The Regulatory Dilemma and the Way Out of China's Digital Trade Barriers in the Comparative Perspective of the United States and China

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Abstract: With the expansion of global digital trade, China's digital economy is becoming growingly crucial to international digital trade. In the past, the understanding of digital trade regulation was limited to protecting the security of China's data, which led to a rather one-sided regulation of China's digital trade. The imperfect regulatory system has resulted in a series of problems such as overly stringent cross-border data flow legislation, conservative data localization regulations, and challenges to personal information security in China. This paper will examine the above problems. To solve the above problems, this paper puts forward the following suggestions. China should seize the important opportunity of digital trade development to improve supporting measures, build a perfect digital regulatory system and deepen the international consultation mechanism. The above measures are expected to facilitate the process for China to adopt legislation governing digital trade and to further the positive growth of China's digital economy.

Keywords: digital trade barriers, data protectionism, cross-border data flows

1. Introduction

1.1. Background of the Study

The digital economy has advanced thanks to the quick growth of digital technologies. According to forecasts by the international authorities Statista and IDC, in 2025, the international data circle will expand from 33 ZB to 175 ZB. Global trade in the digital economy holds great potential and is playing an increasingly important role in promoting the national economy and enhancing national competitiveness.

The exploitation of data resources will directly affect national data security, the growth of the digital economy and the defence of personal data rights. Traditional trade rules can hardly address the issues and challenges arising from the development of digital trade. In recent years, the dispute between the "data protectionism" represented by the European Union and the "data liberalism" represented by the United States has never stopped.[1] As a latecomer to the data industry, China has a difficult time controlling its cross-border data streams. The orderly flow of data is an important guarantee for China to achieve national digital security and develop a digital economy. At the Fourth Plenary Session of the 19th Central, State Council held the element of "data" was officially recognized

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as a factor of production that can be involved in distribution for the first time, reflecting the affirmation and importance that our government attaches to data as economic productivity.

Based on this, China needs to make theoretical innovations and changes and improve digital trade legislation. China also needs to establish a comprehensive international cooperation mechanism to actively seek the freedom to participate in the formulation of rules on cross-border data streams in an international context.

1.2. Literature Review

From a comprehensive perspective, scholars at home and abroad have mainly conducted research on digital trade rules from the following two aspects. Firstly, the comparison of the world's regional segments is the focus of attention. Zhang Zhengyi and Cai Siliu pointed out that the US-led digital trade rules are more complete and provide special regulations on various aspects including ecommerce and intellectual property rights, while the EU-led digital trade rules have been relatively conservative over the years.[2] Zhang Xiaojun pointed out that the USMCA is the "American template" for digital trade rules. The USMCA is a new paradigm of "US-style template" and its strong trade protectionist overtones lead to a lack of inclusiveness in the content of the rules. At the same time, he analyzed the construction of China's trade rules and strategies by taking the digital trade rules of China's FTAs as an entry point.[3] Sheng Bin presented a comprehensive comparison of the concepts, contents, and characteristics of the "US template", "European template", "Chinese template" and "South Pacific template" agreements in the limitations for digital trade.[4]

Secondly, the analysis's second focus involves the content of specific texts. For example, LinSaite analyzed three types of trade barriers in the USMCA separately, namely governing the cross-border transfer of information, the rules on the non-discriminatory treatment of digital products, and the rules on immunity from liability for internet intermediaries.[5] Henry Gao analyzed the digital trade rules in the US FTA through the lens of the TPP, arguing that the TPP has made cross-border information flow, prohibition of data localization, and prohibition of mandatory reporting of source code provisions go a long way in making these provisions more binding.[6] Starting with the non-discriminatory treatment of digital goods, Sacha Wunsch – Vincent pointed out that the US-led FTAs do not clearly distinguish whether digital goods are goods or services, to liberalize digital trade without having to presuppose the issue of their categorization.[7] Zhang Xiaonan specifically analyzed the global development trends for cross-border data streams in global trading and the Chinese strategic routes that are appropriate for such flows.[8]

In general, researchers from both China and other nations provided a relatively comprehensive overview of the rules governing digital trade and digital services trade. Most domestic scholars have also proposed new suggestions for developing digital trade in China. However, there is a lot to add to the studies on digital trade given its rapid expansion. Firstly, the swift growth of digitalization necessitates research on the latest developments in digital competition laws because of the changes in digital technology. Secondly, against the backdrop of the changing international situation, the differences between countries and the strategic purposes behind them have become an important topic and need to be further explored.

