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Construction of Digital Trade Rules under the WTO System: Analysis of Digital Trade Texts Based on Four Regional Trade Agreements

Junfei Chen[1, a, †, *], Ziyin Cheng [2, b, †], and Anqi Yun[3, c, †]

[1]Law School,Nanchang University,Xuefu Avenue,Nanchang,China
[2] Law School, ShenZhen University, Taoyuan Street, Shenzhen, China
[3]NOIC School, Sijiqing Street, Beijing, China
a. 5302120076@email.ncu.edu.cn,
b. 2018304048@email.szu.edu.cn,
c. 13718682517@139.com
[*]corresponding author
[†]These authors contributed equally.

Abstract: Since the 21st century, the rapid development of information technology has contributed to the rise of digital trade. However, WTO still does not have a complete set of systems applicable to digital trade rules. The article adopts two research methods, text analysis and comparative analysis. It takes the text content of digital trade rules of CPTPP, USMCA, DEPA and AfCFTA as the entry point to analyze the current negotiation issues of WTO. The WTO should include the contents contained in the above four regional trade agreements but not included in the scope of negotiation into the negotiation issues, to comprehensively improve the WTO's digital trade system. The construction of digital trade rules under the WTO system should fully draw on existing regional trade agreements to comprehensively improve digital trade rules. Besides, in future negotiations on digital trade rules, WTO should adhere to the attitude of seeking convergence in the negotiation process and seek common ground while reserving differences. In addition, China should be sought as the representative of the major countries that can lead the negotiations to facilitate the conclusion of the talks.

Keywords: WTO, Digital trade, CPTPP, USMCA

1. Introduction

Since the turn of the twenty-first century, the rapid development of the Internet and emerging technologies has brought infinite opportunities to digital product trade. At the same time, it has also greatly affected economic and trade behavior. Digital trade is defined as products and services delivered through smart phones, network connected sensors, the Internet and other related devices [1]. It is worth noting that some scholars believe that digital trade also includes physical goods or commodities traded through information and communication technology (ITC) and digital means [2].

Under the background of COVID-19 pandemic, traditional trade has been hit hard, and digital trade has become more and more common. As an old international economic organization, the World

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Trade Organization (WTO) cannot standardize global digital trade due to the lack of a complete and mature set of digital trade rules. However, as a new regional free trade agreement in recent years, the Comprehensive and Progressive Agreement for Trans Pacific Partnership (CPTPP), the United States Mexico Canada Agreement (USMCA), the Digital Economy Partnership Agreement (DEPA), and the African Continental Free Trade Agreement (AfCFTA) have more comprehensive rules and policies in digital trade than the WTO. Based on this, this paper takes CPTPP, USMCA, DEPA, AfCFTA as the starting point, and focuses on the construction of digital trade rules under the WTO system.

2. The Necessity of Constructing Digital Trade Rules under WTO System

2.1. Realistic Demand: the Decline of Traditional Trade and the Rise of Digital Trade

Since the 21st century, the fourth industrial revolution brought about by information technology has created an intelligent era [3]. The widespread application of information technology has led to a surge in digital trade, while the inefficient traditional trade has been ignored.At the same time, against the background of the global pandemic of COVID-19, the cross-border movement of people is restricted, and traditional trade is easy to fail due to force majeure and changes in circumstances. The WTO report shows that as consumers adapt to social isolation measures, the use of digital trade has increased, while traditional trade has been seriously impacted [4]. In addition, in the context of economic globalization, traditional trade often needs to go through multiple steps and pass through multiple countries. In this process, if it cannot be completed due to the epidemic, the entire trade behavior will be stagnant. The increasing popularity of online offices and teaching during the epidemic period has made the global digital trade with digital products and services, digital knowledge and information as the subject of trade grow steadily. Make more originally dependent on traditional way of international trade country to cross-border e-commerce [5]. Digital trade has grown rapidly in the past two years and has become a trade behavior that cannot be ignored.

2.2. Institutional Contradiction: Contradiction between WTO Trade Rules and Digital Trade

Since WTO is an international trade organization established in the last century, trade rules focus on protecting traditional trade. Therefore, there is no complete system applicable to digital trade rules. Although the WTO has been discussing the formulation of digital trade rules, due to too many members of the organization and differences between developed and developing countries, digital trade rules still have not been a good conclusion. The game focus of WTO digital trade rules negotiation directly or indirectly points to five aspects: data elements, market space, regulatory governance, technology development and income distribution [6]. For example, cross-border data flow not only amplifies the value of data but also brings unequal risks and benefits to different economies, intensifying the contradiction between WTO trade rules and digital trade. With the rapid development of digital trade, it is necessary to solve the contradiction between WTO trade rules and digital trade rules as soon as possible.

