

A Comparative Study on Digital Trade Rules in an Era of Globalization—Take European Union, US and China as an Example

Jie Yu *

Department of English and International Studies, China Foreign Affairs University, Beijing, China

* Corresponding Author Email: yujie@mail.cfau.edu.cn

Abstract. In an era of globalization and digitalization, global digital trade is booming. But issues have also emerged, including those on cross-border digital supervision and international dispute settlement mechanisms. And the international rules on these issues are fragmental. With this background, this essay, comparing theoretical essays and legal texts from the European Union, US and China, intends to offer suggestions for China to engage with the construction of a unified set of global digital trade rule. By using the comparative study and legal text analysis, the essay targets finding out the improving direction for the existing deficiencies of Chinese digital rule design, from the aspect of digital economy cooperation, security protection and dispute settlement mechanisms. This essay concludes that China should not only construct the digital trade rules with Chinese characteristics, but also strengthen its international economic and security cooperation, with the respect for other regions to balance its pursuit for both the security and opening up. In terms of dispute settlement, China also needs to strengthen the supervision and absorb wisdom and learn lessons of the European Union (EU), US and China. While supporting the World Trade Organization (WTO), China also needs to reform its flaws and explore the better Alternatives.

Keywords: Digital trade rules, digital economy cooperation, security protection, dispute settlement.

1. Introduction

These days, driven by globalization and digitalization, global digital economy demonstrates a vibrant development trend. The boosting cross-border e-commerce and digital trade platforms reveals a new trend for digital trade in an era of internet. However, with the deepening digital economic cooperation, issues like risks of cross-border data flows, inefficient cross-border digital supervision and deficient international dispute settlement mechanisms are also emerging. The existent international regulations on digital trade are also fragmented, not unified, unable to solve the problems, so the international community needs a unified system of regulations to help solve these cross-border issues. In recent years, scholars and practitioners from many countries have conducted research and proposed their models on the international digital trade rules, including European Union's pattern focusing on individual rights, American pattern stressing a liberal and open market economy and other new patterns Digital Economy Partnership Agreement (DEPA); Regional Comprehensive Economic Partnership (RCEP). Based on this, this essay focuses on digital economy cooperation, security protection and dispute settlement. By comparing EU, US and China's pattern of these three aspects, this essay tries to offer suggestions targeting the challenges of balancing security and opening up, as well as the dispute settlement mechanisms in Chinese current digital trade rules.

2. Literature Review

EU, US and China are attaching greater importance to the construction of global digital trade rules. The patterns for the rules put forward by the major economic and political entities have both commonalities and differences. And the discussion of them could help with the national research on the localization and internationalization of the rules.

In terms of the digital economy cooperation, similarities and differences all exist among the three patterns, especially from the aspect of cooperation principles, driving forces and mechanisms.

As for the cooperation principles, while promoting to enlarge and deepen the digital trade, Chinese scholars also emphasize prudence towards the connection with international market, i.e. a principle of “both emphasis on security and opening up” with a gradual elevation of opening up. This principle means China should not only reject a blind total opening up but also means a conservative closing up [1-3]. Different from China, scholars from the EU focuses on data protection and if the countries want to cooperate with the union, they must meet the standards of the protection; American scholars stress both the national interest and consumer rights, as well as an open market for those immerging market entities, and there’s even a concept of “tariff-free” [4-6].

The driving forces behind China is simple: its national and people’s interest, so China seeks a peaceful co-existence and shared development with other countries, while the EU and America pursue the status as a role model or leadership in the digital trade rules construction.

More obvious differences exist in the detailed mechanisms, although the three have all recognized the political methods such as consultations and negotiations for legal texts like agreements and treaties. Different from China who proposes multilateral trade negotiations, some EU scholars believe decisions are better than negotiations and agreements in some sensitive fields like data security and tend to initially cooperate with those who have similar ideas, so that the agreements could be more easily signed and implemented [1, 4, 7]. In contrast, American scholars are more conservative, questioning the role of multilateral consultations within the WTO framework and proposing the concept of “bilateralism”, which involves forming alliances on specific issues with a few countries within a smaller scope [8].

