

# The Evolution of Global Digital Trade Rules and China's Response

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**Abstract:** During the new round of reconstruction of international economic and trade rules, stable and formal ones have not yet been made in cyberspace, information technology, and other fields. As a result, digital trade rules have become the focus of attention in many countries, and competition between them is becoming increasingly apparent as they fight for rule-making power. As digital trade accounts for a large proportion of global trade, it is important to improve the overall development of China's digital trade and compete for international discourse power. This paper explores the development of digital trade and the evolution of global digital trade rules, and provides suggestions for China to participate in constructing these rules, competing for this power, and building China's paradigm.

**Keywords:** Digital Trade, Rule Construction, Chinese Paradigm

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## I. INTRODUCTION

In the 21<sup>st</sup> century, as modern information technology has rapidly developed, the Internet, big data, cloud computing, and others have profoundly changed the global mode of production, trading methods, industrial structure, product and service content, and settlement methods. Digital trade, a new form of trade, has developed rapidly, and has gradually become the new driving force for global economic growth.

Global powers are competing to shape the new economy and the future of digital trade. While making global digital trade rules, the interests of each state determines their focus and attitude towards participating in rule-making, which is influenced by their own domestic legislation, national strategy, industrial

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structure, regulatory measures, and the development stage of digital trade. The global digital trade rules are currently still in their formation stage. According to some researchers' opinion, in recent years, three groups have emerged: liberalizers (as represented by the US), regulators (the European Union), and mercantilists (China). Each group champions different degrees and types of government intervention, especially for cross-border data flows. The differences among these approaches, and various attempts to bridge them, could define digital trade rules in the coming years.<sup>1</sup>

## II. CURRENT SITUATION OF GLOBAL DIGITAL TRADE DEVELOPMENT

### A. The Origin and Character of Digital Trade

The emergence and development of digital trade, a new mode of trade, is the result of the joint promotion of various factors. Based on traditional trade forms, digital trade has appeared due to the application of digital technologies such as the Internet and further development of globalization. Many researchers believe that the rise of digital trade is based on the digital economy. The concept of the digital economy was first proposed by the Canadian scholar Don Tapscott in his book *The Digital Economy: Promise and Peril in the Age of Networked Intelligence*.<sup>2</sup>

While digital trade lacks a single recognized and accepted definition, there is a growing consensus that it encompasses digitally enabled transactions of trade in goods and services that can be digitally or physically delivered, and that involve consumers, firms, and governments. That is, while all forms of digital trade are enabled by digital technologies, not all digital trade is digitally delivered. For instance, digital trade also involves digitally enabled but physically delivered trade in goods and services such as the purchase of a book through an on-line marketplace or booking a stay in an apartment through a matching application.<sup>3</sup>

1 Jonathan E. Hillman, The Global Battle for Digital Trade, <https://www.csis.org/people/jonathan-e-hillman> (Last Visited on October 20, 2021).

2 Shi Jingxia, The WTO Plurilateral Negotiation on E-commerce under the Context of Digital Economic, *Oriental Law*, No. 2, 2020, pp. 170-184.

3 OECD, Digital Trade, <https://www.oecd.org/trade/topics/digital-trade/> (Last Visited on October 20, 2021).

The movement of data underpins digital trade. Data is not only a means of production, but also an asset that can itself be traded, and a means through which global value chains (GVCs) are organized and services delivered. It also underpins physical trade less directly by enabling implementation of trade facilitation. Data is also at the core of new and rapidly growing service supply models such as cloud computing, the Internet of Things (IoT), and additive manufacturing.<sup>4</sup>

Currently, the development of digital trade has spawned many concrete economic forms, mainly electronic commerce (e-commerce), including many specific trade types such as data transactions and digital cultural products. At the same time, the rapid development of digital technology has meant that traditional trade in goods and services also involves a trend of digitalization. The relationships among digital trade, goods trade, and service trade are becoming increasingly complex and close.

As policymakers at the WTO and elsewhere consider the economic and societal value of data and data flows, they should recognize that data will naturally flow across borders unless governments erect artificial barriers to stop it. While cross-border data flows can raise legitimate public policy issues such as data privacy or cybersecurity, policymakers need to carefully consider all available policy options to ensure they address data issues while still allowing it to flow freely. This is not unusual in trade, given phytosanitary issues for agricultural goods or safety standards for cars. It then becomes a matter of how countries work together to enact rules that maximize the potential benefits from digital trade and data flows while allowing countries to enact regulations only when necessary, proportionate, and minimally trade-distorting. This is part of the challenge facing policymakers working on digital trade issues in the upcoming WTO negotiations, such as privacy, to ensure that countries do not use these public policy concerns as a cover for digital protectionism.<sup>5</sup>

Digital technologies increasingly enable trade. For example: 1) banks rely heavily on international data transfers; 2) agricultural commodity traders use e-signatures to complete international purchases; 3) manufacturers, freight operators, and logistics enterprises can track and improve the performance of their

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<sup>4</sup> *Ibid.*

<sup>5</sup> Nigel Cory, *Why China Should Be Disqualified from Participating in WTO Negotiations on Digital Trade Rules* (May 9, 2019), <https://itif.org/publications/2019/05/09/why-china-should-be-disqualified-participating-wto-negotiations-digital> (Last Visited on October 20, 2021).

machines and vehicles around the world due to electronic data transfers, and 4) everyday items increasingly combine sensors and internet-enabled applications, large datasets, and high-performance computing capabilities (“Internet of Things”).<sup>6</sup>

The global e-commerce market is growing at a rapid rate. In 2018, global e-commerce sales were estimated at more than €21 trillion, with around 1.5 billion people shopping online.<sup>7</sup>