2. Supervision of Digital Trade Obstacles at this Time in the World

At present, digital trade is now a significant path of economic globalization. Digital trade rules have become a key element in the reconstruction of the international economic order. The Chinese Academy of Information and Communication Technology predicts that the digital economy of the United States and China will reach US\$13.6 trillion and US\$5.4 trillion respectively in 2020, ranking first and second in the world respectively. According to the UNCTAD 2021 report, China and the US

together now make up nearly fifty per cent of the world's scalable data centres. The digitisation of the global economy will not only have a profound impact on the way international trade is conducted. But will also have a profound impact on the reshaping of international trade rules and the international landscape.

Firstly, developed countries dominate the international trade agreements landscape and lead the formulation of global digital rules. Differences between developed and developing countries regarding core provisions of digital trade rules can have a severe effect on the sustainable development of global digital trade and the governance framework. Secondly, the reinforcement of digital barriers and the digital divide is becoming a major impediment to the balanced and long-term expansion of the world's digital trade and economic systems. The Digital Services Trade Restriction Index released by the OECD in 2020 shows that developed countries are significantly less restrictive than developing countries in terms of infrastructure and connectivity, electronic transactions, payment systems, and intellectual property rights.

China is still in the early stages of building digital trade rules. The "US-style template" digital trade rules have posed several challenges for China. Compared to the US, China's digital trade barriers are mainly characterised by overly strict laws regarding the cross-border flow of data, conservative data localization rules and challenges to the security of private data in China.

3. Problems Arose from the Regulation of Digital Trade Barriers in Comparison to the US

3.1. Overly Tight Controls on International Data Transfers

China and the United States are both large and powerful digital trading nations, but their main interests in digital trade are widely divergent. [9] China is currently over-regulating data flows. It has created a tight digital "firewall" through a series of policies and regulations and has taken a more conservative approach to trade agreement arrangements. For the US, breaking down digital trade barriers and liberalizing digital trade have always been a priority. The US believes that limitations on cross-border data transmission would deprive it of a large amount of quality data.

Firstly, from the perspective of transnational data flows, China's primary concern is how to protect national data security and defend itself. For example, Article 50 of the Law of the People's Republic of China on Network Security expressly calls for management and supervision to restrict or even stop transmission if it is found to conflict with laws and administrative regulations. Security Assessment of Personal Information and Important Data Leaving the Country also requires that network operators must not transmit information collected within the country to foreign countries without permission and must conduct prior security assessments. All these measures restrict the "free movement of data across countries" that the US expects.

In contrast, the US has promoted the entry of its dominant digital industries into foreign markets mainly by promoting cooperation on the open transmission of information across borders and limiting market access barriers to trade in digital services. The 2015 TPP Article 14.11, "Electronic Transmissions of Information Across Borders", explicitly proposes to promote "the free flow of data across borders" and "each Party shall recognize that other Parties may have their regulatory requirements for the electronic transmission of information across borders".[10] Article 19.11 of the USMCA directly removes the "regulatory requirements" exception in Article 14.11.1 of the TPP.

China is constructing its domestic law in the opposite direction to the US on the issue of "free data transfer across borders". This scenario could result in China and industrialized nations having increasingly different laws regulating digital trade.

3.2. Conservative Data Localization Provisions

Data localization requirements also an important role in digital regulatory policies. For example, Section 19.1 of the USMCA defines a computer facility as "a computer server or storage device that processes or stores information for commercial use". Article 19.12 further states that each Party may not make the establishment or use a computer facility on its territory to conduct business there.