3. Opportunities and Challenges in Building WTO Digital Trade Rules

3.1. Opportunities

Since the 21st century, the information technology revolution has been widely promoted as the fourth industrial revolution [3]. As the scholar has put it, "The application of information technology has completely escaped the limitations of space and completely transcended national borders [7]." Therefore, the emergence of the digital economy arises at the historic moment. Besides, since 2020,

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the COVID-19 pandemic has impacted traditional trade habits characterized by paper-based and physical transactions, prompting countries to shift their attention and practices from offline to online, thus further promoting the development and prosperity of digital trade. This has brought unlimited possibilities for the development of digital trade, and has also brought unlimited opportunities for the WTO to build digital trade rules.

3.2. Challenges

3.2.1. The WTO Digital Trade Negotiations Face the Challenge of Internal Divisions and Stagnation

On 25 January 2019, 76 WTO members issued a joint statement to begin negotiations on e-commerce. A high standard outcome would be sought to achieve under the WTO agreements and frameworks on hand. As many members as possible would be involved in the negotiations to achieve that outcome [8]. As of January 2021, a total of 86 WTO members participated in the negotiations. In fact, due to the huge differences among some negotiators, such as the United States, which has cross-border data flows and digital trade liberalization at its core; The EU has personal privacy, intellectual property and consumer protection at its core. There are many irreconcilable differences between the two modes [9]. Therefore, negotiations over the past three years have yielded no substantial progress. There are still huge differences among negotiators, no agreement has been reached on the relevant regulations, and the issue of digital trade rules remains stagnant.

3.2.2. The Emergence of Regional Trade Agreements Poses a Challenge to the Formulation of WTO Digital Trade Rules

In order to alleviate the stagnant WTO negotiations, keep up with the pace of digital trade development, and pursue the huge dividends brought by digital trade to meet the rising requirements of economic integration, bilateral and multilateral regional trade agreements in various regions have emerged. For example, CPTPP and DEPA include digital trade rules. In particular, the USMCA, which directly inherits some of the provisions of the Trans-Pacific Partnership Agreement (TPP) on digital trade and has undergone a series of upgrades on this basis. In addition, although the AfCFTA in the African region did not stipulate digital trade rules in a separate chapter at the beginning of its formulation. "in February 2020, the African Union General Assembly determined to include digital trade in the AfCFTA. A protocol will incorporate digital trade issues. When the protocol comes into force, it will become an integral part of the AfCFTA Agreement. In May 2021, the Council of Ministers set up digital trade committee, to coordinate and promote the AfCFTA digital trade protocol negotiations [10].

In terms of digital trade, whether the WTO can catch up and continuously balance or even eliminate the differences between developed and developing countries and LDCs in all aspects of digital trade, depends to a large extent on whether it can absorb and learn from the strengths of existing regional trade agreements around the world.

As can be seen in the table below, CPTPP, USMCA, and DEPA have made corresponding provisions in paperless trade, electronic transmission duty-free, network security cooperation, etc. Besides, in terms of electronic authentication and electronic signatures, source code, CPTPP, USMCA made provisions; In terms of dispute resolution, CPTPP and DEPA have made provisions; In terms of the cost sharing of Internet interconnection, the CPTPP has made provisions; In terms of interactive computer services, the USMCA makes provisions; In terms of government data disclosure, the USMCA and DEPA have made provisions. In addition, DEPA regulates transparency, logistics, electronic invoicing, courier, electronic payments, ICT products using cryptography, online security and security, digital identity, fintech cooperation, artificial intelligence, government procurement,

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competition policy cooperation, open domain, data innovation, small and medium enterprises cooperation, digital inclusion, etc. (Table 1).

Table 1: Comparison of digital trade rules among CPTPP, USMCA and DEPA.