Secondly, in terms of security protections, scholars and official documents from the EU, US and China have revealed their ideological differences based on different historical, cultural and national natures. Unlike the EU's focus on strengthening personal data protection, cyber sovereignty (at the national level) and digital human rights (at the individual level) are given equal importance in the minds of Chinese scholars and are regarded as core concerns [1, 9]. The balance between national security, consumer rights protection and the cross-border development needs of enterprises is the core concern of American scholars [5]. As for specific mechanisms, EU scholars advocate diversifying cooperation mechanisms, like multilateral, bilateral and other forms of consultation and negotiation to empower the system. Chinese scholars have clearly pointed out that as a slightly lagging country, while drawing on the experience of human rights protection in the European Union, China should explore ways to improve its existing "data classification and grading governance mechanism" [3,7,10]; American scholars have further refined its classification of the regulatory targets, and carried out specific regulations on different subjects such as foreign users and foreign sellers according to the US legislations [11].

It is worth mentioning that scholars from the European Union, China and the United States, while striving to reform the existing dispute settlement mechanism, have put forward innovative suggestions for dispute settlement from different perspectives. American scholars, based on advanced artificial intelligence (AI) technology, have proposed an innovative idea of using intelligent legal tools—intelligent legal contracts—to assist in dispute settlement. EU scholars, on the other hand, have focused on the online platforms and out-of-court dispute settlement institutions established by EU countries under the guidance of the Digital Services Act (DSA) framework, and have put forward suggestions for improvement regarding their current situation and deficiencies [12-14]. As a developing country, China pays more attention to the development needs of emerging countries. Drawing on experiences such as the RCEP and DEPA models, and based on the Digital Silk Road, it explores a solution mechanism with Chinese characteristics [1,10]. Meanwhile, unlike scholars from the European Union and China who recognize the WTO dispute settlement mechanism and advocate for its reform, some American scholars have explicitly pointed out that the WTO dispute settlement cannot meet the growth interests of the United States, thus getting embroiled in a controversy over whether to abandon the WTO mechanism [15].

Overall, scholars from the European Union, China and the United States, based on their respective distinctive historical and cultural backgrounds, have come up with different opinions on the global digital trade rule models. In light of China's specific national conditions, some of their insights are worth learning from for the future construction of China's digital trade rule system.

3. A Comparative Study on Digital Trade Rules patterns by the EU, US and China

3.1. Comparison of Models in Terms of Digital Economy Cooperation

As a developing country, China adheres to the principle of putting national interests first, which becomes one of the primary principles for economic cooperation. However, with the continuous expansion of opening up, Chinese scholars analyze the achievements and shortcomings of China's reform and opening up over the years, especially the tangible results and practical experience of the Belt and Road Initiative, examining the breadth and depth of China's current digital trade. They emphasize that while opposing a blind total openness, they also reject excessive conservatism. Therefore, the principle of security and openness has become one of China's digital economy cooperation principles in the new era. How to further achieve a broader and deeper digital trade while strengthening the protection of national and people's interests is an important topic for China [1-3].

In terms of specific cooperation mechanisms, although EU members attach importance to the WTO and negotiations, judgments play an important role due to their common law system. Therefore, in some sensitive areas such as data security, judgments may be more effective than negotiations and agreements. At the same time, EU scholars tend to prioritize reaching agreements with partners possessing similar ideas (such as Singapore and South Korea), which makes it easier to promote the implementation of international rules [4, 7].

By contrast, the US pursues free market and liberates resource flows, to provide a favorable business environment for emerging market entities such as big-tech companies [6]. Some American scholars have studied Trump's new tariff policy through models, emphasizing the damage tariffs cause to the free market and business development and advocating the deliberation of data flow as the core, or "data without borders"; some scholars have even put forward the concept of "zero tariffs" [6]. However, compared to the EU, American scholars are relatively more conservative. Some domestic scholars question the role of the WTO and even propose the concept of "bilateralism", which means forming alliances on specific issues with a few countries within a small scope [8].

