

How to Reconstruct China's Digital Services Trade Rules? Based on Policy Perspective

Mingjian Ding

*Shanghai University, Shanghai, China
dmj15638209095@163.com*

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Abstract: In the new global economy, international trade progressively extends from trade in goods to trade in services. Digital technology plays a vital role in digital transformation and digital trade in services has emerged. However, with the increase in the number of RTA digital trade rules signed and the deepening of the provisions, digital services trade has been developed rapidly. Constructing suitable digital trade rules for China is a classic problem in the development process of China's digital service trade. This paper integrated the current status of China's trade in digital services through literature combing method and chart analysis method. We find that China could actively participate in the formulation of international digital trade rules and standards. Furthermore, this is in agreement with results from recent studies which suggest China should strengthen the intellectual property rights protection of digital service trade in the process of continuously exploring the security standards of cross-border data flow. It is conceivable that China would become one of the world's major countries in digital service trade by devoted to promoting these relevant measures.

1. Introduction

Since the 21st century, international trade has extended from trade in goods to trade in services. digital trade is based internet emerging is fast becoming a key instrument in world trade with the continuous development and popularization of digital technology. International trade has intimately related in economic activities. So digital trade has emerged when it is undergoing digital changes. The inhibitory effect of the COVID-19 on the world economy still exists. Founded on that the global economic situation is still in the recovery stage, the central goal of all countries is still to recover the economy. Against this background, the digitalization of trade methods and trade objects of digital trade have become the focus of international attention. The increasing of anti-globalization and prevalent trade protectionism to the forms of international trade has led to serious consequences. However, in the presence of those defects, digital trade will certainly become a powerful driving force for the economic recovery and development of all countries.

Although the development speed and development prospect of digital trade are very considerable, it is not exactly susceptible. At present, the world has not formed a unified digital trade rules system. There are many countries trying to build a regional digital trade rules system which is suitable for theirs in order to promote the development of their own digital trade because of the continuous development of digital services trade. However, the global digital trade rules under the WTO system have not yet formed a unified rule. The provisions on digital trade rules in the WTO agreements are currently limited to the Global E-Commerce Outline and the Information Technology Agreement signed in the late 20th century. Due to the huge differences in the positions of countries and the constraints of the negotiation efficiency of the multilateral trading system, how to harmonize the differences in the negotiation of digital trade rules is still a current difficult. Through the use of RTAs, a set of rules can be constructed that is conducive to the development of the country's digital trade. Many researches showed that the RTAs had been extremely effective in developing regulations related to trade in services. (Meltzer, 2016)^[1] At the same time, they had begun a qualitative analysis of the RTA's digital trade rules. (Malkawi, 2019)^[2] This paper analyzed the development status of China's digital service trade through literature combing method and chart method. Apparently there is a role for giving policy suggestions to accelerate China's digital service trade.

The rest of the paper is organized as follows. The literature review is presented in Section 2. In Section 3, we used a number of charts to illustrate the current state of our trade in digital services. Finally we have put forward a series of policy recommendations to accelerate our trade in digital services in Section 4.

2. Literature review

The digital era has given rise to a new mode of trade in services. Jang Xiaojuan and Luo Libin (2019)^[3] find that there are many difficulties in the statistics of digital trade in services which consist mainly of in some aspects of data availability, comparability and accuracy. We all know that that there are certain differences in the definitions and statistical calibers of different countries and international organizations. UNCTAD (2018)^[4] and USBEA (2018)^[5] are divided according to the digitalization level of the industry and the way of providing services. OECD (2018)^[6] constructs the basic statistical framework of digital service trade from the delivery mode, related products and related platforms. Currently, China has not yet established a systematic statistical measurement standard for the digital service trade industry. In China's Digital Services Trade Development Report 2018^[7], China's Ministry of Commerce defined three types of trade in digital services: trade in information technology services, trade in digital content services and trade in offshore service outsourcing based on Internet delivery. Lv Yanfang et al.(2021)^[8] argue that the significant influencing elements of the traditional gravity model still partially explain the formation of digital services trade networks. It is obvious that the Internet infrastructure, its connectivity and the free flow of cross-border data play a positive role in promoting the formation of digital services trade networks.

