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# URBANIZATION, REGIONAL DEVELOPMENT AND GOVERNANCE IN CHINA

Jianfa Shen



# Urbanization, Regional Development and Governance in China

Rapid urbanization in China in recent decades and the challenges of social and regional integration and governance have been issues of major concern. This book explores the course of urbanization and development in China over recent decades. It considers a range of issues including urbanization, changing urban and regional systems, regional integration and governance. The book pays particular attention to the economic relations between Hong Kong and mainland China, and how regional development, integration and governance unfold in the Hong Kong–Pearl River Delta region.

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# **Urbanization, Regional Development and Governance in China**

Jianfa Shen



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# Abbreviations

AFC	Asian Financial Crisis
AIIB	Asian Infrastructure Investment Bank
BODs	Biochemical oxygen demands
CEPA	Mainland and Hong Kong Closer Economic Partnership Arrangement
DI	Direct investment
EIA	Environmental impact assessment
FCA	Frontier Closed Area
FDI	Foreign direct investment
FYP	Five-year plan
GaWC	Globalization and World Cities Research Network
GDP	Gross domestic product
GNI	Gross national income
GPRD	Greater Pearl River Delta
HKSAR	Hong Kong Special Administrative Region
HZMB	Hong Kong, Zhuhai and Macao Bridge
ICBC	Industrial and Commercial Bank of China
Jing-Jin-Ji	Beijing-Tianjin-Hebei region
LDCs	Less developed countries
MDCs	More developed countries
MLG	Multilevel governance
OCTS	One country two systems
OLGWRD	Office of the Leading Group for Western Region Development
PRD	Pearl River Delta
R&D	Research and development
RLA	Lok Ma Chau river loop area
SAR	Special Administrative Region
SEZ	Special economic zone
SOEs	State-owned enterprises
TEUs	20-foot equivalent units
TNCs	Transnational corporations
TSEs	Time-space envelopes
TVE	Township and village enterprises
WTO	World Trade Organization
YRD	Yangtze River Delta

### Urbanization and development in China

Urbanization and development in China have attracted wide attention (de Blij 2012: 210-240; Friedmann 2005; World Bank and DRC 2014). The book discusses the national context of urbanization and development in Chapters 2 and 3. Given the unique household registration (hukou) system, models of urbanization and development and unique and important roles of local and central governments in China, it has been a great challenge to understand the processes of Chinese urbanization and development, and how different cities and regions in China interact with each other such as Hong Kong and the Pearl River Delta (PRD) region. This book uses Guangdong and Shenzhen to illustrate the change in the urban system and urban development in China. Development in the PRD region has benefited greatly from the inflow of capital and business knowledge from Hong Kong. But the close relation and sometimes tension between Hong Kong and the PRD region, and mainland China in general, have also become a hot issue since 2008. What is the social and economic relation between Hong Kong and Shenzhen? What role do governments play in the regional integration of Hong Kong, Shenzhen and PRD? This book discusses these issues in detail. The book will contribute to the understanding of urbanization, regional development and governance in China.

Recent urban and regional development and transformation are the result of four processes: marketization (market reform), decentralization, urbanization and globalization, which have contributed to the processes of development in China since 1978 (Wei 2001; Shen 2007). The market reform started in the rural areas. Farming households were allocated farmland for production under the "production responsibility system" introduced in the period 1978–1983. Urban reform started in the 1990s by increasing the autonomy of state-owned enterprises (SOEs). Land markets and housing markets have also been nurtured since then. China has transformed from a centrally planned economy to a socialist market economy. Land and housing have been commodified so rapidly that housing prices in Chinese cities have reached extraordinarily high levels, way above the affordable level of urban residents. The current housing bubble definitely affects the life of urban residents and the normal urban, social and economic development.

One important process enabling this marketization is the decentralization process. The central government has decentralized many administrative powers, such as project and investment approvals to provincial, city and other local governments, facilitating more efficient resource allocation and economic activities at local levels. Many cities and local areas have become large and small tigers, actively promoting investment, trading and economic development. It is also noted that centralization has taken place from time to time to regulate regional development and coordination such as regional planning.

Along with marketization and decentralization, urbanization has been considered a positive process since the 1990s in China. Major investments in large cities have been made, and over 200 million rural migrants have moved into urban areas (Shen 2015a). Outstanding examples include the mega projects of Beijing 2008 Olympics, Shanghai Expo 2010, extensive underground networks in Beijing and Shanghai and high-speed railway network of over 20,000 km connecting major Chinese cities. Urbanization has been considered an important means of stimulating economic development. Many cities count on the land revenue for urban finance, resulting in urban expansion and escalating land and housing prices.

