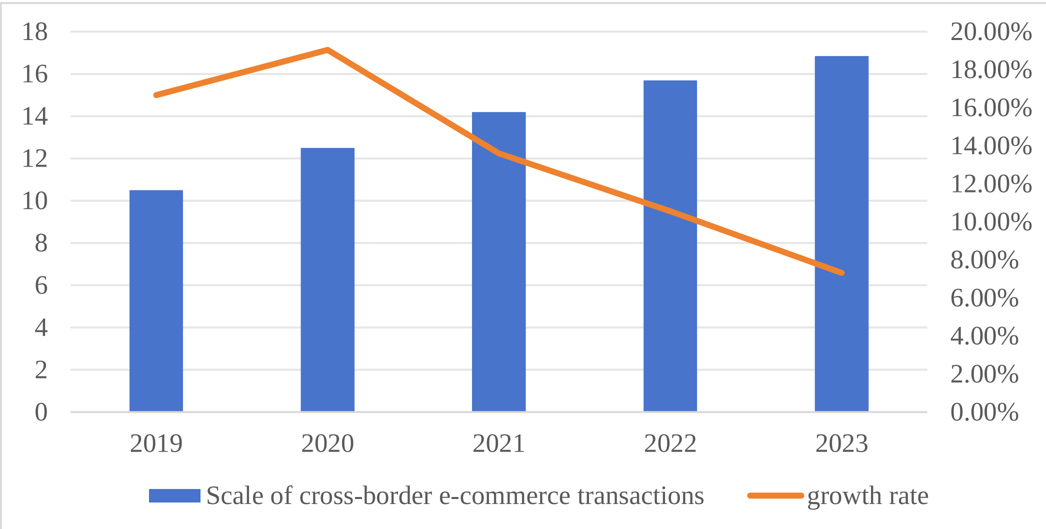

Figure 2. The Scale of Cross-border E-commerce Transactions and Growth Rate in China between 2019-2023 (Trillion Yuan)
Data Source: National Bureau of Statistics

4.2. Unperfect Digital Trade Related Legal Systems and Regulatory Measures

In terms of the relevant legal system and regulatory measures of digital trade in China, there are certain deficiencies in three aspects. First, China lacks specific legal regulation in data flow and supervision. For example, the transnational flow of data includes multiple steps such as collection, sorting, transmission, storage, use and supervision, but the relevant laws have not made detailed regulations on these aspects. Second, there is a lack of systematic law on digital trade. Customs clearance, commodity inspection, consumer rights and interests protection must be involved in the process of digital trade. However China has not formed systematic legal provisions in these aspects, only through the Foreign Trade Law, Customs Law and other different laws to manage this. Third, the laws and regulations of personal information and intellectual property protection are not perfect. For example, China has not formed a unified standard in electronic signature, electronic authentication, credit system and so on. In addition, because digital products are easy to copy, modify and spread the characteristics of convenience, the intellectual property protection is more difficult. Therefore our country’s current Intellectual Property Protection Law has not been fully involved which needs to be further improved.

5. The Difficulties Faced by Digital Trade Under the New Development Pattern Of “Double Cycle”

5.1. The Structural Contradiction Between Effective Supply and Demand Leads to The Poor Terminal Consumption Channel of Digital Trade

Since reforming and opening up, China’s economic construction has made remarkable achievements. From 1978 to 2023, China’s GDP has grown at an average annual rate of 14.6%, and China has become the world’s second largest economy, the largest trading country in goods, and the second largest trading country in services. In recent years, with the prevailing trend of trade protectionism and anti-globalization in the world, the instability and uncertainty factors of our country’s external environment have gradually increased, while the contribution of external demand to economic growth has gradually decreased, far lower than the contribution of final consumption expenditure and gross capital formation to GDP growth. In 2023, the contribution rate of net exports of goods and services to China's GDP growth was only 12.6%. However, the contribution rates of final consumption expenditure and gross capital formation to GDP growth were as high as 58.6% and 28.9%, respectively. At the same time, the COVID-19 epidemic continues to spread around the world, and the global industrial chain supply chain is facing the risk of disruption. Under this situation, domestic cycle will be the strategic point of economic development of our country in the future. However, the consumption growth of our country is weak at present, and the structural contradiction between effective supply and demand is highlighted. Traditional industries have a serious surplus of low-end products and low capacity utilization, while high-end manufacturing and service industries have a serious shortage of supply. With the rising income level and the expansion of the middle class, the consumption demand of residents for high-end, diversified and personalized products and services has increased greatly, and the structural contradiction between the insufficient high-end supply to meet the growing high-end consumption demand has become more and more prominent.