Many researches mostly qualitatively analyzes the digital trade rules of RTA from the characteristics of digital trade rules. Meltzer (2016)^[1] and Malkawi (2019)^[2] attempt to construct the heterogeneity of digital trade terms. Zhou Nianli et al.(2020)^[9] found that RTA containing American-style digital trade rules has an vital role in promoting the development of bilateral digital trade in both through studying the trade effects of representative RTA American-style digital trade rules. The American-style digital trade rules have an effectively positive impact on the trade of financial, insurance and other business services and do not have much positive impact on the trade of personal entertainment. Li Yanxiu (2021)^[10] conducted an empirical study on 50 FTAs

containing digital trade rules that have been signed by 63 economies in the TIVA database. Farther more she also conducted an empirical study on the impacts of the depth of the digital trade rules, market access, trade facilitation, consumer protection and dispute settlement in four categories of clauses on the members' total trade and exports of different industries. However, few researches have studied the combination of RTA digital trade agreements and digital services trade. Based on 59 RTAs among APEC members, Sun Yuhong et al. (2021)^[11] had analyzed the degree of impact, the path of action and the differences in categories of RTA digital trade rules on trade flows of ICT products. Peng Yu et al. (2021)^[12] had established the terms heterogeneity index and quantified the depth of the index to empirically test the role of the depth of RTA digital trade rules on the export of digital services found on the characteristics of different types of digital trade terms of RTA. Zhao Jingyuan et al.(2022)^[13] found that the signing of RTA digital trade rules will have a greater impact on the value-added trade in the digital industry by reducing the cost of bilateral trade based on studying from the perspective of value-added. These result suggest that the signing of RTA digital trade rules could have a greater role in promoting the complex value chain.

3. Digital trade services development in China

By organizing the UNCTAD data, it is much more pronounced that there is a large gap between the various industries of China's digital services trade. According to Table 1, the total export volume of financial services, intellectual property use services, and personal recreation services is relatively small, of which personal recreation services have the smallest volume, with the export volume staying below 1 billion USD until 2018, and reaching 1.214 billion USD in 2018, breaking through 1 billion USD. The export volume of ICT services has shown a trend of rapid development, and made a leap in 2017. Although The export value of insurance and pension services showed a steady upward trend, the volume is small compared to other industries. Other business services is the industry with the largest trade volume of digital services in China, with the export volume showing a significant upward trend.

Table 1: China's exports of digital services trade by industry, 2011-2021.

Year	ICT Services	Insurance and Pension Services	Financial Services	Property Use Services	Personal Recreation Services	Other Business Services
2011	139.08	30.18	8.49	7.43	1.23	563.65
2012	162.47	33.29	18.86	10.44	1.26	510.23
2013	170.98	39.96	31.85	8.87	1.47	572.35
2014	201.73	45.74	45.31	6.76	1.75	688.95
2015	257.84	49.76	23.34	10.85	7.31	584.03
2016	265.31	41.54	32.12	11.68	7.42	578.95
2017	277.67	40.46	36.94	47.62	7.59	615.38
2018	470.68	49.24	34.82	55.63	12.14	699.15
2019	537.85	47.72	39.04	66.44	11.96	732.47
2020	590.34	54.50	42.68	88.79	12.97	754.46
2021	769.92	53.07	51.07	119.48	18.74	936.17