Chinese scholars strongly advocate mechanisms such as bilateral and multilateral trade negotiations, but China also needs to explore various forms and levels of digital trade. The contents of the reached economic and trade agreements still need to be improved, and it is necessary to continuously innovate other more targeted international trade rules. In the process of exchanges, the collision of rules between China and other countries and regions is inevitable. Therefore, China should also make certain compromise in some areas and flexibly formulate more targeted digital trade rules, such as regional rules for specific countries and regions, or separately formulate trade agreements on certain aspects of digital cooperation. From the perspective of feasibility, regional negotiations are generally easier to reduce divisions, and the relevant parties are more likely to reach a consensus under a common cultural background or interests. In the future, regional rules can also provide experience for a broader scale of cooperation. Thirdly, it is still necessary to recognize the international standards under the WTO, and at the same time, overcome the shortcomings of the WTO mechanism through reform, such as designing targeted and hierarchical trade system rules based on different negotiation subjects.

3.2. Comparison of Theoretical Models in Terms of Security Protection

The EU's idea of human rights protection has a profound philosophical and historical foundation. "Data protection level" and "consumer's personal rights" are undoubtedly the characteristics of the

EU's security protection. Based on data privacy protection, EU scholars have once again emphasized the improvement of consumer rights protection laws. Member states have also achieved digital market coordination through regional unified rules (such as the General Data Protection Regulation, DSA), restricting the disorderly flow of data to protect citizens' rights and industrial security, and governing cross-border data, digital services, and digital taxes [4]. They have also constructed a full-chain security system through legislation + regulatory agencies, covering personal information security, critical infrastructure, and foreign investment review. The United States prioritizes national security and the balance between national security, consumer rights protection and the cross-border development needs of enterprises has become a core concern for American scholars. The EU and US emphasize "security", which conflicts with some of China's rules, such as the controversy over whether source codes should be disclosed.

Similar to digital economy cooperation, China is guided by a holistic approach to national security, emphasizing the equal importance of "data sovereignty" and "industrial security". Therefore, unlike the EU's focus on strengthening personal data protection, both the cyber sovereignty (at the national level) and digital human rights (at the individual level) are regarded as core concerns [1, 9]. Although Chinese scholars have gradually recognized the need to recognize parts of developed countries' standards aimed at promoting the free flow of resources, they still have reservations in some important areas, including a tendency to make source code disclosure a condition for market access to strengthen the review of foreign software. Therefore, how to align with the different rule systems of the EU and the US while maintaining the bottom line is one of the important issues that China needs to solve when conflicts arise.

Regarding mechanisms, EU scholars do not pursue a single cooperation mechanism but instead empower the system through various forms. American scholars, on the other hand, from the regulatory perspective, advocate formulating targeted regulatory and supervision rules based on different regulated objects, such as foreign users, foreign sellers, and domestic enterprises [11]. In contrast, as a country that lags slightly in digital trade security protection, how to enhance digital security regulatory and supervision capabilities remains an important topic for China.

3.3. Comparison of Theoretical Models in Terms of Dispute Settlement

Scholars from the EU, China, and the US, while striving to reform the existing dispute resolution mechanisms, have proposed innovative ideas from different perspectives.

American scholars, based on advanced AI, propose using smart legal contracts to assist in dispute settlement [12]. Smart legal contracts have the ability to automatically execute legal contracts in the form of program codes. These contracts are written in conventional computer languages and, in essence, still differ from legal contracts in terms of readability and legal effect. Therefore, although American scholars believe that smart legal contracts and other AI technologies are the future trend, issues regarding their regulation and use still need to be addressed.

