

Investigating Institutional Integration in the Contexts of Chinese City-regionalization: Evidence from Shenzhen–Dongguan–Huizhou

Published in *Land Use Policy*

Xianchun Zhang

Department of Building and Real Estate, The Hong Kong Polytechnic University

Yi Sun

Department of Building and Real Estate, The Hong Kong Polytechnic University, Email: yi.sun@polyu.edu.hk

Acknowledgement

The article is supported by Start-up Fund for New Recruits (Project code: 1-BE0R) and Central Research Grant (Project code: G-YBZH) of the Hong Kong Polytechnic University. Some data collection work was finished by the first author during his PhD studies. We are grateful to the constructive comments from two anonymous referees and the editor. Thank you to Chen Shouqiang for assisting in graphic drawing.

Abstract

By synthesizing EU and China's experiences, we extend the focal point of city-regional development from western contexts to China through developing a triadic conceptual framework of institutional integration. We identify the inter-scalar politics, development of city networks and non-state domain involvement are three critical components to institutional integration of China. Through a case study of Shenzhen–Dongguan–Huizhou (SDH), one emerging city-region in the Greater Bay Area of China, data from social media and official documents using textual analysis and in-depth interviews are deployed. We find that inter-scalar politics is not always prone to facilitating integration-oriented cooperation. Although jurisdictional readjustment creates some *ad hoc* jurisdictions to streamline inter-governmental relations in areas with fragmented administrative divisions, the adjustment itself creates institutional complexity due to competition between those *ad hoc* and original jurisdictions. In terms of development of city networks, Shenzhen connects closely with its neighboring cities, despite the fact that links among neighboring cities are loose. Areas of cooperation in SDH emphasize economic development, coordinated urban management, and activities under the city-helps-city schemes. Municipal governments play an active role in the expansion of city networks and the selection of cooperation areas. Non-state domain involvement is confined to activities in relation to social affairs, which, compared with economic and rule-establishment related activities, continue to lag far behind.

Keywords: Institutional integration, Inter-scalar politics, City networks, Non-state domain, Shenzhen–Dongguan–Huizhou

1. Introduction

Since 2007, China has introduced new-type urbanization as a pathway for future land and territorial development. City-regions, a new spatial scale consisting of a cluster of cities and their hinterlands, become an important geography for population growth, industrial upgrade, and urbanization (Liu et al., 2014a; Chen et al., 2016). Among the different city-regions of China, Pearl River Delta (PRD) has long been the vanguard in advancing integration oriented regional governance (Xu and Yeh, 2010). Institutional reform is one of the distinct characteristics featuring city-regionalization. For example, as the first regional plan legitimized at the national state level, the “Outline of the Plan for the Reform and Development of the PRD (2008–2020)” stipulates that regional level institutions are fundamental to the city-regionalization of PRD through the integration of otherwise uncoordinated resources, workforces, and expertise, all of which help to improve the institutional framework in coordinating various state authorities (Lai et al., 2015; Sun and Chan, 2017).

Urbanization of China has been quite modularly based, that is, the territorial development is progressed independently within the boundary set by administrative division system. Territorial fragmentation thus impedes the efficient land use at regional scale, which accelerates inter-city competition in the search of land resources. To maximize land resources and other capitals, municipal government is keen on setting up industrial zones within its own jurisdiction, which devastates the ecological sustainability of land as well as the “hollowing out” of rural villages due to the large influx of rural migrants to cities (Yang and Wang, 2008; Long et al., 2011; Li et al., 2014). To address these issues, coordinated territorial development is deployed as the key strategy for land use policy and planning. Institutional integration is essential to the coordination outcomes.

Institutional integration is “the policy decisions taken by two or more governments of countries belonging to the same geographic area in order to promote economic co-operation in terms of deepening and/or widening the spheres of co-ordination under the terms of an agreed pact” (Mongelli et al., 2005; p. 6). Hence, examining land and territorial development from the perspectives of institutional integration helps uncover underlying mechanisms whereby the boundaries of various jurisdictions can be made porous to encourage the flow of land resources, capitals and, moreover, the best practices of land governance. It is under this

background that institutional integration has been widely addressed in the territorial development of China.

Existing literature adds a lot values to enrich and contextualize the contents of institutional integration. However, those studies seem not to establish an all-round conceptual framework to indicate the degree of integration. We consider institutional integration with three dimensions: the inter-scalar politics (governmental relations at the vertical level), the development of city networks (horizontal levels) and involvement of non-state domain (“destatization” level). With an emphasis on institutional integration, we aim to answer (1) how integrated institutions unfold at the city-region level, (2) whether institutional integration is effective, and (3) what the policy implications are.

The present article revisits the development pathway of one city-region of PRD, including Shenzhen–Dongguan–Huizhou (SDH), Shanwei, and Heyuan¹, with particular reference to the institutional arrangement that enables coordinated regional development, such as constructing the infrastructure, eliminating the socioeconomic disparities, and upgrading the industrial structure. SDH area the most dynamic region in PRD whose development pathways have been ridden with tensions and inter-jurisdictional games. The tensions include the potential competition among second-tier cities for getting industrial support from Shenzhen consider many Shenzhen based enterprises now have their ramifications in the surrounding cities; the repeated construction and industrial isomorphism between Shenzhen and Dongguan, and inefficient land use due to competition. For example, in Heyuan city, fierce industrial competition leads to “the excessive emigration of rural labors . . . [and] a decline in arable land use intensity” (Liu et al., 2016, p.569).

The remainder of the paper consists of four sections. The first section reviews the experience of the European Union (EU) in relation to institutional integration. Inspired by EU’s experience, we propose a conceptual framework of institutional integration in China consisting of inter-scalar politics, city networks, and non-state domain involvement. We argue that this framework is helpful in examining the extent to which various jurisdictions/stakeholders are integrated and coordinated in the course of regionalization in PRD. The next section presents a case study of the SDH city-region, assessing three critical

¹ Heyuan and Shanwei are included in the SDH, because of the city-helps-city schemes advocated by the Guangdong Provincial Government in 2011. This strategy calls for the “Revitalization and Development of Eastern, Western, and Northern Guangdong” to help backward cities catch up.

components of institutional integration with data from social media, official documents, and in-depth interviews. The final section discusses the theoretical implications in facilitating city-regionalization as well as China's land use and urbanization policy.

2. Institutional integration from the experience of European Union

Institution refers to “the element of expectations regarding one's own activities and that of others by means of which stability and regularity are constituted” (Brie and Stölting, 2012, p. 21). A comprehensive concept on institution studies not only the rules but also the organizations (Greif, 2006). The organization itself is a component of an institution owing to its motivating function for behaviors. An organization, together with the linkages of other organizations, creates specific rules leading to unique organizational behaviors and motivations. Institutions “constitute the structure that influences behavior, while the behavioral responses of agents to this structure reproduce the institution” (Greif, 2006, p. 14).

Integration is essential to the development of inter-jurisdictional cooperation networks whereby member states are obligated to overcoming fragmentation and uncoordinated development (Peng, 2000). The key emphasis is on how the making of a regional territory becomes a platform to achieve “integrative organization and comprehensive legal agreements” (Peng, 2000, p.177) considering the presence of multiple levels of governments, as well as a variety of regional agencies that hold a take in development issues. The emergence of the EU reveals that national states, as individual organizations, can be coordinated through the creation of a supra-national structure by virtue of setting up a regional authority, promoting networks of cities, and facilitating public-private partnerships. The EU consists of 28 nation states and is a typical trans-territorial region (Raunio, 2011; Brenner, 2004).

EU's experience suggests the structural coherence is important to achieving institutional integration. An integration-oriented framework can ease fragmentation and conflicts among different territorial organizations (Sohn et al., 2009; Cardoso, 2016). Politics across multiple levels of governments is key to achieve integration. The presence of multi-level authorities ensures “a system of co-responsibility between institutions of governance at the central, regional and local levels according to the principle of subsidiarity. . . [and] increasing the authority and capabilities of sub-national levels” (Work, 2012, as cited in Bontenbal and Mamoon, 2017, p. 7). The inter-scalar politics addresses trade-offs between power

decentralization and centralized autonomy. In the down-flow of the decision-making and presence of local state discretion, there are also bargaining and compromise (Sharpe, 1993; Vengroff et al., 2003).

Yang (2005) suggested a horizontal dimension of institutional integration of EU, that is, the development of city-to-city networks upon which cooperation, instead of fragmentation, can be achieved. The “horizontal border-crossing network of local authorities” is a platform to test out joint decision making and delivery of socioeconomic policies (Perkmann, 2007). Such networks commit to collaborative strategies of development through capitalizing on positive effects from regionalization (Morrison, 2006; Perkmann, 2007).

Destatization is another feature associated with institutional integration. Destatization means “some of the particular activities (technical, economic, fisco-financial, juridico-political, ideological, etc.) performed by states (on any scale) have been transferred entirely to or shared with, parastatal, non-governmental, commercial, or not-for-profit actors, institutional arrangements or regimes” (Jessop, 2003, p.37). The involvement of non-state domain in EU functions as a management strategy to cope with inefficiency of resource allocation in regional affairs, as well as information asymmetry in economic development (Iasin, 1991; Jessop, 2000).

3. Institutional integration in China’s city-regionalization: a conceptual framework

3.1 Inter-scalar politics

Experiences from EU suggests that three critical components, i.e., inter-scalar politics, development of city network, and involvement of non-state domain, are critical to the effectiveness and efficiency of institutional integration. Inter-scalar politics in China depicts inter-governmental relation at the vertical level. Considering the presence of state socialism in territorial development, inter-governmental relation takes a strong character of command-control fashion (Wu, 2015; Sun and Chan, 2017). Government at lower levels of hierarchy is building block of that at higher levels (Ma, 2005). However, inter-governmental relation becomes more complex in tandem with the rise of pro-growth local state as well as the counter action of central government to ease unlimited local state discretion (Zhang and Zou, 1998; Wong, 2000).