## B. The Development of Digital Trade during the COVID-19 Pandemic

On May 4, 2020, the investigation report of E-commerce, Trade and the COVID-19 Pandemic released by the World Trade Organization (WTO) Trade Facilitation Committee showed that, the enforcement of social distancing, lockdowns, and other measures in response to the COVID-19 pandemic has led consumers to increase their online shopping, social media use, internet telephony, teleconferencing, and streaming of videos and films. This has resulted in spikes in business-to-consumers (B2C) sales as well as an increase in business-to-business (B2B) e-commerce. The increase in B2C sales is particularly evident in online sales of medical supplies, household essentials, and food products. Demand has also increased for Internet and mobile data services.<sup>8</sup> The network capacity and spectrum to accommodate the shift to online activities has required operators and governments to urgently adapt. However, demand has fallen for certain services with a large online component, such as tourism.<sup>9</sup>

Analysis has found that the global service trade dropped by 15.4% in 2020. However, global digital trade exports increased by 3.8% against the trend, accounting for 62.8% of service trade and contributing 98.3% to service export growth, which significantly enhanced the resilience and motivation of service trade development. The WTO predicted that by 2040, the proportion of service trade out of global trade will rise to one third.<sup>10</sup> According to a report

6 European Commission, Digital Trade, <https://ec.europa.eu/trade/policy/accessing-markets/goods-and-services/digital-trade/> (Last Visited on October 20, 2021).

7 *Ibid.*

8 The WTO Work Programme defines “electronic commerce” as the production, distribution, marketing, sale or delivery of goods and services by electronic means.

9 WTO Secretariat, E-commerce, Trade and the COVID-19 Pandemic (May 4, 2020), [https://www.wto.org/english/tratop\\_e/covid19\\_e/ecommerce\\_report\\_e.pdf](https://www.wto.org/english/tratop_e/covid19_e/ecommerce_report_e.pdf), Digital trade (Last Visited on October 20, 2021).

10 Song Zhenyuan & Liao Bingqing, The Service Trade Association Builds a Bridge for International Cooperation in the Digital Field, <https://www.ciftis.org/article/9632384791212032.html> (Last Visited on September 7, 2021).

released by the United Nations Conference on Trade and Development (UNCTAD) on May 3, 2021, the flow restriction caused by the COVID-19 pandemic has caused e-commerce to grow rapidly, and the share of online retail sales out of total retail sales in 2020 increased from 16% to 19%.<sup>11</sup>

Another report released by UNCTAD indicated that COVID-19 has provided a strong impetus for businesses and individuals to adopt digital tools, helping to drive a 6% increase in worldwide exports of information and communications technology (ICT) services, according to a UNCTAD technical note on the pandemic's impact on trade in the digital economy, published on October 21, 2021. The value of information and communications technology services' exports worldwide reached US\$676 billion in 2020 as the usage of communications services, computer services, and software were boosted by lockdown restrictions implemented in many economies. This increased digitally deliverable services to nearly 64% of total services exports, as they underwent limited contraction amidst an unprecedented decline in total services trade. However, while these shares increased across all regions, the pandemic-related acceleration in digitalization risks further exacerbating digital divides, with least developed countries (LDCs) being left further behind.<sup>12</sup>

### III. THE CONSTRUCTION AND EVOLUTION TREND OF THE GLOBAL DIGITAL TRADE RULES SYSTEM

Changes in trade are taking place at an unprecedented speed. As a result of growing interconnectedness and greater demand for just-in-time delivery, trade must be faster and more reliable than ever before. However, there is also an increasingly larger discussion about whether it is necessary to update or clarify existing trade rules and commitments. Trade rules are traditionally predicated on identifying whether products are goods or services and the borders they cross. However, in the digital era, these distinctions may not always be clear-cut. Firms are now increasingly able to flexibly operate from different locations and to bundle goods with services, making it difficult to identify the trade

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11 Barbara D'Andrea, WTO UNCTAD Working Group on Measuring E-commerce and the Digital Economy, [https://unctad.org/system/files/non-official-document/p05\\_tdb\\_edc\\_wg2021\\_DAndrea.pdf](https://unctad.org/system/files/non-official-document/p05_tdb_edc_wg2021_DAndrea.pdf) (Last Visited on May 4, 2021).

12 UNCTAD, Trade Data for 2020 Confirm Growing Importance of Digital Technologies during COVID-19, <https://unctad.org/news/trade-data-2020-confirm-growing-importance-digital-technologies-during-covid-19> (Last Visited on May 4, 2021).

rules that apply to specific transactions.<sup>13</sup> Currently, there are three ways to construct the global digital trade rules system.

### A. Way of Conducting WTO E-commerce Negotiations

The WTO negotiations on digital trade rules are mainly e-commerce negotiations, while most Members do not distinguish between “digital trade” and “e-commerce”. Instead of using the expression “digital trade”, the WTO prefers the concept of “electronic commerce” (“e-commerce”), defined as “producing, distributing, marketing, selling, or delivering goods and services electronically”. The WTO proposed the definition of “e-commerce” in its Declaration on Global Electronic Commerce in the Work Programme on Electronic Commerce established by the Second Ministerial Conference in 1998. In December 2017, at the WTO Ministerial Conference in Argentina, e-commerce negotiations were included in the WTO work agenda, and 49 WTO Members, including the United States, European Union, Japan, Canada, Republic of Korea, China, and Brazil agreed to jointly implement exploratory work and start focusing on future WTO trade negotiations related to e-commerce.<sup>14</sup> In January 2019, at the informal Ministerial Conference held in Davos, Switzerland, 76 WTO Members including the United States, European Union, China, and Australia signed the Joint Declaration on E-commerce, and agreed to start e-commerce negotiations within the WTO framework.<sup>15</sup>

A total of 87 WTO Members have participated in the WTO e-commerce negotiations.<sup>16</sup> These include 38 in Europe, 24 in Asia, 9 in North America, 8 in South America, 6 in Africa, and 2 in Oceania (see Table 1).

