

Local Inter-Governmental Cooperation in Regional Innovation in China: Historical Evolution and Logic of Change

-- Based on The Perspective of Historical Institutionalism

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Abstract

Under the innovation-driven development strategy, inter-governmental cooperation in regional innovation has proliferated, but the historical change logic of local government participation in innovation cooperation has not been explained yet. Based on the theoretical paradigm of historical institutionalism, this paper attempts to construct a "structure-history-action" analytical framework for local government participation in innovation cooperation. Based on the theoretical paradigm of historical institutionalism, this paper attempts to construct a "structure-history-action" analytical framework for inter-governmental cooperation in regional innovation. In the course of more than forty years of change, inter-governmental cooperation in regional innovation in China can be divided into four stages. In the course of more than forty years of change, inter-governmental cooperation in regional innovation in China can be divided into four stages. Firstly, it has been driven by structural conditions in macro-institutional change; secondly, 'path dependence' Firstly, it has been driven by structural conditions in macro-institutional change; secondly, 'path dependence' caused by political and cultural genes, administrative institutional traditions and the 'key nodes' that drive change. Finally, the perceptions and interests of local governments, as micro-actors, have profoundly shaped the direction of change. On this basis, the development path of inter- governmental cooperation in regional innovation is proposed: strengthening the top-level design of innovation cooperation and optimizing.

Keywords

regional innovation, inter-governmental cooperation, historical institutionalism, local government.

1. Introduction

With the continuous advancement of China's administrative system reform, inter-governmental cooperation has become an important part of China's deepening reform practice, and has increasingly become a research hotspot in the theoretical community. With the continuous advancement of China's administrative system reform, inter-governmental cooperation has become an important part of China's deepening reform practice, and has increasingly become a research hotspot in the theoretical community.

Compared with the traditional inter-governmental cooperation, inter-governmental cooperation in regional innovation involves more complex and subtle issues. For the connotation of regional innovation, no consensus has been reached among academics yet. According to Liu Shilin, regional innovation is a process in which various types of innovation subjects within a region form a network of systems and institutions, aiming to promote the development of the regional economy. According to Liu Shilin, regional innovation is a process in which various types of innovation subjects within a region form a network of systems and

institutions, aiming to promote the generation and use of new technology. According to Liu Shilin, regional innovation is a process in which various types of innovation subjects within a region form a network of systems and institutions, aiming to promote the generation and use of new technology. development or new combinations of these elements into the regional economic system within a certain geographical scope, creating a new and more effective way of resource allocation, and improving the quality and efficiency of the regional economy. effective way of resource allocation, and improving the regional innovation capacity and development level. At present, there are few academic studies on inter-governmental cooperation in regional innovation. At present, there are few academic studies on inter-governmental cooperation in regional innovation, and many scholars have proposed that local governments play a crucial role in regional innovation, believing that local governments are the key players in regional innovation. At present, there are few academic studies on inter-governmental cooperation in regional innovation, and many scholars have proposed that local governments play a crucial role in regional innovation, believing that local governments are the guarantee of regional innovation and play an important guiding role in promoting regional. Believing that local governments are the guarantee of regional innovation and play an important guiding role in promoting regional innovation . At the same time, cross-regional coordination and cooperation is an important form of governmental role, and inter-regional innovation linkages are an important driving force for regional innovation, which is a key element in the promotion of regional innovation. important driving force for regional innovation, which can be promoted by local governments through exchanges and coordination with other regions .

In terms of the motivation and logic of inter-governmental cooperation in regional innovation, the existing research mainly analyzes along two paths. On the one hand, some scholars start from the necessity of inter-governmental cooperation in innovation activities, and explain that inter-governmental cooperation in regional innovation is oriented by the expected benefits, and needs to be based on the principle of "one country, two systems". On the one hand, some scholars start from the necessity of inter-governmental cooperation in innovation activities, and explain that inter- governmental cooperation in regional innovation is oriented by the expected benefits, and needs to be based on the principle of cooperation in sharing the common interests, which is aimed at breaking down the administrative barriers, and facilitating the circulation of factors of production and the effective allocation of resources. effective allocation of resources. Traditional administrative divisions create barriers to the flow of innovation factors in the pursuit of self- interest, and in order for innovation activities to be carried out in an efficient and effective manner. Traditional administrative divisions create barriers to the flow of innovation factors in the pursuit of self- interest, and in order for innovation activities to take place in a suitable region, innovation systems must cooperate across administrative boundaries. In innovation cooperation, governments do not follow a single institutional logic; governments involved in cooperation often make decisions based on multiple logics, such as economic funds. multiple logics, such as economic fundamentals, innovation endowments, institutional inertia, and the logic of legitimacy. On the other hand, some scholars analyze the logic of the current innovation cooperation network based on the status quo of the current innovation cooperation network, such as through empirical analysis of the current innovation cooperation network. cooperation network, such as through empirical research on the generation logic of the cooperation network of the Chengdu-Chongqing region's Twin Cities Economic Circle, which concludes that the current innovation cooperation network is based on the status quo of the current innovation network. Cities Economic Circle, which concludes that the synergistic mechanism of the "government-market" is an important driving force to promote regional innovation cooperation. innovation cooperation. Other scholars analyze the influencing factors of collaborative innovation in the Beijing-Tianjin-Hebei region through quantitative modeling to explore the mechanism of power evolution of innovation. Other

