Perceptions of Multi-Lateral Cross Boundary Organization of Local Governments in China: A Q-Analysis

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Most public issues fall beyond the boundaries of any particular local government to solve.

Conversely, many of those problems are equally likely to be too localized for national or

state/provincial governments to solve. Rather, they scale to a level of governance somewhere

between those two levels - often referred to as "the metropolitan region." Such scaling is a

ubiquitous and global phenomenon, and governments in virtually every developed country have

tried a variety of approaches to balance the desire for centralized coordination and decentralized

application. For example, local governments in the United States have seen the emergence of

regionally scaled voluntary cross-boundary organizations of local governments to address

common public policy problems (Miller and Nelles, 2018; 2020). The issue of regional scaling in

China has only recently attracted the attention of Chinese scholars and practitioners. As such, there

is scant scholarly research even though China is experiencing steady growth in such organizational

designs. The purpose of this thesis is to explore Chinese scholars' and practitioners' subjective

understanding of the nature, purpose, and value of these new arrangements that scale to the level

of "region."

This research used Q-methodology to interview 54 Chinese government officials and

scholars who have experience with working in cross-boundary organizations. The researcher used

principal components analysis coupled with varimax rotation then generated four factors. These

four factors identified illustrate different views toward these cross-boundary organizations in terms

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of how local government multi-lateral cross-boundary collaboration should be organized. This research has provided a new angle to view regional intergovernmental cooperation in China.

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1.0 Introduction

It is a global phenomenon that the public issues are no longer within local governments' boundaries and scaled to the regional level, such as environmental regulation, food and drug safety, and natural resources management. Since these problems are beyond the capabilities of local authorities, these local governments have tried a variety of approaches to solve these issues. Developing multi-lateral cross-boundary organizations to promote cooperation became a widely used approach in the United States.

After 1978, the Chinese Economic Reform has promoted economic development but also led to the inter-regional competition among Chinese local. This situation makes it more difficult for local governments to solve regional problems. However, a series of cross-boundary organizations have been developed by both central and local governments.

To better understand these organizations, the practitioners' perspective towards them is valuable for researchers to explore. By using Q methodology, the researcher interviewed 54 Chinese government officials and scholars who have experience with working in cross-boundary organizations. Then through principal components analysis coupled with varimax rotation to generate four factors, which identified illustrate different views toward these cross-boundary organizations in terms of how local government multi-lateral cross-boundary collaboration.

2.0 Literature Review

2.1 The Institutional Collective Action (ICA)

The appropriate division of power and responsibility between national, provincial, and local governments in addressing regional problems is challenging. Higher demands are placed on local government cooperation in public affairs. However, due to limited information asymmetry and rationality, local governments may adopt strategies to pursue short-term interests, leading to dilemmas of achieving collective action. Feiock (2004; 2009 and 2013) has conducted in-depth research on the dilemmas and cooperation mechanisms of various types of institutional collective action, gradually contributing to theories of institutional collective action. The core issue of the theory is to identify the types and conditions of collective action and how to choose cooperative mechanisms. Research on the theory of institutional collective action may help us better understand and promote cooperation between local governments in dealing with cross boundary Problems.

The emergence of ICA theory has realistic and theoretical background. On the one hand, it comes from the interpretation and reflection of the real situation of local governance and local government cooperation in the United States, and on the other hand, it comes from the response to the dispute between two different arguments (one is the way to advocate market competition through decentralization, and the other is to advocate centralized and unified management). ICA theory places multiple research theories under the same research topic, so that we can better understand how to solve ICA dilemmas. These theories include rational choice theory, collective

action theory, transaction theories of organizations, theory of local public economies, theory of social embeddedness, theory of political markets and policy instruments theory.

ICA dilemma and the solution are the fundamental aspect in this theory. ICA has three aspects: horizontal, vertical, and functional. The horizontal dilemma refers to situations that arises between local governments at the same level. it can occur in two ways: when the local government jurisdiction is too small or too large to effectively produce the public services it is expected to provide; or public service production creates externalities across borders. The vertical situation refers to the ICA dilemma that arises between different levels of local government. It occurs when more than one local government at the same level pursues similar policy objectives. The functional ICA situation reflects the fragmentation problems of specific functional and policy areas. Since public services, policies, and resources are interrelated, externalities may occur between functional areas, policy areas, and government components.

There are numerous cooperation mechanisms to solve these situations, and in general, they can be divided according to the degree of local autonomy, the size of the institutional space and the division of cooperation mechanism between participants. In order to carry out systematic research, ICA theory combines the above two dimensions to divide institutional cooperation mechanisms. These two dimensions can show the transaction cost of participating in a cooperation mechanism and can also reflect the ability of the mechanism to effectively solve the cooperative dilemma. Specifically, there are 12 specific categories (see Figure1), but the ICA theory only considers 9 voluntary cooperation mechanisms (Figure1, middle 3 columns in dark green)

Encompassing Complex/ Collective	Multiplex Self-organizing Systems	Councils of Governments/ MPOs *	Regional Authorities 9	Externally Impose Authority/ Annexation
Intermediate/ Multilateral	Working Groups 4	Partnerships/ Multilateral ILAs	Multi-Purpose Districts 6	Imposed or Managed Network
Narrow Single Issue/ Bilateral	Informal Networks	Service Contracts	Single Purpose Special Districts	Imposed District / Mandated Agreements
	Embeddedness	Contracts	Delegated Authority	Imposed Authority

Figure 1 Mechanisms for Integrating Institutional Collective Action Problems

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ICA with its voluntary nature provides a framework of regional governance and local cooperation. Centralized institution and traditional hierarchy are not the only way to solve regional issue. Developing self-governing institutions based on the local situations of a region might be more effective than the intervention by control government (Ostrom, 1990). This type of approach more emphasizes voluntary cooperation than the traditional centralized mechanisms (Stephens and Wikstrom 2000; Katz 2000; Foster 2001). The voluntary nature of institutional collective action provides the autonomy of local governments to express local voice and protect their interests. However, voluntary cooperation is based on several conditions such as trust, reputation and familiarity (Scholz and Berardo 2007; Feiock 2009). When local governments face high risk cooperation, seeking an external authority or a strong-tie network is likely happened (Putnam 2000; Lubell et al. 2002). In voluntary collective action among local governments, trust, reputation, and mutuality are strongly related to the efficiency of cooperation (Scholz and Berardo 2007).

As the previous paragraph mentioned, transaction cost is another major factor in institutional collective action and regional governance as well. It mainly includes the standard information cost, bargaining cost, enforcement cost as well as the loss of local autonomy (Feiock, 2013). The transaction cost generated by the cooperation mechanism, on the one hand, when the institutional space of the cooperation mechanism is the smallest and its execution is based on the embedded relationship, the transaction cost is the smallest; when the cooperation mechanism involves many policy areas and actors, and depends on the authorized government The transaction cost is the largest. On the other hand, the larger institutional and authoritative cooperation mechanism, although it imposes higher transaction costs on participants, is also very effective in solving complex ICA problems.

Regional Intergovernmental Organization, which will be explained in the following section, is a type of Institutional Collective Action with the characteristics of "Encompassing Complex/Collective" and "Contracts" and has more ability of solving complex regional problems.

2.2 Regional Intergovernmental Organizations

American local governments have created cross-boundary organizations for the region to manage members' collective interests. This kind of regional organizations are defined by Miller and Nelles as Regional Intergovernmental Organizations (RIGOs).

Before discussing regionalism, the exploration of how RIGOs growing in the American history is helpful for understanding. During 1870 to 1970, the changing to networking homes also impact the local governments such as the roads, waterlines, cars and gas lines (Gordon, 2016). Urbanizations as a result of this change causes the growing number of cross-boundary local

government institutions. The density of multi-jurisdictional regions also makes the increasing number of problems.

Progressive Era is an important period of reforming local governments to enhance the responsibility and roles of local governments includes the comprehensive power with local territories, democratic election of citizen-legislators, professional management and planning. This increased autonomy of local governments leads to the result of consolidating local interests which make the cross-boundary issue more difficult to solve (Miller and Nelles, 2019). When these professionals put great efforts to protect and advance their local interests, the public problems beyond the local boundaries also force them to find solutions.

As the previous parts mentioned, local governments within a region often share same problems which need the cooperation cross boundaries. The Advisory Commission on Intergovernmental Relations (ACIR) Report (1962), Alternative Approaches to Governmental Reorganization in Metropolitan Areas, has provided one of the earliest and important exploration of metropolitan or regional governance. The approaches include transfer of power to states, extraterritorial powers, urban country, annexation, city-county consolidation, limited-purpose special district, multipurpose metropolitan district, federation, intergovernmental agreements, and voluntary metropolitan council. Within these approaches, voluntary metropolitan council as the most complex and comprehensive way, is gathering the local governments to discussing the regional needs as a whole. In recent years, the organizations like voluntary metropolitan council are very common in both metro and non-metro areas in US since the advantages of its flexibility. However, the critical arguments include effectiveness, legitimacy, accountability and authority are also arose (Miller and Nelles, 2018). The concept of RIGO is came from rethinking and sharpening the idea of voluntary metropolitan council.

The function of RIGOs is coordinating policies cross local jurisdictional boundaries instead of conducting by local governments themselves. However, there are variety of conceptions to describe intergovernmental cooperation phenomenon such as Intergovernmental Organization (IGO) which refers to the cooperation between two or more local governments. To make a clearer distinction between RIGOs with other types of conceptions, Miller and Nelles have developed five properties to identify RIGOs: membership, agenda, legitimacy, ambition and scale. Although RIGOs are not governments themselves, they bring together local governments to coordinate policies across jurisdictional boundaries; have a measure of political authority delegated to them from state and federal governments and through the voluntary participation of their member governments. RIGOs are no longer mere adjuncts to the traditional political bodies(local governments) but are now critical instruments within and of a region: Some examples of the policy areas that RIGOs are actively engaged in and the public services they deliver include 1) clean water supply; 2) solid waste and litter control; 3) urban and rural transportation and transit; 4) preschool education; and 5) economic and workforce development.

The Five properties of are concluded in Miller and Nelles's (2019) book provide the fundamental framework of this research: membership, agenda, legitimacy, ambition and scale:

Membership refers to that the RIGOs originally established by general-purpose local governments which includes counties and municipalities such as local governments. It is crucial and fundamental for any political and cross-boundary organization. Generally, membership of RIGOs are mainly representatives from local governments, sometimes from other governmental entities (federal / national agencies and state / provincial departments) and civic sector organizations. The strategy of membership especially how to manage the power and rights for each member is complex among big and small cities or lower-level and higher-level governments.