Table 1. WTO Members' Participation in E-commerce Negotiations

| Number of Members Participating | Geographical Distribution of Members |       |               |               |        |         |
|---------------------------------|--------------------------------------|-------|---------------|---------------|--------|---------|
|                                 | Europe                               | Asia  | North America | South America | Africa | Oceania |
| 87                              | 38                                   | 24    | 9             | 8             | 6      | 2       |
| Proportion                      | 43.7%                                | 27.6% | 10.3%         | 9.2%          | 6.9%   | 2.3%    |

<sup>13</sup> *Supra* n.3.

<sup>14</sup> WTO, Joint Statement on Electronic Commerce, WTO Ministerial Conference (2017), WT/MIN (17)/60.

<sup>15</sup> WTO Joint Statement on Electronic Commerce, January 25, 2019, WT/L/1056.

<sup>16</sup> Marila Maciel, The 3Cs of Digital Trade: Connectivity, Competition and Collaboration, [https://www.wto.org/english/tratop\\_e/serv\\_e/macieli\\_220621.pdf](https://www.wto.org/english/tratop_e/serv_e/macieli_220621.pdf) (Last Visited on October 20, 2021).

As of March 2020, the WTO has received nearly 50 proposals on e-commerce negotiation, which consists of one or several proposals submitted by 15 Members and several joint proposals. Out of these 15 WTO Members, 6 are developed Members (the European Union as a whole) and 9 are developing Members. Judging from the types of Members, WTO Members at a high development level are more active. All developed economies have submitted individual or joint proposals. The European Union, United States, Japan, Canada, Australia, and New Zealand all submitted individual proposals, among which Canada, Australia, and New Zealand also joined several joint proposals. Switzerland, Iceland, and Norway have not submitted individual proposals, but have joined joint proposals that others have submitted. In contrast, the three least developed Members participating in the negotiations have not submitted individual proposals. Among them, Chad, as the representative of the least developed Members, submitted a joint proposal.<sup>17</sup>

According to Members' geographical distribution, besides the developed Members mainly located in Europe and North America, the Members from Asia are more active. According to the situation of individual proposals, besides developed Members, nine developing Members submitted individual proposals. These are China, Hong Kong (Special Administration Region of China), Chinese Taipei, Singapore, Republic of Korea, Brazil, Russia, Ukraine, and Côte d'Ivoire, among which 5 are from Asia. It is worth noting that although India and South Africa did not join the negotiations, they submitted a joint proposal.<sup>18</sup>

In the WTO e-commerce negotiations, Members involved have reached a consensus on increasing telecommunications infrastructure construction, improving e-commerce facilitation, safeguarding intellectual property rights, protecting consumer privacy, and promoting participation of micro-enterprises. However, differences on many issues remain unresolved. Many Members have differences over several issues in digital trade. Moreover, as a Member's digital trade scale and the promotion of its economic status expand, its attitude towards some of these differences will impact the development of global digital trade. On one hand, the negotiation clauses based on a Member's domestic rules will hinder the global consensus on digital trade. On the other hand, more

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17 WTO General Council, Work Programme and Moratorium on Electronic Commerce, WT/GC/W/787, November 21, 2019.

18 WTO General Council, Work Programme on Electronic Commerce – Review of Progress, WT/GC/W/774, June 4, 2019.

serious disputes will easily develop into digital trade barriers. The specific rules of digital trade involve many differences among Members. For example, developing Members focus on protecting national and network security, and restrict cross-border data flow. However, developed Members advocate creating an open digital trade environment. Some developed Members regard the prohibition of cross-border data localization and free data flow as the key to cross-border e-commerce, thus advocating for the elimination of trade barriers. Furthermore, developed Members pay attention to maintaining network security while also focusing on protecting intellectual property rights and technological innovation. Among developed Members, the European Union believes that to protect consumers' privacy, measures can be taken to restrict cross-border data flow. It prioritizes privacy protection over data flow, which differs from the United States. In comparison, many developing Members emphasize infrastructure construction, such as the establishment of electronic communication networks. They are committed to improving domestic institutions, national capacity-building, and gaining foreign experience. Moreover, they have higher requirements for preserving public space. These aspects are depicted in Table 2.

Table 2. Disputes Regarding Specific Rules of Digital Trade

| Member of WTO            | Data Localization                                                                                  | Free Flow of Cross-border Data                                                                                   | Data Privacy Protection                                                                               |
|--------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
| United States of America | Data can be stored in other countries.                                                             | Supports the free flow of data and Customs duty free treatment of digital products.                              | Reduces data protection, promotes data exchange and sharing.                                          |
| EU                       | Forbids storing data in browsers in other countries.                                               | Free movement is allowed between countries with full certification standards in the EU.                          | Strict data protection, especially data privacy.                                                      |
| United Kingdom           | Emphasizes data localization.                                                                      | Ensures that data can be fully protected when it flows into the UK. Otherwise, it limits cross-border data flow. | Conditional data is open, but personal privacy must be protected.                                     |
| Japan                    | Data related to national security must be stored locally, while other data has fewer restrictions. | Japan-UK CEPA (Japan-UK Comprehensive Economic Partnership Agreement) allows personal data to flow freely.       | Sets up a third-party to supervise, take measures to prevent data leakage, and focus on data privacy. |

For example, regarding the issue of personal data flow, the United States supports the free flow of personal data, while many countries in the European Union have proposed strict requirements for data management. Moreover, in terms of data localization, Russia, Indonesia, Vietnam, Turkey, and other countries have advocated for facilities localization or data localization requirements. Furthermore, these countries restrict citizens' data or sensitive business data such as electronic payment from leaving their country. In future international negotiations, China should focus on the differences and core issues of each country, explore solutions and countermeasures, and promote the development of its digital trade.<sup>19</sup>