scholars analyze the influencing factors of collaborative innovation in the Beijing-Tianjin-Hebei region through quantitative modeling to explore the mechanism of power evolution of innovation cooperation network. The Beijing-Tianjin-Hebei region through quantitative modeling to explore the mechanism of power evolution of innovation cooperation network.

Based on the structural institutionalism paradigm, this paper will conduct a diachronic study of inter-governmental cooperation in regional innovation, comprehensively organize the stage-by-stage process of inter-governmental relations change, and explore the deeper mechanisms behind the change, with a view to providing insights into the transformation and upgrading of regional innovation in the future.

2. Analytical Framework: The Historical Institutional Paradigm

2.1. Conceptualization of the historical institutional paradigm

The key concepts of historical institutionalism are institutions and their historical evolution, i.e., a set of formal and informal procedures, practices and norms embedded in organizational structures. The key issue is to determine when and how change occurs, as well as the nature of the change itself. Under the historical institutionalism paradigm, the understanding of institutions tends to encompass three levels of connotation.

First, as the name suggests, historical institutionalism focuses on the historical evolution of institutions. Historical institutionalism emphasizes that institutional development is path-dependent - past decisions tend to constrain future institutional change, and future institutional changes (i.e., changes in procedures, practices, norms, and conventions) are constrained by the current institutional environment, so that, in response to similar macro-social structures, different countries, regions or societies make very different institutional responses to similar macro-social structures. Thus, the survival of institutions is explained by the term path dependence in historical institutionalism, and institutional change is explained by the term critical junctures.

Second, institutions in historical institutionalism reflect social power relations. The notion of path dependence implies that institutions do not necessarily represent optimal equilibria or balances of interests, but are rather a manifestation of the power relations in our societies, and that institutional "procedures, practices, norms, and conventions" are not a neutral coordinating mechanism. Institutions themselves are therefore like the rules of the game, which provide resources that can be exploited by certain privileged actors. Thus, institutions themselves are like the rules of the game, which provide resources that can be utilized by certain privileged actors, and the study of institutions and institutional change can identify the distribution of interests and power among groups.

Finally, actors' perceptions and agency also influence the process of institutional change. First, institutions mediate between actors' ideologies and their identities (including class, organizations to which they belong, etc.). That is, historical institutionalists argue that actors' preferences and actions are not external to their institutional context, and that actors' behavior is subject to accepted norms of behavior, regulations based on proper logic, and governed by their identity, role in the political community, and by the ethos, power, and obligations of the institutions in which they are embedded. Secondly, actors can use their initiative to pursue their own interests by transforming ideas into an expression of interest, i.e. a relatively independent idea generated by the rational assessment of the actor, which guides the search for creative solutions.

2.2. Historical institutionalism and local inter-governmental cooperation in regional innovation

To apply a paradigm to analyze the change of inter-governmental cooperation in China's regional innovation, it is necessary to examine the compatibility and applicability of this paradigm to China's institutional change.

First of all, the analytical tool of historical institutionalism is ephemeral in nature, which "reveals the mechanism and power source of system creation, maintenance and change, and historically traces back the structural background of key moments and the time sequence of major events", which fits the development history of inter-governmental cooperation in regional innovation since the reform and opening up.

Second, historical institutionalism has shaped the model of mid-level institutional analysis that connects the macro and micro levels. The emergence and evolution of inter-governmental cooperation in regional innovation not only depend on a certain historical background and institutional environment, but also play an important role in the actions of local governments as concrete actors. Using the paradigm of historical institutionalism to analyze inter-governmental cooperation in regional innovation can not only analyze the institutional background of this phenomenon from the macro-institutional level, but also help to discover the endogenous dynamics of its development and change, and provide new ideas for the change and development of regional innovation, which is of great practical significance.