Since market reform and opening up, economic decentralization has injected municipal and township governments strong incentives to promote local economic development (Wu, 2002). Municipal and township governments aim to maximize economic returns within their own jurisdictions (Wu, 2002; Zhang and Wu, 2006; Xu and Yeh, 2009; Sun et al., 2017). This is achieved through land development, construction of infrastructure, and unlimited use of resources. This pro-growth localism gives rise to the territorial fragmentation as inter-jurisdictional competition triggers environmental degradation, and oversupply and repetition in construction (Xu and Yeh, 2010). Because of this competition, jurisdictional adjustment is deployed as a quick remedy to ease competition through redefining the boundary of territorial development and adjusting administrative rankings of different jurisdictions so that they can cooperate (Ma, 2005; Zhang and Wu, 2006; Li and Wu, 2018). Territorial fragmentation is thus stopped through jurisdictional annexations, mergers, and upgrading (Ma, 2005; Wu, 2016).

The jurisdictional (re)adjustment reflects that in order to stop competition at the locale, those fragmented jurisdictions need to be restructured and placed under a more streamlined governmental hierarchy so that future development pathways are coordinated (Li and Wu, 2018). The process of adjustment (such as converting county to city, merging fragmented jurisdictions) creates a new set of inter-governmental relations (Ma, 2005; Sun and Chan, 2017). For example, upper-level government (such as central and provincial governments) can make use of top-down hierarchy to change jurisdictional setting at the local level (Ma, 2005; Zhang and Wu, 2006). In this process, inter-scalar politics involves not only command and control between upper and lower levels of governments but also compromise and cooperation that happen in those adjusted units. Moreover, local governments can ease competition and facilitate cooperation through creating jurisdictions of new ranks (such as demarcation of new development areas) (Wong and Tang, 2005; Luo and Shen, 2007). Hence, inter-scalar politics involves relations between those newly established and remaining jurisdictions (Liu et al., 2014b; Jiang and Luo, 2016).

Tackling inter-scalar politics is conducive to achieving institutional integration. Cutting unnecessary jurisdictional complexity at the regional level is good for regional policy making with less tension and trade-offs (Zhang and Wu, 2006). This will improve cost-effectiveness of decision-making, particularly for decision making in relation to adjacent jurisdictional units (Xu, 2008; Li and Wu, 2012). The process includes command and compliance across

the levels in the hierarchy, also bargaining, rivalry and compromise so as to achieve certain policy tasks (Ma, 2005; Zhang and Wu, 2006). In sum, to ease fragmentation, jurisdictional adjustment makes use of and recreates a set of spatial scales (manifested as inter-governmental relations), upon which the politics (e.g., bargaining, rivalry and compromise) is key to achieve integrated policymaking and territorial development. Politics associated with the creation of different spatial scales enable “numerous activities of flexible competition, cooperation, and negotiation” (Li et al., 2014, p. 129).

3.2 Development of city network

As mentioned, politics is essential to institutional integration and only cooperation sheds light on positive pathways towards integrated development. Compared to inter-scalar politics, city networks are something substantial and tangible, refiled as “the form and intensity of interactions between actors who are potentially willing to cooperate.” (Sohn et al., 2009, p.925). Existing scholarship has confirmed that city network constitutes to institutional integration because forming networks needs collaborative and co-growth strategies (Luo and Shen, 2009; Chan and Xian, 2012; Li and Wu, 2013). In China, almost all city networks are government-initiated (Xu and Yeh, 2013; Sun and Chan, 2017). For example, to build up Guangzhou–Zhuhai inter-city railway, municipal governments play a dominant role to solve problems in terms of space and project investment (Xu and Yeh, 2013).

Developing city networks is oriented to multiple tasks (Taylor, 2001; Perkmann, 2007; Luo and Shen, 2009; Chan and Xian, 2012). This is similar to EU wherein the areas of cooperation are well-rounded with diversified prisms, such as economic development, social matter, and daily operation issues (Perkmann, 2007). In terms of mode of cooperation, the networks can be effected through setting formal institutional arrangements, such as joint conferences, inter-city agreements, and regional planning (Farrell and Héritier, 2003). Networks also include *ad hoc* institutional arrangement, such as communication and investigations, joint actions, and organization of events initiated by specific functional units (Luo and Shen, 2007, 2009; Li and Wu, 2013). The functions of different modes vary and are complimentary with each other. The formal cooperation ensures an integration-oriented platform upon which different parties are committed to (Luo and Shen, 2009; Li and Wu, 2018). This also articulates clear leadership in the networks. Those *ad hoc* institutional settings are important to expand areas and achieve some “intermediate outcomes”, the small

wins in some policy issues, including formulating strategic plans or joint fact finding (Ansell and Gash, 2008).

3.3 Non-state domain involvement/De-statization

Non-state domain involvement is important because the decision making on and provision of services rely more on its involvement than that of the formal state domain (Xu and Yeh, 2013; Li et al., 2014). Since the market reform in 1978, city-regionalization evolved to incorporate non-state stakeholders, such as NGOs, new economic organizations, and public institutions (Wu, 2002; Feng et al., 2008; Luo and Shen, 2007). Non-state sectors play a crucial role in service provision (Chong et al., 2006; McKee et al., 2006; Kwak et al., 2009). The degree of involvement of different players is crucial in analyzing the relationship between state and non-state domains in city-regionalization (Armstrong et al., 2011). Appropriate structure of participation is also essential to linking state, market, and society.

The market and social actors are active considering decentralization and marketization in post-reform China. Non-state actors are encouraged to participate in various regional affairs, such as social development, economic development, and institutional cooperation (Wu, 2015). Central to the non-state domain involvement is to investigate the fields/areas in which market and social actors play a leading role (Iasin, 1991; Jessop, 2000; Warleigh, 2001). The involvement of market and social actors, particularly the areas and participation form, directly affect the performance of integrated development. Organizational forms with flexibility are good to repack the responsibilities of actors who are willing to cooperate (Maier and Meyer, 2011).

Seen from these perspectives, the three components, above, are important to investigate institutional integration in the process of city regionalization of China. The three dimensions are also intersected—with inter-scalar politics oriented to coordination and integration, city networks can be established with the substantial involvement of market and social actors, giving rise to the expanding non-state domain involvement. Specifically, the inter-scalar politics constitutes to the structural coherence that articulates inter-governmental relations for cooperation. City networks are something substantial and tangible that offers platforms to activities for integrated development as well as accommodates commitments from non-state domain. Non-state domain involvement is conducive to offsetting the deficiencies in the

inter-scalar structure of governmental systems, not only in supply of funding and technology, but also in efficiency and legitimacy under the marketization.

Scant literature has linked jurisdictional adjustment with the discussion of inter-scalar politics and explored how this politics constitutes to cooperation and integration. In terms of city network, it is important to present the richness and depth of networks by data “mining” in order to understand what main areas of cooperation are and what modes have been deployed. This information is useful to evaluate the current progress of institutional integration in China’s regional development, which will also inform future land use and sectoral development plan by making reference to city-region as an integrated spatial unit.

4. Empirical backgrounds and research methods

4.1 Study area

SDH has a total area of 36,322 km², which comprises one vice-provincial-level municipality, Shenzhen (subordinate to the central government and the Guangdong Provincial Government); four prefecture-level municipalities, Dongguan, Huizhou, Heyuan, and Shanwei (under the Guangdong Provincial Government); ten counties; one county-level city; and twelve districts ranked at the same administrative level as counties and county-level cities (Fig.1). The jurisdictional ranking of SDH comprises at least four tiers and no formal regional authority (Fig. 2).