Differences arise for various reasons. Each country's national strength, interests, and cultural values are different. E-commerce in developed countries tended to start earlier and has already had a high coverage rate. For example, the United States not only has extensive digital economic strength but also a first-mover advantage, with its information technology and cutting-edge technology far exceeding most other countries throughout the world. As a result, a more open and free digital trade market will help the United States to maximize its competitiveness. However, the e-commerce coverage and development level in developing countries and least developed countries are still very low. On one hand, this will force them to accelerate their development of information technology and further integrate into the world economy and trade system. On the other hand, it is also a challenge because some countries are inevitably marginalized, causing the development of digital trade to erode their new industries and traditional trade methods. Moreover, letting data become concentrated among individual developed countries or giant cross-border e-commerce enterprises will result in monopolies and vicious circles. From the perspective of cultural values, Europe has always emphasized privacy protection. According to Articles 7 and 8 of the Charter of Fundamental Rights of the European Union, privacy is an important basic human right. However, the United States has always emphasized the free flow of data, with less government supervision.<sup>20</sup>

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19 Yue Yunsong and Huo Peng, WTO E-Commerce Negotiation and Digital Trade Rules Game, *International Business Research*, No. 1, 2021, pp. 73-85.

20 Zheng Lingli, On Legal Issues of Data Localization and Exceptions in RTAs, *International Business Research*, No. 4, 2020, pp. 85-96.

## B. Way of High-standard and Mega-regional Trade Agreements

The WTO, United Nations Commission on International Trade Law (UNCITRAL) and several regional trade agreements (RTAs) have addressed technological neutrality in the context of e-commerce and digital trade. Granted, many preferential trade arrangements (PTAs) struck even in the heyday of PTA formation in the 2000s contain e-commerce-related rules. For example, many PTAs have adopted the WTO's moratorium on customs duties on electronic transmissions, and many also promote paperless trade. In a 2017 mapping, 75 PTAs, or over a quarter of all PTAs notified to the WTO at the time, had specific provisions on e-commerce. In addition, PTA provisions on issues such as intellectual property protection, services liberalization, technical barriers to trade, and paperless trade commitments also facilitate trade and e-commerce. Many PTAs also promote domestic regulations alignment with international model laws on e-commerce. However, it is only within the past few years that countries have adopted e-commerce chapters with the comprehensive scope such as that applied in the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP).<sup>21</sup>

In recent years, the WTO's multilateral system has encountered challenges such as anti-globalization and unilateralism, resulting in setbacks in the multilateral negotiation function under the WTO framework. In addition, the Appellate Body for dispute settlement has long been suspended. Under the WTO framework, e-commerce issues have progressed from multilateral negotiations to plurilateral negotiations, and finally experienced problems with the setback of the Doha Round negotiations. Although the United States and other hegemonic powers have found new ways to conduct regional trade negotiations and demonstrate a trend of returning to WTO multilateral negotiations, e-commerce negotiations under the WTO framework have not yet achieved substantial results. It is unknown whether these negotiations can be restarted in the future to make rule-making more inclusive and open. Since it was difficult to make substantial progress during WTO Doha Round negotiations, RTAs have accelerated. Starting in 2015, the growth rate of RTAs has slowed down due to factors such as the weak global economic recovery and rising trade protectionism. In January 2017, former US President Donald Trump announced his withdrawal

21 Kati Suominen, Do CPTPP-style Digital Trade Rules Add New Value? <https://www.csis.org/analysis/do-cptpp-style-digital-trade-rules-add-new-value> (Last Visited on October 14, 2021).

from the Trans-Pacific Partnership Agreement (TPP), starting the post-TPP period. At this stage, many high-standard and mega-regional free trade agreements have emerged, resulting in many rules and standards under the multilateral WTO framework being further extended and upgraded. Some of the new clauses have even been referenced and quoted in more RTAs, gradually becoming highly influential international rules. Without exception, these high-standard and mega-regional free trade agreements have separately listed digital trade (e-commerce) to upgrade and extend the trade rules in related fields (see Table 3).

Analysis has found that digital trade, especially e-commerce, has become the focus of negotiations among countries in RTAs. In many high-standard and mega-regional free trade agreements, a consensus has been reached on issues such as digital taxation, information transmission, data flow, electronic signatures, and electronic authentication, which have become indispensable rules of digital trade. At the same time, relevant principles and clauses established in some RTAs have also been quoted in subsequent agreements and have become an international rule and paradigm through the RTA platform. Compared with the content of multilateral negotiations, RTA standards are higher than multilateral standards.

Regarding the negotiations of e-commerce, RTAs involve fewer subjects than those under the WTO framework, so it is easier for their negotiators to reach an agreement on certain terms and rules. At the same time, when negotiating RTAs, certain breakthroughs and extensions are attempted in some clauses based on the conditions and development level of the negotiating parties. This flexibility makes RTAs a solution to the development of digital trade rules outside the WTO's multilateral framework. Based on the successful examples and influence of high-standard and mega-regional free trade agreements, subsequent negotiations can learn from them as well as make innovations and changes. After Brexit, to keep maintaining its preferential terms in other countries' markets, the UK has been actively seeking trade negotiations. After 94 days of negotiations, the Japan-UK CEPA based on the Japan-EU EPA was successfully signed.<sup>22</sup> The similarity between the two texts is over 90%, and its biggest changes are mostly in the e-commerce chapter, showing that those involved highly valued the new format of digital trade (see Table 4).

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22 The EU-Japan Economic Partnership Agreement (EPA) was signed on July 17, 2018, and the UK-Japan Comprehensive Economic Partnership Agreement (CEPA) was signed on October 23, 2020.