In summary, with the analytical paradigm of historical institutionalism, this paper tries to construct an analytical framework of "structure-history-action" for inter-governmental cooperation in regional innovation. Specifically, based on the perspective of historical evolution, it specifically analyzes the mechanism and interaction of various elements in the evolution of inter-governmental policies in regional innovation.

3. Historical trajectory: Local inter-governmental cooperation in regional innovation Evolutionary history

3.1. Prelude to the beginning: horizontal economic and technical cooperation (1979-2003)

Before the reform and opening up, due to China's implementation of the planned economy system, under this system, the economic development of the whole country and regional cooperation presents a situation of administrative division, inter-regional economic and technical cooperation is also embodied in the central government-led characteristics of the local government's cooperation with less internal drive. In 1979, the State Council put forward the sixteen-word guideline of "avoiding shortcomings, giving full play to strengths, protecting competition, and promoting unity", the development strategy and thinking of China's various economic zones have undergone a great transformation, from the concept of establishing independent industrial and national economic systems to the strategic thinking of strengthening regional economic cooperation, which opened the way of inter-regional economic and technical cooperation. prelude to inter-regional economic and technical cooperation, and also formed the germ of regional innovation cooperation.

At this stage, inter-governmental cooperation was mainly based on horizontal regional economic cooperation, and the institutional framework and organizational construction of regional cooperation had begun to bear fruit. In 1985, the nationwide reform of the science and technology system was carried out under the overall leadership of the CPC Central Committee. Horizontal economic cooperation organizations of different scales and contents emerged at the inter-provincial, inter-regional and inter-city levels, such as the "Yangtze River Delta Cities Economic Coordination Committee" initiated by the Yangtze River Delta cities at a joint meeting

in 1997, in which the mayors or deputy mayors of the cities were the main members. In 2001, China's accession to the World Trade Organization (WTO) accelerated its integration into the world's innovation network.

Innovation cooperation at this stage is aimed at building an institutional system of cooperation, breaking down regional divisions and administrative barriers. However, at this stage, innovation cooperation among local governments still has many limitations. First of all, it is a stage where cooperation and conflict coexist. Due to the planned economy, local governments are committed to building local independent industrial system, therefore, in this stage of local government inter-governmental relations, the brand of block division is obvious, although the formation of a certain degree of cooperation, but local governments still make decisions in their own interests, resulting in duplication of construction and disorderly competition, regional division of labor and the flow of factors of production is impeded, which results in the prevalence of local protectionism. This resulted in the prevalence of local protectionism, which was reflected in the "regional raw materials war" in the mid-to-late 1980s. In addition, the depth of inter-governmental cooperation at this stage was lacking, as governments at all levels in the region generally strengthened communication and coordination through regular meetings, but lacked specific institutional mechanisms to rely on.

3.2. Initial development: cooperation mechanisms taking shape (2003-2012)

In April 2003, the Ministry of Science and Technology held a seminar on the research of regional innovation system construction in Beijing, which clarified the strategic height of strengthening the construction of regional innovation system and emphasized that strengthening the construction of innovation system is the key point of local scientific and technological work. At the same time, in order to push forward the construction of regional innovation system and strengthen the innovation cooperation and communication between localities in the whole country, the "Liaison Committee on the Research of Regional Innovation System Construction" was established. The framework and mechanism of the inter-governmental cooperation of China's regional innovation has been gradually built up since then.

In order to break down administrative barriers and further deepen innovation cooperation between governments, regional innovation mechanisms have been constructed in accordance with economic linkages. 2003, Jiangsu, Zhejiang and Shanghai signed the "Agreement on Jointly Promoting the Construction of the Yangtze River Delta Innovation System by Shanghai, Jiangsu and Zhejiang", establishing the Yangtze River Delta Regional Innovation System Construction, which is comprised of the leaders in charge of the two provinces and one city. 2009 saw the release of the Outline of the Plan for the Reform and Development of the Pearl River Delta Region (2008-2020) by the National Development and Reform Commission (NDRC).

At this stage the inter-governmental cooperation in regional innovation, breaks through the previous restriction of taking administrative regions and economic zones as the main spatial direction, and carries out the inter-governmental cooperation with the direction of "main function areas" instead - breaks through the situation where the administrative regions seek independent development and compete with each other, and focuses more on the flow of innovation factors and the comprehensive development of economic communities. Instead, inter-governmental cooperation is directed towards "main functional areas". Under the institutional arrangement of cross-provincial and cross-county innovation cooperation, administrative barriers in inter-governmental cooperation are gradually reduced, and innovation cooperation is further deepened. However, at this stage, the inter-governmental cooperation network of regional innovation is showing an uneven situation, which is reflected in the fact that the closer innovation cooperation is mainly concentrated in the three economic growth poles of the Yangtze River Delta, the Pearl River Delta and the Bohai Rim, while the

construction and development of the inter-governmental cooperation network of other regions are relatively lacking.