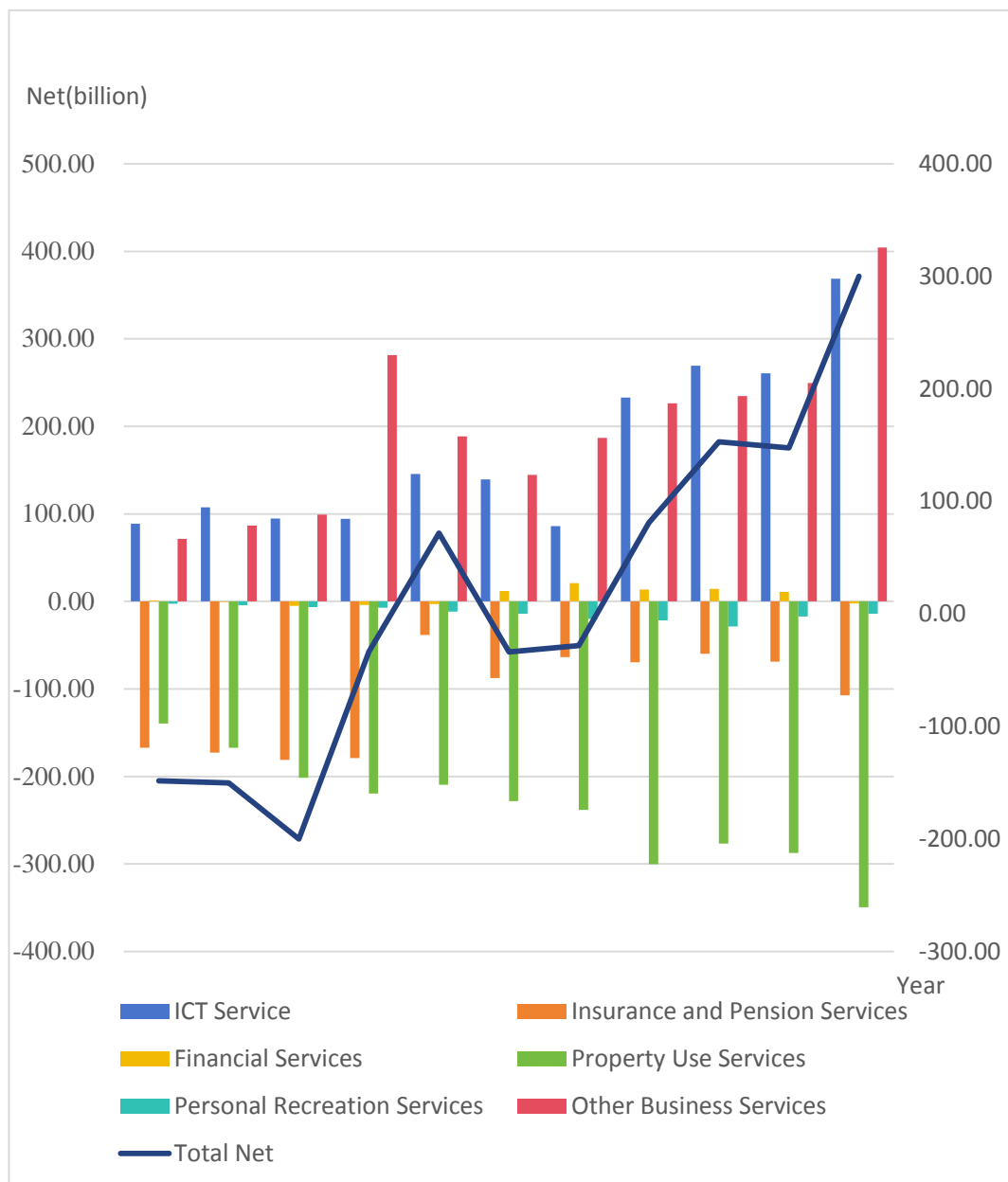


Figure 1: China's net trade in digital services, 2011-2021.

According to Figure 1, the net amount of China's trade in digital services shows a significant upward trend from 2011 to 2021. In 2015, the net amount exceeded 0 for the first time, realizing a trade surplus in digital services, which declined in 2016 and 2017, but in 2018, it re-achieved a trade surplus in digital services, and the surplus has been increasing. These changes show that the level of development of China's trade in digital services has been rapid this year. In the digital services trade industry, personal recreation services, intellectual property use services and insurance and pension services have been in trade deficit. The deficit of personal recreation services showed a gradually increasing trend from 2011 to 2019. The deficit even exceeded 2 billion U.S. dollars in 2018, but due to the small overall scale of personal recreation services, the deficit has not yet exceeded 3 billion U.S. dollars in 2019. Since 2019, the net personal recreation services show an

upward trend, and the deficit is 1.398 billion dollars in 2021. The insurance and pension services industry is larger than personal recreation and entertainment, and its deficit has a greater impact on China's trade in digital services. From 2011 to 2021, the industry's exports were at a low rate of growth, while imports were at a high rate of growth so that overall the industry's deficit showed an expanding trend. Nevertheless, in 2015, because of the plummeting imports of insurance and pension services, the industry's trade deficit surplus narrowed to 3.818 billion U.S. dollars. Intellectual property use services are the largest source of the country's trade deficit in digital services, and the deficit in this sector shows a significant widening trend. It is not until 2021 that the export value of this industry exceeds 10 billion U.S. dollars, while the import value of this industry has exceeded 10 billion U.S. dollars since 2011 by growing at a high rate. It shows that the imbalanced development of China's imports and exports in this industry.