Table 3. High-standard and Mega-regional Free Trade Agreements in E-commerce (Digital Trade Chapter Review)

| Agreement          | CPTPP                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Japan-EU EPA (The EU-Japan Economic Partnership Agreement)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | USMCA (United States-Mexico-Canada Agreement)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | RCEP (Regional Comprehensive Economic Partnership)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Signing Time       | March 8, 2018                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | July 17, 2018                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | November 30, 2018                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | November 15, 2020                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| E-commerce Section | Chapter 14: Electronic Commerce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Chapter 8: Trade in Services, Investment Liberalization and Electric Commerce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Chapter 19: Digital Trade                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Chapter 12: E-commerce                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Chapter Directory  | Article 14.1: Definitions;<br>Article 14.2: Scope and General Provisions;<br>Article 14.3: Customs Duties;<br>Article 14.4: Non-Discriminatory Treatment of Digital Products;<br>Article 14.5: Domestic Electronic Transactions Framework;<br>Article 14.6: Electronic Authentication and Electronic Signatures;<br>Article 14.7: Online Consumer Protection;<br>Article 14.8: Personal Information Protection;<br>Article 14.9: Paperless Trading;<br>Article 14.10: Principles on Access to and Use of the Internet for Electronic Commerce;<br>Article 14.11: Cross-border Transfer of Information by Electronic Means;<br>Article 14.12: Internet Interconnection Charge Sharing;<br>Article 14.13: Location of Computing Facilities;<br>Article 14.14: Unsolicited Commercial Electronic Messages;<br>Article 14.15: Cooperation;<br>Article 14.16: Cooperation on Cybersecurity Matters;<br>Article 14.17: Source Code;<br>Article 14.18: Dispute Settlement. | Article 8.70: Objective and General Provisions;<br>Article 8.71: Definitions;<br>Article 8.72: Customs Duties;<br>Article 8.73: Source Code;<br>Article 8.74: Domestic Regulation;<br>Article 8.75: Principle of No Prior Authorization;<br>Article 8.76: Conclusion of Contracts by Electronic Means;<br>Article 8.77: Electronic Authentication and Electronic Signature;<br>Article 8.78: Consumer Protection;<br>Article 8.79: Unsolicited Commercial Electronic Messages;<br>Article 8.80: Cooperation on Electronic Commerce;<br>Article 8.81: Free Flow of Data. | Article 19.1: Definitions;<br>Article 19.2: Scope and General Provisions;<br>Article 19.3: Customs Duties;<br>Article 19.4: Non-Discriminatory Treatment of Digital Products;<br>Article 19.5: Domestic Electronic Transactions Framework;<br>Article 19.6: Electronic Authentication and Electronic Signatures;<br>Article 19.7: Online Consumer Protection;<br>Article 19.8: Personal Information Protection;<br>Article 19.9: Paperless Trading;<br>Article 19.10: Principles on Access to and Use of the Internet for Digital Trade;<br>Article 19.11: Cross-border Transfer of Information by Electronic Means;<br>Article 19.12: Location of Computing Facilities;<br>Article 19.13: Unsolicited Commercial Electronic Communications;<br>Article 19.14: Cooperation;<br>Article 19.15: Cybersecurity;<br>Article 19.16: Source Code;<br>Article 19.17: Interactive Computer Services;<br>Article 19.18: Open Government Data. | Article 12.1: Definitions;<br>Article 12.2: Principles and Objectives;<br>Article 12.3: Scope;<br>Article 12.4: Cooperation;<br>Article 12.5: Paperless Trade;<br>Article 12.6: Electronic Certification and Electronic Signature;<br>Article 12.7: Online Consumer Protection;<br>Article 12.8: Online Personal Information Protection;<br>Article 12.9: Unsolicited Commercial Electronic Information;<br>Article 12.10: Domestic Regulatory Framework;<br>Article 12.11: Customs Duties;<br>Article 12.12: Transparency;<br>Article 12.13: Cyber Security;<br>Article 12.14: Location of Computing Facilities;<br>Article 12.15: Cross-border Transfer of Information by Electronic Means;<br>Article 12.16: Dialogue on Electronic Commerce;<br>Article 12.17: Settlement of Disputes. |

Table 4. E-commerce Section Comparison between the Japan-EU EPA and the Japan-UK CEPA

| Term Name                                                      | Japan-EU EPA                                                            | Japan-UK CEPA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------|-------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Customs Duties                                                 | The parties shall not impose customs duties on electronic transmission. | 1. The parties shall not impose customs duties on electronic transmission, including content transmitted electronically, between a person of a Party and a person of the other Party.<br>2. For greater certainty, paragraph 1 does not preclude a Party from imposing internal taxes, fees or other charges on electronic transmissions, provided that those taxes, fees or charges are imposed in a manner consistent with this Agreement.                                                                                                                                                        |
| Electronic Authentication and Electronic Signature             | Three paragraphs. (Contents Omitted)                                    | Added paragraph 4, “The Parties shall encourage the use of interoperable electronic authentication and electronic signatures”.                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Principles on Access to and Use of the Internet for E-commerce | There is no provision.                                                  | Subject to its applicable policies, laws and regulations, each Party should adopt or maintain appropriate measures to ensure that a consumer in its territory may:<br>(a) access and use services and applications of the consumer’s choice available on the Internet, subject to reasonable, transparent and non-discriminatory network management;<br>(b) connect the devices of the consumer’s choice to the Internet, provided that such devices do not harm the network; and<br>(c) access information on the network management practices of the consumer’s Internet access service supplier. |
| Personal Information Protection                                | There is no provision.                                                  | Five paragraphs. (Contents Omitted)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Open Government Data                                           | There is no provision.                                                  | Three paragraphs. (Contents Omitted)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Cross-border Transfer of Information by Electronic Means       | There is no provision.                                                  | Three paragraphs. (Contents Omitted)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Location of Computing Facilities                               | There is no provision.                                                  | Three paragraphs. (Contents Omitted)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