3.3. Integration and upgrading: expansion and upgrading of the cooperative network (2012-2018)

In 2012, the 18th CPC National Congress put forward the implementation of innovation-driven development strategy, gave innovation a very high strategic position, emphasized that "scientific and technological innovation is the strategic support for improving social productivity and comprehensive national strength", and emphasized the need to pay more attention to the role of collaborative innovation. 2016, the CPC Central Committee and the State Council formally released the "Outline of the National Innovation-Driven Development Strategy", which put forward optimizing regional innovation layout and creating regional economic growth poles. Development Strategy Outline, proposing to optimize the layout of regional innovation and create regional economic growth poles. At this stage, the inter-governmental cooperation network in China's regional innovation has been continuously upgraded and integrated, moving towards a more balanced and broader multi-level cooperation situation.

At this stage, the network of inter-governmental cooperation in regional innovation is not only expanding domestically to a wider scope, but also opening the way to international integration. In February 2013, the leaders of the capital cities of four provinces, namely Hubei, Hunan, Jiangxi and Anhui, met in Wuhan and reached the Wuhan Consensus, which formed the strategic goal of building the "fourth pole" of China's economic growth by relying on the city clusters in the middle reaches of the Yangtze River and strengthening cooperation and innovation under this strategic goal to strengthen the driving force of innovation. Under the strategic goal of "the fourth pole" of China's economic growth and strengthening cooperation and innovation under this strategic goal, this consensus has opened up an inter-governmental cooperation network in the field of regional innovation among the city clusters in the middle reaches of the Yangtze River. In addition, under the national deployment of promoting major strategic regional innovation, several synergistic strategic innovation regions such as Beijing-Tianjin-Hebei, Yangtze River Economic Belt, and "One Belt, One Road" have become the new force in regional innovation cooperation.

With the policy deployment and strategic planning of the central government, the innovation cooperation among local governments has realized energizing and empowering, and the strategic layout of inter-governmental cooperation in regional innovation at this stage has become clearer, more balanced and broader in terms of geographical distribution, and has continued to dissolve the administrative barriers, with a closer cooperation relationship among governments and the formation of a multi-level regional innovation plateau.

3.4. Refreshing the paradigm: the way forward for a new cooperative mechanism (2018-present)

In 2018, the Opinions of the Central Committee of the Communist Party of China and the State Council on the Establishment of a More Effective New Mechanism for Coordinated Regional Development clearly put forward the strengthening of inter-provincial junction area cooperation, and the exploration of the establishment of a new mechanism for cooperation with unified planning, unified management, cooperation and joint construction, and benefit sharing. In this stage, strategic regional planning has been further implemented and improved, and inter-provincial cooperation in regional innovation has become a more important support for regional coordinated development, and the diversified and digitalized features embodied in cooperation and innovation have injected new power into the mode of cooperation and innovation.

In February 2019, the Outline of the Plan for the Development of the Guangdong-Hong Kong-Macao Greater Bay Area proposed to promote the construction of the "Guangzhou-Shenzhen-Hong Kong-Macao" Science and Technology Innovation Corridor, and to jointly build a Guangdong-Hong Kong-Macao Greater Bay Area Big Data Center and an internationalized innovation platform. In December 2019, the Outline of the Plan for the Integrated Development of the Yangtze River Delta Region placed science and technology innovation at an important strategic level, requiring the promotion of the deep integration of science and technology innovation and industrial development, and the creation of a regional innovation community. In October 2020, the Outline of the Plan for the Construction of the Chengdu-Chongqing Regional Twin-City Economic Circle passed the review, putting forward the goal of building a collaborative innovation system, fostering the two modernized metropolitan areas around the main city of Chongqing and Chengdu, and driving the accelerated development of the surrounding municipalities and districts around the central city. In 2021, on October 8, the Central Committee of the Communist Party of China and the State Council issued the Outline of the Plan for Ecological Protection and High-Quality Development of the Yellow River Basin, which proposes to strengthen innovation and cooperation in the areas of ecological and environmental governance, agriculture and animal husbandry, and industrial transformation in the region. In addition, to coordinate inter-governmental cooperation in regional innovation, the establishment of some organizational structures has created organizational conditions for the construction of new mechanisms for cooperation, such as the "Yangtze River Delta Regional Cooperation Office" established in 2018, which is responsible for the strategic planning of innovation cooperation in the Yangtze River Delta region, as well as the construction of institutional mechanisms, and the coordination of various tasks.