In 2016-2020, financial services are in trade surplus. In 2021, although it is in trade deficit, the difference between the import and export scale of this industry is not large. ICT services and other business services are the industries in which China has always maintained a trade surplus from 2011 to 2021. The trade surplus has been increasing, showing a strong upward trend, indicating that China has a strong advantage in these two industries. Also because of the strong development of other business services and ICT services, China's trade in digital services realized a trade surplus of more than 8 billion U.S. dollars in 2018, and the surplus has been able to continue to expand. In 2021 China's trade surplus in digital services reached 30 billion U.S. dollars.

4. Conclusions and suggestions

We know that the continuous development and improvement of the digital trade system of the United States and Europe is a major challenge to the development of China's digital service trade. In this case, if China's digital service trade wants to stand out and occupy a place in the international arena, it is necessary to build digital trade rules suitable for the development of China's digital service trade.

First, China should actively participate in the negotiation of international digital trade rules to unite with countries or regions with similar demands to increase the depth and breadth of China's digital trade rule system. When signing regional trade agreements, it should fully respect the interests and demands of partner countries. At the same time, China preferably strengthen cooperation in the construction of digital infrastructure such as the Internet and big data to provide strong technical support for the development of digital trade in services.

Second, accelerating the upgrading of existing FTAs regarding digital trade rules should be taken into account. The current trade agreements signed by China cover 13 of the 19 core provisions of the highest standards of the current digital trade rules. However, there are still gaps in the areas of open networks, network access and use, source codes, interactive computer services, government data openness, ICT products using encryption and taxation. Nevertheless, there are not many FTAs in China that cover a wide range of areas in terms of digital trade provisions. A number of agreements remain only at the primary stage of promoting trade facilitation, with more general and less operational provisions for other areas of digital trade. Therefore, China should conduct more in-depth negotiations with partner countries on the provisions of the digital trade rules and, on this basis, broaden the areas they cover and increase their depth.

Third, it should learn from the reasonable provisions in the U.S.-European template and improve them into Chinese-style digital trade rules that are suitable for China. China is less receptive to "interactive computer services," "open government data," "ICT products using encryption technology," "taxation," and so on. "The negative impact of these provisions on China can be minimized as the details of the provisions are refined and debated. China could adopt a positive

attitude toward these provisions and accelerate the pace of progress. On the other hand, it is more difficult for China to accept "open network, network access and use" and "source code". Because these provisions are relatively radical and contrary to China's existing laws, regulations and regulatory policies, China should take the best and discard the worst, and take appropriate measures.

Beside actively participating in standard-setting for international digital trade rules, China must improve the relevant domestic laws and regulations. According to the mechanism of the impact of RTA digital trade rules on the export of digital service trade is realized through the access effect and cost effect, so China should turn in the following two aspects of construction.

Firstly, China needs to actively promote the formulation and improvement of domestic compatible laws and regulations to strive for early convergence with the digital trade rules at the international level. China's digital service trade is mainly dominated by cross-border e-commerce. Although the E-Commerce Law of the People's Republic of China enacted in 2018 is able to solve some of the problems of cross-border e-commerce, it still needs to be supplemented and amended with more details. The lack of depth and breadth of relevant domestic laws increases the risk of trade friction with partner countries and affects China's participation in the development of international digital trade rules. China should incorporate the international conventions it has acceded to into its domestic legislation and establish a legal system that is in line with international standards and meets the needs of the development of digital service trade.

Secondly, it should enhance the efficiency of domestic regulation and clarify the conditions for access, so as to create a robust domestic market and institutional environment for the development of digital trade rules. The transaction process of digital service trade is basically inseparable from network payment, and such network transaction is associated with third-party payment business. So it is necessary to regulate third-party payment to ensure the safety of payment. At present, according to China's laws, the third-party payment service providers (non-financial institutions) are subject to institutional regulation and must set up foreign-invested enterprises within the country and obtain payment business licenses. The requirement of localized presence of third-party payment service providers increases the business costs of electronic payment enterprises and invariably hinders the international association of electronic payment systems. The regulation of third-party payment in Europe and the United States is more inclined to post-entry regulation. The U.S. regards third-party payment organizations as non-bank financial institutions. Because the U.S. does not carry out separate legislation, it focuses more on the supervision of the payment process. The EU treats third-party payment institutions as financial institutions and has carried out an independent and professional regulatory system, focusing on the examination of the qualifications of third-party payment institutions.