Although the membership might be complex, there is still a condition or criteria of RIGO: at least 51% of members are governments representatives.

Agenda defines that a broad agenda of public policy area should be covered in RIGOs which makes them different from other regional organizations such as single-purpose special districts. As the previous paragraph mentioned, the regional problems are various and covering a wide range of policy areas.

Legitimacy refers to the high legitimacy as view from federal agency and state governments which is a crucial determinant of the role and effect of organizations in policy-making process at regional level.

Ambition means RIGOs need to have a clear agenda to become a voice of local governments in a particular region in broader federal and state communities. Miller and Nelles have developed a set of regional roles, which are from serving the local interests, creating regional communication platforms to promoting regional cooperation and seeking decision making of regions.

Scale defines that in geography aspect, RIGOs should cover larges where a set of local governments with representational rights. Scale as the fifth criteria of RIGOs is important when an organization fulfill all of the other four factors. At the same time identifying one organization within a region is efficiency for both practical and study aspects.

These five properties are developed and illustrated in *Discovering American Regionalism:*An Introduction to Regional Intergovernmental Organizations (Miller and Nelles, 2019) providing the foundation of this research especially the statements adopted in the following Q-study design.

2.3 Chinese Literature

In recent years, Chinese scholars have begun to pay attention to the governance of the metropolitan area and have conducted research on the theory and practice of intergovernmental relations and regional cooperative governance.

The studies on governmental relations have two aspects: horizonal relations and vertical relations. Horizontal relation refers to the relationship between local governments, and the vertical relation refers to the relation between local, provincial and central governments. Horizontally, since scholars have stressed the negative impact of the gap of social and economic development between local areas are seriously hindering the social development, how to narrow this gap and promote regional development has become a major topic in contemporary regional governance research (Ling, 1998; Q. Xie, 2000). There are also some scholars argue that the need for cooperation is beyond the competition among local governments (Xie, 2000). Vertically, the centralized style of government still plays the major role. Local government have to follow the order from higher level government. However, regional cooperation is also the need of central government (Ling, 1998). In the meanwhile, central government also realized that including the local voices could make the cooperation more efficient and effective (Zhang, 2010b).

After clarifying that regional cooperation serves both the needs of local and central governments, scholars pay more attention on exploring the regional cooperation approaches. First of all, focusing on regional governance not the traditional government, which means involving the staheholder's opinion in the decision-making process is necessary (Chen & Yang, 2012). Then, along with the rise of regional public issues, the administrative model of the administrative district has increasingly exposed its inherent limitations and deficiencies. Therefore, some scholars in China have analyzed the existing problems of the administrative system of China's metropolitan

areas, and believe that the establishment of an intergovernmental cooperation organization is more suitable for the current metropolitan areas (J. Liu, 2001). Some scholars put forward the concept of regional "composite administration", and considered it to be a new way to solve the conflicts within multi-governmental cooperation in China, emphasizing the cooperation of multi-level governments, including the civic sectors' voices, and nesting a multi-center, self-governing cooperation mechanism (J. Wang, Bao, Liu, & Wang, 2004). After experiencing the changes of the post-new public management era, the flourishing development of metropolitan area represented by the Pearl River Delta, the Yangtze River Delta, and the Beijing-Tianjin-Hebei region urgently requires new regional theories. Therefore, some scholars have proposed to build a network governance platform to meet the needs (Ye, 2012). With the deepening of research, scholars believe that the high-level government should guide regional cooperation and the development planning process, and the local governments should have some autonomy to manage the regional issue (Y. Liu & Liu, 2010; Yang, 2011a, 2011b).

2.4 Q-Methodology

Given the exploratory nature of this research, researcher did not employ a form of Q-methodology that tests hypotheses derived from theory. Accordingly, this research implies Q as a source of inductive reasoning: This form of Q-methodology seeks to make discoveries rather than predictions. It is thus the most suitable method for the purpose of this research, which is generating the perceptions from governmental officials toward Chinese RIGOs.

Q Methodology is a philosophically grounded technique of qualitative and mixed-methods research. According to Stephenson (1953), who bases his work on the human sciences and qualitative explanation, individuals best express their qualitative understanding of the world by sorting statements on a numerical scale that measures how strong they agree or disagree. This rating is called a Q-sort, which reflects the views of respondents who provide subjectively grounded attitudes towards a topic (Brown and Ungs, 1970). Subjectivity is the individual's own perception of a certain problem conveyed at a certain moment. It is closely related to the individual's personality, growth environment, educational background, social status, and other factors. The emergence of Q-methodology is designed to make up for the technical shortcomings of other methods of investigating an individual's' subjectivity. In the past 30 years, this method has been applied widely in research on various problems, for example, public participation (Doody, Kearney, et. al, 2009), public opinion (Stephenson, 1964), energy policy (Lee and Chuang, 2012), environmental policy (Barry and Proops, 1999) and decision making (Steelman and Maguire, 1999). Compared with the widespread implementation of Q-methodology in the United States, there is no Q-study in Chinese.

Q-methodology requires the respondent to evaluate statements related to other items. In other words, the evaluation of every subject will influence the others. A comprehensive view of an individual's attitude will be produced through this process (Brown and Ungs, 1970). The complete Q-sort involves correlated items. Q also enables us to distinguish different groups of individuals with similar attitudes on a topic through factor analysis(Q-factors) (Brown, 1980).

A set of operations that perform a Q method is called Q technique, which is not direct inquiry of respondent 's subject view but uses a number of statements related to the research content to compile Q classification data and requires the subject to press on these statements. The

results of the sorting in this methodology is the data of the survey for further statistical processing to understand the subject's view of the research content. To achieve the above operations, Q method implementation steps including four steps: collect Q classification data, Q-sorts design, determining the P-sample and implementing Q-sorting, and data processing and analysis.

2.4.1 Collect Q classification data

Collect Q classification data, that is, to determine the correct use of the Q method for the Q sample. The researcher first needs to identify the topic to be studied and understand the topic comprehensively. Generally, in the initial stage, as long as it is related to the research topic, it can be collected first which can be broad. The researcher needs to further screen and improve them to scientific and unambiguous statements of the number of statements that describe the subject of the study.

2.4.2 Q-sorts design

Generally, Q-sorts is determined by the nature of the subject. The number of levels to be divided into requires the researcher to judge. Generally, researchers choose odd levels, and it is divided into 7 levels (1-7 or -3+3), 9 (1-9 or -4+4), or Level 11 (Levels 1-11 or -5 to +5) commonly. Regardless of the level of division, from left to right should be the division of the attitude or recognition level of the respondent from "most agree" to "most disagree" or from "favorite" to "least favorite". Under each level Corresponding to a number of Q statements and the number of

arrangements is normal distributed or approximately normal distributed. The entire Q-sorts design has an inverted isosceles triangle shape.

2.4.3 Determining the P-sample and implementing Q-sorting

In the Q methodology, the group of subjects (respondent s) who perform Q-sorts is called a P-sample. Since the Q-methodology includes a particular group of individuals, the method considers that the representative viewpoint of a particular problem is limited, and the opinions reflected in the niche people are also present in a larger group.

In addition to Q sorting, a general questionnaire is usually developed to obtain personal information such as the age, gender, occupation, and education level of the respondent for data analysis and analysis.

2.4.4 Data processing and analysis

After the data is collected, the data needs to be processed and analyzed. It is generally considered that the following steps are required: input data to calculate correlation coefficient, factor analysis and factor rotation, calculation factor to determine the classification of respondent s, and analysis report of calculation factors.

In this research, the attitudes of governmental officials and scholars who are working in Chinese regional intergovernmental organizations on a set of statements will be researched.

3.0 Methodology

3.1 Generating the Q-Set

To generate Q sets, the first step collected a comprehensive list of items (statements) suggestive of a subjective opinion about RIGOs, which is a proxy for the "concourse". Items were drawn from Miller and Nelles (2019) work. And then selected 36 representative samples of items (the Q-set), of which 10 statements reflect Membership; 7 statements Multi-Agenda; 8 statements Legitimacy; 6 statements Ambition; and 5 statements Scale.

The statements of memberships include:

- 1) Our organization should be primarily constituted by general-purpose local governments.
- 2) The more there are civic sector organizations (e.g. nonprofits and business interests) represented within our organization, the more accountable it will be.
- 3) Our organization should give each member the same voting weight when making decisions.
- 4) The more there are civic sector organizations (e.g. nonprofits and business interests) represented within our organization, the more effective and efficient it will be.
- 5) Poorer jurisdictions should not have to pay at the same rate as richer jurisdictions.
- 6) Our organization would be more legitimate if there was active participation by federal / state (national / provincial) agencies on our board.
- 7) The more there are other government entities (e.g. federal / national agencies and state / provincial departments) represented within our organization, the more accountable it will be.
- 8) Each general-purpose local government member should provide financial support to our organization in relation to their relative population.

- 9) The more there are other government entities (e.g. federal / national agencies and state / provincial departments) represented within our organization, the more effective and efficient it will be.
- 10) Our organization would be more legitimate if there was active participation by civic sector organizations on our board.

This group of statements are focusing on the membership. The first statement provides a discussion of "Are the regional intergovernmental organizations developed initially by local government or other governmental entities such as higher-level government?" This is a crucial topic in China with a continuing discussion of the role of central government and local governments in developing a regional intergovernmental organization (Cui, 2015). Third statement is discussing the voting weight for each member. More generally, whether the members of the organization have the same influence in the decision-making process will be studied. The fifth and the eighth statements are about the question of how to distribute the spend of this kind of organization or the payment of public services. for example, use population or economic situation as the criteria to distribute the financial cost. The rest of the statements in this group are discussing the membership should or should not include civic sectors and other governmental entities.

The statements of agenda include:

- 1) Our organization should have an agenda that covers a broad number of policy areas.
- 2) There are certain policy areas (or policy niches) that only our organization can tackle.
- 3) The fewer the number of policy areas our organization engages in, the more effective it will be.
- 4) The more the number of policy areas our organization engages in, the more effective it will be.
- 5) Having a broad agenda is better than having a narrow agenda.

- 6) Our role should be more focused on planning than on delivering programs and services.
- 7) Our organization should actively address emerging policy issues confronting our region.

This group of statement are discussing the agenda issue. The first, third, fourth and fifth statements are talking about the preference of large agenda and narrow agenda the regional intergovernmental organizations should have. The second statement is discussing that are there A certain policy area only this kind of organization could solve. Their sixth statement pays attention um they role of organization between planner and deliver. The last statement is talking about that should the organization actively solve the emerging policy issue in their region.