At this stage, inter-governmental cooperation in regional innovation has opened a chapter in the construction of new mechanisms and modes. In terms of the content of cooperation, it not only involves promoting the development of economic and scientific and technological innovation and playing a leading role in regional innovation, but also cooperation to promote ecological protection, such as the strategy for the ecological protection and high-quality development of the Yellow River Basin; in terms of the mechanism of cooperation, the emergence of a coordinating organization is conducive to the formation of an orderly pattern of inter-federal cooperation in terms of management; and in terms of the mode of cooperation, the development plan for the Guangdong-Hong Kong-Macao Greater Bay Area puts more emphasis on the role of new infrastructures such as digitalization. In terms of the mode of cooperation, the Guangdong-Hong Kong-Macao Greater Bay Area Development Plan places more emphasis on the role of new types of infrastructure, such as digitization, highlighting the significant rise of digitization and intelligence in inter-governmental cooperation.

4. Logic of Change: Dynamics, Logic and Direction of Local Intergovernmental Cooperation in Regional Innovation

Based on the analytical paradigm of historical institutionalism and the analytical framework of "structure-history-action", we analyze the logic of change of inter-governmental cooperation in China's regional innovation from the three aspects of structural conditions, historical changes and actors' actions.

4.1. Fundamental Drivers: Structural Conditions

Under the paradigm of historical institutionalism, the dependence and embeddedness of the system itself makes the dynamics of institutional change largely derive from the structure of the system in which it is embedded, and the structural factors stipulate the power structure of the actors in the system change, which is the key factor determining the choice of the system.

Institutional change at all levels is in a linked system of innovation, so the macro-institutional arrangement is a decisive factor affecting inter-governmental cooperation in regional innovation, and the arrangement of the macro-institutional in China's economic, political, scientific and technological fields constitutes the structural dynamics of the development of the inter-governmental cooperative relationship and change in the regional innovation.

1)Transformation of the economic development model

Since the reform and opening up, the deepening of China's economic system reform has had a profound impact on inter-governmental cooperation in regional innovation. At the beginning of the economic system reform, the government played a leading role in economic development, and it promoted the rapid development of the national economy through unified planning and administrative means. As the role of the market mechanism in resource allocation has become more prominent, the government's main responsibilities have shifted from administrative management in the past to market regulation and service functions, with the government playing more of a guiding and coordinating role to support local innovation and development. At the same time, the improvement of systems and laws in the process of economic system reform also plays an important role in the innovation and cooperation of local governments, especially in the financial system, the central and local financial relations have gone through a change from the highly centralized unity of collection and expenditure to the "separate food", the lump-sum system, and then to the tax system of the financial system, the division of financial authority and expenditure responsibility has gradually become clear, especially in 1994, when the central and local governments were given the right to collect and spend money, and the central and local governments were given the right to collect and spend money. The division of fiscal rights and expenditure responsibilities has gradually become clearer.

2)Advancement of political system reform

Since the reform and opening up, China's government has continuously promoted changes and upgrades in the governance system, which has played an important role in inter-governmental cooperation in regional innovation. In the adjustment of central-local relations, the strengthening of local governments' autonomy allows local governments to formulate and implement policies more independently to promote innovation and development in the region, providing a more relaxed policy environment and greater policy space for inter-governmental cooperation in regional innovation, which is conducive to the exchanges and cooperation among local governments. The improvement of modern governance capacity of local governments by political system reform is also one of the factors that have an important impact on inter-governmental cooperation in regional innovation, which realizes the management and regulation of social affairs and improves the efficiency and quality of government services by means of digitization, informatization and networking. This modern governance capacity enhancement provides more efficient and precise means for coordination and cooperation among local governments, which is conducive to the development of inter-governmental cooperation in regional innovation.

3)Updating the concept of science, technology and innovation

In the process of China's scientific and technological development, the concept of scientific and technological innovation has been constantly updated, and has played an important role in promoting the development of inter-governmental cooperation in regional innovation. 1978, at the National Science Conference, Deng Xiaoping put forward the important assertion that "the key to modernization is the modernization of science and technology", which has become the concept of the national scientific and technological innovation work. Consensus. The emergence of inter-governmental cooperation in regional innovation also conforms to this national trend. The 18th CPC National Congress proposed the implementation of the innovation-driven development strategy, giving science and technology innovation an extremely high strategic

position. Under the guidance of the concept of innovation-driven development, and with the release of important documents such as the Guiding Opinions on Further Strengthening Regional Cooperation and the Outline of the National Strategy for Innovation-Driven Development, the innovation cooperation of the local governments has been deepened, and the cooperation mechanism and tools have been further developed and perfected.