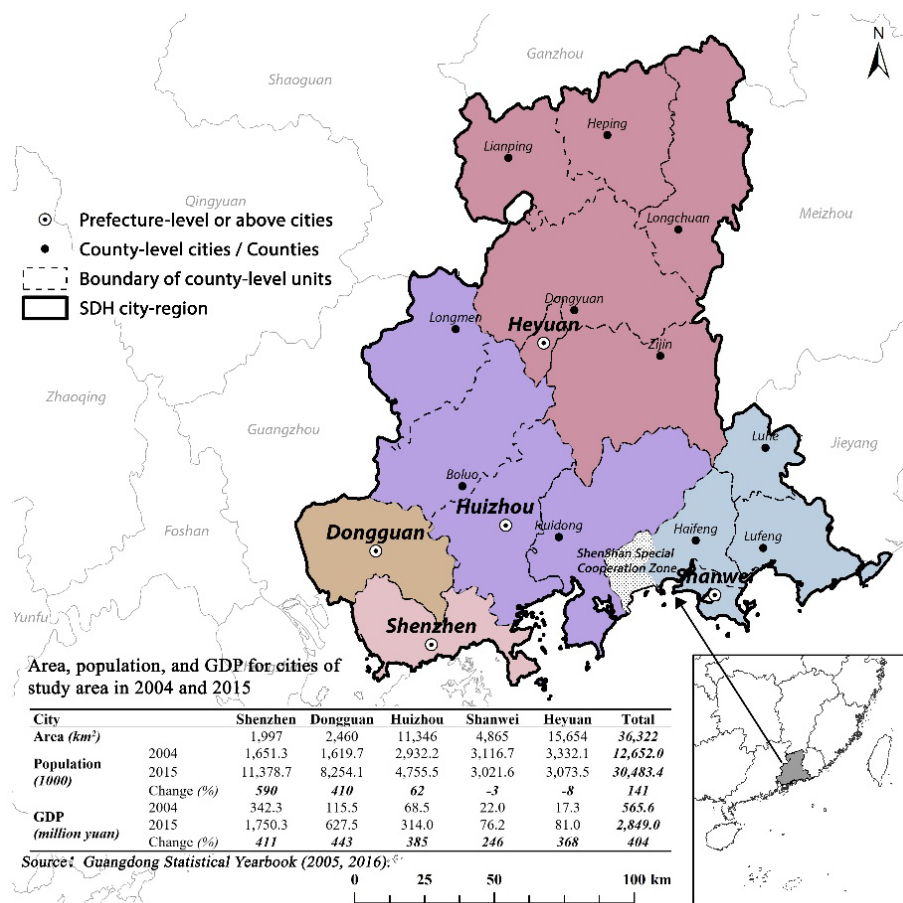


Fig. 1. Location of the SDH city-region

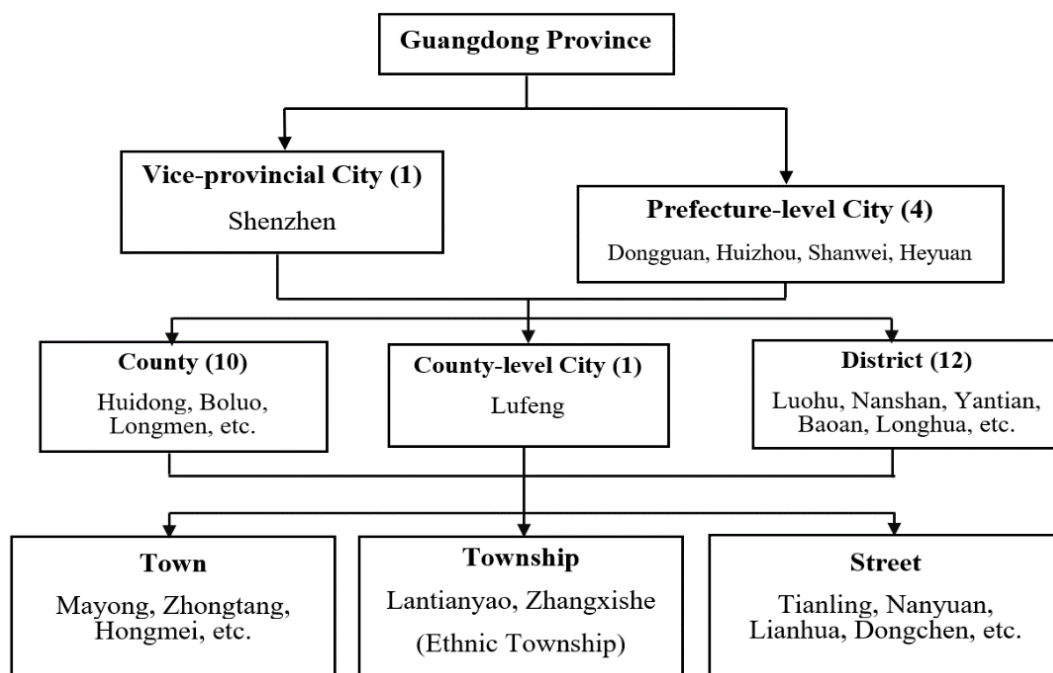


Fig. 2. Jurisdictional setting of SDH as of 2016

In the 1994 PRD Economic Region Urban Cluster Plan, SDH belonged to “Eastern Development Region”, consisting of Shenzhen, Dongguan, and Huizhou. The 1994 Plan hoped that since the three cities are geographically adjacent, there might be possible synergy in search for coordinated development. SDH as a geographical concept formally appeared in the 2004 PRD Urban Cluster Coordinated Development Plan, as one sub-region in PRD. Guangdong promulgated the strategy “Revitalization and Development of Eastern, Western, and Northern Guangdong” in 2011. Two backward cities in peripheral region of Guangdong, i.e. Shanwei and Heyuan, were incorporated into SDH. This marks the emergence of Guangdong’s “city-helps-city scheme”. Guangdong hopes that the core city (Shenzhen) can assist backward cities (Shanwei and Heyuan) in socioeconomic development. The promulgation of the SDH Coordinated Development Plan (2012–2020) positions SDH as modern industrial hub facing a global market. SDH is the most variant city-region in the PRD. In 2015, SDH has 30.5 million people, contributing 2,849 billion Yuan to the GDP (Guangdong Provincial Government, 2016). SDH ranks the number one in its GDP contribution as compared to Guangzhou–Foshan–Zhaoqing (including Qingyuan and Yunfu) and Zhuhai–Zhongshan–Jiangmen (including Yangjiang).

4.2 Data collection methods

To analyze inter-scalar politics, we collect data in relation to the administrative setting and jurisdictional arrangement in the Shenzhen, Dongguan, Huizhou, Heyuan, and Shanwei using statistical yearbooks from 2001 to 2018. City networks and non-state domain involvement are obtained by analyzing data from social media, mainly the official websites of the municipal governments. We also use two popular search engines (*Google* and *Baidu*) to search for news dated from 2004 to 2015 in both Chinese and English. Social media is used to decide and analyze cooperation linkages between cities (Aggarwal and Zhai, 2012; Li and Yan, 2013). Social media is an innovative means for data mining. Data incorporated in social media reflect the intensity of network expansion and connection in regional coordinated development (Zhang et al., 2018).

City name is typed as the keyword to search for cooperation news². The government website of one city is used to search for cooperation-related news about other cities, leading to a total of 10 pairs. For instance, to collect news between Dongguan and Shanwei, we search “Shanwei” in the Dongguan official website and “Dongguan” in the Shanwei official website. Inter-city cooperation news is likewise obtained by typing two cities in the search boxes of *Baidu* and *Google* until all 10 pairs are searched. A total of 1,015 news reports are obtained, excluding redundant and irrelevant news. The cooperation news includes both government initiated and those undertaken by market and civil society (such as NGOs and communities).

We integrate the news into a database to demonstrate city networks and non-state domain involvement. Given the large data size, textual analysis is adopted to code and analyze the news titles and contents. We adopt the manual method of textual analysis following an established protocol (Basil, 2003).

We select a 12-year time span from 2004 to 2015, which is further categorized into six periods of two years each: 2004–2005, 2006–2007, 2008–2009, 2010–2011, 2012–2013, and 2014–2015. Under different time periods, the news reports for each pair are counted, and the total numbers are used to reflect the intensity of city-to-city links. A matrix is used to number, inscribe, and analyze all 1,015 news through cooperation mode, areas of cooperation, stakeholder types, and participation forms. The first two themes relate to development of city networks and the last two relate to non-state domain involvement. After perusing the news titles and contents, the abbreviated answers to these four issues are summarized as keywords to fill in the matrix. An inductive analysis method is employed to integrate similar categories. After three rounds of induction and consolidation, six cooperation modes, five areas of cooperation, five stakeholder types, and four participation forms are identified (Table 1).

Communication and investigation, joint action, and organization of events are ad hoc and only applicable to specific issues. Joint conference, inter-city agreement, and regional planning regularly occur and have clear rules of action and participatory members as formal institutional arrangements. Among five areas of cooperation, the percentage of each aspect in

² We understand that the coming-into-being of city networks also includes contestation and bargaining, instead of cooperation, between cities. However, in this study, we confined our scope only to those factors conducive to achieving institutional integration instead of fragmentation. We acknowledge this is a limitation for our study. Conceptually, the rivalry and tension between jurisdictions at horizontal level belong to inter-scalar politics. We discuss one case about this tension, that is, the set-up of “new” district in Shenzhen and its relations with remaining districts.

all five areas for each city pair is calculated by dividing the relevant news by the total number of news.

Table 1

List of cooperation mode and areas of cooperation.

Cooperation mode

Category	Definition	Key domains
Communication and investigation	Inter-city surveys or communication activities among senior local officials for urban management	- Survey - Practices sharing - Communication
Joint action	Joint workshops or practices on urban development and management (e.g., joint fire drills and pollution control)	- Joint action
Organization of events	Activities that are jointly organized by two or more cities to facilitate social development (e.g., exhibitions for urban culture and co-sponsored expositions)	- Organization of events
Joint conference	A regular inter-city organization that discusses significant issues among local officials in different cities	- Joint conference - Open forum among cities
Inter-city agreement	A formal inter-city agreement jointly issued by local officials to normalize their daily actions in coping with cross-border issues by providing strategic outlines and action guidelines	- Signing of inter-city agreement
Regional planning	Inter-city activities that aim to formulate relevant SDH integration plans	- Planning

Areas of cooperation

Category	Definition	Key domains
Comprehensive issue	Creation of a comprehensive and multifarious framework to steer inter-city cooperation	- Comprehensive issue
Economic development	Inter-city cooperation for urban and regional economic growth	- Industrial development - Infrastructure construction
Institutional design	Inter-city agreement designed to formulate coordinated urban management and institutions	- Urban management - Urban planning
Social development	Inter-city cooperation for facilitating social development	- Science and education - Resource and environment - Disaster emergency - Entertainment
City-helps-city scheme	A special inter-city assistance activity to revitalize and develop eastern, western, and northern Guangdong.	- Aid support

The five stakeholder categories are government–government, government–market, government–society, market–market, and society–society. The four participation forms of stakeholders include chamber of commerce, public institution (e.g., hospital, school, and charity house), NGO, and community. To calculate the non-state domain involvement, we

generate the intensity of involvement by a specific stakeholder through dividing the number of relevant stakeholder news by the total numbers of news. For example, the participation level of market actors is obtained through dividing the aggregate number of government–market and market–market news by the total number of news.

The contents of news are likewise summarized as evidence to illuminate the findings from calculation. In addition, to further examine the underlying mechanism of institutional integration in SDH, we interview seven local officials, seven urban planners, and four managers of chambers of commerce and NGOs from March to April 2016 (Table 2). Relevant interview transcripts are presented as supplementary materials.