As digital trade and high-standard and mega-regional free trade agreement rapidly develop, the relationship between them has become increasingly close. In the future, RTAs will be an important platform for building global digital trade rules. Cross-border e-commerce is currently an important part of RTA negotiations in many countries. However, since 2016, the RTA process has gradually slowed down. Moreover, RTAs that have been recently signed and come into effect have begun to have high-standard and exclusive trade rules led by developed economies such as the United States, European Union, and Japan. This not only impacts the WTO's existing multilateral trade rules system, but also tends to promote the integration of existing RTAs. Moreover, the United States, Japan, and EU are deliberately reshaping future global economic and trade rules. Their proposals of "high-standard" economic and trade rules further aggravate the fragmented global economic and trade rules system and also increase the costs of trading partner economies along with those of small and medium-sized enterprises (SMEs) to adapt to these rules. In addition, many exclusive "poison pill" clauses are emerging, which will cause the trend of "taking sides" to become increasingly apparent in the future. As a new form of business, cross-border e-commerce has gradually grown into an important mode of trade. In the future, cross-border e-commerce rules will be increasingly related to striving for economic interests and the right to speak, and will also more clearly reflect each country's diplomatic attitudes.

### C. Way of Developed Economies' External Constraints

For a long time, developed economies led by the United States have experienced strong development and had a solid economic foundation, which are manifested as the externalization and introspection of the digital trade rules during their formulation. On one hand, such a country can use bilateral, plurilateral, and multilateral negotiation platforms to upgrade its own domestic rules in digital-trade-related fields to international rules to maintain its dominant position during the formulation of digital trade rules and attain more economic benefits. On the other hand, it can use domestic rules and regulations in digital-trade-related fields to restrict other countries' ability to participate in global governance. As a result, it can influence and control these countries' digital trade

rules and policies without being subject to the obligations of multilateral rules.<sup>23</sup>

Many countries have set a threshold for domestic standards. As some of them participate in international competition, many outward constraints will gradually extend to the international community and affect the construction of global digital trade rules. Ever since the former US President Donald Trump took office, the United States has highly valued the formulation of digital trade rules. In addition, the digital rules of the USMCA will be widely promoted in US-led RTAs. The United States tried to replace the term “e-commerce” with “digital trade”. Additionally, it adopted the strictest possible standards to ensure the flow of cross-border data and enhance market openness. The United States is constantly spreading American digital trade rules across the world through its free trade agreement negotiations. These include the Digital Trade Agreement between the United States and Japan based on USMCA, the initiation of trade negotiations between the United States and UK, and the negotiation of extensive agreements with Brazil.<sup>24</sup>

## IV. CHINA’S DEVELOPMENT AND CHALLENGES ON DIGITAL TRADE

### A. Current Situation of China’s Digital Trade

China has undergone a massive transformation since the Third Plenary Session of the 11<sup>th</sup> Central Committee of the Communist Party of China (December 18-22, 1978). It has changed from a planned to a market economy, and from an economy that was almost totally closed to one that is much more open than most countries at the same income level.<sup>25</sup> China is the world’s second largest digital economy, behind the United States, and leads the world in the value of many digital applications, including e-commerce and mobile payments. Its netizens’ extensive online activity also provides huge amounts of data that is useful for training artificial intelligence (AI) algorithms. China’s dominance in 5G

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<sup>23</sup> *Supra* n. 2.

<sup>24</sup> *Supra* n. 20.

<sup>25</sup> Chen Jianfu, *The Transformation of Chinese Law: From Normal to Substantial*, *Hong Kong Law Journal*, No. 1, 2007, pp. 689-670.

infrastructure will further support its digital economy, and its early 5G rollout could give its entrepreneurs a head start in developing new digital applications. China's digital economy along with the importance of data and digital services is intertwined with its manufacturing activity and centrality in global value chains, providing an enormous scope for exporting digital services as inputs in manufactured products.<sup>26</sup>

China's digital economy is large and growing. Based on a taxonomy by the Organization for Economic Co-operation and Development (OECD), China's digital economy was around 6% of the gross domestic product in 2018, compared to around 7% in the United States, 8% in Japan, and 10% in the Republic of Korea. However, in absolute terms China has the world's second largest digital economy, after the United States. Moreover, China has digital strengths. For example, it accounts for 40% of global e-commerce transactions, larger than that of France, Germany, Japan, the United Kingdom, and the United States combined.<sup>27</sup> The transaction value of China's mobile payments in 2016 was US\$790 billion, 11 times that of the United States, the next largest market. In terms of artificial intelligence, China overall trails the United States but leads in specific applications such as facial recognition.<sup>28</sup> This range of digital activity drives extensive online activity that generates enormous quantities of data capable of training artificial intelligence algorithms.<sup>29</sup>

During the 13<sup>th</sup> Five-Year Plan period (2016-2020), China's scale of digital trade expanded rapidly, and formed a digital trade legal policy system. Statistics show that during this period, China's digital trade volume increased from US\$200 billion in 2015 to US\$294.76 billion in 2020, a 47.4% increase, and its share in service trade increased from 30.6% to 44.5%.<sup>30</sup>

26 Joshua P. Meltzer, *China's Digital Services Trade and Data Governance: How Should the United States Respond?* <https://www.brookings.edu/articles/chinas-digital-services-trade-and-data-governance-how-should-the-united-states-respond/> 1 (Last Visited on October 20, 2021).

27 Jonathan Woetzel, Jeongmin Seong, Kevin Wei Wang, James Manyika, Michael Chui and Wendy Wong, *China's Digital Economy: A Leading Global Force*, <https://www.mckinsey.com/featured-insights/china/chinas-digital-economy-a-leading-global-force#> (Last Visited on October 20, 2021).

28 Daniel Castro, Michael McLaughlin and Eline Chivot, *Who Is Winning the AI Race: China, the EU or the United States?* Center for Data Innovation, <https://www.datainnovation.org/2019/08/who-is-winning-the-ai-race-china-the-eu-or-the-united-states/> (Last Visited on October 20, 2021).