China has actively engaged in the globalization process as one of the major development strategies. Open door policy was adopted along with economic reform in 1978, aiming to increase exchange with the outside world, attract foreign investment, and learn advanced technology and management experiences. China has been successful in boosting the inflow of foreign investment and international trade. China has also scaled up its outward investment since 2008. The launch of the "One Belt One Road" initiative in 2013 and the founding of the Asian Infrastructure Investment Bank (AIIB) in 2015 are the important milestones of China's active engagement in globalization.

According to Population Division, Department of Economic and Social Affairs, United Nations (2014: 12), China and India will be the major source of urban population growth from 2014 to 2050. The urban population in the world will increase by 2.5 billion people, including 11.7% from China (292 million) and 16.2% from India (404 million).

The accelerated urbanization and population mobility is a result of two profound changes in the Chinese society: economic decentralization during the transition toward a market economy and deregulation of migration control (Shen 2007). Rural reform and rural development since the 1980s has improved the efficiency of the agricultural sector and released a huge rural labor force. Initially, "leave the land but not the home town" was encouraged, and the rural industrialization and rural urbanization took place based on TVEs (township and village enterprises). Since the 1990s, "leave the land and the home town" has become a popular form of urbanization, and many rural migrants have moved to coastal areas to work in the manufacturing, construction and service sectors. With economic development in rural areas and the source regions of migrants, some migrants have returned to their hometowns or nearby towns and cities, causing a labor shortage in some coastal areas. The settlement intention of these rural migrants has important implications on development and urbanization in China, and some interesting

studies have been conducted (Zhu and Chen 2010). The next section will discuss urbanization and hukou reform in detail.

Urbanization and development are not even processes in China. There has been significant development in eastern China and major cities, resulting in profound urban and regional restructuring. With the transition of the Chinese economy from a highly centralized planned economy to a socialist market economy, the eastern region and major cities have benefited from being one step ahead of economic reforms, a good economic foundation, an inflow of foreign investment and an unbalanced regional development strategy. But coordinated regional development has been emphasized since 1996, and the state has been actively promoting balanced development with particular support to less advanced regions. The most noticeable is the launching of the strategy of developing the western region in 1999. One section will examine the trends of urban and regional restructuring and related studies, especially on regional inequality and three leading economic regions, including Greater Pearl River Delta (GPRD), Yangtze River Delta (YRD) and Beijing-Tianjin-Hebei region (Jing-Jin-Ji).

Along with the growth of major cities, there has also been increasing concern on inter-city competition and cooperation. The GPRD region is an outstanding case of rapid economic growth, spatial restructuring and cross-boundary regional integration. The cross-boundary regional integration and governance in GPRD is dynamic and complicated with the presence of two Special Administrative Regions (SARs) in China, Hong Kong SAR and Macao SAR, under "one country two systems" (OCTS). Another section reviews regional development and governance in GPRD and related studies. An outline of the book is presented in the final section.

### Urbanization and hukou reform

China experienced significant underurbanization from the late 1950s to late 1970s (Ran and Berry 1989; Wu and Treiman 2004). The accelerated urbanization process in China has been driven by a massive inflow of rural migrants since the early 1980s (Pannell 1995; Shen 2002a; Shen and Huang 2003; Zhu and Chen 2010). Earlier studies on urbanization in China largely focused either on formal urbanization or small towns (Ma and Lin 1993; Kirkby et al. 2000). The large-scale inflow of rural migrants to large cities and their implications to Chinese urbanization have attracted great attention recently. The main focus has been on the hukou (household registration system) policy, the process of rural to urban migration and the settlement intention of rural migrants (Shen 2002a; Zhu 2000; Zhu and Chen 2010; Chan and Zhang 1999; Fan 2008, 2011). Shen (2015a) examined the question whether the current (informal) urbanization in China is (dis)similar to that of other third-world countries and how to achieve sustainable urbanization (Gilbert 1990; Ginsburg 1991; McGee 1991).

As a fundamental institution of the Chinese society, the hukou system was introduced to control migration nationwide in 1958. Under this system, each person is registered either as "agricultural population" or as "non-agricultural population"

at particular localities. The "non-agricultural population" is usually found in Chinese cities, while the "agricultural population" is mostly found in rural China. A resident should live and work in the place of hukou. The hukou system was relaxed in the early 1980s, and rural migrants were allowed to move into urban areas and be registered as temporary population.