Table 2

List of the interviewees

Types	Number	Affiliations
Local officials	A, B	Urban Planning Department in Shenzhen
	C	Development and Reform Bureau in Huizhou
	D	Urban Planning Department in Shanwei
	E	Management committee of <i>Shen–Shan Zone</i>
	F	Longhua New District government
	G	Development and Reform Commission in Shenzhen
Urban planners	A, B	Planning and Design Institute of Perking University (Shenzhen) Co., Ltd.
	C, D, E, F	Urban planning and Design Institute of Shenzhen
	G	Shenzhen Lay-Out Co., Ltd.
Managers of chambers of commerce and NGOs	A, B	Shenzhen Songgang Chamber of Commerce
	C	Shenzhen Hi-tech Industry Association
	D	Shenzhen Lions Clubs

5. Institutional integration of SDH

5.1 Inter-scalar politics

Jurisdictional adjustment among cities of SDH is one typical feature characterizing institutional integration. Since 2000, SDH has had at least six rounds of jurisdictional adjustment (Table 3). The ranking upgrade and promotion is the most common way to ease competition and facilitate coordinated inter-governmental relations. Different from “converting county level cities to districts”, the “promotion”, i.e., set-up of new districts (sometimes in the name of cooperation zones), is not associated with a formal jurisdictional title as recognized under current administrative division system of China. These districts and zones enjoy specific, sometimes higher than general, administrative execution powers with

“blurred” administrative statuses. This initiative aims to eliminate the negative effects of territorial fragmentation by ensuring development of advanced areas or places with development potential would not be confined due to their administrative ranking mismatch (local official A). This jurisdictional arrangement changes inter-scalar politics with a new set of governmental hierarchy and inter-governmental relations. The cases below articulate two different scenarios whereby initiatives for institutional integration change inter-scalar politics in two contrasting dimensions.

Table 3

Jurisdictional adjustment of SDH since 2000

Year	Adjustment details	Advantages and disadvantages
2003	Huiyang, a county-level city, was converted to a district of Huizhou City	<ul style="list-style-type: none"> - To reduce the inter-jurisdictional competition - To repair the urban–rural fragmentation
2007	The Guangming New District was established, administrated by a Bao'an district in Shenzhen.	<ul style="list-style-type: none"> - To increase the autonomy of Guangming New District in socioeconomic development by upheaving its jurisdictional ranking - To reduce administrative tiers to accelerate administrative efficiency
2009	The Pingshan New District was established, administered by Longgang district in Shenzhen.	<ul style="list-style-type: none"> - To help Pingshan acquire more space for socioeconomic development based on the concessionary policies from the set-up of a new district - To increase the autonomy of Pingshan by upheaving its jurisdictional ranking. With higher ranking, processes for planning approval become easier and industrial subsidies from the municipal government increase.
2011	The Longhua and Dapeng New Districts were established and administered by the Bao'an and Longgang districts, respectively.	<ul style="list-style-type: none"> - <i>ibid.</i>
2011	Shenzhen–Shanwei Special Cooperation Zone with the prefecture-level administrative status was set up.	<ul style="list-style-type: none"> - To reduce the regional disparity between Shenzhen and Shanwei - The Shenzhen obtains the land resources to accommodate industries - Shanwei gains the advanced industries from Shenzhen to revitalize its backward economy
2016	The Longhua New District and Pingshan New District were converted from new districts to districts.	<ul style="list-style-type: none"> - To strengthen the administrative functions of Longhua and Pingshan and promote economic growth by officially acknowledging these two economic spaces as two independent administrative units - Territorial fragmentation and competition emerge again between these two districts and their surrounding districts

2018	The Guangming New District was converted from new district to normal district.	- As competition between new district and surrounding normal districts arises, the “new” jurisdictional title was withdrawn
------	--	---

Source: Summarized from the statistical yearbooks of five cities (2001–2018) and related news.

The first case is Shenzhen–Shanwei Special Cooperation Zone (hereafter referred to as *Shen–Shan Zone*). This zone is located in Shanwei as an inter-jurisdictional cooperation park. It is established in 2011. When Shenzhen came up with a proposal to build industrial transfer parks in Dongguan and Huizhou (due to the geographical proximity), both cities rejected the offer considering that Shenzhen would intervene on land development (local officials B and C). With tension arising between Shenzhen and the two cities, provincial government repackaged the project under city-helps-city schemes and designated Shanwei as the final site for the project. Besides, provincial government coordinated in the bargaining between Shenzhen and Shanwei, leading to the establishment of *Shen–Shan Zone* (local officials D and E).

Without formal administrative positioning under the current administrative division system, *Shen–Shan Zone* has the autonomy in personnel appointment and removal which is empowered by the provincial government. *Shen–Shan Zone* management committee is established to oversee the development within the industrial park and exerts its own discretion in socioeconomic development affairs. The provincial government hopes that, through less intervention from upper-level government, the management committee can be more proactive and innovative in industrial development as well as in attracting investment (local official E). The provincial government is very generous in resource allocation. For example, to ease the inadequacy of construction land, the provincial government allocated approximately 70 and 370 ha for the *Shen–Shan Zone* in 2014 and 2015, respectively (local officials A and E).

The creation of *Shen–Shan Zone* facilitates the institutional integration by reducing the regional socioeconomic disparity between advanced and backward cities. *Shen–Shan Zone* overcomes dual administrative systems thanks to the coordination from provincial government. Consequently, Shenzhen and Shanwei collaborate in economic development and the collaboration helps solve their own urban issues such as over-accumulation, inadequate industrial spaces in Shenzhen and the backward economic structure of Shanwei. As one local official expressed:

“Shenzhen has confronted significant problems related to the inadequacy of its urban space. The actual supplies of construction land in 2015 and 2016 merely reached 1,390 and 1,173 ha, respectively, and most of the land were allocated for public services. The land used for industrial development is even less than 1 km² every year. Such development deadlock compels the Shenzhen municipal government to seek for land at the SDH scale. The Shanwei municipal government expresses their aspiration to lend land by building an industrial transfer park, because it hopes the industries introduced from Shenzhen can help Shanwei revitalize its backward economy.” (local official A)

The second case is the “new” districts initiated by the Shenzhen municipal government. Since 2007, Shenzhen has set up four new districts. These “new” districts are created either by merging the whole or some parts of the two original districts into one or demarcating a smaller area within one district. These new districts are granted with additional administrative execution powers. In this way, municipal government hopes these districts can further progress economic development with less administrative hurdles, without changing the formal administrative system (local official F). Again, these new districts are independent of formal administrative status. The municipal government directly oversees the socioeconomic and spatial development of these new districts. These *ad hoc* new districts obtain great economic achievements. For example, investment of fixed asset in these four “new” districts increased from 73 billion yuan in 2012 to 102.6 billion yuan in 2015 (Shenzhen municipal government, 2016). The growth ratio of these investments is much higher than those common districts.

It seems that these “new” districts are economically competitive to act as economic engines for the whole region. However, the demarcation of these new districts causes vicious competition for developmental resources with neighboring districts that have normal administrative ranking (urban planners A and B). Administratively, antisymmetric jurisdictional ranking between new and conventional districts makes coordinated development a difficult task (urban planners A and B). Since 2016, these unique districts have been converted to conventional districts because the ranking promotion creates administrative complexity and fragmentation. Only one new district, Dapeng, was retained until now.

The two stories of jurisdictional adjustment impact on inter-scalar politics, on contrasting dimensions. The *Shen-Shan Zone* pushes inter-scalar politics towards collaboration by articulating clear responsibility of both cities. Shenzhen is responsible for constructing infrastructure, introducing industries, and attracting investments. In fact, many tenants in *Shen-Shan Zone* are subsidiaries of Shenzhen's corporation. Shanwei is responsible for land preparation (such as land acquisition and housing demolition). Provincial government plays a role as coordinator whereas decision-making is jointly shared by Shenzhen and Shanwei in the form of *Shen-Shan Zone* management committee. This arrangement helps to enhance administrative efficiency because the empowerment from provincial to local shortens the approval cycle of some megaprojects. However, in the Shenzhen's case, the adjustment itself creates *ad hoc* jurisdictions that enjoy higher development priorities. The process adds to territorial fragmentation because it aggravates struggles and conflicts for developmental resources between new and conventional districts. Subsequently, the adjustment generates uncoordinated development with neighboring districts/counties; further increasing fragmentation despite the aim to promote integrated spatial planning. The set-up of "new" districts pushes inter-scalar politics towards rivalry and hegemony in competing for development resources.

5.2 City network

Connections between cities and their areas of cooperation

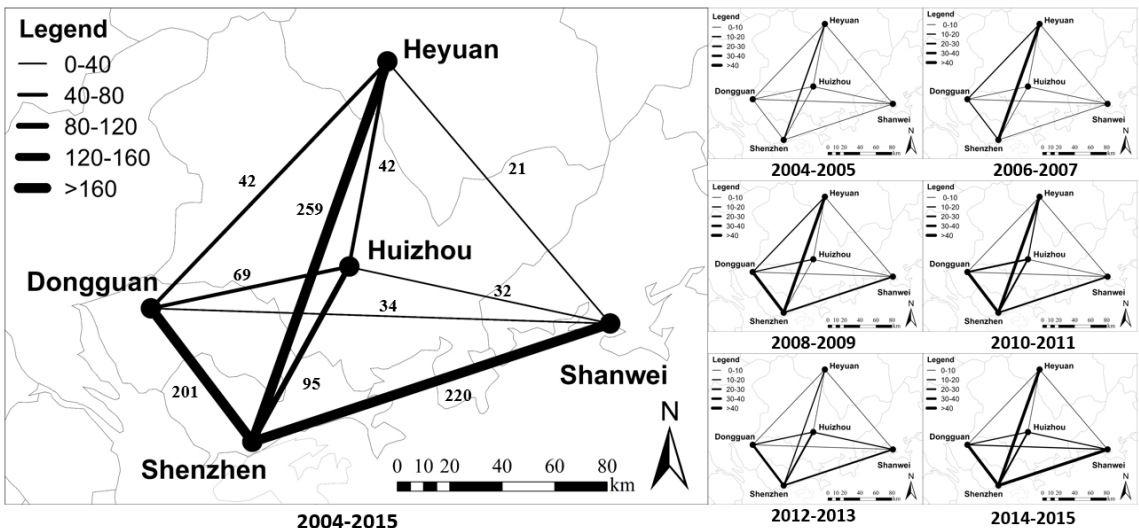


Fig. 3. Connection between cities in SDH

Notes: The boldness of the line indicates the number of news between cities.