Finally, China must be devoted to strengthening intellectual property protection in trade in digital services. At present, intellectual property protection has become a key issue in trade in digital services. The main contradiction in the protection of digital intellectual property rights is how to strike a balance between protecting the legitimate rights and interests of originators and eliminating the monopoly of information supply platforms. Both domestic and foreign countries are in the exploration stage in this field, but have not yet reached a unified standard. China is in the exploratory stage of the application of technology related to digital intellectual property rights, but the relevant legal construction is still immature, and there is still a certain gap between China and the developed countries in the world in terms of the specific provisions of intellectual property protection. China can learn from the experience of the United States and the European Union to strengthen cooperation with Europe and the United States in technology and system construction and gradually explore the formation of an intellectual property protection system suitable for the development of China's digital service trade. The U.S. is in the leading position in technology, and

the U.S. has adopted the digital copyright protection (DRM) technology, which provides strong technical support for the protection of digital resources. Through digital technology cooperation with the U.S., China develops and improves the technical means of digital copyright protection through using of blockchain, big data, cloud computing and other technologies to ensure that digital intellectual property rights are not infringed upon. The EU unfolds digital intellectual property protection by clarifying rights and responsibilities, and in April 2019 the EU adopted the Digital Single Market Copyright Directive, which clearly defines the scope of responsibility of originators and distributors. China can learn from the EU's experience and introduce relevant digital copyright protection laws to eliminate the monopoly of information supply platforms and regulate market behavior.

Reference

- [1] Meltzer, J. . (2016). *Maximizing the opportunities of the internet for international trade*. Social Science Electronic Publishing.
- [2] Asni, A.E. , Muk, B. ,&Dumancic,K. .(2019). *DEFINING AND MEASURING THE DIGITAL ECONOMY IN CROATIA*. *The International Conference on the Economics of Decoupling (ICED)*.
- [3] JIANG, X.J., LUO, L.B. (2019). *Globalization of Services in the Age of Networks-New Engine Acceleration and Competitiveness of Great Powers*. *China Social Science*, 02, 68-91+205-206. (Chinese)
- [4] UNCTAD.UNCTAD Project on Measuring Exports of ICT-Enabled Services(Digitally-Delivered Services). *United Nations Conference on Trade and Development*, 2018.
- [5] USBEA. *Defining and Measuring the Digital Economy[R]*. *Bureau of Economics Analysis*,2018. 1-25.
- [6] OECD. *Handbook on Measuring Digital Trade:Status Update*.OECD Publication,2018.
- [7] Ministry of Commerce of the People's Republic of China. (2018). *Report on the Development of Trade in Services in China*. 2019. *China Business Press*.(Chinese)
- [8] Lv, Y.F., Fang, R.N., Wang, D. (2021). *Topological Characteristics and Influence Mechanism of Global Digital Service Trade Network*. *Research on Quantitative and Technical Economics*, 38(10).128-147.(Chinese)
- [9] Li, Y., CHEN, H.Q., ZHOU, N.L. (2016).*Challenges and Responses to China's "U.S.-style Template" of Digital Trade Rules*. *International Trade*, 10, 24-27+37.(Chinese)
- [10] Li, Y.X. (2021). *Research on the value chain trade effect of digital trade rules in FTA*. *International Economic and Trade Exploration*, 37(09),99-112.(Chinese)
- [11] SUN, Y.H., YU, M.Y., ZHAO, L.Y. (2021). *A study on the impact of regional digital trade rules on trade flows of ICT products*. *World Economic Research*, 08, 49-64+136.(Chinese)
- [12] Peng, Y., Yang, B.Z., Shen, Y.L. (2021). *How RTA Digital Trade Rules Affect Digital Service Exports - Based on the Perspective of Heterogeneity of Agreement Provisions*. *International Trade Issues*, 04, 110-126.(Chinese)
- [13] Zhao, J.Y., He, S.Q., Zhang, R.Q. (2022). *A Study on the Impact of RTA Digital Trade Rules on Value Added Trade in Digital Industries*. *World Economic Research*, No.343(09), 48-61+136.(Chinese)