China's regulatory position is the opposite. According to Article 37 of the Cybersecurity Law, "localization of digital storage" must be implemented within a specific scope. This means that key information infrastructure operators will receive a lot of private information and significant data when conducting business in China. These data should be stored in China. Furthermore, Article 2 of the 2017 "Measures for Security Assessment of Personal Information and Important Data Leaving China " changed the target of security assessment from "critical infrastructure operators" to "network operators", extending the target of review to all subjects.

As can be seen, under the USMCA structure, the US digital trade laws are offensive in nature, while China is defensive in nature. The US is likely to use the "US template" of digital trade rules itself, with its trade provisions on liberalizing data streams and storage, as the standard, and demand that China create trade rules that are consistent with it. The push to implement a "data flow and storage regulation" based on domestic law will be great as a result.

3.3. Challenges to the Protection of Our Personal Onformation

Based on different national contexts, positions and policy objectives, the different levels of personal information protection measures adopted by countries inevitably limit the free streams of data across countries to a certain extent.[11] China's domestic legislation has always been a concern. In 2017, the U.S. government sent a formal letter to the WTO Council on Trade in Services. It expressed concern about the measures that China has implemented and is preparing to implement, such as the Cybersecurity Law. It argues that the measures involve localization requirements that could seriously impede cross-border information transfer, and requests the WTO Council on Trade in Services to include the matter in its agenda.[12]

At present, China primarily adopts Cyber Security Laws to protect the sovereignty of the internet and to ensure network functionality and information security. It states that operators of vital information infrastructures must store all personal information and significant data they gather and generate while conducting business within the nation. To undertake national security reviews of data processing activities that affect or may influence national security, the Data Security Law mandates the creation of a data security review system. In addition, the Personal Information Protection Law mandates that processors of personal information up to a predetermined quantity and operators of important information infrastructures preserve personal information generated and gathered within the nation.

It is clear from the provisions of the USMCA that the US approach to digital trade is still focused on the free flow of data. Section 19.8 of the USMCA promotes the free movement of data across international borders by constructing a lower level of standards for personal information security. The US prefers to have a lower level of safety of private details standards as long as it can achieve effective control over its data.

China believes that there are financial and social advantages to protecting users' data in e-commerce, which can improve consumer confidence in digital trade. Meanwhile, The US emphasizes the appropriate level of personal information protection to avoid losing the right to data entry in the face of a global trend towards higher levels of information protection.

4. Reasons for Differences in Digital Trade Regulations Between China and the US

Currently, the global development of the digital economy shows a great imbalance, with a huge gap between developed and developing countries in terms of digital technology and digital trade restrictions. From the perspective of developing countries, they are constrained by factors such as the lagging level of digital technology and the lack of a legal system, plus they are mostly in a passive position in the game of digital trade rules. From the point of view of developed countries, the US, for example, has been committed to promoting digital trade liberalization. Giving top priority to the interests of the United States is the primary prerequisite for this liberalization. At the same time, the United States ignores other countries' pursuit of the development and benefits of digital trade. Under the background of not fully respecting the legitimate sovereignty of other countries in the field of digital trade, advanced" American-style templates "have gradually been formed.

The offensive and exporting of developed countries are in stark contrast to the passive acceptance of developing countries. Such a digital trade situation will have a huge impact on the stability of the existing international economic legal order. It will create an imbalance between the strong and the weak.

4.1. Ideological and Political Goal Differences

The game of interests between countries is an important reason for the creation of digital trade barriers. As the world's largest socialist country, China faces a serious challenge from Western ideology. The power conflict between China and the US in the digital economy is an indication of the sense of urgency brought to the United States by the growing trend of China's digital economic ecology. It means that although the US maintains its leading position, China is narrowing the gap, in general, and in some high-tech fields. The US and even the international market are increasingly relying on China to achieve value-added links, which will bring increasing pressure on the US to adopt policies that maintain its leadership [13]. For example, the Information Technology and Innovation Fund of the US identified the US as a leader in the global digital economy. While it viewed China as a challenger who wants to seek global hegemony through technology. In recent years, the United States has regarded China as its primary competitor and implemented a comprehensive strategy to control China, with cultural and ideological infiltration. Moreover, western countries have made use of international media institutions and advanced network technology to launch a massive attack on China's political system.