The EU, with regional judicial institutions at its core and multilateral coordination, prioritizes resolving disputes within the region through internal EU judicial means. Specific rules include regional judiciary, multilateral participation, and bilateral mechanisms. At the same time, since the EU set the (DSA) framework, EU scholars have analyzed and criticized the newly established out-of-court dispute settlement mechanisms. Although online platforms have reduced the cost of dispute resolution for parties, especially for individuals and small or medium-sized enterprises with limited resources, and provided users with new channels other than internal complaints and judicial litigation, thereby improving the user rights relief system, but the regulatory strength, legal binding force, operation standards, and service quality of ODS in each member state still need to be improved [13, 14].

China pays more attention to the development needs of emerging countries. Although it has drawn on experiences such as the RCEP and DEPA models, it also has practical cases like the "Digital Silk Road", exploring a solution mechanism with Chinese characteristics.

At the same time, although some American scholars support the Trump administration's withdrawal from the WTO, for EU and Chinese scholars, acknowledging the shortcomings of the WTO dispute settlement mechanism and advocating for its reform is currently a better choice.

4. Suggestions for Improvement

Based on the above analysis of the construction of digital trade rules in China, the US and the EU, the following optimization suggestions can be summarized.

4.1. Optimization Suggestions for Insufficient Digital Economy Cooperation

Firstly, promote recognition of rules and align with international high standards. In the process of opening up to the outside world, China needs to respect the unique rule systems of different countries and regions. On the basis of maintaining its own bottom line, it should attempt to absorb and accommodate international rules to facilitate the flow of international resources.

Secondly, deepen regional cooperation and enhance the influence of rules. China should follow the trend of the globalization era and continue to expand the breadth and depth of its opening up. While engaging with the global market, it should pay attention to the implementation of rules through regional cooperation and take into account the construction of rules with Chinese characteristics.

Thirdly, improve the enterprise support system and reduce compliance costs. Technology companies and other emerging market entities are indispensable driving forces for China's economy. China should draw on the support policies for its own enterprises in Europe and the United States, recognize the importance of free resource circulation for enterprise development, improve the enterprise support system, enhance support for enterprises, and help them better go global.

4.2. Optimization Suggestions for Insufficient Security Protection

Firstly, strengthen regulatory standards and enhance the operability of rules. China's current digital trade regulatory system needs to be improved. It should continue to explore a regulatory and supervision system suitable for cross-border digital trade.

Secondly, balance openness and security and optimize regulatory methods. Drawing on the existing security assurance system of the European Union, China should continue to improve and implement more detailed regulatory rules, such as strengthening the classification and governance of data, to break through regulatory obstacles.

At the same time, strengthen international security cooperation and enhance risk prevention and control capabilities. In the global market, China is also facing increasing risks in international trade, with more unstable, uncertain, and unpredictable risks. China cannot complete domestic and international security guarantees on its own. While improving the domestic security regulatory system, China should also strengthen security cooperation and exchanges with other countries and regions to build a stronger security guarantee network.

4.3. Optimization Suggestions for Insufficient Dispute Settlement

Improve the enterprise rights protection support system and lower the threshold for rights protection. Drawing on the out-of-court dispute resolution mechanism of the European Union, China can create a dispute settlement mechanism with Chinese characteristics. This mechanism should be based on the standard of efficiently solving problems for enterprises and difficulties for consumers, making it easier and more effective for market entities to protect their legitimate rights and interests.

Enhance multilateral discourse power and strengthen influence under the WTO framework. Although the WTO currently has some problems in resolving digital trade issues, China should continue to support the reform of the WTO mechanism. It needs to enhance its discourse power and influence in multilateral cooperation and promote the joint improvement of internationally recognized trade rules by all countries and regions as possible.

5. Conclusion

This essay adopts the research methods of comparative study and legal text analysis, focusing on the United States, the European Union, and China, to interpret scholars' discussions as well as legal texts such as laws, regulations and trade agreements. It conducts a comparative study of their models in three aspects: digital economy cooperation, security protection, and dispute settlement mechanisms. In response to the existing cross-border digital cooperation, security and dispute resolution issues in China, optimization suggestions have been explored, which are specifically manifested in the following aspects:

In terms of economic cooperation, China should examine the current lackage in the breadth and depth of its opening up, respect the specific cooperation concepts of different countries, promote mutual recognition of rules with the international community, and align with international high standards. At the same time, people should deepen regional cooperation, explore a cooperation model with Chinese characteristics in the process of continuously expanding opening up to the outside world, and enhance the influence of own rules.