Shenzhen was the core city and was strongly connected with Dongguan, Shanwei, and Heyuan from 2004 to 2015 (Fig. 3). In terms of areas of cooperation, Shenzhen–Shanwei has strong ties in economic development, accounting for 31% of the total. The primary area of cooperation remains activities under city-helps-city schemes. This reflects strong incentives from the provincial government to help underdeveloped cities catch up by designating an advanced partner city. A total 42% of Shenzhen–Shanwei news and 51% of Shenzhen–Heyuan news are about actions, guidelines, and policies that Shenzhen will take to help Shanwei and Heyuan. This result means that Shenzhen effectively assists underdeveloped cities under political mobilization from the provincial government.

The cooperation between Shenzhen and Dongguan concentrates on institutional design. For example, frequent joint conferences occur between Shenzhen and Dongguan regarding urban security (10 times from 2006 to 2015) and emergency response (9 times from 2013 to 2015). Cooperation on institutional design (rule-establishment related activities), such as joint workshops for senior managers of the two cities to learn urban management and planning, or the formulation of *ad hoc* planning, work quite well in enabling Shenzhen and Dongguan. The potential competition in the industrial development between Shenzhen and Dongguan imposes obstacles for real cooperation in the economic sphere. This finding can be proven by the site selection of *Shen–Shan Zone*, as noted by local officials:

“In the beginning, Shenzhen attempted to cooperate with Dongguan in the construction of an industrial transfer park owing to the relatively high degree of infrastructure integration and industrial development. However, the Dongguan municipal government was reluctant because the park would be built in Dongguan but overseen by Shenzhen. Moreover, Dongguan wanted high-end industries from Shenzhen, instead of those relocated from Shenzhen, to facilitate its industrial upgrade. Finally, Shenzhen had to select Shanwei as its partner in economic cooperation.” (local officials A, B and C)

Compared with Dongguan, Shenzhen is keen on selecting Huizhou as its primary cooperation partner in economic development. This is because Huizhou, as an emerging economy, has a large proportion of lands to accommodate relocated industries from Shenzhen (urban planners C, D, E, and F). In this way, Shenzhen can acquire adequate urban space to upgrade its industrial structure by developing new industries. Substantial institutional level collaborations are also initiated to secure the Shenzhen–Huizhou socioeconomic integration

through specific guidelines. For example, including Shenzhen and Huizhou, five cities (i.e. Shenzhen, Dongguan, Huizhou, Shanwei, and Heyuan) have held an annual joint conference of collaboration on urban security since 2006. Under this conference, the “Public Security Bureau Police Collaboration among Five Cities Framework Agreement” was signed to offer specific guidelines for strengthening urban security.

Overall, city-to-city cooperation is intensifying. In SDH, the primary areas of cooperation include economic development and institutional design (to create coordinated urban management), accounting for 27.8% and 26% of all areas of cooperation, respectively. City-helps-city schemes are progressing substantially as this is a task assigned by provincial government.

Social development remains on the sidelines (Fig. 4). The relocation of backward industries is still the primary objective of Shenzhen to promote its collaborations with Shanwei and Heyuan in terms of economic development. The city has very few actual incentives on social assistance, such as scheduled donations and co-building hospitals or schools. As noted by an urban planner:

“Assisting backward cities is a political slogan because how to assist and to what extent and forms between the core and outlying cities are not officially documented by the provincial government. For Shenzhen, such an initiative merely provides an opportunity to relocate its backward industries to these less-developed cities. With respect to other forms of aid activities, Shenzhen only organized sporadic informal activities for propaganda and to meet the requirements of the provincial government.” (urban planner G)

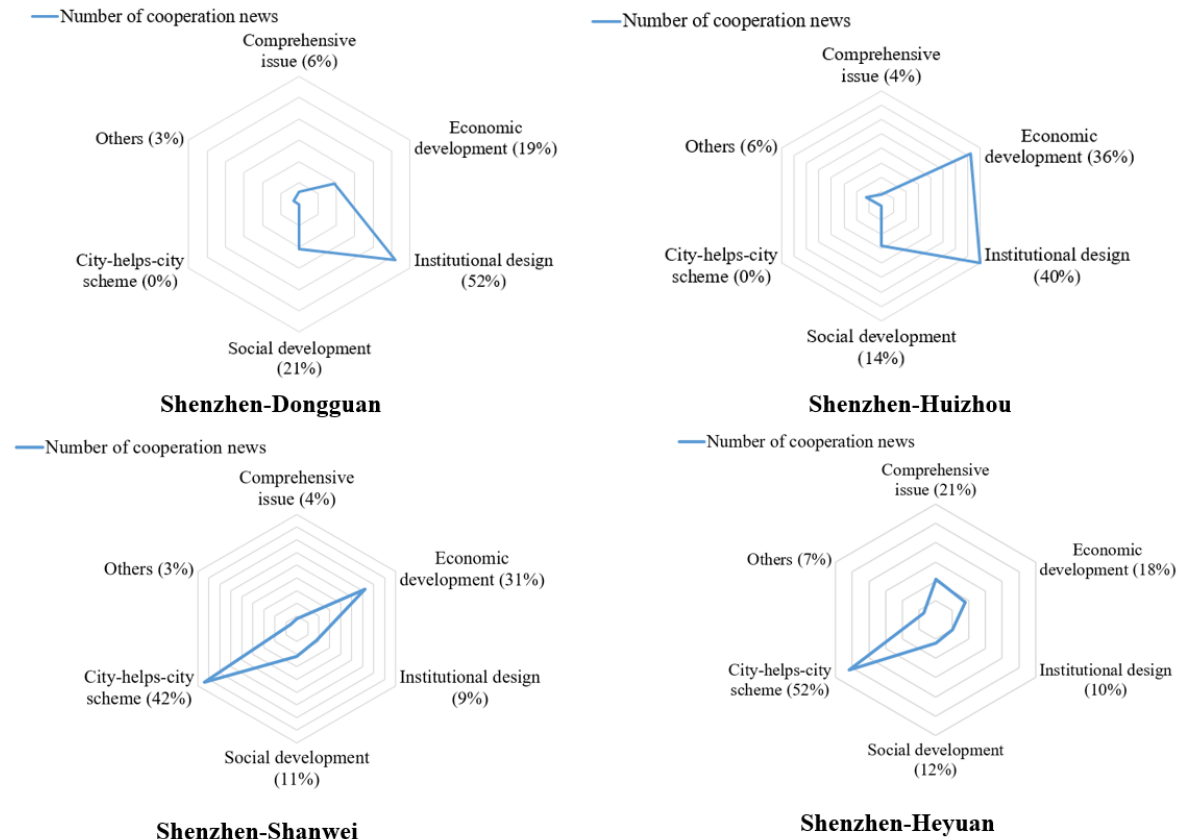


Fig. 4. Areas of cooperation of four inter-city groups from 2004 to 2015

Cooperation mode

Six cooperation modes have been identified for SDH (taxonomy in Section 4.2). Cooperation between cities primarily occurs through *ad hoc* institutional arrangement. Communication and investigation accounts for the largest percentage (43%) in all SDH cooperation modes because these activities can be organized in a flexible manner. Discussion among involved parties helps to exchange ideas and experience about urban management and regional development (local official G). Inter-city agreements, joint conference, and regional planning have been acknowledged and practiced in most areas of cooperation. This routinized agenda setting is conducive to consensus oriented decision-making among municipalities. This formal events and actions also provide chances for nurturing commitment from municipal governments (local official G).

The *ad hoc* institutional arrangement applies to activities under city-helps-city schemes. For example, the Shenzhen Lions Clubs donated goods to disaster-affected areas in Shanwei and Heyuan in 2013, while the Shenzhen Chaoshan Culture Research Association provided

medical assistance by sending drugs and medical facilities to hospitals in Shanwei and Heyuan in 2015.

Compared with Shenzhen–Shanwei and Shenzhen–Heyuan (*ad hoc* institutional arrangement for aid activities), the cooperation modes of Shenzhen–Dongguan and Shenzhen–Huizhou are formal. For example, transport planning is governed by the SDH Transportation Integration Plan among Shenzhen, Dongguan, and Huizhou. This plan is jointly drafted and promulgated by all five city mayors through the annual conference on transportation integration. These formalized cooperation modes allow for the promulgation of substantial inter-city agreements and *ad hoc* course of action. For example, the Joint Conference for party leaders and governmental officials of Shenzhen, Dongguan, Huizhou, and Shanwei has been held annually since 2007. A series of agreements is established which, in effect, provides a detailed outline and action guidelines for regional infrastructure construction.