No	Digital trade rules	CPTPP	USMCA	DEPA
1	Paperless Trade	√	√	√
2	Electronic Authentication and Electronic Signatures	√	√	
3	Online Consumer Protection	√	√	√
4	Personal Information Protection	√	√	√
5	Unsolicited Commercial Electronic Messages	√	√	√
6	Domestic Electronic Transactions Framework	√	√	√
7	Customs Duties	√	√	√
8	Transparency			√
9	Cybersecurity Cooperation	√	√	√
10	Calculating Facility Location	√	√	√
11	Cross-Border Electronic Transmission	√	√	√
12	Dispute Settlement	√		√
13	Non-Discriminatory Treatment of Digital Products	√	√	√
14	Principles on Access to and Use of the Internet	√	√	√
15	Internet Interconnection Charge Sharing	√		
16	Source Code	√	√	
17	Interactive Computer Services		√	
18	Open Government Information		√	√
19	Logistics			√
20	Electronic Invoicing			√
21	Express			√
22	Electronic Payments			√
23	Information and Communication Technology Products that Use Cryptography			√
24	Online Safety and Security			√
25	Digital Identities			√
26	Financial Technology Cooperation			√
27	Artificial Intelligence			√
28	Government Procurement			√
29	Cooperation on Competition Policy			√
30	Public Domain			√
31	Data Innovation			√
32	Small and Medium Enterprises Cooperation			√
33	Digital Inclusion			√

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Although the basic digital facilities and talented teams in the African region are relatively scarce, the completion and use of the AfCFTA's digital trade protocol will further stimulate the development of the digital economy in the African region. And from the AfCFTA text, the signal of change in this era has been keenly captured by the African Continental Free Trade Area. For example, its trade in services focuses on five priority areas, including business services, communication services, financial services, tourism services and transport services, and has derived a pairing coordination mechanism for each area to create a regional trade market environment that encourages the development of the digital economy and facilitates digital trade [11]. For example, in the case of commercial services, the localization of computer facilities is regulated; In terms of financial services, consumer protection, cross-border data, and the flow of capital licenses are regulated; In terms of communication services, it regulates data protection, consumer protection, anti-spam content; In terms of tourism services, the content of the license is stipulated; In terms of transport services, the coordination of transport carrying capacity and cross-border operations are regulated (Table 2).

Table 2: Provisions under the AfCFTA relating to the main areas of electronic commerce [11].

	Commercial Services	Financial Services	Communication Services	Tourism Services	Transport Services
Institutional provisions	Localization of Computer Facilities	Consumer Protection, Cross-Border Data, the Flow of Capital Licenses	Data Protection, Consumer Protection, Anti-Spam Tontent	License	Coordination of Transport Carrying Capacity and Cross-Border Operations
Specifics	Data processing; Software applicable; Database services; Engineering and design	Payment	Cross-border data; Email; Network information or data processing; Network information or data retrieval	Travel agencies	Ancillary services for all modes of transport

Sources

At the July 12-14, 2022 negotiation meeting, co-conveners – Australia, Japan and Singapore – said three rounds of face-to-face talks would be held for the remainder of the year to secure a new comprehensive outcome by the end of 2022 [12]. The core topics of the negotiations were cross-border data flow, restrictions on data storage localization, personal information protection, government data openness, electronic transmission tariff exemption, domestic digital service tax, copyright and patent protection, trade secret protection, non-mandatory disclosure of source code and proprietary algorithms, market access, Internet openness, net neutrality, technical standard barriers, policy transparency, consumer rights protection, unsolicited electronic information, Internet intermediary liability, platform monopoly, network security, regulatory cooperation, simplified border measures, paperless trade, Electronic signatures and certifications, electronic invoicing, financial and technical assistance (Table 3).

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Table 3: The main topics of the WTO e-commerce negotiations [6].

	Categories	Topics
1	Data flow and management	cross-border data flow, restrictions on data storage localization, personal information protection, government data openness
2	Digital trade-related taxes	electronic transmission tariff exemption, domestic digital service tax
3	Intellectual Property Protection	copyright and patent protection, trade secret protection, non-mandatory disclosure of source code and proprietary algorithms
4	Market openness and fair competition	market access, Internet openness, net neutrality, technical standard barriers, policy transparency
5	Digital governance and cybersecurity	consumer rights protection, unsolicited electronic information, Internet intermediary liability, platform monopoly, network security, regulatory cooperation etc.
6	Supporting system	simplified border measures, paperless trade, Electronic signatures and certifications, electronic invoicing etc.
7	Development cooperation	Bridging the digital divide, financial and technical assistance, policy flexibility

Sources

A comprehensive comparison of Tables 1, 2 and 3 shows that WTO does not include the domestic electronic transaction framework, location of computer facilities, dispute resolution, non-discriminatory treatment of digital products, cost sharing of Internet interconnection, logistics, express delivery, electronic payment, digital identity, financial technology cooperation, artificial intelligence, government procurement, and digital inclusion as the main contents of e-commerce negotiations. Therefore, this article believes that the primary issue for improving the WTO's digital trade rules is how the WTO should draw on the strengths of the public to promote the detailed rules of the WTO digital trade rules in the aforementioned e-commerce negotiations.