5.2. Data Security and Personal Privacy Protection Face Challenges

Under the new dual-cycle development pattern, the flow of personnel, information, data and other factors in domestic and international markets is more frequent, the allocation efficiency of resources on a global scale is further improved, the scope of cross-border trade is expanding, and the national boundaries of data flows are increasingly blurred. In this context, personal privacy protection and data security are becoming increasingly important. From the domestic level, at present, the legislative process of data security and data management in our country is relatively slow, which needs to be further improved. In practice, mobile payment and cross-border payment are widely used with strong interest demands for data risk prevention, data subject rights protection, and national security maintenance (Chen, 2022). Legislation and system design are significantly lagging behind practical needs. On the one hand, citizens’ sense of integrity and self-protection of daily personal information is weak, and consumers’ personal privacy information is exposed to the risk of leakage at any time in the process of digital trade. On the other hand, some e-commerce sellers rely on big data platforms to analyze the consumption needs and habits of online shoppers and sell goods at high prices to loyal consumers, resulting in the so-called “big data killing” and other irregularities, which seriously infringes on the rights and interests of consumers.

6. Policy Suggestions for Promoting the Development of Digital Trade Under the New Development Pattern of “Double Cycle”

6.1. Quickly Adjust the Pattern of Income Distribution

Building a new development pattern with the domestic cycle as the main body and the dual cycles promoting each other means that the domestic cycle and the construction of the domestic market are the basis of future strategic development, and its purpose is to drive the foreign cycle from the domestic cycle. Our country has the largest population in the world, with over 400 million middle-income group. Therefore, it has a vast consumer market and huge potential for domestic demand. However, in the current distribution of primary income, the proportion of government and enterprise income is relatively high, while the proportion of residents’ income is too low. Moreover, the primary distribution income is the main component of residents’ disposable income in our country. At the same time, digital products and digital services are the core of digital trade, and the purchase of digital products and digital services signifies a higher level of consumer demand. Thus, it also needs to be matched by a higher level of income. In view of this matter, the pattern of income distribution should be adjusted first. To achieve this, relevant policies should be improved and more support should be given to new consumption patterns. For example, tax incentives could be given to enterprises with innovative spirit in fields such as e-commerce and Internet services. In addition, measures could be provided to reduce enterprise costs, and pricing policies are given to enterprises that carry out services such as online consultation, distance education, and Internet medical care.

6.2. Strengthen the Protection of Personal Privacy and Data Security

In the long term, the crucial part of achieving a secure and orderly flow of cross-border data is to accelerate the implementation of relevant regulatory departments for cross-border data transmission supervision (Zhao et al., 2021). With the increasing reliance on data in digital trade, China is prioritizing the establishment of robust data protection laws and cybersecurity measures. This includes safeguarding personal information, ensuring data privacy, and preventing cyber attacks. By building trust in the digital ecosystem, China aims to attract more foreign investors and partners. First, it should make sure that the collection, storage, processing, analysis, mining and trading of data and information are reasonable and compliant with the law, and strictly crack down on illegal activities such as stealing, buying, selling and abusing personal data and information in order to maintain personal information and data security. Second, based on ensuring data and information security, the information barriers between regions should be broken to promote the orderly flow of data between multi-industry, multi-field, cross-department and cross-level , as well as form a unified and standardized domestic data and information market. We will promote the establishment of international big data exchanges in regions that meet the requirements, and explore pilot projects to innovate business models for data trading. Third, recognizing the importance of data in digital trade which needs to work to streamline the regulations governing cross-border data flows. This includes negotiating data transfer agreements with other countries and establishing clear guidelines for the secure and efficient exchange of data across borders.

6.3. Improve the Level of Openness

Recently, developed countries have accelerated the pace of development in the field of digital trade. They pay close attention to the formulation of their own digital trade development strategies, and have been in a comparative advantage in the global digital trade competition. In the face of the competitive pressure of developed economies such as Europe and the United States in digital trade, we should participate in international cooperation in global digital trade and raise the level of opening-up. Countermeasures could be take in the following ways. First, We could actively participate in the negotiation of global digital trade rules and the formulation of standards, and strive to have more say in the new round of international economic and trade rules negotiations.Nowadays, digital trade has become an important topic in the negotiations of many countries. For example, digital trade has been included as a separate chapter in the USMCA. Therefore, our country should rely on its influence in the United Nations, WTO and other international organizations. Then, actively participate in the negotiation of global multilateral digital trade rules and international cooperation in the regulation of cross-border data flows to reduce the digital trade barriers between countries. Second, it is necessary to increase investment in digital industries in emerging markets such as the "One Belt One Road" to upgrade their digital capabilities (Sun and Ren, 2021). The specific measures could be encourage enterprises to increase investment in digital infrastructure and plan the layout of digital industries and digital service markets in countries along the " One Belt, One Road". Then we could promote the digital products, brands, services and technical standards what China has comparative advantages on, and constantly enhance the global competitiveness and influence of China's digital trade.