5.3 Non-state domain involvement

Participation level and areas of cooperation

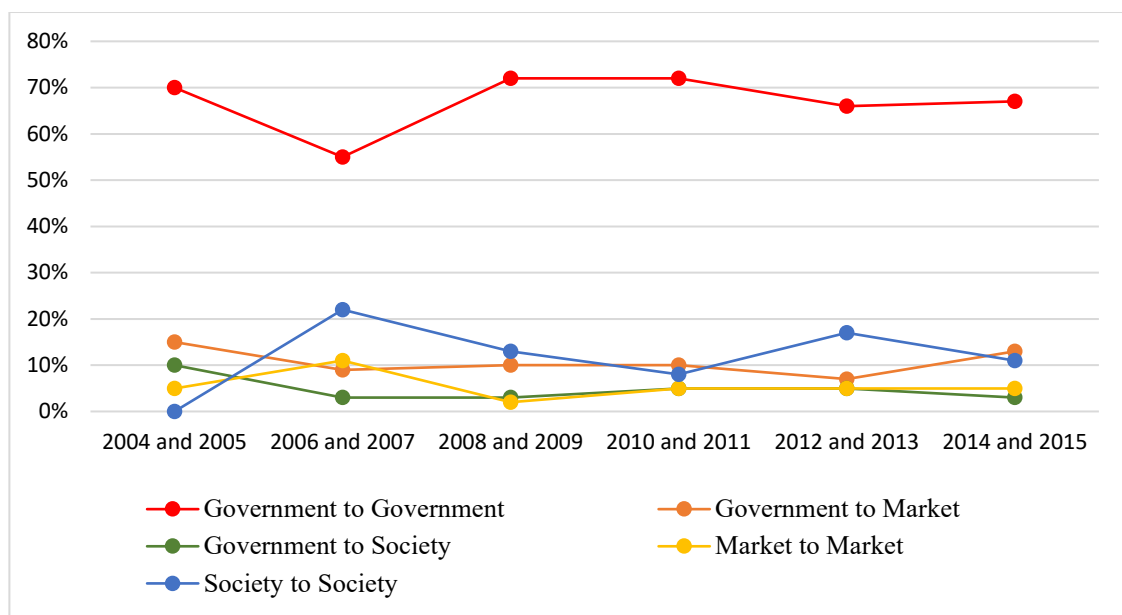


Fig. 5. Ratio of five types of cooperation in institutional integration from 2004 to 2015

Notes: The ratio indicates the proportion of stakeholder news to total news

Fig. 5 illustrates the frequency and intensity of the five types of cooperation from 2004 to 2015. Government-to-government cooperation dominates the other four types to play a

dominant role in facilitating the integration process. In comparison, the proportion of other types of stakeholder collaboration accounts for less than 20% among all data obtained. The government clearly understands that obtaining resources, labor, and capital from the non-state domain is much more sufficient and effective (local official G). Government–market and government–society cooperation thus focus on economic and social development, as well as aid activity. For example, governments cooperate with chambers of commerce to enable industrial introduction and with NGOs to boost the social development of underdeveloped cities. However, the involvement of market and social actors here is relatively marginalized, accounting for around 17% of total news obtained. This indicates that non-state actors merely play an assistant role.

Specifically, market actors engage in economic development and activities under city-helps-city scheme through cooperation with other market actors or the government. Inter-market cooperation concentrates on city-helps-city scheme, whereas government-to-market cooperation focuses on economic development. For example, the Shenzhen Hi-tech Industry Association visited Huizhou to explore the development of a high-tech industry in 2011. For Heyuan, the Shenzhen Songgang Chamber of Commerce donated 850,000 Yuan to construct a primary school (managers A and B). Civil society, particularly NGOs, primarily participate in social development through government-to-society and society-to-society cooperation. For example, the Paradise International Foundation initiated waste treatment for cross-boundary rivers in 2009. In addition, the Shenzhen Literature and Arts Association discussed channels to strengthen cultural communication between cities in 2015.

Participation form

The main participation of market actors is the chamber of commerce (see Appendix 1). The majority of market actors comes from Shenzhen. The chambers of commerce are involved in economic development and activities in relation to city-helps-city schemes. They are also affiliated to the government to bolster economic linkages across jurisdictions. These linkages include industrial collaboration, business communication, and building industrial transfer parks. The emergence of market actors in Shenzhen is largely due to the city's good economic profile and its relatively well-established urban management compared with the other SDH cities.

“The chambers of commerce flourish in Shenzhen because of the solid economic foundation. Industrial development and rapid economic growth create favorable conditions for the role and strength of market forces. These are the driving forces for the establishment of chambers of commerce. For example, Shenzhen strictly protects intellectual property rights compared with other cities in China.” (manager C)

Social actors engage in public affairs that help to improve the environment and citizens’ well-being (see Appendix 2), such as entertainment, environmental protection, education and culture. Public institutions (e.g., public hospitals and schools), NGOs, and the community, significantly contribute to these activities (manager D). However, most activities that NGOs initiated have limited impact on SDH development. For example, several Shenzhen-based foundations help to improve city greening and protect the river. These tasks are set by municipal governments, and thus from their perspective, the role of social actors is not fully acknowledged (local official G).

In sum, the non-state domain involvement in SDH is mainly peripheral because the integration remains a government-led project. Compared with the dominant role the government plays in all subject areas, the Shenzhen Chamber of Commerce acts as representative and executor to deliver economic development and aid activity. The social actors in Shenzhen mostly participate in these social development-related issues, manifesting in the form of public institutions (such as hospitals), NGOs, and the community.

6. Discussions and conclusion

This study frames and examines institutional integration in China’s regional development. Considering the experience of EU, central to institutional integration is the politics across multiple layers of government to maintain structural coherence for cooperation and co-flourishing. Horizontally, the presence of border-crossing network of local authorities is essential to achieving multiple tasks in institutional integration. City networks denote the substantial and tangible outcomes of integration. Destatization in EU is also significant, articulating the functional importance of non-state sectors in facilitating integration. Inspired by EU’s experience, we contextualize institutional integration in the contexts of China’s territorial development particularly after economic reform and opening up. We argue that in the process of regionalization, reshuffling of inter-governmental linkages is achieved through

jurisdictional (re)adjustment, upon which inter-governmental relation can be reshaped towards integration and collaboration. The inter-scalar politics in China's regionalization is triggered through jurisdictional adjustment. The "politics" involves not only command and control, but also bargaining, rivalry and compromise. At the horizontal level, building city networks on various aspects makes integration concrete. Similar to EU, marketization in China gives rises to the emergence of market and social sectors. Conceptually, this framework extends the focal points of institutional integration to the non-Western contexts, which covers not only hierarchical links but also horizontal networks and non-state domains. The case study of SDH city-region reflects three important findings.

First, inter-scalar politics is mobilized and changed through jurisdictional adjustment. There are two different scenarios about the politics. In *Shen-Shan Zone* case, the politics is oriented to cooperation between two cities. Creating the inter-jurisdictional park not only solves the problem of inadequacy of urban space in Shenzhen but also relocates its industries to Shanwei to upgrade the latter's underdeveloped economy. Provincial government is a facilitator who assigns development opportunities and grants administrative power to the local authority. The set-up of *Shen-Shan Zone* helps achieve institutional integration as the future development within the zone is determined jointly by the committee, which rids the lengthy process of bargaining between two cities.

Not all adjustments help alleviate fragmentation. The designation of new districts in Shenzhen aims to serve as economic engines of regional development. Without a formal administrative title compared with normal districts, these new districts are exempted from unnecessary administrative procedures in attracting investment and approving new projects. Ideally, by enhancing the development priority of advanced jurisdictions, the new districts can create more economic values by unharnessing their usual administrative title, which used to be a hurdle in competition. However, the rise of new districts impairs the administrative power of conventional districts, creating new tension in socioeconomic and spatial development. These new districts have been transformed into conventional districts since 2016, yet fragmentation remains. The adjustment creates jurisdictions with variegated administrative titles, indicating that inter-scalar politics is prone to creating more institutional complexity and paradox—repairing existing by generating new fragmentation.

In addition, the absence of regional authority leads to the provincial government acting as a gatekeeper for regional development. However, provincial governments in China already

assume multiple tasks, including securing coordinated regional development, delivering social services, and promoting pro-growth initiatives at the overall provincial scale. Xu and Yeh (2009) argue that the provincial government acts as a “watchful eye” of the central government in the recent land development. Our case study suggests that such “watchful eye” is very strategic in facilitating institutional integration. For example, provincial government is using various strategies to rid fierce competitions among local jurisdictions and regional disparity between advanced and underdeveloped cities. This explains the coordination role of provincial government in *Shen–Shan Zone*.

The second highlight is that, in terms of city networks, Shenzhen sits as the center of SDH. Shenzhen’s cooperation with neighboring cities reflects an increasing trend toward a monocentric mode. Shenzhen privileges city-helps-city schemes with the peripheral cities, showcasing its commitment to the provincial government. It should be noted that Shenzhen also considers what the city can get in return when it helps others. The set-up of *Shen–Shan Zone* is partially an initiative to help Shanwei catch up in industrialization. Shenzhen government shares the tax income and profits from the tenants too. Therefore, Shenzhen is active in this initiative. However, the government retreats in other activities under “city-helps-city schemes” particularly those in relation to social development (donation of goods and necessities and building public hospitals). The government leaves the tasks for non-state sectors.

Strongest connections between Shenzhen and other cities are economic and institutional cooperation, particularly for industrial development, infrastructure construction, urban management, and urban planning. This economy-comes-first ideology is largely due to the limited land in Shenzhen. For example, the actual supplies of construction land in 2015 and 2016 were merely total 13.9 and 11.7 km², respectively³. According to the estimation, only 7.2 km² can be annually allocated in Shenzhen for construction from 2016 to 2020⁴. Social development, which is largely undertaken by non-state sectors, will continue to lag far behind.

Finally, our study confirms that non-state domain involvement is very much limited. This finding supports the observation of He and Wu (2005), that is, “... the private sector has little

³ Source: Shenzhen China, Retrieved from <http://www.sz.gov.cn/cn/xxgk/zfxxgj/ghjh/csggh/jq/>.

