

Differential Interaction: Development of Cross-border Data Flow Governance Mechanisms In Asean

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Abstract. Cross-border data flows, which are fueled by the digital economy, increase the productivity and efficiency of the global economy. The cross-border movement of data has a direct influence on both national security and the growth of the digital economy. Therefore, in order to deal with the security and development issues brought on by the digital geopolitical game, on the one hand, ASEAN focuses on the overall growth of the digital economy and data security, on the other hand, it continues to encourage the spread of the innovative "ASEAN+" governance model and actively participates in the creation of regulations for the digital world. The digital geostrategic competition between large nations is skillfully employed, on the other hand, to aim for a more advantageous position in order to mitigate the negative impacts brought on by mechanism fragmentation. A governance mechanism for cross-border data flow is built using the relational governance concept of "self" and "other" interaction. The negotiating cost and compliance cost will be decreased through the adaptable interplay between mechanism spillover and mechanism internalization, expanding the digital economy in the ASEAN region and enhancing competitive advantages on a worldwide scale.

Keywords: Differential interconstruction; ASEAN; Cross-border data flow; Governance mechanisms.

1. Introduction

1.1. Research Background

The digital economy has evolved into a new engine for global economic growth and trade expansion, according to the 2019 Digital Economy Report from the United Nations [1]. According to Statista's statistics and forecasts, the global data sphere is undergoing a dramatic expansion, with the total global data generation expected to reach 174ZB in 2025 and 2,142 zB in 2035 [2]. With the characteristics of fluidity, timeliness and non-exclusivity, data is becoming an important factor of production. The free flow of data across borders means open markets, reciprocal trade, mutual trust in research and innovation sharing. The global economy is moving from physical trade to digital trade.

The geo-game of major countries has started to concentrate on rising digital market regions as competition in the global digital market has increased. The sustainability of the "ASEAN way" has been repeatedly questioned by the geopolitical game played in the digital sphere, with ASEAN leading the way in digital competitiveness among major nations. Different cross-border data flow mechanisms within and outside of ASEAN are intertwined from a morphological perspective, and from a functional perspective, the degree of fragmentation of these mechanisms is growing, which is counterproductive to ASEAN's overall interests in promoting the growth of the digital economy. However, despite uneven internal network technology and digital economy development, intertwined external relations and rules, and participation in regional economic cooperation organizations and bilateral and multilateral economic and trade exchanges, ASEAN has been able to quickly develop its digital economy thanks to a variety of regional cross-border data flow governance mechanisms.

1.2. Literature Review

The existing research mainly focuses on two aspects of the evolution process of cross-border data flow in ASEAN: fragmentation and securitization of governance rules for cross-border data flow.

According to Vivian Balakrishnan (2018), the fragmentation of data governance rules has been made worse by major countries' participation in the digital geopolitical game, which has also undermined ASEAN's ability to coordinate regional governance and threatened its centrality [3]. Lu

Chuangying (2023), who holds a different perspective, thinks that ASEAN can effectively exploit the relationships between major countries to work toward a more advantageous position and get greater help from major countries in the development of digital infrastructure, the transfer of digital technology, and talent training [4]. Amita Acharya has stressed that ASEAN has a lot of experience and advantages in dealing with great power competition, and if ASEAN remains united and makes the necessary changes, it can not only survive great power competition, but also continue to play an important role in managing great power competition [5].

From the standpoint of cross-border data security, Hong Yongmiao, Zhang Ming, and Liu Ying (2022) think that the fast expansion of the digital economy as an emerging sector of industry is significantly facilitated by the cross-border movement of data [6]. Liu Yangyue and Liu Xiaofeng (2022) However, there are disparities in laws and regulations across ASEAN members due to their various levels of development, which poses some security issues. As a result of advances in digital technology, each individual member country has challenges with the growth of the digital economy and the establishment of regional integration legislation among member nations. After analyzing the pros and cons of data sovereignty, cross-border data flows, and data localization, Richard D. Taylor argues that with the spread of new, data-intensive technologies, the negative consequences of data localization will become more and more obvious, resulting in "data dependence." Countries with the lowest levels of data localization and the most open flow of information are expected to benefit the most from new data-intensive embedded (networked technologies) [7].