Therefore, while actively expanding and opening up to the outside world. China still needs to adhere to the socialist system, ensure ideological stability and safeguard national security. For example, China's Network Security Law stipulates that for information originating outside China that is prohibited by law or regulation from being published or transmitted, the relevant institutions shall be notified to take the technical and other steps required to block it. The above provisions differ significantly from the requirements of the US government to safeguard cross-border data movement. Such differences in ideology and political objectives have led to significant differences between our digital trade barrier norms and those of the US.

4.2. There are Differences in the Level of Development of the Digital Economy

Firstly, there are differences in the level of digital technology between countries. Advances in digital technology are the main reason for the rapid development of digital trade in recent years. One reason why the United States can adhere to the proposition of free cross-border data flow is that its Internet companies have a dominant advantage. The other reason is that the United States can effectively control its data. The manufacture and sale of digital products and services are increasingly concentrated in a few Internet-operating enterprises. Some countries have a first-mover advantage.

The key technologies and core products on which the digital economy is based are mainly produced by a few countries. For example, the United States is more advanced in the field of digital technology and more capable of providing digital products and services than other countries and thus has a greater advantage in international digital trade. The US International Trade Commission estimates that online trading activities contributed 2.4 million US jobs and \$710 billion per year to the US economic output in 2012, raising real wages by 4.8% [14].

Secondly, the level of trade advancement between China and America varies, also reflected in the differences in the development environment, legal protection, digital infrastructure and other aspects. As a global leader in digital trade, the United States has developed digital trade more maturely and perfectly and pays more attention to maintaining its leading edge. Therefore, it advocates a more open international environment to promote the expansion of internet trade [15]. In contrast, China's electronic commerce is still in its infancy, with a lack of experience in the creation of digital commerce legislation. For the sake of information security, it tends to adopt a more cautious and conservative attitude in formulating digital trade strategies, and digital trade barriers are more intensive.

4.3. Different Internal Focus of Policy Development

The ease of free flow of data has made data development face a market that is no longer a single domestic or regional market, but a global one. Businesses, as trade subjects, have an undeniable influence on the development of policy.

For the U.S. economy, digital trade can contribute to overall economic growth by increasing productivity in a growing number of industries and lowering operating expenses across all spheres of society and the economy. For U.S. businesses, the digital deal can increase information availability, enhance economic communication, and lower transaction costs, which means more local markets and completely new revenue designs for both modern and conventional businesses, and therefore a better digital trade environment is generally expected. Therefore, the US aggressively promotes the globalization, convenience, and supervision of global digital trade, seeking to leverage its technological and market advantages to support domestic enterprises and provide them with a better platform to maximize the interests of their digital enterprises. Compared to countries with an advantageous digital economy, countries with a disadvantage in digital trade do not have a favourable situation for the growth of digital trade, and the digital infrastructure is not well developed.

5. The Way to Perfection in China

5.1. Seize the Important Opportunity of Digital Trade Development and Improve Supporting Measures

China should raise the development of digital trade to a national strategic level and attach importance to it. Firstly, China should seize the important opportunity of digital trade development. At present, although the global digital trade rules have made certain development, no unified opinion has been formed. China should strengthen its research on digital trade rules, follow closely the latest development in digital trade rules, strengthen the research on the legal system related to digital trade, and offer a favourable institutional setting for the growth of digital trading.

Secondly, it is necessary to improve support measures based on seizing the opportunity. China's technological innovation capability is weak. There are "neck" problems in basic software, operating systems and core chips. China should strive to promote the application of digital technology in infrastructure such as e-payment, e-invoicing and digital identity to enhance its voice in global digital governance. The contradiction between the "high investment" feature of digital infrastructure construction and the "universality" objective should be reconciled. A comprehensive digital

infrastructure system should be built to enhance information communication capabilities and achieve an effective global allocation of trade resources. The digital trade dividend can be shared through the effective allocation of trade resources on a global scale [16].