In terms of security protection, at the domestic level, people will continue to steadily balance openness and security, draw on the experience of the European Union, improve the enterprise support system, reduce compliance costs, and at the same time strengthen regulatory or supervision standards and enhance the operability of rules, exploring optimized regulatory approaches; at the international level, people should enhance international security cooperation and improve the capacity for risk prevention and control.

In terms of dispute settlement mechanisms, efforts should be made to enhance multilateral discourse power, strengthen influence under the framework of the WTO through reforms and other means, and at the same time improve the enterprise rights protection support system and lower the threshold for rights protection.

At present, due to the differences in national interests, national nature, cultural background and other factors among countries, global digital trade rules still present a state of regionalization and fragmentation, and the construction of digital trade rules in various countries and regions has its own focus. The issue of fragmentation, as a common key topic for all countries, will also exist for a considerable period of time in the future. It is hoped that, more workers from the theoretical or practical fields will be able to further put forward optimization suggestions on China's participation in the construction of the global digital trade rule system and the exploration of a "Chinese model" with Chinese characteristics.

References

- [1] Zhao Jun, & Zhai Shuaiyu. The logical framework of the international rule system for the "Digital Silk Road": Learning from the substantive practice of the "Belt and Road Initiative". *Journal of Business Economics*, 2022, (07): 56 - 69.
- [2] Liu Bin, & Cui Ningning. Digital trade rules and China's institutional opening-up: Future orientation and practical approaches. *Studies on Socialism with Chinese Characteristics*, 2022, (02): 31 - 41.
- [3] Mei Ao, & Zhu Jiawei. New developments in international digital trade rules and China's responses under the background of institutional opening-up. *Economist*, 2025, (02): 87 - 95.
- [4] Brussels. It is time for the EU to rethink its digital trade policy and fully protect consumers' digital rights. BEUC, 2023.
- [5] Mamasoliev, S. Global supply chain resilience: implications for us trade policy and national security. *American journal of education and learning*, 2024, 2 (4): 525 - 535.
- [6] Ruiz Estrada, M. A. Openness Trade or Closedness Trade which is the Best Choice for the US? Available at SSRN 5227107, 2025.
- [7] Jütten, M. The EU's digital trade policy. European Parliamentary Research Service, 2024.
- [8] Burri, M. Towards a New Treaty on Digital Trade. *Journal of World Trade*, 2021, 55 (1): 77 - 100.

- [9] Namysłowska M. The Silent Death of EU Consumer Law and Its Resilient Revival: Reinventing Consumer Protection Against Unfair Digital Commercial Practices. *Journal of Consumer Policy*, 2025: 1 - 20.
- [10] Zhang Xiaojun, & Hou Jiao. Digital trade rules: The "US model" and the construction strategy of the "China-ASEAN plan". *Academic Forum*, 2022, 45 (04): 83 - 92.
- [11] Joseph R. Biden Jr., & Order, E. 13694. Continuation of the National Emergency with Respect to Significant Malicious Cyber-Enabled Activities. *Federal Register*, 2025.
- [12] Pendell, G. Managing disputes in a digital trade transaction environment. CMS, 2023.
- [13] Husovec, M. Certification of Out-of-court Dispute Settlement Bodies under the Digital Services Act. Available at SSRN 4501726, 2023.
- [14] Harrison, R., Shipp, J., & Curtis, A. Settling DSA-related Disputes Outside the Courtroom: The Opportunities and Challenges Presented by Article 21 of the Digital Services Act. Available at SSRN 4787648, 2024.
- [15] Mueller, Alex. One step forward, two steps back: the united states' new direction on digital trade. *Minnesota Journal of Law, Science and Technology*, 2024, 26 (1): 116 - 204.