4.2. Logical Foundations: Historical Change

Path dependence and critical nodes are two important elements of historical institutionalism in explaining the historical variation of institutions, and using these two perspectives, the historical causality of the variation of inter-governmental cooperation in regional innovation can be explored, which constitutes the logical basis of the meso-level.

1) Regional Innovation Intergovernmental Cooperation in China Path Dependency of Change

Although some institutions are incompatible with general social norms such as freedom or justice, the strong inertia of sticky institutional settings can perpetuate them. Once institutions are set, interest groups and preferences evolve based on them and often become difficult to change, in other words, historical factors limit the range of options. The change process of inter-governmental cooperation in regional innovation reflects the path-dependent character, which is mainly reflected in our political culture and administrative system tradition.

The survival and inheritance of two features in the political and cultural genes of our country still have a greater impact on modern local government cooperation - the institutional inertia of centralization and the setting up of administrative divisions. First, before the reform and opening up, China's highly centralized political system and planned economy system make local governments have limited autonomy, although after the reform and opening up, local governments have become independent administrative subjects of interest, the inertia of the centralized system still makes local governments have less freedom in cooperation strategies; second, the setting of administrative divisions makes the interests of the regions separated, and the idea of local protectionism creates administrative barriers for cooperation between local governments. The idea of local protectionism creates administrative barriers to cooperation between local governments.

In China's administrative system, the assessment standards of local governments and their officials, which take GDP as the main index, have hindered innovation cooperation. On the one hand, local government decision-makers act as "economic participants" and "political participants" in cooperation. On the one hand, local government decision makers act as "economic participant" and "political participant" in the cooperation, i.e., in order to maximize the economic benefits for their own interests or the interests of their own region and their own political development and promotion space, while neglecting the overall interests of the cooperative body. Therefore, although the state has implemented a series of initiatives such as the governance of urban agglomerations and the introduction of market regulation mechanisms, the dissolution of administrative barriers between local governments has gone through a complex and arduous process, and so far, the roots of local government relations under China's administrative system have not yet been truly deconstructed, and it is more difficult to generate endogenous change dynamics, in order to truly realize the effective change of inter-governmental cooperation in regional innovation, to play a key role in the interactions with the structure and actors, and break the path-dependence.

2) Key nodes of inter-governmental cooperation in regional innovation change

In historical institutionalism, fundamental changes can occur at key nodes, which are often understood as windows of opportunity to temporarily reduce the "usual constraints on action". There are four nodes that have played an important role in the process of changing inter-governmental cooperation in regional innovation. The first node is the establishment of the "Sixteen Character Guidelines" in 1979, when inter-regional economic and technological

cooperation was highly concerned at the national level and began to be incorporated into the national strategic system planning, such as in the Circular of the State Council of the Central Committee of the Communist Party of China in 1981, when the State Council forwarded the "Reporting Outline on China's Scientific and Technological Development Guidelines" from the State Science and Technology Commission (SSTC), which expressed that "between the grassroots units, strengthen collaboration, close contact, and gradually break the boundaries of regions and departments." After this the central and local specific policies on strengthening inter-regional economic collaboration were introduced one after another, and the cooperation of local governments in seeking common development gradually became an important part of the reform in the field of science and technology innovation in China. The second key point is the 2003 National Work Exchange Conference on Regional Innovation System Construction, which officially elevated the keyword of "regional innovation" to the height of national strategy, and regional innovation became an important theme of inter-regional governmental cooperation. Mechanisms for inter-governmental cooperation in regional innovation moved to a new level. The third key point is the introduction of the innovation-driven development strategy in 2013, which gives "innovation" a higher strategic position and becomes a milestone in the evolution of regional Intergovernmental Cooperation in Innovation. The fourth key point is the proposal of the new mechanism of regional coordinated development, the "new mechanism of cooperation" between provinces and regions has become a new guide for the inter-federal cooperation in the field of regional innovation, leading the inter-federal cooperation in innovation to promote in all directions, deep and wide fields. These four key nodes have promoted three important transformations in regional innovation inter-governmental cooperation, effectively breaking through the constraints of the old system on the establishment and development of the new system under the path dependence, and providing effective reference for the subsequent system development and change.