⁴ Liao, Yingping. (2017, December 13). *With land constraints, Shenzhen’s competitiveness fades*. Retrieved from <http://news.szhome.com/268298.html>

influence on local governance and the decision-making process in local development” (p.21). The Chamber of Commerce acts, under government dictation, to deliver economic development and aid activity. The municipal government is yet to fully acknowledge the role of social actors. In the process of institutional integration, economic and social partners are positioned under state-orchestrated tasks towards development and territorial integration—a legacy of the state socialism.

Our study has a number of implications for some thorny problems in China’s future territorial development and land use policymaking. First, China’s land-centric urbanization has led to environmental degradation, wasting of resources, weak rural sustainability, and socioeconomic inequity (Chen et al., 2016; Liu et al., 2018). The migrants from remoting areas accelerate the rural hollowing and devastates the socioeconomic sustainability of rural areas (Long et al., 2011; Li et al., 2014; Liu et al., 2016). We find that promotion of institutional integration by developing city networks and streamlining inter-governmental relations can help offset such negative effects and achieve co-development of land and industries in remoting areas. The rural lands and low-industrialized economies of Heyuan and Shanwei, by cooperating with advanced cities, can be effectively revitalized by setting up inter-jurisdictional cooperation zones. In the case of *Shen-Shan Zone*, the prosperous industries brought by the advanced cities enhance the *on-site* employment of rural labors, which also improve the land use intensity by bringing high-tech and management experiences.

Second, jurisdictional adjustment is deemed as the easiest approach to rearrange the distribution of resources (e.g., construction land allocation) and population under the urban-rural transformation (Chien, 2013). We find that jurisdictional adjustment is not always effective as the adjustment *per se* creates institutional complexity. Li et al (2015) note that rapid urban-rural transformation through jurisdictional (re)adjustments will decrease the rate of cultivated land conservation. This study argues that city-helps-city schemes should contribute to the distribution of resources and population. Apart from the commitment to central policy, the success of this schemes is based on interests of individual city. Every city will take what they can get in return into account. This voluntary negotiation process can offset monopolistic position of cities in attracting people and recourses.

Third, with the promotion of land-use system reform, creating integrated urban-rural land market is of great importance under the China’s double-track pricing system (Ding, 2003;

Dang et al., 2016). This study identifies that the cooperation platform among actors is essential to the integrated development. The land use policy in making of integrated urban-rural market should fully emphasize platform formulation, essential for the equal negotiation among villagers, village committees, urban governments, and market players. This cooperative platform is very significant in the benefit distribution process which is conflict driven.

Last, with reference to industrial land redevelopment, the institutional uncertainty and path dependency at the urban scale normally hamper the implementation of urban renewal projects (Guo et al., 2017; Wang et al., 2018). With the fragmented land use pattern, this study finds that for some backward cities, borrowing elites, technology, and capital at the regional scale can be a means to break path dependency. Through well-defined divisions of responsibilities among cities, some knowledge- and technology-intensive industries from advanced cities can be easily transferred to the backward areas to achieve balanced development.

References

- Aggarwal, C.C., Zhai, C. (Eds.), 2012. Mining text data. Springer, New York.
- Ansell, C., Gash, A., 2008. Collaborative governance in theory and practice. *Journal of Public Administration Research and Theory*. 18, 543-571.
- Armstrong, D., Bello, V., Gilson, J., Spini, D., 2011. *Civil Society and International Governance: The Role of Non-state Actors in Global and Regional Regulatory Frameworks*. Taylor & Francis: London.
- Basit, T., 2003. Manual or electronic? The role of coding in qualitative data analysis. *Educational Research*. 45, 143–154.
- Bontenbal, M.C., Mamoon, D., 2017. Understanding city-to-city cooperation: North South partnerships of local authorities as development schemes. Retrieved from <https://mpira.ub.uni-muenchen.de/82698/>. Accessed 14 April 2019.
- Brenner, N., 2004. Urban governance and the production of new state spaces in Western Europe, 1960–2000. *Review of International Political Economy*. 11, 447–488.

687 Brie, M., Stölting, E., 2012. Formal institutions and informal institutional arrangements, In T.
688 Christiansen., C. Neuhold (Eds), *International Handbook on Informal Governance*,
689 Edward Elgar: Cheltenham, UK and Northampton, MA, USA.

690 Cardoso, R. V., 2016. Overcoming barriers to institutional integration in European second-
691 tier urban regions. *European Planning Studies*. 24, 2197–2216.

692 Chan, R., Xian, S., 2012. Assessing the incentives in regional city-to-city cooperation: A case
693 study of Jiangyin-Jingjiang industrial park of Jiangsu province in the Yangtze river
694 delta region. *Asia Pacific Viewpoint*. 53, 56–69.

695 Chen, M., Liu, W., Lu, D., 2016. Challenges and the way forward in China's new-type
696 urbanization. *Land Use Policy*. 55, 334–339.

697 Chien, S. S., 2013. New local state power through administrative restructuring—A case study
698 of post-Mao China county-level urban entrepreneurialism in Kunshan. *Geoforum*. 46,
699 103–112.

700 Chong, E., Huet, F., Saussier, S., Steiner, F., 2006. Public-private partnerships and prices:
701 evidence from water distribution in France. *Review of Industrial Organization*. 29,
702 149.

703 Dang, S., Yuan, D., Kong, W., 2016. Land cooperatives as an approach of suburban space
704 construction: Under the reform of Chinese land transfer market. *Frontiers of*
705 *Architectural Research*. 5, 425–432.

706 Ding, C., 2003. Land policy reform in China: assessment and prospects. *Land use policy*. 20,
707 109–120.

708 Farrell, H., Héritier, A., 2003. Formal and informal institutions under codecision: continuous
709 constitution-building in Europe. *Governance*. 16, 577–600.

710 Feng, J., Zhou, Y., Wu, F., 2008. New trends of suburbanization in Beijing since 1990: From
711 government-led to market-oriented. *Regional Studies*. 42, 83–99.

712 Greif, A., 2006. *Institutions and the Path to the Modern Economy: Lessons from Medieval*
713 *Trade*. Cambridge University Press: Cambridge.

714 Guangdong Provincial Government. 2016 Guangdong Statistical Yearbook. 2016.
715 Government Printer.

716 Guo, Y., Xiao, Y., Yuan, Q., 2017. The redevelopment of peri-urban villages in the context
717 of path-dependent land institution change and its impact on Chinese inclusive
718 urbanization: The case of Nanhai, China. *Cities*. 60, 466–475.

719 He, S., Wu, F., 2005. Property-led redevelopment in post-reform China: A case study of
720 Xintiandi redevelopment project in Shanghai. *Journal of Urban Affairs*. 27, 1–23.

721 Iasin, E., 1991. Destatization and privatization. *Problems in Economics*, 34, 5–22.

722 Jessop, B., 2000. Governance failure. In: Stoker G. (Ed.), *The new politics of British local*
723 *governance*. Palgrave Macmillan: London, England.

724 Jessop, B., 2003 *The future of the state in an era of globalization*. *International Politics and*
725 *Society*. 3, 30–46.

726 Jiang, F., Luo, X., 2016. Analysis to the cooperative modes of industrial parks: a case study
727 on Jiangsu Province. *Urban Problems*. 35, 38–43 (in Chinese).

728 Kwak, Y., Chih, Y., Ibbs, C., 2009. Towards a comprehensive understanding of public
729 private partnerships for infrastructure development. *California Management*
730 *Review*. 51, 51–78.

731 Lai, S., Yan, Y., Liu, G., Pang, X., Li, Y., 2015. A review, evaluation and reflection of the
732 Pearl River Delta regional plan. *Urban Planning Forum*. 224, 12–19 (in Chinese).

733 Liu, G., Wang, H., Cheng, Y., Zheng, B., Lu, Z., 2016. The impact of rural out-migration on
734 arable land use intensity: Evidence from mountain areas in Guangdong, China. *Land*
735 *Use Policy*. 59, 569-579.

736 Liu, Y., Fang, F., Li, Y., 2014a. Key issues of land use in China and implications for policy
737 making. *Land Use Policy*. 40, 6–12.

738 Liu, S., Luo, X., Tian, D., Wang, Y., 2014b. Preliminary study on China's cross-boundary
739 new district in forming mechanisms, spatial organizations and governance model.
740 *Economic Geography*. 34, 41–47 (in Chinese).

741 Liu, Y., Li, J., Yang, Y., 2018. Strategic adjustment of land use policy under the economic
742 transformation. *Land Use Policy*. 74, 5–14.

743 Li, X., Yan, G., 2013. Empirical analysis to the collaborative network for regional public
744 governance: taking Yangtze River Delta Urban Agglomeration for example. *Urban*
745 *Problems*. 32, 77–83 (in Chinese).

746 Li, Y., Liu, Y., Long, H., Cui, W., 2014. Community-based rural residential land
747 consolidation and allocation can help to revitalize hollowed villages in traditional
748 agricultural areas of China: Evidence from Dancheng County, Henan Province. *Land*
749 *Use Policy*. 39, 188–198.

750 Li, Y., Li, Y., Westlund, H., Liu, Y., 2015. Urban–rural transformation in relation to
751 cultivated land conversion in China: Implications for optimizing land use and
752 balanced regional development. *Land Use Policy*. 47, 218–224.

753 Li, Y., Wu, F., 2012. The transformation of regional governance in China: The rescaling of
754 statehood. *Progress in Planning* 78, 55–99.

755 Li, Y., Wu, F., 2013. The emergence of centrally initiated regional plan in China: a case
756 study of Yangtze River Delta Regional Plan. *Habitat International*. 39, 137–147.

757 Li, Y., Wu, F., 2018. Understanding city-regionalism in China: regional cooperation in the
758 Yangtze River Delta. *Regional Studies*. 52, 313–324.