4. Proposals to Improve the WTO's Digital Trade Rules

4.1. Fully Learn from Existing Regional Trade Agreements to Comprehensively Improve Digital Trade Rules

The WTO is an established world trade organization, and should make full use of the digital trade negotiations that have begun, fully draw on the content of existing regional trade agreements and their practices, so that at the end of the negotiations, its digital trade rules can form the most comprehensive and perfect system of digital trade rules, and live up to World Trade Organization's reputation.

CPTPP and DEPA are trade agreements for the Asia-Pacific region. Among them, the CPTPP came into force in 2018, and its qualifications are deeper than other regional trade agreements, and there

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are higher standards in digital trade rules [13]."DEPA is extremely cutting-edge and inclusive compared to the e-commerce chapters in previous trade agreements such as the CPTPP [9]." According to Table 1, DEPA is more detailed and comprehensive than the rules of CPTPP. The USMCA and AfCFTA are trade agreements in North America and Africa, respectively. The text of the digital trade rules of the above-mentioned regional trade agreements selected in this article is relatively new, complete and comprehensive, and the trade area covers four major regions: Asia, the Americas, Africa and Oceania. In addition, the four regional trade agreements cover three levels: developed, developing and least developed countries. Therefore, from a comprehensive point of view, the above-mentioned regional trade agreements have great reference value for the formulation of WTO digital trade rules.

The WTO should include in the negotiations the detailed rules for digital trade in the four regional trade agreements that have been stipulated but have not yet been included in the WTO e-commerce negotiations. Relevant content includes, but is not limited to: electronic transaction framework, logistics, express delivery, electronic payment, digital identity, financial technology cooperation, artificial intelligence, government procurement, digital inclusion, etc.

4.2. Seek Convergence in the Negotiation Process

The WTO e-commerce negotiations have been going on for more than three years, but no substantial progress has been made. The reason lies in many aspects, such as the large number of members, the large number of negotiation topics, and the large differences between the members representing regional interests. Adding the above to the scope of negotiations on this basis may exacerbate the stagnation of negotiations. However, supplementing the above content to the scope of negotiations provides great value and benefits for the WTO digital trade rules to become a comprehensive and perfect digital trade system in the world. Therefore, in the case of a large number of negotiation topics, while pursuing the "high-quality results" of e-commerce negotiations, the host should "submit bridging and convergence-building ideas". As Ambassador Hung Seng Tan of Singapore put it, "resolve impasse and bridge differences", rather than keep making suggestions [12]. It should be known that the achievement of all consensus results requires more or less compromise and concessions from all parties.

4.3. Enhance the Role of Major Powers in Facilitating Negotiations

Fukuyama, a well-known American scholar, published an article entitled "Epidemic and Political Order" during the epidemic. The article points out that the key capabilities to respond to the epidemic lie in three points: state capacity, social trust and leadership [7]. Applying this perspective to WTO e-commerce negotiations, since national capacity cannot be directly applied to the negotiating table, the key capabilities to be able to successfully complete negotiations are social trust and leadership. However, the reality is that in the face of national interests, it is difficult to rely on social trust to reach an agreement on a certain issue, so this is only an ideological ability, which can only play a supporting role in the digital trade negotiating table. So the strong momentum for efficiently completing digital trade negotiations now lies in leadership.

The leader of the information technology industry in the fourth industrial revolution is the United States, which is supposed to be the leading party in the WTO e-commerce negotiations. However, in reality, the leadership of the United States is seriously lacking, because both administrations have "focused on small multilateral and bilateral trade negotiations to make up for the lack of WTO trade rules, and to build a network of regional and bilateral free trade agreements with the United States as the core through 'starting from scratch' to achieve the fundamental purpose of safeguarding US trade interests [14]." At the same time, they continue to fight tariff wars with other trading partners. It is to

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shout the slogan of fairness and freedom, and to practice trade protection. The United States cannot assume the role of competent leadership without relative fairness in negotiations.