4.3. Basic directions: Main actions

As the main body of local inter-governmental cooperation in regional innovation, local governments will influence the inter-governmental cooperation relationship under the guidance of their own interests and perceptions, and at the same time, as local government officials are the constituent elements of local governments and the concrete implementers of public power, their perceptions and interests also guide the basic direction of the inter-governmental cooperation relationship change at the micro level.

1) Perceptions of actors

Institutional change is not entirely passive, but the perceptions of the actors also play an important role. The practical process of regional collaboration aims at "building a specific regional community through regional awareness and regional identity, common interests and responsibilities, mutual trust and high cognitive interdependence". Therefore, the subject's perception is an important factor in regional collaboration.

In Intergovernmental Partnerships for Regional Innovation evolution and development, the concept of new regionalism has been an important catalyst for the renewal of actors' concepts, and its dissemination in China has become an important driving factor for local governments to adopt writing strategies.

2) Measuring the interests of actors

Regional innovation emphasizes that local governments safeguard their own interests and the overall interests of the region, and advocates that regional innovation actors share benefits and responsibilities in cooperative innovation activities, therefore, as the main actors in the regional innovation inter-governmental cooperation, the interest orientation and interest measurement of local governments and their officials determine their attitudes and actions

towards inter-governmental cooperation, and have a decisive role in the direction of inter-governmental cooperation relations.

The decentralization reform in the economic field and the institutional mechanism focusing on GDP growth have given rise to a system in which local governments compete for economic resources, and it is difficult for local governments to avoid protective or even predatory competitive strategies. Therefore, the organization of economic development and scientific and technological innovation is gradually carried out in the basic territorial unit of provinces, cities, which some scholars call "regional economy" .

5. Summary

In summary, taking the four major events in the historical development process of local inter-governmental cooperation in regional innovation as the key nodes, local inter-governmental cooperation in regional innovation in China can be divided into four stages. In the evolution process of local inter-governmental cooperation in regional innovation, China's political culture and administrative system traditions have made the evolution process reflect the characteristics of path dependence, and the arrangement of the macro system constitutes the structural driving force for the development and change of the inter-governmental cooperation relationship in regional innovation in . The macro system arrangement constitutes the structural driving force for the development of and changes in regional innovation, and as an actor, the conceptual cognition and interest orientation of local governments play a decisive role in the direction of the development of inter-governmental cooperation in regional innovation. The logic of its evolution is shown in Figure 1.

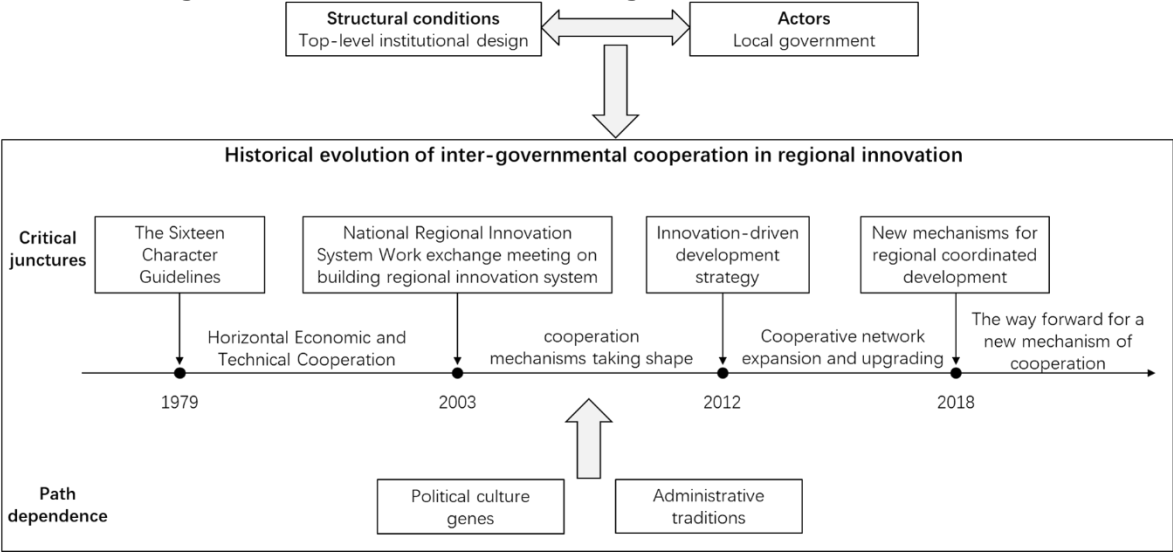


Figure 1 Logic of Change and Dynamic Mechanisms of Local Intergovernmental Cooperation in Regional Innovation

References

[1] Liu Shilin: "Conditions for the Establishment of Regional Innovation System and Key Factors for its Construction", China Science and Technology Forum, No. 01, 2003, pp. 18-22.