In conclusion, theoretical research on cross-border data governance principles now in use tends to concentrate more on explaining the conflict between fragmentation and integration. The word "relationships", a crucial component in the study of international politics, is not combined to dynamically express the interaction within and outside the region. In this regard, this study introduces the relationship theory in international politics and uses the relationship governance theory of differential interaction to describe how ASEAN's governance system for cross-border data movement has evolved.

2. The Concept And Mechanism Of Differential Interaction Patterns

The so-called "difference order" is centered on "oneself", pushing out in a circle, farther and farther, and thinner and thinner, like water ripples [8]. In a differential pattern, the relationship is variable. The analysis of interest relations in the differential interaction model is mainly manifested in three aspects: First, under the assumption of relationship rationality, the will, interest and behavioral preference of countries change with the change of the nature of inter-state relations. State behavior is not determined by the power structure, institutional structure or conceptual structure, but by the cognition and choice of the relationship between countries [9]. Second, inter-state relations are not directly determined by a single factor but are the result of comprehensive influence of many factors under special circumstances. A country's perception of its interest's changes as its context changes [10]. Third, the relationship is flexible and changeable, and the difference reflects the mixed state of non-binary opposition between actors, which provides us with a dynamic perspective to understand the interaction between actors. In general, differential interaction is formed on the basis of States' continuous formation and "self-centred" inter-state networks and participation in "other-centred" networks in the international community. In these relational networks, each relator is the center of the self-circle network and the node of the other-circle network at the same time [11].

The creation and selection of mechanisms also play a dominant role in the interaction process of regional governance, and the two modes of others joining and others leading their own participation result in distinct strong and weak interactions centered on "already" and distinct interaction forms depending on the various interest relationships in various contexts. The relationship process, in which the country's strategic choices are changeable and changeable, has emerged when a series of informal textual conventions are created in a flexible and inclusive open mode through ongoing interaction between actors. State actors can freely transform the relationship context and relationship network,

forming differentiated choices and interactions of national strategic goals in different relationship networks [12]. The identity of “self” and “other” from the perspective of relationship theory, which is changeable and changeable, can be used to summarize its internal logic. Actors can continuously participate in relationship operation and relationship selection in the differential relationship network according to the needs of interests to achieve the expected strategic goals. Self-centered spillover diffusion interaction and other-centered internalized choice interaction are the major modes of differential interaction evolution in the ASEAN data governance process [13].

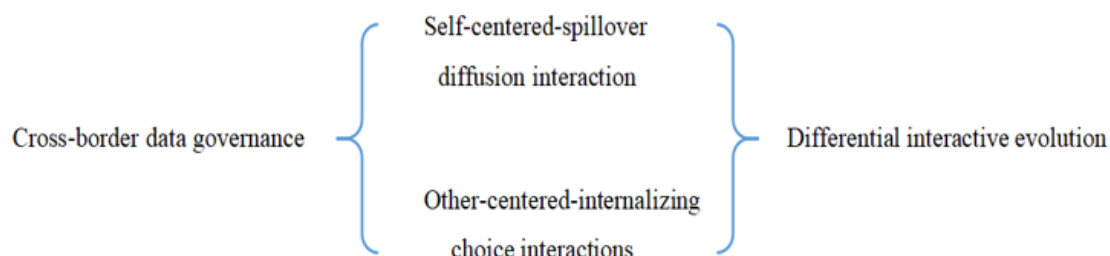


Fig 1. Differential interactive evolution.

In the self-dominated mechanism, the regional can create and maintain an orderly relationship circle or relationship network through the mechanism to expand their influence. And through the mechanism spillover diffusion, so that the actor can continuously obtain its dominant relationship circle or relationship network structure resources. The normativity produced by the relationship network elements of regional mechanisms will also react to the dominant and centrality of regional development. The mechanism spillover formed by the relationship network reduces the uncertainty in the interaction process of actors and the transaction cost of compliance behavior. Norms can restrict the interaction of actors and regulate the relationship between them. Diffusion promotes the recognition and support of extraterritorial actors for the architecture of regional governance mechanisms.