5.2. Building a Sound Digital Regulatory System

While China is seizing the opportunity to develop digital trade, it should also pay attention to the harmonization of data and information flows with privacy protection. China's existing laws still lack integrated considerations on data security and data use, personal information protection and reasonable use.

Firstly, the state should formulate laws and regulations. The country first needs to classify and classify digital information for management. The state should also implement a cross-border transmission license system for sensitive data related to personal information. At the same time, non-sensitive data that do not belong to this category are classified as allowing free flow of data and non-localized storage. Security of personal data laws must be passed quickly in China, promote the classification and management of personal data, raise awareness of compliance among China's digitally driven enterprises, and build a personal information protection regime that facilitates free information flow and reconciles privacy protection. At the same time, the existing laws should be repaired for incompleteness. For example, the Law of the People's Republic of China on Cybersecurity prohibits the transfer of personal data on vital information infrastructures, but unclassified controls on the flow of private data information may hinder normal data transfers and the development of digital trade.

Secondly, for enterprises, before collecting personal data for data processing, they should first establish a clear and specific purpose that is known to the data subject. In the subsequent processing process, the processing and utilization of personal data by enterprises should be limited to the purpose established in advance. This is to prevent data companies from purposelessly abusing the personal data of data subjects.

5.3. Deepening International Consultation Mechanisms

First of all, China will study the rule systems of developed countries in depth. China should reasonably draw on some of the rules of the "American template" and strive to build a "Chinese template" that meets the needs of China's digital trade development. In the same method, China should actively take part in digital trade negotiations and express its position in due course. It is even more important to actively approach countries with the same aspirations to jointly establish digital trade partnerships. This is the only way to build digital trade rules that meet the national conditions of developing countries.

China should actively take advantage of the Belt and Road construction to make full use of its influence and discourse on existing economic and trade platforms. Taking the advantage of cross-border e-commerce as an opportunity, China will take the lead in concluding digital trade terms with countries along the "One Belt, One Road" to promote the construction of a Chinese digital trade circle.

The US, Europe and Japan have been in the top echelon of global digital trade, relying on their strong digital economies and advanced internet technologies. In terms of establishing rules for digital trade, although there are conflicts, they are united in advocating data movement internationally. The unified position of the three parties will help them to form a "common circle of interests" and attract other developed countries to join. Developing countries such as China have a serious divergence from the US-EU-Japan idea of the free flow of data across borders and are likely to be excluded from the US-EU-Japan "common sphere of interest", making it difficult to participate deeply in the discussions on the development of digital trade rules.

Therefore, China should actively participate in multilateral trade negotiations with developing countries. Taking an active part in the formulation of international rules is a good way to improve their digital trade rule system.

6. Conclusion

The rapid expansion of the online economy necessitates the removal of trade restrictions and the establishment of global data freedom. However, unrestricted data flow can pose significant risks to national security and personal privacy protection, resulting in new issues of digital competition regulation.

In the negotiation of digital trade rules, China should take the lead in establishing concerns like data flow limits and data localization requirements during the negotiation of digital trade regulations. China is also supposed to coordinate various aspects of cooperation and actively promote the further enhancement of China's international competitiveness and voice in digital trade. In terms of improving relevant legislation, China should further improve relevant domestic laws and regulations, and establish a legal system that ensures the coordination of national cyberspace security. The fair rivalry between companies and the safeguarding of personal information must continue. At the same time, China should also strive to consolidate key internet platforms, develop core technologies, and contribute to China's future sustainable growth in its economy. In the future, China should take a more proactive stance, speed up the government in digitalization, better balance and promote trade and data flow, and orderly promote the process of regional and multilateral digital trade rules in the context of balancing the domestic and international overall situation.

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