There are two kinds of migrants in China. Permanent migrants refer to those migrants whose hukou have also been transferred to their destination. Temporary migrants refer to those migrants who have left their hukou of origin and mostly are registered as temporary population at their destination. The majority of permanent migrants are non-agricultural population, while temporary migrants are mostly agricultural population (Shen 2006). For simplicity, the increase in non-agricultural population process, while the increase in temporary population and agricultural population is termed informal urbanization process (Zhu 1998; Shen 2006; Shen et al. 2002).

Thus the population at a Chinese city consists of three parts: the local population (further divided into people with local hukou status of non-agricultural population and agricultural population previously), permanent migrants (with local hukou) and temporary migrants (without local hukou) (Shen 2005, 2006, 2015a).

According to recent population censuses (NBS 2011a: 96), the urban population in China more than tripled in the period of 1982–2010, increasing from 210.82 million in 1982 to 458.44 million in 2000 and 665.57 million in 2010. The level of urbanization reached 49.7% in 2010. The temporary migrants contribute to the bulk of the increased urban population and usual residents in Chinese cities based on the census definition.

The formal and informal urbanization can also be indicated by the growth of the urban hukou population and the temporary population. According to an estimation based on census data, the urban non-agricultural population was increased by 147.3% in the period of 1982–2010. The formal urbanization process is strong following the pace of the total urban population growth in China. As a result, the total urban non-agricultural population in 1982 to 309.41 million in 2000 and 358.2 million in 2010 (Shen 2006; PCO and DPES 2012). But there has been even greater increase in the temporary population. It increased from 6.57 million in 1982 to 39.63 million in 1990, 144.39 million (including 35.38 million from the same urban district) in 2000 and 260.94 million (including 39.96 million from the same urban district) in 2010 (PCO and DPES 2012; NBS 2011b). Overall, 66.27% of the urban population had local hukou in China in 2010, down from 75.27% in 2000.

With the increasing number of migrants in Chinese cities, an important question remains as to whether the government should encourage, control or regulate informal but "legal" migration from rural areas. Usually, the rural temporary migrants do not have full rights of employment, housing, education and social welfare at the destination, which has attracted many social and policy concerns (Yang 1993; Shen 1999).

In the late 1990s, various city governments, such as Beijing and Shanghai, still had tight regulations and restrictions on temporary population's access to

certain groups of good occupations (Shen 1999). With the progress of the market economy, various discriminative measures based on hukou have been abolished gradually (Shen 2006). Provisions were made in 1992 for some established rural migrants with stable employment, income and housing to obtain "blue-chop" hukou status with similar education and welfare rights to local hukou status (Wong 1998).

An experiment was started in May 1997 in 450 small towns to grant full permanent resident rights, valid only locally, to migrants who have had stable employment, income and housing for two years (Zhang 1999). Such policies were implemented in all designated towns and urban areas of county-level cities after 1 October 2001 (State Council of China 2000). People can acquire local hukou if they have stable housing or income. Special polices have been adopted by Shanghai to grant local hukou to qualified migrants (Zhang 2010).

The distinction between the hukou statuses of agricultural population and non-agricultural population began to be abolished in Guangdong in 2002 (Shen 2006). Similar policy changes at the national level announced in 2005 caused a debate over whether China is abolishing the hukou system (Chan and Buckingham 2008). This policy benefited people with the hukou category of "agricultural population" in urban areas.

One major development in hukou reform came in November 2011 when the State Council announced new policies of further hukou reform (General Office of State Council 2011). The document spells out the guideline on hukou reform. On the one hand, the document attempts to control excessive conversion of rural land to urban land by offering urban hukou to rural residents in some cities. On the other hand, the document proposes different policies for granting hukou to migrants in different urban areas. Basically, local hukou should be given to people with stable jobs and accommodations, and family members in urban areas of county-level cities and designated towns. For small and medium-sized cities with urban districts, local hukou should be given to people who have stable jobs and accommodations for over three years, and have joined social insurance schemes for certain years, along with their family members. But more rigorous requirement can be imposed for granting local hukou if population pressure exceeds the comprehensive urban carrying capacity. There is no hukou policy change for cities under central administration, vice-provincial-level cities and other large cities. They will implement existing policy for urban hukou and rationally control population size.