The statements of legitimacy include:

- 1) Our organization should have a high degree of intergovernmental legitimacy as viewed by national government law enforcement agencies.
- 2) Our organization should have a high degree of intergovernmental legitimacy as viewed by national government transportation agencies.
- 3) Our organization should have a high degree of intergovernmental legitimacy as viewed by national government health, education, and welfare agencies.
- 4) Our organization should have a high degree of intergovernmental legitimacy as viewed by national government budgeting or personnel agencies.
- 5) Our organization should have a high degree of intergovernmental legitimacy as viewed by state/provincial government law enforcement agencies.
- 6) Our organization should have a high degree of intergovernmental legitimacy as viewed by state/provincial government transportation agencies.
- 7) Our organization should have a high degree of intergovernmental legitimacy as viewed by state/provincial government health, education, and welfare agencies.

8) Our organization should have a high degree of intergovernmental legitimacy as viewed by state/provincial government budgeting or personnel agencies.

This group of statement pay attention on legitimacy of the organization. to be more detailed, should the organization have a high degree of intergovernmental legitimacy as field by state provincial or national government, including budgeting and personnel agencies, education health and welfare agencies, law enforcement agencies, and transportation agencies?

The statements of ambition include:

- 1) Our organization should work to foster collaboration across local jurisdictional boundaries, including with our neighboring regions and across state/provincial lines when appropriate.
- Our organization to take a leadership role and to be a primary player in regional economic development issues.
- 3) Our organization should focus on fostering regional collaboration among private, nonprofit and philanthropic sector leaders with our local elected officials, including overcoming traditional turf battles and stove piping of programs and services.
- 4) Our organization has modified our culture over the years to continue serving local governments, yet also broadened our partnerships and relationships with private, nonprofit, philanthropic and academic institutions.
- 5) Our organization is focused on providing the leadership and vision necessary for the region to remain competitive.
- 6) Our organization's highest priority should be to serve the interests of its constituent local governments.

This group of statement pay attention on ambition of the organization. Whether the organization should actively promoting the cooperation (first and third statements); whether the

organization should take a leadership role (second and fifth statements); whether the organization should actively changing and modifying (fourth statement); and whether the local interests are the priority of the organization (sixth statement).

The statements of scale include:

- 1) Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region.
- 2) Our organization should be large enough to represent all the governments in our region.
- 3) If there were fewer members in our organization, we would be better able to perform our function.
- 4) Our organization should help governments in sub-regions of our region deal with issues unique to those sub-regions.
- 5) Our organization should review significant regional economic development plans that are proposed for our region.

This group of statement pay attention on scale of the organization. The first and second statements is discussing whether the organizations should promote the cooperation or represent all the local governments within their region; the third statement is about should the organization includes few members; the fourth is about whether the organization should help the member local governments solve their problems. As for the fifth, the discussing is focusing on whether should reviewing the regional development plan be included in the organization's responsibility.

3.2 Selecting the P (participant) Set

Selecting P sample includes two steps in this research: identifying Chinese RIGOs and contacting the governmental officials and scholars who have working experiences in RIGOs. The original plan is to collect 30 samples but after the interviews for 2019 summer, 54 P-Samples have been collected. The detailed explanation of P-samples will be in the data part of this proposal.

3.3 Collecting Q-sort Data

All the P-samples are collected through face to face interview. The interview will be structured in following order:

- (1) Introducing research background
- (2) Explaining the ethical issue (detail explanation will be in the ethical issue part)
- (3) Ask their opinion on the general background of Chinese RIGOs they familiar with.

 (including how Chinese local governments cooperation, what are the role of provincial and national government's role in regional intergovernmental cooperation, and how local governments solving regional problems)
- (4) Introducing how to finish the Q-Sort and doing the Q-sort.
- (5) Continuing on interviewing their opinion on Chinese RIGOs through generally following the five properties.
- (6) Asking their idea about what advantages and limitations of Chinses RIGOs.

3.4 Q Correlation and Factoring

For the analysis of the data, we used principal components analysis coupled with varimax rotation. Several factor with the percentage these factors could explained of the overall variance will be derived from the analysis. The four factors identified illustrate different views toward RIGOs in terms of how local government multi-lateral cross-boundary collaboration should be organized.

3.5 Factor Interpretation

The defining statements for the factors have been determined in previous step and they were analyzed contextually to describe what each factor means substantively.

4.0 Ethic Issues

As the previews paragraph illustrated, the respondents are governmental officials in Chinese central government and local governments. The respondents' identity and potential cultural confliction might also generate several ethical concerns.

Al though in China, both national laws and local laws and regulations are protecting individuals including governmental officials to do interviews especially freer for accepting the academic interviews. However, after contacting several governmental officials, the reality is that they still hold the concerns that might make them reject the interviews: how their opinion will be analysis and interpreted; whether the research and its institution is politically neutral and pure academic and whether the preservation and destruction of data is anonymous, confidential and secure. To relieve these concerns, several technical approaches have been implemented during whole research process.

To relive the concern about how their opinion might be analysis and interpreted, researcher has provided the explanation of the whole research methodology (Q Methodology), example of possible result and how to interpret the result. Although Q Methodology is relatively academic and hard to understand for people who are not familiar with it, make a concise, clear and understandable explanation for respondents is necessary.

To relive the concern about whether the research and its institution is politically neutral and pure academic, a brief introduction of researcher, research center and university have been provided when contact with the potential respondents. To enhance the reliability of researcher and respondents' sense of security, all the government organizations and officials interviewed are

recommended by the Chinese Institute of Administrative Management or introduced through researcher's personal Network.

To relive the concern about whether the preservation and destruction of data is anonymous, confidential and secure, before the interview begin, researcher has explained the detailed data preservation and destruction process. After the respondents agreed. The interview would only begin if the respondent is fully informed and consented.

As for the ethical concern about the Chinese culture aspect, an experienced scholar Dr. Jialing Zhang has reviewed the design of the research study and the questions to be addressed and made sure this research study does not conflict with the local cultural and social norms of China.

5.0 Data

5.1 Selecting Target Organizations: Identify whether the organization meets five criteria (membership, agenda, legitimacy, ambition and scale).

Although RIGO is a concept deeply embedded in the so-called American Regionalism, since there are many RIGO-like organizations around the world, this research want to examine whether the conceptual framework of RIGOs can be utilized in better understanding how local government multi-lateral cross-boundary collaboration develops in countries other than the US. Therefore, the first step of data collection is identifying RIGO-like organizations (or RIGO-equivalents) in China. In this step, the identification criteria are five properties in Miller and Nelles's book.

Chinese intergovernmental regional organizations and formal regional cooperation are not as extensive as the United States. Thus, the number of regional intergovernmental organizations is still relatively small. According to the regional cooperation records in the official website of Chinese National Development and Reform Commission (NDRC), a total of 24 regional cooperation in organizational form have been recorded since 11.30.2015 (the official recording data begins at 11.30.2015 in NDRC official website). This organizational-form cooperation does not all meet the five properties, and some of them have not yet have a formal organizational form.

In comparing the characteristics of the China Regional Cooperation Organization with the five prosperities, there are thirteen organizations that have the five properties:

- 1) Beijing-Tianjin-Hebei Coordinated Development Leading Group
- 2) Pan-Pearl River Delta Regional Cooperation Organization

- 3) Guangdong, Hong Kong and Macau Greater Bay Area Development Leading Group
- 4) Yangtze River Delta Economic Coordination Association
- Interprovincial Consultation and Cooperation Association of the Upper Reaches of the Yangtze
 River
- 6) Guangdong-Guangxi-Guizhou High-Speed Rail Economic Zone Cooperation Joint Conference
- 7) Meng-Jin-Yu Great Wall Golden Triangle Cooperation
- 8) Jin-Shan-Yu Yellow River Golden Triangle Regional Cooperation
- 9) North Bay City Cooperation Organization
- 10) Northeastern (12+2) Regional Cooperation
- 11) Shenzhen-Guan-Hui Economic Circle (3+2) Cooperation
- 12) Eastern Zhejiang Economic Cooperation
- 13) Central Plains Economic Cooperation

5.2 Select and Contact the Respondents

As the ethical issue section has mentioned, the respondents are reached through Chinese Public Administration Society and Researcher's Personal Network. Chinese Public Administration Society is the highest public administration research association belongs to the General Office of the Chinese State Council, which has close relationship and frequent connection with both national and local governments. Therefore, through these approaches, 54 P-Samples have been collected. Theses 54 samples includes 40 respondent s who are general governmental officials and 14

respondent s are scholars in regional governance field and also the policy advisors in regional intergovernmental organizations.

5.3 Data Retention

The data collected are primarily on the paper questionnaire and then recorded into electric format. Additionally, there is no name but only number of them. During the research, the data is confidential and then, after the research finished, all the questionnaires will be destroyed.

5.4 Data Analysis

For the analysis of the data, researcher used principal components analysis coupled with varimax rotation. There are several factors derived and these factors identified illustrate different views toward RIGOs in terms of how local government multi-lateral cross-boundary collaboration should be organized. The defining statements for the factors have been determined and they were analyzed contextually to describe what each factor means substantively.

6.0 Research Findings

The purpose of this research of Q-Method is to study the perceptions of RIGO-like organizational members towards multi-lateral cross boundary organization of local governments in China. The findings will be summarized mainly followed the following: Related Explanation of the Chinese government structure, Main approaches of Chinese local governments cooperation, advantages and disadvantages of RIGO-like organizations, as well as the Q-analysis results.

6.1 Related Explanation of the Chinese government structure

As the previous sections mentioned, RIGOs and the five properties are concepts generated in the US which might need to be adjusted and explained.

First of all, it is clear that the Chinese government structure has a relatively centralized character. In general, there are four levels of governments in China including: county-level, municipality-level, provincial-level and the Central Government. However, the reality is more complex. To be more specific, in provincial level, there are 22 provinces, 5 Autonomous Regions and 4 Provincial-Level Municipalities (including Beijing, Tianjin, Shanghai and Chongqing). Each provincial-level unit includes several municipalities (also called cities but not includes the 4 Provincial-Level Municipalities)

The key decision-making process is happened in the committee including the political leaders within a region. For example, the committee in a province including the Governor, Secretary of the Provincial Party Committee, Deputy Governor and Mayor of Major Cities.