29 *Supra* n. 26.

30 Zhang Daofeng and Ge Xiaowei, *In 2020, China's Digital Trade Volume Will Be 294.76 Billion US Dollars*, <https://china.huanqiu.com/article/44cLZhMdiGm> (Last Visited on September 3, 2021).

China's 14<sup>th</sup> Five-Year Service Trade Development Plan is basically completed, and included the phrase "digital trade" for the first time. The China Digital Trade Development Report 2020 released by the Ministry of Commerce of the People's Republic of China predicts that during the 14<sup>th</sup> Five-Year Plan period (2021-2025), China's scale of digital trade will continue to expand. By 2025, its total import and export of digitized service trade will exceed US\$400 billion, accounting for about 50% of the total service trade.<sup>31</sup>

## B. US Strategies and Response to China's Digital Trade Development

After Joe Biden took office, he focused on two aspects. One was fighting COVID-19, and the other was the United States' economic recovery. The second involved international trade, which meant that the Biden administration would have to deal with former US President Donald Trump's foreign trade strategy.<sup>32</sup>

However, China remains largely closed to foreign competition due to its restrictions on digital services imports, a heavily restricted and regulated Internet that requires localized data, and has limited access to online information. These limits to foreign competition contrast with China's outward-focused efforts intended to shape the international environment and the development of norms and rules affecting data governance that match its domestic approach. This includes its presence in international standard-setting bodies as well as its support for broadband connectivity and smart cities as part of its Digital Silk Road and the broader Belt and Road Initiative.<sup>33</sup>

Some scholars argue that these Chinese efforts abroad and restrictions domestically are harmful to US interests. The United States has been leading efforts supporting an open Internet, particularly through its development of digital trade commitments and support for similar efforts in the G20 and OECD. However, more is needed to effectively counter China's efforts globally including the Digital Silk Road, or it risks an Internet bifurcated between the United States and China, with security and economic consequences for the United

31 Cai Yaxin, What Is Digital Trade? What Changes Does Digitalization Bring to Service Trade? <https://www.chinanews.com/cj/2021/09-13/9564149.shtml> (Last Visited on September 13, 2021).

32 Fu Huang'an and Li Xiaofu, New Changes in the Sino-US Trade War and China's Legal Response, *Journal of WTO and China*, No. 2, 2021, p. 109.

33 *Supra* n. 26.

States and its allies.<sup>34</sup>

The United States has already responded by developing new digital trade rules in FTAs supporting the free flow of data and further services trade liberalization. The United States is also pushing for data flow commitments during the WTO e-commerce negotiations.<sup>35</sup> In the G20, the United States has worked with the G20 Leaders on statements regarding data flows and digital trade, yet these outcomes have been limited due to the response from G20 Members China, India, and Russia.<sup>36</sup>

The United States continues to work on developing international standards. As noted, however, China's strategic engagement with international standards bodies, including its resources, suggests the United States needs to reconsider its approach to standard setting, including by allocating increased resources and political capital to ensure that international standards are technically optimal while supporting open and competitive markets.

The United States is also working with its allies on broader data governance issues focused on specific technologies, such as through the Global Partnership on Artificial Intelligence and developing the OECD's principles on artificial intelligence. These efforts strengthen normative expectations that markets remain open and competitive.

However, more is needed from the United States. Any approach to addressing the challenges China presents regarding digital services trade and data governance will require a coordination with its allies as well as more attention domestically to the regulatory issues that drive data flow restrictions.<sup>37</sup> On the international front, the United States should work with like-minded countries on a comprehensive approach to data governance that could also draw in market access issues centered on data flows and digital services. This could involve a combination of more robust common international standards along

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<sup>34</sup> *Ibid.*

<sup>35</sup> Joshua P. Meltzer, *The United States-Mexico-Canada Agreement: Developing Trade Policy for Digital Trade, Trade Law and Development*, Vol. 11, No. 2, 2019, p. 241.

<sup>36</sup> 2019 G20 Osaka Leaders' Declaration, <https://g20.org/en/g20/Documents/2019-Japan-G20%20Osaka%20Leaders%20Declaration.pdf> (Last Visited on October 20, 2021).

<sup>37</sup> Tom Wheeler, Moving from "Secret Sauce" to Open Standards for 5G (February 18, 2020), <https://www.brookings.edu/blog/techtank/2020/02/18/moving-from-secret-sauce-to-open-standards-for-5g/> (Last Visited on October 20, 2021).

with the development of interoperability mechanisms that support data flows and achieve domestic regulatory objectives such as privacy and cybersecurity.

In parallel, the United States needs more comprehensive domestic regulation on data and tech issues, particularly federal privacy regulation. This is needed to address concerns amongst allies, especially the European Union, regarding online privacy. Progress here could lead to better alignment and ambition amongst the United States' allies on other data governance priorities. More broadly, the United States' traditional reliance on industrial self-regulation has left its government with an absence of robust regulatory models for data governance that can guide other countries looking to understand how to increase trust in online activity while benefiting from the economic and trade opportunities of cross-border data flows. The United States' lack of any of these models has provided space for China's approach to gain traction, pulling developing countries closer into China's digital sphere, including the concomitant emphasis on data restrictions and localization that are barriers to trade in digital services.