In the mechanism dominated by others, the region carries out more flexible internalization and selection interaction with countries outside the region according to the development of different countries. On the one hand, it accepts the mechanisms dominated by different countries outside the region and seeks the relationship balance in the overlapping of multiple mechanisms to maintain its own favorable position in the interaction of mechanisms. On the other hand, in the process of internalizing selection, flexible participation forms can meet the interest needs of different levels of participants inside and outside the domain. When the interests of the relationship are consistent with the position of the relationship, the actor will make a consistent internalized choice, and when the interests of the relationship are inconsistent with the position of the relationship, the actor will make a different choice. Because in the process of regional integration, the development level and pursuit of interests of countries cannot be completely consistent, the choice of differences will often bring more flexible and effective development of regional relations.

3. Interactive Evolution of ASEAN Data Cross-border Flow Governance Mechanism

Cross-border data plays an increasingly prominent role in supporting international trade activities, promoting transnational scientific and technological cooperation, and promoting data resource sharing. Promoting cross-border data flow has become an important way to improve the quality of digital economy development and ensure global connectivity. However, cross-border data flow not only improves the efficiency of cross-border cooperation through the characteristics of cross-time, technology and virtualization, but also brings security issues such as network security, national security and data sovereignty. The ability of ASEAN to govern as a regional community is put to the test by the efficient regulation of international data flows. A massive flow of data is produced by the swift operation of the digital economy, and an excessively free or even disordered flow could

endanger security as well as regional and national business interests. In this regard, ASEAN actively encourages the growth of regional data integration to create a mechanism spillover for cross-border data flow, and on the other hand, it also works with flexible mechanism selection options for contact with nations outside the region.

3.1. ASEAN-focused Spillover and Diffusion Interaction

The “centrality” of ASEAN remains its strategic objective in the area of data governance. To establish a secure and efficient cross-border data flow between ASEAN and economies outside the area, actively develop a self-centered interaction model and take part in the development of data governance regulations in regional trade agreements. The Regional Comprehensive Economic Partnership (RCEP), which was signed by 15 nations in the Asia-Pacific region, including China, Japan, South Korea, Australia, and New Zealand, under its leadership, has a distinct chapter on e-commerce. It makes clear that members cannot localize facilities as a requirement for doing business in their territories, nor can they prevent cross-border data flow activities to achieve business objectives. However, it also specifies exceptions that allow members to localize facilities or limit data flow across international boundaries where necessary to further a legitimate public interest, provided that the demands are fair and non-discriminatory, and do not obfuscate trade restrictions; or if they are required to do so in order to safeguard fundamental security interests and are not subject to dispute by other parties. Although the RCEP regulations on cross-border data flow are not very extensive, they do take into account the dual objectives of national security and industrial development and do so to the greatest extent possible, which is conducive to promoting more extensive and in-depth cooperation between all participants in the growth of the digital economies and cross-border data flow of individual member countries and the entire Asian region. This embodies the data governance concept of “pluralism and co-governance” advocated by ASEAN, promotes the unrestricted international flow of data under the premise of ensuring data security and promotes the evolution process of spillover and diffusion of its mechanism. It is closely related to the key directions of ASEAN’s economic development in the coming period. From the perspective of development, the exception clause of RCEP data cross-border rules not only accommodates the diversity of data governance measures of various countries, but also recognizes the phenomenon of “digital divide”, in fact, provides a transition period for developing countries to make up for the digital divide and gradually adapt to the rapid development of the digital economy.

3.2. Interaction Centered on the Other Through Internalized Decision

When dealing with mechanisms of contact centered on nations outside the region (others), ASEAN nations frequently adopt a more flexible stance, not by joining all nations in choosing to interact but by joining some countries to do so. In terms of protecting individual privacy and promoting cross-border data flow, ASEAN focuses on enhancing data governance at the regional level. For this reason, ASEAN has developed a system for cross-border data transmission and a framework for data classification that not only ensures data security for data flow among ASEAN member countries, but also creates chances for the international expansion of ASEAN businesses through the harmonization of global data governance regulations. Chapter 14 of the CPTPP, “Electronic Commerce,” adopts the view that the TPP model cross-border data flow provisions advocate the freedom of data flow and endorses the protection of personal information for economic reasons rather than the protection of human rights. However, the CPTPP provides only public policy exceptions to the extent that States parties may adopt data localization measures to achieve legitimate public policy objectives or protect their essential security interests. The public policy exception invoking the cross-border movement of data clause requires a judicial decision on whether the State party has demonstrated that the measures taken go beyond what is necessary. It can be seen that the standards for cross-border data flow are relatively high. For instance, only Singapore, Brunei, Malaysia, and Vietnam have opted to join the CPTPP, which has stringent standards and conditions, for the Comprehensive and Progressive Agreement for Trans-Pacific Partnership. The Indo-Pacific Economic Framework (IPEF), in the field