Comparing to the US governmental structure, the influence of higher-level government executive orders and willingness on lower-level governments is relatively more powerful. To be more specific, if the provincial government developed a regional plan, the local government need to follow the plan and implement related policies.

The decentralization is also existing in China, although it is relatively weaker than the US. One of the most representative examples is the cooperation in the Yangtze River Delta which is strongly promoted by the local governments' spontaneous cooperative behaviors. Not only the cooperation between local governments but also the communication and cooperation between private sectors were already frequent before the official regional intergovernmental organization famulated.

6.2 The main forms of regional intergovernmental cooperation in China

6.2.1 Regional Intergovernmental Communication and Negotiation

Communication and Negotiation among regional local governments, including bilateral mutual visits and multilateral consultations among senior executive heads, as well as various seminars, exchange meetings, forums, etc., are one of the most commonly used methods in regional cooperation in China. In the early stages of local government cooperation, this form was also the most easily accepted by all stakeholders. Therefore, various communications, meetings,

and visits led by local government leaders in the region are the most frequent forms of collaboration. However, this sort of cooperation formats has not implemented so much actual programs but stay at a relatively superficial level.

6.2.2 Regional Intergovernmental Cooperation Agreement

As long as the needs of cooperation growth, only communication or negotiation is not enough for local governments. Agreements and contracts were adopted in regional governance with an extensive scope including culture, tourism, food, technology, and environment in the region. For example, in 2004, the Pan-Pearl River Delta local governments signed the Pan-Pearl River Delta Regional Intellectual Property Cooperation Agreement; in the same year, Jiangsu, Zhejiang, and Shanghai jointly signed the Agreement on Strengthening Cultural Cooperation in the Yangtze River Delta; In 2011, the five provinces, municipalities and municipalities in Beijing, Tianjin, Hebei, Shanxi, and Mongolia jointly signed the Framework Agreement on Strategic Cooperation in Cultural Development.

6.2.3 Regional counterpart support

The third type of regional cooperation is not a typical 'cooperation' but a cooperation with an aim of narrowing economic development gap and it has a strong 'socialism with Chinese characteristics' or 'Chinese-style socialism'. During the interview, one of the frequent answers explain this type of regional cooperation is: 'Chinese style cooperation'.

This 'Chinese style cooperation' is based on one major principle policy called 'Common prosperity'. Common prosperity means that all members of society have a happy, prosperous, and beautiful material and cultural life, which is the fundamental goal of China's development of a socialist market economy. Xiaoping Deng, Former President of China, advocated that some areas and some people get rich first, drive and help backward areas and people, and finally achieve common prosperity. This is the basic political background of Regional counterpart support. Narrowing the gap of economic status between developed and underdeveloped areas is a unique regional cooperation method in China. It can be divided into three types of policy models: border counterpart support, counterpart assistance in areas with severe disaster losses, and counterpart support for major projects. On the whole, counterpart support has played a positive role in promoting the development of ethnic and underdeveloped regions, enhancing the coordination of regional development, and has produced good political and economic benefits.

6.3 Correlation Matrix

Analyzing Q-Sorts in Ken-Q Analysis is used to produce a correlation matrix. The PQ-Method is the most widely used software for Q-Method, however, it only can be run in windows system. Ken-Q is a web-based tool for Q-Method which is building based on PQ-Method and Python with a more visualized display form and easier to understand. In this study, both PQ-methods and Ken-Q Analysis are used during the analysis and the same results generated. For a better visualization, the analysis outcome from Ken-Q Analysis is adopted.

6.4 Factor Analysis

The next step after the correlation metrics is factor analysis. The analysis software uses the correlation metrics generated in previews step, clusters the Q-sorts and then generates eight unrotated factors in the following table:

Table 1 Unrotated Factor Matrics

Particip	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8
ant								
1	0.4413	0.1856	0.5683	-0.2781	-0.0292	-0.0295	0.1572	-0.2956
2	0.7116	-0.0648	-0.1038	0.1064	-0.1115	0.347	0.0562	0.1606
3	0.4512	-0.1147	0.0558	-0.7012	-0.2441	0.2656	-0.1411	-0.0618
4	0.7088	0.2695	-0.249	-0.0519	-0.0277	-0.0333	-0.1576	0.1156
5	0.3406	-0.165	0.345	-0.1971	0.2181	0.0871	0.1258	-0.3104
6	0.3095	0.5737	-0.0185	-0.0488	0.1072	-0.1203	0.0293	-0.0915
7	0.1208	0.2454	0.3942	0.4031	-0.1681	0.1093	-0.2154	-0.0311
8	0.1898	0.0372	0.2996	0.396	-0.3622	0.0812	0.3907	-0.251
9	0.4718	0.1934	-0.2184	-0.0282	0.5136	0.0595	-0.0816	0.2139
10	0.6399	-0.4291	0.0078	0.044	0.0272	-0.0755	-0.1481	0.101
11	0.4933	0.1682	-0.5546	-0.1988	0.0959	0.1029	0.1051	0.1826
12	0.2918	-0.1961	0.0751	-0.3547	-0.017	0.409	-0.0957	0.0336
13	0.4301	0.1518	0.4299	-0.0668	0.1373	-0.2071	-0.1519	0.4474
14	0.5315	0.2362	-0.0679	-0.1831	0.2738	0.0599	0.0601	-0.2087
15	0.1511	0.5759	-0.0893	0.0714	0.3623	-0.2658	-0.0906	-0.261
16	0.5595	0.0772	-0.3139	-0.164	-0.3299	0.1072	-0.1006	0.1635
17	0.1006	0.2133	0.4547	0.2846	0.2845	0.0179	-0.1164	-0.2639
18	0.3439	-0.065	0.0789	0.2785	-0.3173	0.022	-0.4375	-0.3042
19	0.0181	0.1185	0.4848	0.2877	-0.2792	0.274	-0.104	0.3566
20	0.3778	-0.178	0.1771	0.0625	0.5446	0.1876	0.1614	-0.0439
21	0.2229	0.4141	0.2075	0.338	-0.1583	-0.0688	0.2224	0.3722
22	0.4479	0.0224	0.5538	-0.2011	0.0273	0.1917	-0.1253	0.1786
23	0.2952	-0.2669	0.2304	-0.0464	0.0503	-0.4501	-0.0621	0.0668
24	0.457	0.1608	0.3376	0.16	0.1618	0.0988	-0.28	0.344
25	-0.0231	0.2238	-0.2895	0.3962	0.1313	0.431	-0.1584	-0.027
26	0.3838	-0.1938	-0.1747	0.3408	0.0119	-0.1609	0.2642	0.0622

27	0.5314	0.0918	0.0743	0.3104	-0.1496	0.355	-0.0852	-0.2327
28	0.3974	-0.3763	0.0367	0.2506	-0.2864	-0.0036	-0.3907	0.1104
29	0.3721	-0.1876	-0.2534	0.3771	0.022	0.2273	0.1882	-0.1713
30	-0.1892	0.2964	0.3004	-0.0495	-0.1484	-0.1508	0.417	0.4199
31	0.4866	-0.348	0.1434	-0.1219	0.0209	0.0751	0.31	0.3938
32	0.5426	0.125	-0.3708	0.1605	0.1761	0.4318	-0.2145	0.0242
33	0.4144	0.1776	-0.0648	0.1049	-0.3241	-0.2582	0.1825	0.1708
34	0.6454	0.3118	0.2967	0.0174	-0.3569	-0.0165	0.0836	-0.1993
35	0.4188	-0.1019	-0.3027	-0.1844	0.3244	-0.1296	0.0509	-0.0032
36	0.4072	0.1054	-0.0958	-0.0106	0.1867	0.4097	0.5855	0.0341
37	0.1726	0.1327	0.488	-0.2107	0.1802	-0.2991	-0.2001	-0.3097
38	0.5827	-0.0213	0.266	-0.1728	0.278	0.0378	0.2931	0.1233
39	0.5137	-0.2277	0.0235	0.0814	-0.1837	0.0813	-0.1887	-0.2029
40	0.4795	0.2677	-0.12	0.4469	-0.265	0.0026	0.1688	-0.0242
41	0.5498	0.5055	0.0932	-0.2545	-0.0813	-0.1721	0.02	-0.0346
42	0.4512	-0.1147	0.0558	-0.7012	-0.2441	0.2656	-0.1411	-0.0618
43	0.6851	0.311	-0.163	-0.0595	0.0062	-0.0947	-0.2289	0.1722
44	0.4798	-0.1218	0.1546	0.3095	0.4657	-0.183	-0.2749	0.1903
45	0.4827	-0.5721	-0.161	0.1327	0.1026	-0.2222	0.2056	-0.191
46	0.6209	-0.408	0.0872	0.1664	-0.0296	-0.1524	0.1715	-0.0425
47	0.5734	-0.1843	-0.2187	0.038	-0.3975	-0.2499	0.0809	-0.1317
48	0.6217	-0.1904	-0.0988	0.1998	0.2641	-0.239	-0.2167	-0.0226
49	0.6109	-0.5372	-0.0673	0.0887	-0.0883	-0.2842	0.1182	-0.0167
50	0.584	-0.6159	-0.0814	-0.0723	-0.071	-0.2104	-0.025	-0.0461
51	0.2148	0.5879	-0.3025	0.1493	0.1072	-0.1992	-0.0849	-0.0004
52	0.3082	0.5709	-0.3285	-0.1887	-0.2695	-0.1927	-0.1136	-0.1533
53	0.5241	0.3232	0.1516	0.0768	0.1726	0.1495	0.3127	-0.3875
54	0.3748	0.4593	-0.1969	-0.2463	-0.2762	-0.2613	0.1354	0.052
Eigenva	11.1470	4.99999	3.79277	3.43266	2.99821	2.49454	2.37774	2.27364
lues	8	7		1	6	8	8	7
% Explain	21	9	7	6	6	5	4	4
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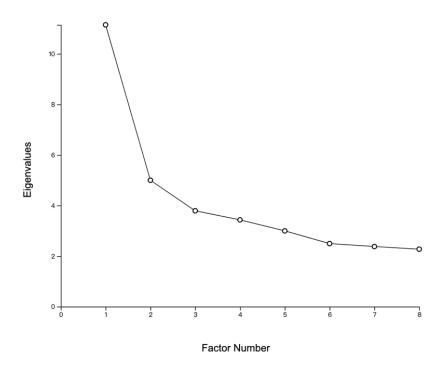


Figure 2 Scree Plot of Eigenvalues

The next step is to make decision on how many factors to extract from the data set. Eigenvalues are one of the criteria to determine the factors and the eigenvalue lower than 1.0 could generate inconclusive results (Militello & Benham, 2009). In this study, since all eight factors have the eigenvalue more than 1.0 (N=54), all eight factors are remaining at the first time of factor analysis. According to Watts and Stenner (2012), generally, researchers make decision on how many factors should maintained is based on the criteria of eigenvalues. However, other than the typical criteria generally used in factor analysis, a preliminary interpretation could also affect the determination of the number of factors in Q-Method. For instance, if one perception is similar or unreal comparing with other perceptions, fewer factors may be extracted by researchers. Therefore, because of the correlation between factors which shows the factor 5 to factor 8 have a high similarity with the first four factors, four factors remained for following analysis.