As many rural migrants are not likely to get local hukou in large cities, the document also provides basic policy guidelines on rural development and rural migrants. First, the production and living conditions in the rural areas will be improved so that basic public services will be equalized between urban and rural areas. Second, various policies and regulations should be improved to solve the outstanding problems facing rural migrants such as wages, children's education, skill training, public health, housing purchasing and renting, social security, occupational safety and health. New policy measures to be introduced on employment, free education and skilled training in the future should not be linked with the type

of hukou. Third, continuing efforts will be made to form a unified hukou system for urban and rural areas. The resident cards system for temporary population should be gradually implemented.

The hukou policy reform has been moved back and forth over time. No significant change has been made in granting local urban hukou to most migrants from rural areas, especially in prefecture-level cities and large cities. This will remain one significant focus of urban study and urbanization policy in China. The eventual solution will have profound effects on the urbanization process, urban and regional development and governance discussed in this book.

## Urban and regional restructuring

China's economic development in the last three decades was largely driven by industrialization, making use of abundant human resources and foreign capital. China had a very weak industry base in 1949. The total value of fixed assets was just over RMB10 billion. Production technology was obsolete, and primitive mining and handcraft industries accounted for 40% of the industry (NBS 1999). In the period from the founding of the People's Republic of China to 1978 before the economic reform, industries emerged from scratch, focusing on heavy industries. After the first three years of recovery and large-scale economic construction during the first five-year plan (FYP) period (1953–1957), 156 important projects were completed with the support of the former Soviet Union. But in the 20 years, from 1958 to 1978, China's industrial development entered a period of fluctuation, with the fastest growth rate of 34.3% in 1969 and the slowest growth rate of -13.8% in 1967. Economic development was unstable during the periods of the Great Leap Forward in 1958 and the Great Cultural Revolution in 1966–1976. Although the industrial growth rate was 8% on average during these years, the internal industrial structure was poor, with a high proportion of heavy industries. There was severe shortage of light industrial products in the country, and people lived on minimum consumption, which also affected economic growth (Shen 2015b).

In the period of economic reform and opening up from 1979 to the present, Chinese economy transformed from a highly centralized planned economy to a socialist market economy. The industrial reforms experienced two stages of power decentralization and profit concession, and institutional innovations. First, a series of reforms on power decentralization and profit concession were implemented among SOEs during the early years of economic reform. SOEs were given autonomous power over their management to some degree, which strengthened their ability for self-development.

Second, the "Law on State Owned Industrial Enterprises of the People's Republic of China" was passed in 1988, symbolizing the beginning of the institutional innovations of industrial enterprises. This law legalized the autonomous power of state-owned industrial enterprises. The Third Plenum of the Fourteenth Central Committee of the Communist Party of China adopted the "Decision of the Central Committee of Communist Party of China on Some Issues Concerning the Establishment of a Socialist Market Economy System" in 1993. Many enterprises began to operate following the mode of the modern enterprise system. Through a series of institutional innovations, China has established a market economy system, and enterprises have become the main players in the market economy (Shen 2015b).

While China still retains a number of major SOEs, many small SOEs have been privatized. Foreign companies, joint ventures, private companies and family businesses have become important parts of the Chinese economy. After China joined the World Trade Organization (WTO) in 2001, China opened its domestic market, actively attracting foreign investment and engaging in international trading. China's average tariff rate to foreign products fell from 42.9% in 1992 to 15.6% in 2000 and 9.8% in 2010 (Information Office of the State Council 2011). China's ranking in export rose from 31st in 1978 to 1st in 2009–2014. The rank of China's GNI (gross national income) per capita rose from 175th in 1978 to 80th in 2014 (World Bank 2015).

With a weak economy at the beginning of economic reforms, China adopted an unbalanced regional development strategy, the coastal development strategy, in its sixth FYP for 1981–1985. This was followed by a development strategy of three economic belts for 1986–1992, guided by the ladder-step theory. According to this theory, China is divided into three economic belts. The strategy assigns priority of development to the eastern region, locates energy and raw material projects in the central region and makes preparation for developing the western region (Figure 1.1). According to the theory, development will late diffuse to central and western regions like descending the steps from a ladder.