of digital economy and technical standards, in order to ensure the equal treatment of digital products, it has set standards in the field of cross-border data flow and data localization that go beyond the domestic laws and international conventions of some countries. Which is led by the US, has strict rules for the digital economy, data protection, and market monitoring, Cambodia, Laos, and Myanmar among the ASEAN countries also decided against joining. However, ASEAN International has created a China-ASEAN Pilot Zone for Cross-border Data Flow based on its own interests, improved the data flow risk regulation system, and arrived at a regulatory consensus on cross-border data exchange based on the multilateral regulatory framework and regional guiding principles in response to China's "Digital Silk Road" initiative [14].

4. The Impact And Enlightenment Of The ASEAN Cross-border Data Flow Governance Interaction Mechanism

Differential interaction chooses the form of interaction to achieve relationship coordination in accordance with the differences in the dominating positions in various relationship networks, reflecting the flexible and evolving relationship network of state players in the international community. As a regional international organization, ASEAN serves as a crucial channel for policy coordination between ASEAN member states and international multilateral mechanisms. As a result, ASEAN needs to strengthen data governance in order to not only account for the member countries' varying degrees of progress in developing their digital economies, but also to be in line with the frameworks used by various international mechanisms. By employing the differential building of relational powers, emerging economies and countries have been able to go from being "passive" to "active" in the development of the digital economy. This shift is reflected in the evolution of ASEAN's cross-border data flow governance mechanism. As a result of this governance framework, the regional integration of the digital economy has been accomplished by ASEAN. On the one hand, the expansion of the digital economy has the ability to reduce regional barriers, increase levels of integration, promote internal connectivity, assemble ASEAN forces, and create a climate that is more favorable for the flow of cross-border data. On the other side, a higher level of integration may make it easier to build the digital economy smoothly. A collaborative force inside the domain is established through the digital connection of production factors, and it eventually grows to build a potent organic and substantial digital economic community. The development of ASEAN's differential interaction mechanism for cross-border data flow governance would eventually affect and spread to nations outside the area due to the significant role ASEAN plays in geopolitics and its delicate position in the game of great powers. This technique can be developed by digital powers and relevant nations into a crucial option for settling data governance conflicts and even for balancing regional circumstances.

It should be noted that in the process of explaining and using the concept of "difference", we should not only pay attention to the meaning of "difference", that is, the variability of the relationship circle, but also pay attention to the "order" contained in it, that is, the change of the relationship position of the actors in different relationship circles. Limited by cases and length, the exploration and application of the concept of "differential" in international relations is still preliminary in this paper, and the research on the evolution of the governance mechanism of cross-border data flow in ASEAN under the differential interaction mode is still in the initial stage, without in-depth discussion on more complex data security issues. Therefore, how to realize the security of cross-border data flow through differential interaction is a topic worthy of further study on this basis.

5. Conclusion

On the one hand, the governance of cross-border flows in ASEAN faces adjustment challenges from factors such as unbalanced internal data governance level and fragmentation of regional digital trade rules. On the other hand, it is troubled by the differential superposition of regional digital trade rules and the resistance of the integration of cross-border data flow. In this regard, in order to adapt

to the new changes and challenges brought about by cross-border data flow, ASEAN has continuously promoted the evolution of its cross-border data flow governance mechanism, adopted a flexible relational governance model to cope with the game of great powers, and created mutual care between "self" and "others" through differential interaction, so as to achieve effective governance of cross-border data flow. However, the selection of cases in this study has certain limitations, and the research on cross-border data evolution needs to continue to track, and it is necessary to grasp the evolution direction of the mechanism from a more complete and systematic perspective.

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