Table 2 The eigenvalue and percentage of explained variance of factors

	Factor1	Factor2	Factor 3	Factor 4
Eigenvalues	11.14708	4.999997	3.79277	3.432661
% Explained Variance	21	9	7	6
Cumulative % Explained Variance	21	30	37	43

21% of the variance is represented by Factor 1; 9% of the variance is represented by Factor 2; 7% of the variance is represented by Factor 3; and 6% of the variance is represented by Factor 4. For a total 43% variance represented by these four factors. The following table shows the correlations between factor scores.

Table 3 Correlations between Factor Scores

	factor 1	factor 2	factor 3	factor 4
factor 1	1	0.2906	0.3552	0.0517
factor 2	0.2906	1	0.3442	0.1318
factor 3	0.3552	0.3442	1	0.1367
factor 4	0.0517	0.1318	0.1367	1

6.4.1 Factor Loadings

For further exploration of the factors, a Varimax rotation of factors analysis is to distinguish the 4-factors generated in previous steps. Each Q-Sort will be loaded onto a factor with their correlation score through Varimax rotation. The following table shows the details of the Varimax rotation result.

Table 4 Factor Matrix with Defining Sorts Flagged

Q sort	Factor 1		Factor 2		Factor 3		Factor 4	
1	-0.0107		0.2164		0.6743	flagged	0.3576	
2	0.5765	flagged	0.4135		0.1437		0.093	
3	0.12		0.268		0.7054	flagged	-0.3574	
4	0.3342		0.7168	flagged	0.1184		0.0121	
5	0.2061		-0.0107		0.4953	flagged	0.1151	
6	-0.1633		0.5943	flagged	0.0601		0.2102	
7	0.0047		0.038		-0.0308		0.6247	flagged
8	0.1948		-0.0257		-0.0273		0.4946	flagged
9	0.2247		0.5059	flagged	0.041		-0.0192	
10	0.715	flagged	0.0865		0.2773		-0.0085	
11	0.2511		0.6521	flagged	-0.0308		-0.3598	
12	0.182		0.0619		0.4283	flagged	-0.1861	
13	0.1005		0.2109		0.4459	flagged	0.3793	
14	0.1586		0.5349	flagged	0.2549		0.0135	
15	-0.2175		0.5104	flagged	-0.1257		0.2096	
16	0.3248		0.534	flagged	0.1272		-0.1939	
17	-0.0409		-0.0036		0.0841		0.5784	flagged
18	0.3582	flagged	0.0975		-0.0055		0.2616	
19	-0.0413		-0.1304		0.0819		0.5539	flagged
20	0.3591	flagged	0.0323		0.2312		0.162	
21	-0.0234		0.295		-0.0824		0.5329	flagged
22	0.1253		0.1039		0.6376	flagged	0.3393	
23	0.3115		-0.0845		0.3194		0.0862	
24	0.2086		0.2383		0.2428		0.4638	flagged
25	0.0328		0.1964		-0.4872	flagged	0.1202	
26	0.53	flagged	0.1216		-0.1673		0.0881	
27	0.3991		0.3163		0.0191		0.3647	
28	0.5861	flagged	-0.0633		0.0523		0.1159	
29	0.5443	flagged	0.1438		-0.2449		0.0568	
30	-0.3808	flagged	-0.0197		0.1009		0.2465	
31	0.4795	flagged	0.0194		0.4036		-0.0157	
32	0.4075		0.5348	flagged	-0.1443		-0.019	
33	0.2171		0.3841	flagged	0.0214		0.1528	
34	0.1981		0.4906		0.3674		0.4326	
35	0.3324		0.3244		0.1195		-0.2854	
36	0.2218		0.3574	flagged	0.09		0.0339	
37	-0.1222		0.0384		0.4849	flagged	0.28	
38	0.3018		0.2616		0.5031	flagged	0.1673	
39	0.5144	flagged	0.1367		0.1847		0.0742	

40	0.3348		0.4608		-0.2358		0.3685	
41	-0.0494		0.6786	flagged	0.37		0.1769	
42	0.12		0.268		0.7054	flagged	-0.3574	
43	0.2752		0.6992	flagged	0.1604		0.0768	
44	0.4839	flagged	0.1084		0.078		0.3358	
45	0.7575	flagged	-0.0546		0.0751		-0.146	
46	0.7189	flagged	0.0429		0.23		0.1255	
47	0.5528	flagged	0.3005		0.0864		-0.0932	
48	0.6264	flagged	0.2586		0.0655		0.0948	
49	0.7912	flagged	0.0175		0.2055		-0.0751	
50	0.7677	flagged	-0.026		0.309		-0.216	
51	-0.1187		0.628	flagged	-0.2847		0.1266	
52	-0.1599		0.728	flagged	-0.0289		-0.0895	
53	0.1542		0.472	flagged	0.1917		0.3532	
54	-0.0875		0.6498	flagged	0.1306		-0.0626	
%Explained Variance	14		13		9		7	

(flagged indicates that the at or above sig. p<.05 confidence level)

43% of the variances are represented by the total rotated factors. 14% of the variance is represented by Factor 1; 13% of the variance is represented by Factor 2; 9% of the variance is represented by Factor 3; and 7% of the variance is represented by Factor 4. Seventeen participants are loaded in Factor 1 at or above significant level of p<.05; sixteen participants are loaded in Factor 2 at or above significant level of p<.05; ten participants are loaded in Factor 3 at or above significant level of p<.05; six participants are loaded in Factor 4 at or above significant level of p<.05.

6.4.2 Factor analysis Results

There are four factors generated after the Q-sort analysis. However, before the explanation of factors in detail, several points need to be clarified:

First of all, during the interviews, a common situation or a similar situation of how governmental officials view the regional cooperative action and organization is limited by two different situations: the regional cooperation is still in a very initial stage in China; respondents' understanding of how regional intergovernmental organizations work is mostly limited by their own organization's working agenda.

Second, since the regional intergovernmental organization is in a relative initial stage, majority of the respondents are wearing two "hats". To be more specifically, the governmental officials are both working in other governmental departments and the scholars are also working in research institutions. This double-position situation has both advantages and disadvantages during the interviews. On one hand, the position other than RIGO's help participants has a more comprehensive view of cross boundary governance and organizations. One the other hand, not all of the participants' focus is on organizational work in other words, their major work and position is not in regional intergovernmental organizations.

Third, majority of the board members of these regional intergovernmental organizations are local governments. For example, the boards of Yangtze River Delta Economic Coordination Association and Guangdong, Hong Kong and Macau Greater Bay Area Development Leading Group include all the representatives of local governments and few from central government. However, the administration office of Beijing-Tianjin-Hebei Coordinated Development Leading Group is located in the Central Government with representatives in member governments and more from central government. Therefore, except of the Beijing-Tianjin-Hebei, the majority of board member in other regions are local governments' representatives. According to the interviews and reports, the role of organizations is more like a platform promoting the communication and cooperation between local governments representatives.

Finally, since the government structure is very different from the United States, a relatively centralized structure affects the function of these organizations in three ways:

Higher level government also has power to promoting intergovernmental cooperation and solving regional problems within their boarder. For example, if the regional problem is crossing several city boundaries in a province, the provincial government has the power to gathering the related stakeholders together negotiating the solution and in the same time, city governments need to follow the provincial government's order.

Then, although the local governments' needs are the major factor of developing a regional intergovernmental organization, the National Plan of Regional Development formulated by central government is also fundamental and critical in establishing cooperation organizations and mechanisms. For example, this plan is fundamental during the development of Beijing-Tianjin-Hebei Coordinated Development Leading Group, Guangdong, Hong Kong and Macau Greater Bay Area Development Leading Group, and the Yangtze River Delta Economic Coordination Association. Meanwhile, one of the most powerful drivers of continued cooperation and communication in these regions is also this National Plan.

The third way is about the decision-making process. The members of decision-making process in provincial level includes governor of province and a committee. The committee including the Deputy Provincial Governor and Mayor of major cities. So, this process already includes local government representatives.

Finally, the factor analysis result with statements scores and ranks is in the following chart:

Table 5 The factor analysis result with statements scores and ranks

Statement Number	factor 1		factor 2		factor 3		factor 4	
	Z-score	Rank	Z-score	Rank	Z-score	Rank	Z-score	Rank
1	1.02	5	0.6	11	-0.73	28	-0.48	25
2	-0.2	23	-1.52	35	-0.95	29	0.68	9
3	1.74	1	-0.99	31	-1.26	32	0.86	8
4	-0.09	22	-1.58	36	-0.44	25	0.13	16
5	0.96	6	-0.31	21	2.5	1	-0.27	23
6	0.49	13	1.03	8	1.04	4	-0.05	21
7	-0.77	30	-0.2	17	-0.01	20	-1.74	35
8	0.17	18	-0.56	25	-1.6	35	-0.87	28
9	-0.08	21	0.14	14	-0.16	22	-1.93	36
10	1.21	4	-0.54	24	-0.47	26	-1	29
11	1.31	2	1.38	5	1.67	3	-1.05	30
12	-1.37	32	-1.02	32	-1.67	36	-0.5	26
13	-2.27	35	-1.38	34	-1.04	30	0.27	13
14	1.29	3	-0.28	20	0.35	12	-0.64	27
15	0.88	7	0.21	12	0.41	11	-1.12	33
16	-1.69	34	-0.2	18	2.3	2	1.5	4
17	0.85	8	1.1	7	0.93	5	1.36	5
18	0.65	11	-0.53	23	0.86	6	-1.07	31
19	-0.27	24	-0.35	22	0.22	16	-1.07	32
20	0.37	15	-0.1	16	0.47	10	-0.03	18
21	0.42	14	-0.64	27	0.6	7	-0.03	20
22	-0.62	29	-0.95	30	0.22	15	-0.34	24
23	-0.31	25	-0.64	28	-0.22	23	0.33	12
24	0.19	17	-0.02	15	0.12	19	0.48	11
25	-0.46	27	-0.59	26	0.13	18	0.2	14
26	0.74	10	2.41	1	0.3	13	1.07	6
27	-0.32	26	0.84	9	-0.09	21	2.08	1
28	0.12	20	1.58	3	-0.22	24	0.94	7
29	0.14	19	1.44	4	-0.51	27	-0.05	22
30	-0.46	28	1.38	6	0.49	9	-0.03	19
31	-2.33	36	0.73	10	-1.47	33	-1.73	34
32	0.5	12	1.63	2	0.53	8	0.62	10
33	-1.27	31	-1.14	33	-1.58	34	0.18	15
34	-1.58	33	-0.88	29	-1.17	31	0.06	17
35	0.26	16	-0.27	19	0.3	14	1.65	2
36	0.76	9	0.18	13	0.17	17	1.6	3

6.5 Factor Interpretation

The factor interpretation is mainly based on the distinguishing statements especially with a relatively high or low Q-sort value in each factor. These distinguishing statements will be providing a set of shared subjective opinions of the participants represented by the factor.