However, the coastal development strategy resulted in increasing regional inequality in China. Thus adjustment of macroregional development strategy was initiated in 1992, and a coordinative development policy was formally adopted in the ninth FYP (1996-2000) and the National Long-Term Goal Plan for 2010, aiming to reduce interregional development gap gradually. The open policy was extended to central cities and all provincial capitals in the inland, excluding Lasa. The state invested heavily in the mining of rich natural resources and the construction of infrastructure in the western region. This strategic change moved further with the launching of the strategy of developing the western region in 1999. The Office of the Leading Group for Western Region Development (OLGWRD) was established in January 2000, and the state invested heavily in the infrastructure, education and ecological construction in the region. Other regional development strategies have also flourished since 2002, such as Revitalizing Northeast China initiated in 2003, Rise of Central China in 2004, Outline of Regional Planning of YRD in 2007-2009, Pan-PRD Regional Development and Cooperation in 2004/2016, Planning Outline of Development and Reform in PRD in 2008 and the Guangdong-Hong Kong-Macao Bay Area in 2017.

In the 11th FYP (2006–2010), harmonious socialist society and coordinated regional development was emphasized. In the 12th FYP (2011–2015) and 13th FYP (2016–2020), scientific development and coordinated regional development, healthy urbanization (12th FYP) and new types of urbanization (13th FYP) were promoted.



Figure 1.1 Three economic regions in China

Note: Inner Mongolia was included in the central economic belt and Guangxi was included in the eastern economic belt in the development strategy of three economic belts for 1986–1992.

Generally, social inequality and regional inequality have changed over time. The Gini coefficient of China increased from 0.317 in 1978 to 0.479 in 2003, 0.491 in 2008, 0.474 in 2012 and 0.462 in 2015, according to official statistics (Lu 2013; Statista 2017). Using multiple data sources, Xie and Zhou (2014) reported that China's income inequality reached very high levels in the period 2005–2012, with the Gini coefficient in the range of 0.53–50.55. They found that a substantial part of China's high income inequality is due to regional disparities and the rural-urban gap.

According to Fan and Sun (2008) and using the Theil index, there was declining intraregional inequality and increasing interregional inequality among the three regions from 1978 to 2004. Both interregional and intraregional inequalities have declined during 2004–2006, reflecting convergence in the growth rate among provinces and regions. Tables 1.1-1.3 show the changing ranks of provincial regions in terms of gross domestic product (GDP) per capita in the eastern, central and western regions of China. In the eastern region, the ranks of Jiangsu, Zhejiang, Fujian and Shandong rose significantly, while the ranks of Hebei and Liaoning fell greatly in the period 1978–2015. Jiangsu, Zhejiang, Fujian and Shandong benefited from economic development, especially the coastal development strategy (Yeung and Shen 2008a). Liaoning in northeast China suffered a lot in the recent period of economic development, which hosts many SOEs and old heavy industries, facing competition from join ventures, foreign and private enterprises in the coastal region of China. Hebei was a province that lost many development opportunities to Beijing and Tianjin surrounding it. Some attempts have been made in recent years to relocate some functions and industries from Beijing to Hebei. The most outstanding project was the Xiongan New District, as it was the most important national project set up by the central government in April 2017.

In the central region, the ranks of most provinces were stable, while the ranks of Shanxi and Heilongjiang fell greatly. Heilongjiang was one of the three provinces

Year	1952	1978	1990	2000	2010	2015
Beijing	4	2	2	2	2	2
Tianjin	3	3	3	3	3	1
Hebei	21	10	17	11	12	19
Liaoning	6	4	4	8	8	9
Shanghai	2	1	1	1	1	3
Jiangsu	13	12	9	5	4	4
Zhejiang	18	15	7	4	5	5
Fujian	15	18	10	6	10	7
Shandong	25	16	11	9	9	10
Guangdong	10	8	6	7	7	8
Hainan	11	21	18	15	23	18

*Table 1.1* Changing ranks of provincial regions in terms of GDP per capita in the eastern region

Data sources: DSC (1999); NBS (1979, 1991, 2001, 2011a, 2016).

Year	1952	1978	1990	2000	2010	2015
	1702	1770	1770		2010	
Shanxi	22	14	19	22	18	27
Jilin	9	11	12	14	11	12
Heilongjiang	1	5	5	10	16	20
Anhui	14	30	29	21	26	25
Jiangxi	12	29	28	23	24	24
Henan	20	28	25	18	21	22
Hubei	17	17	14	12	13	13
Hunan	16	13	20	17	20	16

*Table 1.2* Changing ranks of provincial regions in terms of GDP per capita in the central region

Data sources: DSC (1999); NBS (1979, 1991, 2001, 2011a, 2016).