Although the information technology industry is dominated by the United States, China has also played an indispensable role in it." On the one hand, China's super market size can bring advantages in business model innovation. In recent years, among the world's top ten Internet companies, there are basically 6 American companies and 4 Chinese companies, which is enough to explain the problem. On the other hand, China has advantages in hardware manufacturing in the information technology industry [7]." Therefore, from a theoretical point of view, without mixing political factors, China can replace the United States as a strong leader in leading the WTO e-commerce negotiations.

5. Conclusion

The realistic demand for digital trade construction originates from the fall of traditional trade and the rise of digital trade. At the same time, the construction of digital trade rules also highlights the contradiction between the lack of WTO digital trade rules and the realistic development of digital trade. From the perspective of efficiency and pragmatism, the development of digital trade is not only subject to the difference in the level of development of digital trade among members but also subject to the bottleneck of the current WTO modernization and reform, therefore, countries attempting to directly build global multilateral rules for digital trade under the WTO framework will encounter multiple resistance. The open negotiation method can promote the WTO to return to the multilateral rules of digital trade by reaching a critical mass, and in this process, although there are compromises, it is also the most practical and feasible transition solution. Considering the diversity and development of digital trade issues and the complexity of WTO member states' interests, open plurilateral agreements may become the main theme for the construction of global digital trade rules in the future. Although China has missed the opportunity to lead the giant digital trade rules platform such as TISA and CPTPP, it can grasp the negotiation opportunity of digital trade rules making under the WTO framework. Provide Chinese wisdom and contribute Chinese power to the formulation and improvement of WTO rules on digital trade.

References

[1] *United states international trade commission. (2017). Global Digital Trade 1: Market Opportunities and Key Foreign Trade Restrictions. Retrieved from https://www.usitc.gov/publications/332/pub4716.pdf*

[2] *Bin Sheng, Jiang Gao. (2020) Beyond traditional trade: The connotation, characteristics and influence of digital trade. Social Sciences Abroad, 4, 18-32.*

[3] *Janow, M., Mavroidis, P. (2019) Digital Trade, E-Commerce, the WTO and Regional Frameworks. World Trade Review, 1, 1-7.*

[4] *World trade organization. (2022) WTO Report Looks at Role of E-Commerce during the COVID-19 Pandemic. Retrieved from https://www.wto.org/english/news_e/news20_e/rese_04may20_e.htm*

[5] *Shuzhong Ma, Gangjian Pan. (2020) From Cross-border E-commerce to Global Digital Trading: A Reexamination Perspective from Global Transmission of COVID-2019. Journal of Hubei University (Philosophy and Social Science), 5, 119-132.*

[6] *Yunsong Yue, Peng Huo. (2021) WTO E-commerce Negotiation and Digital Trade Rules Game. International Business Research, 1, 73-85.*

[7] *Zhan Shi. (2020) POJIAN. Hunan Literature Publishing House Co., Ltd.*

[8] *World trade organization. (2019) Joint Statement on Electronic Commerce. Retrieved from https://docs.wto.org/dol2fe/Pages/SS/directdoc.aspx?filename=q:/WT/L/1056.pdf&Open=True*

[9] *Weilu Liu. (2021) A new force in global digital trade rule-making. China Internet, 8, 40-43.*

[10] *AfCFTA. Digital Trade. Retrieved from https://au-afcfta.org/trade-areas/digital-trade/*

[11] *Yu Xiao, Ting Wang. (2021) The Opportunities and Challenges for China-Africa Economic and Trade Cooperation Affected by the Agreement of African Continental Free Trade Area. Intertrade, 12, 68-76.*

[12] *World trade organization. (2022) E-Commerce Talks Mark New Phase in Negotiations. Retrieved from https://www.wto.org/english/news_e/news22_e/ecom_14jul22_e.htm*

DOI: 10.54254/2753-7048/4/2022828

[13] Lihua Dai, Yutong Lv and Hongsong Chen. (2022) Digital trade rules and impact of CPTPP-a comparative analysis with RCEP. Journal of Chang'an University (Social Science Edition), 3, 22-23.

[14] Yuhuan Zhang. (2021) The Future of WTO and Multilateral Trading System. Review of Economic Research, 6, 32-40.