6.5.1 Factor 1 Broader Agenda Deliver

The first factor generated from the analysis result is Broader Agenda Deliver including the respondents holding the following view:

Table 6 Distinguishing Statements for Factor 1

State	Statement	fac	fact	Sig	fac	fact	Sig	fac	fact	Sig	fac	fact	Sig
ment		tor	or1	nif	tor	or2	nif	tor	or3	nif	tor	or4	nif
Num		1	Z-	ica	2	Z-	ica	3	Z-	ica	4	Z-	ica
ber		Q-	sco	nc	Q-	sco	nc	Q-	sco	nc	Q-	sco	nc
2		SV 5	re	e *	SV	re	e	SV	re	e	SV 2	re	e
3	Our organization should give each member the same voting weight when making decisions	3	1.7 4	*	-3	0.9		-3	1.2		2	0.8	
	same voting weight when making decisions		_			9			59			0	
14	The more the number of policy areas our	4	1.2	*	0	_		1	0.3		-2	-	
	organization engages in, the more effective it		9			0.2			51			0.6	
	will be.					82						39	
10	Our organization would be more legitimate if	3	1.2	*	-1	-		-1	-		-2	-	
	there was active participation by civic sector		1			0.5			0.4			0.9	
1	organizations on our board.	1	1.0		1	39		_	74		1	99	
1	Our organization should be primarily constituted by general-purpose local governments.	3	1.0		1	0.6 01		-2	0.7		-1	0.4	
	by general-purpose local governments.					01			33			8	
5	Poorer jurisdictions should not have to pay at	3	0.9	*	0	-		5	2.5		-1	-	
	the same rate as richer jurisdictions.		6			0.3			03			0.2	
	į.					07						71	
15	Having a broad agenda is better than having a	2	0.8		1	0.2		1	0.4		-3	-	
	narrow agenda.		8			11			11			1.1	
26		_	0.7	*		0.1		0	0.1		4	19	
36	Our organization should review significant regional economic development plans that are	2	0.7	*	1	0.1 84		0	0.1 68		4	1.5 95	
	proposed for our region.		0			04			08			93	
6	Our organization would be more legitimate if	1	0.4		2	1.0		3	1.0		0	_	
	there was active participation by federal / state	-	9		_	28			37			0.0	
	(national / provincial) agencies on our board.											47	
8	Each general-purpose local government member	0	0.1	*	-1	-		-4	-1.6		-2	-	
	should provide financial support to our		7			0.5						0.8	
	organization in relation to their relative					58						65	
2	population.	1	-0.2	*	-4	_		-2			2	0.6	
2	The more there are civic sector organizations (e.g. nonprofits and business interests)	-1	-0.2		-4	1.5		-2	0.9			0.6 75	
	represented within our organization, the more					1.3			5			13	
	accountable it will be.					1,							
7	The more there are other government entities	-2	-	*	0	-		0	-		-4	-	
	(e.g. federal / national agencies and state /		0.7			0.2			0.0			1.7	
	provincial departments) represented within our		7			02			13			43	
2.4	organization, the more accountable it will be.	2			_			2			0	0.0	
34	If there were fewer members in our	-3	1.5		-2	- 0.8		-3	1 1		0	0.0 64	
	organization, we would be better able to perform our function.		1.5			0.8 75			1.1			04	
16	Our role should be more focused on planning	-4	-	*	0	-		4	2.3		3	1.4	
10	than on delivering programs and services.		1.6		U	0.2			2.3		,	95	
	01 6		9	<u> </u>		02		<u> </u>	<u></u>		<u> </u>		
13	The fewer the number of policy areas our	-4	-	*	-4	-		-2	-		1	0.2	
	organization engages in, the more effective it		2.2			1.3			1.0			71	
	will be.	_	7	<u> </u>		76			37		<u> </u>		
31	Our organization's highest priority should be to	-5	- 2 2	*	2	0.7		-3	1 4		-4	1.7	
	serve the interests of its constituent local governments.		2.3			28			1.4 71			1.7 25	
	migla (*) Indicates Cignificance at D	<u> </u>		l	İ	i .	İ	l	/ 1	<u> </u>	l	23	

(Asterisk (*) Indicates Significance at P < .01)

The first factor also the most representative factor in this research includes the arguments of same voting weight of members, more policy areas, more focusing on delivering and the local interests are not highest priority.

Same voting weight of members means the members in the organization have the same power in decision making process. According to the interviews, one of the major reasons is that the local governments of rich or developed areas often have more power in decision making. In other words, the opinion of relatively poor areas is difficult to affect the final decisions made collectively. Participant No.18 said: "One of the major goals of regional cooperation is reducing the development gap between areas. If less developed places do not have enough power in the decision-making process, they will always be in a passive position in the regional cooperation process." The other reason is the unequal level of local governments. As the related background mentioned above, not all of the member local governments in a regional intergovernmental organization are at the same political level. For instance, in Jing-jin-ji region, mayor of Beijing and Tianjin is actually having a higher political level than the governor of Hebei province. In this circumstance, the local interests of Hebei province might face more difficulties when they want to affect the decision. The similar situation also happened in Yangtze River Delta, the political level of mayor and the economic situation of Shanghai is higher than other local governments in the region. Therefore, many interviewees hold the view that because this inequality among members has become one of the main obstacles to creating an effective regional cooperation, to make sure the member governments have same voting weight is important in regional intergovernmental organizations.

Larger agenda refers to the range of policy area the organization should covered. Many participants in this research hold this kind of view believing that a large agenda covering comprehensive policy areas is necessary even the regional issue in a particular area is only in limited area. It is believed that this type of organizations is a "complement" to government functions. The regional organizations should be familiar with all general policy areas which could

provide the ability of quickly reaction when higher government implements policy to solve regional problems. For example, participant No.39 said: "Anything could be regionalized. Although some region only has problems of air pollution, the causes and solutions are not only related to environment protection and they might face more complex problem in the future. Large agenda is a kind of preparation."

Follow the previous examples, the participants hold this view that the role of the regional intergovernmental organizations is to "assist and implement". For example, participant No.2 said: "Decision-making mainly occurs at higher levels of government, and the main role of regional organizations is to assist and implement." In other words, the organization is delivering public services and implementing policies following the decision from higher level government. For example, participant No.20 argued: "When a region facing problems, higher level governments make plans, but they need help from local to implement the policy. Single local government has limited capacity, but the regional intergovernmental organization should be more suitable."

In China, especially the political philosophy, the collective interests prevail over individual interests. Similarly, national or regional interests prevail over local interests. As the 39th respondent said, focusing only on local interests is selfish, and focusing on regional interests is more effective in the long run. Therefore, when asking the respondents about the priority of local interests, many respondents hold the view that the collective interests of the regional as a whole is more important.

6.5.2 Factor 2 Bureaucratic Collaboration Promoter

The second factor generated from the analysis result is Bureaucratic Collaboration Promoter including the respondents holding the following view:

Table 7 Distinguishing Statements for Factor 2

Stat eme nt Nu mbe r 26 Our organization should work to foster collaboration across local jurisdictional boundaries, including with our neighboring regions and across state/provincial lines when appropriate. 32 Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region. 28 Our organization should focus on fostering regional	fac tor 1 Q- S V	fac tor 1 Z- sco re 0.7 4	Si gn ifi ca nc e	fac tor 2 Q- S V	fac tor 2 Z- sco re 2.4	Si gn ifi ca nc e	fac tor 3 Q- S V	fac tor 3 Z- sco re	Si gn ifi ca nc	fac tor 4 Q- S	fac tor 4 Z- sco	Si gn ifi ca
nt Nu mbe r 26 Our organization should work to foster collaboration across local jurisdictional boundaries, including with our neighboring regions and across state/provincial lines when appropriate. 32 Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region. 28 Our organization should focus on fostering regional	1 Q- S V	1 Z- sco re 0.7	ifi ca nc	2 Q- S V	Z- sco re	ifi ca nc e	3 Q- S V	3 Z- sco	ifi ca nc	4 Q- S	4 Z-	ifi
Nu mbe r 26 Our organization should work to foster collaboration across local jurisdictional boundaries, including with our neighboring regions and across state/provincial lines when appropriate. 32 Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region. 28 Our organization should focus on fostering regional	Q- S V	Z- sco re 0.7	ca nc	Q- S V	Z- sco re	ca nc e	Q- S V	Z- sco	ca nc	Q- S	Z-	
mbe r 26 Our organization should work to foster collaboration across local jurisdictional boundaries, including with our neighboring regions and across state/provincial lines when appropriate. 32 Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region. 28 Our organization should focus on fostering regional	S V 2	sco re 0.7	nc	S V	sco re	nc e	S V	sco	nc	S		
r 26 Our organization should work to foster collaboration across local jurisdictional boundaries, including with our neighboring regions and across state/provincial lines when appropriate. 32 Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region. 28 Our organization should focus on fostering regional	V 2	re 0.7		V	re	e	V			17		nc
across local jurisdictional boundaries, including with our neighboring regions and across state/provincial lines when appropriate. 32 Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region. 28 Our organization should focus on fostering regional				5	2.4	*			. ~	V	re	e
our neighboring regions and across state/provincial lines when appropriate. 32 Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region. 28 Our organization should focus on fostering regional	1	4					1	0.3		3	1.0	
our neighboring regions and across state/provincial lines when appropriate. 32 Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region. 28 Our organization should focus on fostering regional	1				1						73	
lines when appropriate. 32 Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region. 28 Our organization should focus on fostering regional	1											
32 Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region. 28 Our organization should focus on fostering regional	1											
multi-jurisdictional collaboration among local governments within a clearly defined region. 28 Our organization should focus on fostering regional		0.5		4	1.6	*	2	0.5		2	0.6	
governments within a clearly defined region. 28 Our organization should focus on fostering regional					3			25			17	
	0	0.1		4	1.5	*	-1	-		2	0.9	
collaboration among private, nonprofit and		2			8			0.2			43	
philanthropic sector leaders with our local elected								24				
officials, including overcoming traditional turf battles												
and stove piping of programs and services.												
29 Our organization has modified our culture over the	0	0.1		3	1.4	*	-2	-		-1	-	
years to continue serving local governments, yet also		4			4			0.5			0.0	
broadened our partnerships and relationships with								08			5	
private, nonprofit, philanthropic and academic												
institutions.												
30 Our organization is focused on providing the leadership	-2	-		3	1.3	*	2	0.4		0	-	
and vision necessary for the region to remain		0.4			8			9			0.0	
competitive.		6									3	
27 Our organization to take a leadership role and to be a	-1	-		2	0.8	*	0	-		5	2.0	
primary player in regional economic development		0.3			4			0.0			84	
issues.		2						91				<u> </u>
31 Our organization's highest priority should be to serve	-5	-		2	0.7	*	-3			-4		
the interests of its constituent local governments.		2.3			3			1.4			1.7	
1 Our annuitation devalde animalia anaticat de	3	1.0		1	0.6		-2	71		-1	25	
1 Our organization should be primarily constituted by	3	1.0		1	0.6		-2	0.7		-1	0.4	
general-purpose local governments.								33			8	
16 Our role should be more focused on planning than on	-4	_		0		*	4	2.3		3	1.4	-
delivering programs and services.	-4	1.6		U	0.2		4	2.3		3	95	
denvering programs and services.		9			0.2						93	
35 Our organization should help governments in sub-	0	0.2		0	_	*	1	0.2		4	1.6	
regions of our region deal with issues unique to those		6		0	0.2		1	97		-	47	
sub-regions.		0			7)			7/	
18 Our organization should have a high degree of	1	0.6		-1	-		3	0.8		-3	_	
intergovernmental national government law		5			0.5			57			1.0	
enforcement agencies.					3			0,			67	
21 Our organization should have a high degree of	1	0.4		-2	-	*	2	0.6		0	-	
intergovernmental national government budgeting or		2		1 -	0.6		1 ~	02			0.0	
personnel agencies.		l -			4						33	
12 There are certain policy areas (or policy niches) that	-3	-		-3	-		-5	-		-1	-	
only our organization can tackle.		1.3			1.0			1.6			0.4	
		7			2			67			98	
2 The more there are civic sector organizations (e.g.	-1	-		-4	-	*	-2	-		2	0.6	
nonprofits and business interests) represented within		0.2			1.5			0.9			75	
our organization, the more accountable it will be.					2			5			1	
4 The more there are civic sector organizations (e.g.	-1	-		-5	-	*	-1	-		0	0.1	
nonprofits and business interests) represented within		0.0			1.5			0.4			28	
our organization, the more effective and efficient it will		9			8			4				
be.												

(Asterisk (*) Indicates Significance at P < .01)

The second factor including the distinguish arguments of promoting collaboration and less civic sector organizations.

The respondents who hold these kinds of view believe that the regional intergovernmental organization should play an active role to promote the collaboration among local governments. To be more specific, this kind of organizations should not stay and wait for the order from higher level government or the requirements from local governments, but more proactively promoting cooperation between local governments. For instance, participant No.37 argued: "Although local governments often have cooperation needs, for local government leaders, managing government affairs are busy, and the cooperation and exchanges are time-consuming, troublesome, and often outweigh the benefits." Participant No.11 also mentioned that the regional intergovernmental organizations should actively promoting the communication and cooperation.

Civic sectors hardly participate in governmental decision-making process. Although the government has adopted many methods to solicit opinions from the society, direct participation of civic sectors in decision-making is still very rare (Participant No.16). During the research, it is found that all of the members in the thirteen regional intergovernmental organizations are purely governmental members. At the same time, part of the participants also holds the view of purely governmental membership. For example, participant No.4 said: "In fact, in current Chinese society, civic sectors or non-governmental organizations are still immature and the number is very limited." and participant No.16 explained: "Perhaps as society develops, the situation will change. But in the current situation, I think the introduction of civic sectors will reduce the efficiency of organizational decision-making."

6.5.3 Factor 3 Social Equity Planner

The third factor generated from the analysis result is Social Equity Planner including the respondents holding the following view:

Table 8 Distinguishing Statements for Factor 3

State	Statement	fac	fact	Sig	fac	fact	Sig	fac	fact	Sig	fac	fact	Sig
ment	Statement	tor	or1	nif	tor	or2	nif	tor	or3	nif	tor	or4	nif
Num		1	Z-	ica	2	Z-	ica	3	Z-	ica	4	Z-	ica
ber		Q-	sco	nc	O-	sco	nc	O-	sco	nc	O-	sco	nc
		sv	re	e									
5	Poorer jurisdictions should not have to pay at the	3	0.9		0	-		5	2.5	*	-1	-	
	same rate as richer jurisdictions.		6			0.3						0.2	
	•					1						71	
16	Our role should be more focused on planning	-4	-		0	-0.2		4	2.3	*	3	1.4	
	than on delivering programs and services.		1.6									95	
			9										
30	Our organization is focused on providing the	-2	-		3	1.3		2	0.4		0	-	
	leadership and vision necessary for the region to		0.4			8			9			0.0	
	remain competitive.		6									3	
14	The more the number of policy areas our	4	1.2		0	-		1	0.3	*	-2	-	
	organization engages in, the more effective it		9			0.2			5			0.6	
	will be.					8						39	
26	Our organization should work to foster	2	0.7		5	2.4		1	0.3		3	1.0	
	collaboration across local jurisdictional		4			1						73	
	boundaries, including with our neighboring												
	regions and across state/provincial lines when												
	appropriate.												
19	Our organization should have a high degree of	-1	-		-1	-		0	0.2		-3	-	
	intergovernmental national government		0.2			0.3			2			1.0	
	transportation agencies.		7			5						73	
22	Our organization should have a high degree of	-2	-		-2	-		1	0.2		-1	-	
	intergovernmental state/provincial government		0.6			0.9			2			0.3	
	law enforcement agencies.		2			5						41	
2	The more there are civic sector organizations	-1	-0.2		-4	-		-2	-	*	2	0.6	
	(e.g. nonprofits and business interests)					1.5			0.9			75	
	represented within our organization, the more					2			5				
	accountable it will be.												
8	Each general-purpose local government member	0	0.1		-1	-		-4	-1.6	*	-2	-	
	should provide financial support to our		7			0.5						0.8	
	organization in relation to their relative					6						65	
	population.												

(Asterisk (*) Indicates Significance at P < .01)

The third factor including the distinguish arguments of deciding payments should consider the economic situation and the regional intergovernmental organization should be more focusing on planning. Respondents who hold this view think the payment should not be the same to all the local governments especially the poor areas and the financial support of the organization should not depend on the population. Although the administration body of regional intergovernmental organizations is hardly independent from the local government or the higher-level government, providing public services and creating cooperation platforms are expensive. Since there is no standards or roles of sharing the financial support or the cost for the organizations, the sharing rate depends on the occasion. As the previous section mentioned, one of political principles of Chinese Government is narrowing the development gap between local areas. Therefore, providing help on payment to the local governments of relative poorer areas suits the political value better as the respondence No.1 said: "Developed areas have an obligation to support less developed areas"

Although it is generally agreed among the participants who holds this view that the poor and rich area should not pay at the same level, the distribution ratio of the costs incurred by regional intergovernmental organizations in the provision of public services is inconclusive. Population is another way to make the distribution, however, interviewees who represented by this factor disagree with this way. For example, participant No.42 argued that the payment distribution method should be formulated according to different cooperation content. Another reason of not using population is that some area with large population are still suffer from poverty. Because of the Residential Restriction Policy (Hukou Policy), it is not easy for citizens to move to another area based on the economic situation or the job opportunities. For instance, Henan and Hebei Province have large population but the economic situation is not well.

The participants who hold this kind of view think their organization should play a role as a planner instead of a public service deliver. The main reason is they don't think regional cooperation organization should have a larger body including delivering different types of services

but keep the main administrative body relatively simple, small and efficient by only make a detailed plan based on the need of local governments and Nation Regional Development Plan. For example, the participant No.13 argued: "The need of local governments is not clear and ready to implement as a plan as well as the National Regional Development Plan which is too general. Our organization should be the expert in making the comprehensive plan". Therefore, making comprehensive and easy-implemented plans should be the main function of their organizations.

6.5.4 Factor 4 Regional Leader

The fourth factor generated from the analysis result is Regional Leader including the respondents holding the following view:

Table 9 Distinguishing Statements for Factor 4

Stat	Statement	fac	fac	Si									
eme		tor	tor	gn									
nt		1	1	ifi	2	2	ifi	3	3	ifi	4	4	ifi
Nu		Q-	Z-	ca									
mbe		S	sco	nc									
r		V	re	e									
27	Our organization to take a leadership role and to be a	-1	-		2	0.8		0	-		5	2.0	*
	primary player in regional economic development		0.3			4			0.0			8	
	issues.		2						9				
35	Our organization should help governments in sub-	0	0.2		0	-		1	0.3		4	1.6	*
	regions of our region deal with issues unique to those		6			0.2						5	
	sub-regions.					7							
36	Our organization should review significant regional	2	0.7		1	0.1		0	0.1		4	1.6	*
	economic development plans that are proposed for our		6			8			7				
	region.												
16	Our role should be more focused on planning than on	-4	-		0	-		4	2.3		3	1.5	*
	delivering programs and services.		1.6			0.2							
			9										
28	Our organization should focus on fostering regional	0	0.1		4	1.5		-1	-		2	0.9	*
	collaboration among private, nonprofit and		2			8			0.2			4	
	philanthropic sector leaders with our local elected								2				
	officials, including overcoming traditional turf battles												
	and stove piping of programs and services.												
3	Our organization should give each member the same	5	1.7		-3	-		-3	-		2	0.8	*
	voting weight when making decisions		4			0.9			1.2			6	
						9			6				
2	The more there are civic sector organizations (e.g.	-1	-		-4	-		-2	-		2	0.6	*
	nonprofits and business interests) represented within		0.2			1.5			0.9			8	
	our organization, the more accountable it will be.					2			5				
23	Our organization should have a high degree of	-1	-		-2	-		-1	-		1	0.3	
	intergovernmental state/provincial government		0.3			0.6			0.2			3	
	transportation agencies.		1			4			2				