759 Li, Z., Xu, J., Yeh, A., 2014. State rescaling and the making of city–regions in the Pearl River
760 Delta, China. *Environment and Planning C: Government and Policy*. 32, 129–143.

761 Long, H., Zou, J., Pykett, J., Li, Y., 2011. Analysis of rural transformation development in
762 China since the turn of the new millennium. *Applied Geography*. 31, 1094–1105.

763 Luo, X., Shen, J., 2007. Urban governance in cross-border coalitions: The case of the
764 Jiangyin Economic Development Zone in Jiangjiang, China. *International*
765 *Development Planning Review*. 29, 353–377.

766 Luo, X., Shen, J., 2009. A study on inter-city cooperation in the Yangtze River delta region,
767 China. *Habitat International*. 33, 52–62.

768 Maier, F., Meyer, M., 2011. Managerialism and beyond: Discourses of civil society
769 organization and their governance implications. *Voluntas: International Journal of*
770 *Voluntary and Nonprofit Organizations*. 22, 731–756.

771 Ma, L., 2005. Urban administrative restructuring, changing scale relations and local
772 economic development in China. *Political Geography*. 24, 477–497.

773 McKee, M., Edwards, N., Atun, R., 2006. Public-private partnerships for hospitals. *Bulletin*
774 *of the World Health Organization*. 84, 890–896.

775 Mongelli, F., Dorrucchi, E., Agur, I., 2005. What does European institutional integration tell
776 us about trade integration? ECB occasional paper, No. 40.

777 Morrison, T. H., 2006. Pursuing rural sustainability at the regional level: Key lessons from
778 the literature on institutions, integration, and the environment. *Journal of Planning*
779 *Literature*. 21, 143–152.

780 Peng, D., 2000. The changing nature of East Asia as an economic region. *Pacific Affairs*. 73,
781 171–191.

782 Perkmann, M., 2007. Construction of new territorial scales: a framework and case study of
783 the EUREGIO cross-border region. *Regional Studies*. 41, 253–266.

784 Raunio, T., 2011. The changing world of EU governance. *International Studies Review*. 13,
785 314–317.

786 Sharpe, Jim L., (Ed.), 1993. *The Rise of Meso-Government in Europe*. Sage Publications:
787 London.

788 Shenzhen Municipal Government. 2016 Shenzhen Statistical Yearbook. 2016. Government
789 Printer.

790 Sohn, C., Reitel, B., Walther, O., 2009. Cross-border metropolitan integration in Europe: the
791 case of Luxembourg, Basel, and Geneva. *Environment and Planning C: Government*
792 *and Policy*. 27, 922–939.

793 Sun, Y., Chan, R. C., 2017. Planning discourses, local state commitment, and the making of a
794 new state space (NSS) for China: Evidence from regional strategic development plans
795 in the Pearl River Delta. *Urban Studies*. 54, 3281–3298.

796 Sun, Y., Lin, J., Chan, R. C., 2017. Pseudo use value and output legitimacy of local growth
797 coalitions in China: A case study of the Liede redevelopment project in
798 Guangzhou. *Cities*. 61, 9–16.

- 799 Taylor, P. J., 2001. Specification of the world city network. *Geographical Analysis*. 33, 181–
800 194.
- 801 Vengroff, R., Nyiri, Z., Fugiero, M., 2003. Electoral system and gender representation in sub-
802 national legislatures: Is there a national—sub-national gender gap? *Political Research*
803 *Quarterly*. 56, 163–173.
- 804 Wang, B., Tian, L., Yao, Z., 2018. Institutional uncertainty, fragmented urbanization and
805 spatial lock-in of the peri-urban area of China: A case of industrial land
806 redevelopment in Panyu. *Land Use Policy*. 72, 241–249.
- 807 Wong, C. P., 2000. Central-local relations revisited the 1994 tax-sharing reform and public
808 expenditure management in China. *China Perspectives*, 52–63.
- 809 Wong, S. W., Tang, B. S., 2005. Challenges to the sustainability of ‘development zones’: A
810 case study of Guangzhou Development District, China. *Cities*. 22, 303–316.
- 811 Xu, J., 2008. Governing city-regions in China: theoretical issues and perspectives for regional
812 strategic planning. *Town Planning Review*. 79, 157–186.
- 813 Xu, J., Yeh, A. G., 2009. Decoding urban land governance: state reconstruction in
814 contemporary Chinese cities. *Urban Studies*. 46, 559–581.
- 815 Xu, J., Yeh, A. G., 2010. Coordinating the fragmented Mega-city regions in China: State
816 reconstruction and regional strategic planning. In Xu, J., Yeh, A.G. (Eds.), *Governance*
817 *and Planning of Mega-City Regions: An International Comparative Perspective*.
818 Routledge: New York.
- 819 Xu, J., Yeh, A. G., 2013. Interjurisdictional cooperation through bargaining: the case of the
820 Guangzhou–Zhuhai railway in the Pearl River Delta, China. *The China Quarterly*.
821 213, 130–151.
- 822 Warleigh, A., 2001. ‘Europeanizing’ civil society: NGOs as agents of political
823 socialization. *JCMS: Journal of Common Market Studies*. 39, 619–639.
- 824 Wu, F., 2002. China's changing urban governance in the transition towards a more market-
825 oriented economy. *Urban Studies*. 39, 1071–1093.
- 826 Wu, F., 2015. *Planning for Growth: Urban and Regional Planning in China*. Routledge.

- Wu, F., 2016. China's emergent city–region governance: a new form of state spatial selectivity through state-orchestrated rescaling. *International Journal of Urban and Regional Research*. 40, 1134–1151.
- Yang, C., 2005. Multilevel governance in the cross-boundary region of Hong Kong–Pearl River Delta, China. *Environment and Planning A*. 37, 2147–2168.
- Yang, D., Wang, H., 2008. Dilemmas of local governance under the development zone fever in China: a case study of the Suzhou region. *Urban Studies*. 45, 1037–1054.
- Zhang, J., Wu, F., 2006. China's changing economic governance: Administrative annexation and the reorganization of local governments in the Yangtze River Delta. *Regional Studies*. 40, 3–21.
- Zhang, T., Zou, H. F., 1998. Fiscal decentralization, public spending, and economic growth in China. *Journal of Public Economics*. 67, 221–240.
- Zhang, X., Guo, Q., Cheung, D., Zhang, T., 2018. Evaluating the institutional performance of the Pearl River Delta integration policy through intercity cooperation network analysis. *Cities*. 81, 131–144.

855 **Appendix 1**

856 Information on major chambers of commerce in inter-city cooperation.

Title	Location	Time	Issue	Target city
Shenzhen Hi-tech Industry Association	Shenzhen	2011	Shenzhen Hi-tech Industry Association visited Huizhou for an exploration of a high-tech industry development.	Huizhou
Heyuan Chamber of Commerce in Shenzhen	Shenzhen	2012	Establishment of the Heyuan Chamber of Commerce in Shenzhen	Heyuan
Shenzhen Fuyong Chamber of Commerce	Shenzhen	2010	Shenzhen Fuyong Chamber of Commerce donated 850,000 Yuan to Heyuan for the construction of a primary school.	Heyuan
Shenzhen Songgang Chamber of Commerce	Shenzhen	2009	Shenzhen Songgang Chamber of Commerce donated 100,000 Yuan to Heyuan for the construction of a primary school.	Heyuan
Timepiece Industry Joint Chamber of Commerce between Shenzhen and Hong Kong	Shenzhen	2007	Timepiece Industry Joint Chamber of Commerce between Shenzhen and Hong Kong recommended Heping at Shenzhen.	Heyuan
Shenzhen Chamber of Commerce	Shenzhen	2015	Shen-Shan Zone signed an agreement with Shenzhen Chamber of Commerce to build innovative business incubators.	Shanwei
Shenzhen-Shanwei Chamber of Commerce	Shenzhen	2012	Shenzhen-Shanwei Chamber of Commerce was established to strengthen the economic cooperation between the two municipalities.	Shanwei
Shenzhen, Shen-Shan Zone Chamber of Commerce	Shen-Shan Zone	2015	The establishment of Shenzhen, Shen-Shan Zone Chamber of Commerce, aims to facilitate economic cooperation between the two municipalities.	Shenzhen Shanwei
Dongguan Luhe Chamber of Commerce	Dongguan	2015	The director visited Dongguan Luhe Chamber of Commerce for learning and exploration.	Shanwei
Dongguan Taiwan Investment Enterprise Association	Dongguan	2008	Dongguan Taiwan Investment Enterprise Association aims to promote commercial development with Shanwei .	Shanwei

Dongguan Industry and Chamber of Commerce	Dongguan	2011	Dongguan Industry and Chamber of Commerce explored Huizhou for industrial cooperation.	Huizhou
Dongguan Dongkeng Chamber of Commerce	Dongguan	2009	The directors of Dongguan Dongkeng Chamber of Commerce visited the Hi-tech Industrial Park in Heyuan for exploration.	Heyuan

Source: Based on the database constructed by authors

Appendix 2

Information on major cooperation issues among societies in SDH.

Organization	Theme	Issue	Time
Shenzhen Advertisement Association	Cultural communication	Participate in advertising exhibition	2010
Public school	Aid activity	Donating books	2011
Shenzhen Lions Clubs	Aid activity	Donating goods to disaster-affected areas	2013
Shenzhen Literature and Arts Association	Cultural communication	Discussing channels to strengthen cultural communication	2015
Shenzhen Chaoshan Culture Research Association	Aid activity	Medical assistance	2015
Public school	Education	Exchanging experiences on college entrance examination	2009
Public school	Entertainment	Holding joint variety shows	2007
The Paradise International Foundation	Environmental protection	Initiating activities on waste treatment for cross-boundary river	2009
Community	Environmental protection	Initiating activities on waste treatment for cross-boundary river	2011

Source: Authors' summary from the inter-city cooperation news of the database