[2] Gu Xin: "Connotation and Characteristics of Regional Innovation System", Journal of Tongji University (Social Science Edition), No. 06, 2001, pp. 32-37.

[3] Zeng Xiaobin and Bao Yequn: "Trying to Discuss Regional Innovation Main Body and Its Capability System", International Economic and Trade Exploration, No. 07, 2008, pp. 12-16.

[4] Jia Rong and Liu Shilin: "Research on the Cross-Administrative Regional Innovation System in the Yangtze River Delta", Science and Science and Technology Management, No. 08, 2006, pp. 44-50.

- [5] Liu Jinying: "Exploring the Role of Local Government in Regional Innovation System", Science and Technology Management Research, No. 08, 2009, pp. 40-42+46.
- [6] Lu Wenchao: "The Willingness of Local Governments to Effectively Cooperate under Regional Synergistic Development--Taking Beijing-Tianjin-Hebei Synergistic Development as an Example", Gansu Social Science, Vol. 02, 2018, pp. 201-208.
- [7] Jia Rong and Liu Shilin: "Research on the Cross-Administrative Regional Innovation System in the Yangtze River Delta", Science and Science and Technology Management, No. 08, 2006, pp. 44-50.
- [8] Wang Lu Hao: "Multiple Logic of Intergovernmental Cooperation in Regional Innovation - Discourse Analysis Based on Eight Cities in Chengdu Economic Zone", Journal of Shanghai Jiao Tong University (Philosophy and Social Science Edition), No. 04, 2016, pp. 72-83.
- [9] Liu, X., Deng, S. Jia, et al: "Intergovernmental Cooperation Mechanism of Regional Innovation Community and Its Construction and Development Countermeasures: Taking Chengdu-Chongqing Region Twin Cities Economic Circle as an Example", Science and Technology Management Research, Vol. 24, No. 2, 2022, pp. 91-100.
- [10] Huang Xingguo, Peng Weihui, et al: "Research on the Evolution and Influence Mechanism of Technological Innovation Network of Twin-city Economic Circle in Chengdu-Chongqing Region", Economic System Reform, No. 04, 2020, pp. 50-57.
- [11] Su Yi and Cao Zheng: "Research on the Evolution of Beijing-Tianjin-Hebei Regional Collaborative Innovation Network and Influencing Factors", Research Management, Vol. 03, 2023, pp. 43-55.
- [12] Sara Bannerman, Blayne Haggart, "Historical Institutionalism in Communication Studies," Communication Theory, Vol. 25, No. 1, 2014, pp. 1-22.
- [13] Peter A Hall, "Historical institutionalism in rationalist and sociological perspective," Explaining institutional change: ambiguity, agency, and power, 2010, pp. 204-223.
- [14] Paul Starr, The creation of the media: Political origins of modern communications, Basic Books New York, 2004, pp. 24.
- [15] Johan P Olsen, "Change and continuity: an institutional approach to institutions of democratic government," European political science review, Vol. 1, No. 1, 2009, pp. 3-32.
- [16] Wang Zhirui and Chen Ji: "The Historical Lineage and Occurrence Mechanism of China's Environmental Management System Reform - An Examination Based on the Perspective of Historical Institutionalism", Jinan Journal (Philosophy and Social Science Edition) 2022, No. 09, pp. 121-132.
- [17] Paul Pierson, Theda Skocpol, "Historical institutionalism in contemporary political science," Political science: The state of the discipline, Vol. 3, No. 1, 2002, pp. 1-32. , No. 1, 2002, pp. 1-32.
- [18] Lin Shangli: "Reconstructing Intergovernmental Relations and National Governance", Exploration and Controversy, No. 01, 2011, pp. 34-37.
- [19] Li Jinlong and Wang Min, "Coordination of Intergovernmental Relations within Urban Agglomerations: Theoretical Interpretation, Practical Dilemmas, and Path Selection", Tianjin Social Science, No. 01, 2010, pp. 83-87.
- [20] Zheng Xianwu, "The Theory of New Regionalism: Origins, Development and Trends towards Synthesis", European Studies, No. 01, 2006, pp. 39-58+157.
- [21] César E Ortiz-Guerrero, "The new regionalism: policy implications for rural regions," Cuadernos de desarrollo rural, Vol. 10, No. SPE70, 2013, pp. 47- 67.
- [22] Wang Ming'an and Shen Qixin: "Research on Intergovernmental Political Synergy Based on Regional Economic Integration", Theory Monthly, No. 12, 2013, pp. 133-136.