13	The fewer the number of policy areas our organization engages in, the more effective it will be.	-4	2.2 7	-4	1.3	-2	1.0 4	1	0.2 7	*
33	Our organization should be large enough to represent all the governments in our region.	-3	1.2 7	-3	1.1 4	-4	1.5 8	1	0.1	*
34	If there were fewer members in our organization, we would be better able to perform our function.	-3	1.5 8	-2	0.8	-3	1.1 7	0	0.0	*
6	Our organization would be more legitimate if there was active participation by federal / state (national / provincial) agencies on our board.	1	0.4 9	2	1.0	3	1.0 4	0	0.0	
12	There are certain policy areas (or policy niches) that only our organization can tackle.	-3	1.3 7	-3	1.0	-5	1.6 7	-1	0.5	
10	Our organization would be more legitimate if there was active participation by civic sector organizations on our board.	3	1.2	-1	0.5 4	-1	0.4 7	-2	-1	
11	Our organization should have an agenda that covers a broad number of policy areas.	4	1.3	3	1.3	4	1.6 7	-2	1.0	*
18	Our organization should have a high degree of intergovernmental national government law enforcement agencies.	1	0.6	-1	0.5	3	0.8 6	-3	1.0 7	
19	Our organization should have a high degree of intergovernmental national government transportation agencies.	-1	0.2	-1	0.3	0	0.2	-3	1.0 7	*
15	Having a broad agenda is better than having a narrow agenda.	2	0.8 8	1	0.2	1	0.4	-3	1.1	*
7	The more there are other government entities (e.g. federal / national agencies and state / provincial departments) represented within our organization, the more accountable it will be.	-2	0.7 7	0	0.2	0	0.0	-4	1.7 4	*
9	The more there are other government entities (e.g. federal / national agencies and state / provincial departments) represented within our organization, the more effective and efficient it will be.	0	0.0	1	0.1	-1	0.1 6	-5	1.9	*

(Asterisk (*) Indicates Significance at P < .01)

The fourth factor including the distinguish arguments of Regional leadership and less other government entities.

Some participants hold the opinion that focusing on developing the leadership role in a region to promoting economic development and cooperation is crucial for a regional intergovernmental organization. This might be one reason that all of the three major regional cooperation organization, Jing-jin-ji, Yangtze River Delta and the Great Bay Area, are all have a leader group at national government. Participant No.24 said: "Because the main function of regional intergovernmental organizations is to coordinate the cooperation between local governments, if it is only a general cooperative organization, its function is difficult to play

effectively and only with leadership can we effectively promote cooperation and provide regional public services." To sum up, the leadership is the position for better performing the function.

Less other government entities are another main idea of this factor. A sharing understanding of regional intergovernmental organizations is the trying to keep the organizational body as small as possible which means only keep the main function. "other government entities" in their view is not the necessary part and not the main function as well. Participant No.17 argued: "In my experience, the more other government entities exist in an organization, especially those that are not directly related to the main work content and goals, will seriously reduce the efficiency and effectiveness of the organization's work." As for the accountability, if there is a government entity from higher level government, there might be some negative effects. For example, No.21 mentioned: "In Chinese government's system, higher level government gives orders to lower levels government, and at the same time, higher levels of government also take the responsibility and accountability." Therefore, respondents with this view, relatively resistant to including other government entities in their organizations.

6.5.5 Consensus Statements

After analysis, there are several statements that do not distinguish between any pair of factors as the following chart:

Table 10 Consensus Statements

Statem	Sign	Statement	facto	factor	facto	factor	facto	factor	facto	factor
ent	ifica		rl Q-	1 Z-	r2 Q-	2 Z-	r3 Q-	3 Z-	r4 Q-	4 Z-
Numb	nce		SV	score	SV	score	SV	score	SV	score
er										
17		Our organization should actively address emerging	2	0.85	2	1.102	3	0.931	3	1.36
		policy issues confronting our region.								
24		Our organization should have a high degree of	0	0.192	1	-0.02	0	0.117	1	0.48
		intergovernmental state/provincial government								

health, education, and welfare agencies.
--

Actively solving the regional problem is generally agreed by majority of participants in the four factors. It is crucial that regional intergovernmental organization should not only focus on the regional problems that already existing but also the problems might occur in the future.

6.5.6 Demographic Composition

Except for the 42nd (scholar) participant, other scholars are represented by the first two factors. Compared with Demographic Composition between practitioners and scholars, scholars' results are more homogeneous. One important reason is that the interviewees (scholars) are mainly from two major regional governance research centers in China, and the regional cooperation organizations that they provide consultation and participate in planning are very similar. For example, in the Regional Governance Research Center Located in Guangdong Province, scholars are mainly involved in the cooperation of the Pan-Pearl River Delta in the Greater Bay Area, but regional governance scholars in Beijing are more involved in the collaborative governance of Beijing-Tianjin-Hebei region. In addition to the above feature, no obvious correlation was found between demographic and factor analysis result.

7.0 Conclusion

When public issues have gone beyond the boundaries of local governments and become a regional sharing problem, cooperation between local governments often offers an effective approach. For this reason, scholars and practitioners are paying more attention to exploring local government cooperation mechanisms. At the same time, regional intergovernmental organizations (RIGOs) in the United States appear to be emerging as a common way for local governments to act collectively. In contrast, in China, similar organizational forms are also emerging. Compared to the US, similar organizational forms have not emerged as widely, and they are still in the initial stages. Understanding the perceptions of organization members is necessary to achieve a more thorough understanding.

In this study, Q-methodology was employed to explore the subjective attitudes of government officials and scholars who are the members in major RIGO-like organizations in China. The analysis generated four factors representing the perspectives of the organization members: deliverer of a broader agenda, promoter of bureaucratic collaboration, planner of social equity planner, and regional leader. Through these four factors, the major opinion of organization members towards RIGO-like organizations is explained. The other interview questions also provided a relatively detailed understanding of how regional cooperation works in China and what problems remain to be solved.

8.0 Limitations and future research

Policy choices and administrative strategies are closely related to a country's political values and political philosophy, which are very different between the United States and China. The statements in this Q-study are developed based on the five properties from Miller and Nelles's Book (2019) and generated from the American context. This American theoretical background may raise problems and limitations when applying the statements to China. Therefore, understanding both is crucial for understanding how and why cross-boundary organizations and regional governance work in future research, it will be essential to conduct more in-depth interviews of government officials at different levels in different regions. To be more specific, the researcher plan to use Repertory Grid Methodology to generate statements from Chinese practitioners themselves and then adopt these statements to study the cross-boundary organizations. This more China-specific research design might provide more valuable results in the future.

Appendix A Q-Statements

Membership

- 11) Our organization should be primarily constituted by general-purpose local governments.
- 12) The more there are civic sector organizations (e.g. nonprofits and business interests) represented within our organization, the more accountable it will be.
- 13) Our organization should give each member the same voting weight when making decisions.
- 14) The more there are civic sector organizations (e.g. nonprofits and business interests) represented within our organization, the more effective and efficient it will be.
- 15) Poorer jurisdictions should not have to pay at the same rate as richer jurisdictions.
- 16) Our organization would be more legitimate if there was active participation by federal / state (national / provincial) agencies on our board.
- 17) The more there are other government entities (e.g. federal / national agencies and state / provincial departments) represented within our organization, the more accountable it will be.
- 18) Each general-purpose local government member should provide financial support to our organization in relation to their relative population.
- 19) The more there are other government entities (e.g. federal / national agencies and state / provincial departments) represented within our organization, the more effective and efficient it will be.
- 20) Our organization would be more legitimate if there was active participation by civic sector organizations on our board.

Multi-agenda

- 8) Our organization should have an agenda that covers a broad number of policy areas.
- 9) There are certain policy areas (or policy niches) that only our organization can tackle.
- 10) The fewer the number of policy areas our organization engages in, the more effective it will be.
- 11) The more the number of policy areas our organization engages in, the more effective it will be.
- 12) Having a broad agenda is better than having a narrow agenda.
- 13) Our role should be more focused on planning than on delivering programs and services.
- 14) Our organization should actively address emerging policy issues confronting our region.

Legitimacy (vertical)

- 9) Our organization should have a high degree of intergovernmental legitimacy as viewed by national government law enforcement agencies.
- 10) Our organization should have a high degree of intergovernmental legitimacy as viewed by national government transportation agencies.
- 11) Our organization should have a high degree of intergovernmental legitimacy as viewed by national government health, education, and welfare agencies.
- 12) Our organization should have a high degree of intergovernmental legitimacy as viewed by national government budgeting or personnel agencies.
- 13) Our organization should have a high degree of intergovernmental legitimacy as viewed by state/provincial government law enforcement agencies.
- 14) Our organization should have a high degree of intergovernmental legitimacy as viewed by state/provincial government transportation agencies.
- 15) Our organization should have a high degree of intergovernmental legitimacy as viewed by

state/provincial government health, education, and welfare agencies.

16) Our organization should have a high degree of intergovernmental legitimacy as viewed by state/provincial government budgeting or personnel agencies.

Ambition

- 7) Our organization should work to foster collaboration across local jurisdictional boundaries, including with our neighboring regions and across state/provincial lines when appropriate.
- 8) Our organization to take a leadership role and to be a primary player in regional economic development issues.
- 9) Our organization should focus on fostering regional collaboration among private, nonprofit and philanthropic sector leaders with our local elected officials, including overcoming traditional turf battles and stove piping of programs and services.
- 10) Our organization has modified our culture over the years to continue serving local governments, yet also broadened our partnerships and relationships with private, nonprofit, philanthropic and academic institutions.
- 11) Our organization is focused on providing the leadership and vision necessary for the region to remain competitive.
- 12) Our organization's highest priority should be to serve the interests of its constituent local governments.

Scale

6) Our organization actively promotes the mission of multi-jurisdictional collaboration among local governments within a clearly defined region.

- 7) Our organization should be large enough to represent all the governments in our region.
- 8) If there were fewer members in our organization, we would be better able to perform our function.
- 9) Our organization should help governments in sub-regions of our region deal with issues unique to those sub-regions.
- 10) Our organization should review significant regional economic development plans that are proposed for our region.

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