## V. CHINA'S STRATEGIES FOR DIGITAL TRADE RULES

### A. Participating in Constructing Digital Trade Rules

China is a party involved in trade negotiations under the RCEP, which includes the 10 member states of the Association of Southeast Asian Nations (ASEAN) (Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam), in addition to Australia, China, Japan, Republic of Korea, and New Zealand.<sup>38</sup> Not surprising given its large and diverse membership, RCEP negotiations have dragged on for some time, partly due to disputes over whether to include provisions covering data flows and digital trade as in TPP/CPTPP, which Japan and others favor.<sup>39</sup>

Rules enabling data flows facilitate digital enterprises' global ambitions,

38 Joshua P. Meltzer, *Governing Digital Trade*, *World Trade Review*, No. 1, 2019, pp. 23-24.

39 Yang Liyan, *The Influence of ASEAN Community on the Integration of South China Sea Policy and China's Countermeasures*, *The Foundation for Law and International Affairs Review*, No. 1, p. 65.

whether these are firms from countries with a large domestic economy that can help them scale up domestically before going international — such as in China and the United States — or firms from small countries that have found a niche competitive advantage that could benefit from global markets, such as firms from Singapore, Estonia, and Peru.<sup>40</sup>

As the connection between digital trade and traditional trade in services and goods is becoming closer, China, a strong traditional trading economy, should focus more on the formulation of these rules. These rules inevitably affect China's overall economic development and challenge its rule application and governance ability. Since joining the WTO, China has been promoting the formulation of digital trade rules in line with its interests by signing FTAs such as the China-(Republic of) Korea Free Trade Agreement, China-Australia Free Trade Agreement, and other binding trade agreements. Currently, taking advantage of the Belt and Road Initiative, China is building an improved digital trade rules system. Nevertheless, a huge gap still exists between China and developed economies such as the United States and European Union in the formulation of these rules. In addition, under the WTO framework, China should further study the existing provisions concerning these rules, such as the General Agreement on Trade in Services (GATS) and Agreement on Trade-Related Aspects of Intellectual Property Rights (TRIPS). The Chinese government should actively submit relevant proposals to the WTO, which would have an important influence on the formulation of digital trade rules.

Many scholars have pointed out that China's role in international rules has changed from a recipient of rules to a participant in rule-making. Furthermore, they also emphasized that China should choose trade, investment, e-commerce, and SMEs as its priorities to strive for its right of rule-making, so it can achieve its right to speak.

## B. Enhancing China's Right to Speak

China's digital trade starts late, but is developing rapidly. Its digital economy

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40 Yasu Ota, *Pacific Trade Rules on Digital Data May Already Be Outdated* (March 15, 2019), <https://asia.nikkei.com/Spotlight/Comment/Pacific-trade-rules-on-digital-data-may-already-be-outdated2> (Last Visited on October 20, 2021).

continues to develop rapidly, with its scale reaching 39.2 trillion yuan in 2020, accounting for 38.6% of the GDP. This situation effectively supports its prevention and control of COVID-19 as well as its social and economic development.<sup>41</sup>

The future development of China's cross-border electronic commerce needs to focus on following international rules with high standards, which requires it to understand current complicated global digital trade rules. High standards do not mean high restrictions, and high specifications do not mean high efficiency. Thus they should be further subdivided and proven, and it is needed to make a choice on which kind of digital trade rules are reasonable, effective, and suitable for the development of China. In addition, in some areas of digital trade, China can try to create and innovate to enhance its international status and form a Chinese paradigm. For example, when building an international hub port for digital trade, a few cultural industries and fields can be selected for pilot projects. Using the European Union's "Principle of Culture Exception" as a reference, market access rules that align with national interests and international standards can be explored. This will help maintain China's cultural diversity, promote its development of digital products and services, help it to actively participate in formulating international rules, and enable it to continuously enhance its right to speak. As an emerging power, China plays an important role in formulating digital trade rules. It is critical to actively participate in constructing these rules and enhance China's right to speak, which can promote the development of its cross-border e-commerce.

Digital trade rules are the key to the governance of digital economy. The development of digital economy enriches the existing economic format, improves trade welfare, and optimizes capital allocation. However, there are also some problems such as a widening digital divide that forms a market monopoly and aggravates financial exclusion. Governance in the digital economy era cannot be separated from the shaping of international rules. When digital trade gradually grows into an emerging international economic form, the research and formulation of digital trade rules is the key to digital economic governance. Current RTAs are developing rapidly, and they have partially solved many common problems. As high-standard and mega-regional free trade agreements such

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<sup>41</sup> *Supra* n. 26.

as CPTPP, USMCA, and the Japan-UK CEPA have emerged, many of China's previous rules and standards have been unable to adapt to the development of digital trade, so China must study the existing digital trade rules, select several industries for pilot projects, as well as explore those rules that align with national interests and international standards. Moreover, it is imperative to promote future negotiations between China and developed economies.

The Chinese government should explore the development trend of global digital trade rules based on its own conditions. It should judge the advantages and disadvantages of digital trade rules and take measures to promote the development of its digital trade. Forming strategic rules suitable for China's national conditions will be an essential topic for it to more effectively interact with the world in the future. China will participate in global digital trade governance and rule-making in the future. Therefore, it is necessary to combine the digital perspectives of technology, finance, government, and security. This can help the Chinese government to promote the fairness and rationality of the global governance system and ensure equal interests and opportunities for all parties in the new international situation. It is also necessary to re-examine the digital technological changes resulting from the rapid development of digital trade. China should also consolidate the central position of its regional value chain and develop brand-new comparative advantages in the digital economy era to achieve an effective and successful "dual circulation". In some areas, major differences exist between China and developed countries, so China should participate in negotiating international digital trade rules. The Chinese government can appropriately strengthen international cooperation, reduce differences between China and developed countries, and create a Chinese paradigm.

## VI. CONCLUSION

Digital trade or electronic commerce, as a recent rapidly developing economic model, has become a major focus of the international community. On one hand, as an important form of the digital economy, it exists widely. On the other hand, because of its digital and cross-border nature, it has also been greatly

influenced by international economic and trade rules. Thus, it has become the main focus of competition during the evolution of global digital trade rules. In the future, to develop China's digital trade and cross-border e-commerce, the Chinese government must actively explore the economic and trade rules suitable for its situation. It is important to gradually enhance China's right to speak internationally and create a healthy business environment for the development of digital trade and cross-border e-commerce.