7. Conclusion

Under the new dual-cycle development pattern, which emphasizes both domestic and international economic circulations, digital trade in China has indeed ushered in tremendous benefits. It has significantly expanded the scope of cross-border trade, enabling businesses to reach new markets and consumers across borders more efficiently. Additionally, digital trade has increased the types of trade commodities, catering to the diverse needs and preferences of consumers worldwide. Furthermore, it has expanded the market access of small and medium-sized enterprises (SMEs), providing them with unprecedented opportunities to grow and compete on a global scale. Under the backdrop of globalization, digital trade has forged intimate ties among countries, fostering interconnected economies and markets. As the economic development of our country transitions from a rapid growth phase to a more stable period, it is essential to acknowledge that competitive pressures persist both domestically and internationally. In this paper, we have undertaken a comprehensive data collection and analysis of the current status of China's digital trade. Our findings reveal a steady increase in scale, particularly in the realm of digital service trade, which underscores the potential and promise of this sector. However, we also identified several critical challenges, including the relatively small volume of digital trade compared to its potential and the imperfect state of digital trade-related legal systems and regulatory measures.

In light of these challenges, it is imperative to develop targeted countermeasures to address the underlying issues. Specifically, we propose suggestions that focus on three key aspects: the pattern of income distribution, the protection of personal privacy and data security, and the level of openness in digital trade. By addressing income inequality and fostering inclusive growth, we can enhance domestic consumption and create a larger market for digital products and services. Simultaneously, strengthening data protection laws and establishing robust regulatory frameworks will instill confidence in consumers and businesses alike, facilitating the safe and secure exchange of digital goods and services. Lastly, increasing openness in digital trade will attract foreign investment, promote technological innovation, and expand market access for Chinese digital firms.

In conclusion, the development of digital trade in China presents both opportunities and challenges. By addressing these challenges head-on through targeted policies and strategies, we can harness the full potential of digital trade to drive economic growth, foster innovation, and enhance global competitiveness.

References

[1] Abeliansky, A.L., & Hilbert, M. (2017). Digital technology and international trade: Is it the quantity of subscriptions or the quality of data speed that matters?. Telecommunications Policy, 41, 35-48.

[2] Borga M, Koncz-Bruner J. (2012) Trends in Digitally-enabled Trade in Services, 8, 1-8, Available from https://www.bea.gov/research/papers/2012/trends-digitally-enabled-trade-services

[3] Cong, S., et al., (2023). Exploring the Development of China's Digital Trade in the Context of the Domestic and International Double Cycle. In: Koucheryavy, Y., Aziz, A. (eds) Internet of Things, Smart Spaces, and Next Generation Networks and Systems. NEW2AN 2022. Lecture Notes in Computer Science, vol 13772. Springer, Cham.

[4] Fefer, et.al. Digital Trade and U.S. Trade Policy, report (2017). Washington D.C., University of North Texas Libraries, UNT Digital Library, Avaiable from https://digital.library.unt.edu; crediting UNT Libraries Government Documents Department.

[5] LinJones. (2015) Digital Trade in the U.S. and Global Economies [J]. Optics & Spectroscop, Available from https://www.usitc.gov/publications/332/pub4485.pdf

[6] Lopez-Gonzalez, J., & Jouanjean, M. (2017). Digital Trade: Developing a Framework for Analysis. Meltzer, J.P. "Governing Digital Trade" [J].World Trade Review, 2019(18):1-26.

[7] Meltzer, J.P. (2016). Maximizing the Opportunities of the Internet for International Trade. Economics of Networks eJournals [J]. Congressional Research Service. 2017, CRS Report for Congress, R44565 the Quantity of Subscription sort

the Quality of Data Speed That Matters?" [J]. Telecommunications Policy, 2017, 41(01):35-48.

[8] Weber, R.H. (2010). Digital Trade in WTO-Law - Taking Stock and Looking Ahead. Institutions & Transition Economics: Microeconomic Issues eJournal.

[9] Chen, J. (2022). Research on the International Competitiveness of China's Digital Trade. (Master's thesis, Shandong University of Finance and Economics)

[10] Guo, S.W, et al., (2018). "New Engine of Foreign Trade" under the New Normal: the Development of Cross-border E-commerce and the Transformation and Upgrading of Traditional Foreign Trade in China. Economist (08), 42-49.

[11] Jia, H.Q. (2019). Concept, Business Environment Assessment and Rules of Digital trade. International Business (09), 90-96.

[12] Li, J, et al., (2021). Concept Connotation, Development Trend and Countermeasures of Digital Trade. International Business (05), 12-21.

[13] Li, Y. (2015). Export Trade Product Quality and International Competitiveness - an Empirical Study Based on Chinese Manufacturing Industry. Contemporary Finance and Economics (12), 88-96.

[14] Li Z.M, et al., (2014). Digital Trade: Development Trend, Impact and Countermeasures. International Economic Review (06), 131-144+8.

[15] Sun, Y.Q., & Ren Y. (2023). Thinking on Digital Trade Cooperation between China and Asia-Pacific Emerging Economies. International Business (06), 25-35.

[16] Zhao, X.Q., et al., (2021). Opportunities, Challenges and Countermeasures of China's Digital Trade Development under the New Development Pattern of "Double Cycle". Reformation of the Economic System (04), 22-28.