Table 1.3 Changing ranks of provincial regions in terms of GDP per capita in the western region

Year	1952	1978	1990	2000	2010	2015
Inner Mongolia	8	20	15	16	6	6
Guangxi	29	23	30	27	27	26
Chongqing	23	22	21	19	14	11
Sichuan	26	26	26	24	25	23
Guizhou	31	31	31	31	31	29
Yunnan	24	24	22	28	30	30
Tibet	7	19	24	29	28	28
Shaanxi	30	25	23	26	15	14
Gansu	27	27	27	30	29	31
Qinghai	19	6	13	20	22	17
Ningxia	28	9	16	25	17	15
Xinjiang	5	7	8	13	19	21

Data sources: DSC (1999); NBS (1979, 1991, 2001, 2011a, 2016).

in northeast China that faced many economic problems in the reform period. In the western region, the ranks of Inner Mongolia, Chongqing and Shaanxi rose significantly, while the ranks of Tibet, Qinghai, Ningxia and Xinjiang fell greatly. Inner Mongolia's economy benefited from rapid economic growth, especially the mining industry. Chongqing was one of the four municipalities under the direct administration of the central government with rapid economic development, while Shaanxi had a good economic foundation as well as research and development. Tibet, Qinghai, Ningxia and Xinjiang were located in the sparsely populated areas with poor environment (Yeung and Shen 2004).

Along with the rise of the coastal region in China, three powerful economic regions have emerged in China, and these regions have been further consolidated in the period of 2000–2016. The GPRD rose first in the 1980s with the "one-step ahead" implementation of economic reform and open door policy. Shenzhen's growth as an instant city and special economic zone (SEZ) has been a miracle

(Chen and de'Medici 2010). YRD led by Shanghai took off from the mid-1990s after the development of Pudong New District was launched in 1990. The Jing-Jin-Ji led by Beijing has been growing along with the growth of the national economy, though the growth has taken place mainly in Beijing and Tianjin cities. A rich literature has emerged that studies the planning, development, spatial patterns, urbanization, role of research and development (R&D), economic clusters, transport system, dynamics and mechanism of these regional economies and major cities.

For the Jing-Jin-Ji region, Gu and Shen (2003) examined the changes of urban sociospatial structure in Beijing with the inflow of a large number of migrants. Wei and Yu (2006) examined the role of the state in globalizing Beijing: attracting foreign investment, building a world-class central business district, constructing Zhongguancun as "China's Silicon Valley" and hosting the 2008 Olympic Games. Zhao (2013) analyzed the development potentials and division of functions between different financial centers of Hong Kong, Beijing and Shanghai in China. Gu et al. (2015) demonstrated that a "hybrid" form of planning, combining global concepts and Chinese ideas, is emerging to direct the shape and form of Beijing.

For the YRD region, Yusuf and Wu (2002) examined the national and municipal policies and their implementation that may facilitate Shanghai to become a global city. Wei et al. (2006) assessed the role and significance of foreign investment in the transformation of Shanghai into a global city. Zhang (2006) analyzed the forces affecting the inter-city relationship among cities in the region, and regional alliance was proposed as a solution. The central and local relation is an important aspect of spatial and economic governance in China. Li and Wu (2013) examined the YRD Regional Planning as recentralization from the perspective of state restructuring and changing regional governance. The importance of territorial administrative divisions was highlighted (Li and Wu 2017).

GPRD has been the focus of numerous studies. Tremendous land-use changes have taken place in the region since the economic reform in 1978. Li and Yeh (2004) analyzed land-use changes over two time periods, 1988-1993 and 1993-1997, to demonstrate the effects of land-use policies on the direction and magnitude of landscape change. Gu et al. (2001) examined the trend of regional polarization in the reform period in Guangdong province. They found that some emerging cities, such as Shenzhen, Zhuhai and Zhongshan in the core PRD region, have become strong growth centers. The dominant role of Guangzhou has been weakened in the post-reform period. Local government revenue and savings per capita were found to be the key factors determining the level of local development, confirming the key role of "local state corporatism" in regional development in China. Liao and Wei (2012) found that there has been increasing inequality in Guangdong since the early 2000s, caused by the widening gap between the core region of PRD and the rest of the province (periphery) and between the urban and rural areas. Regional development and dual-track urbanization were studied by Shen (2002b) and Shen et al. (2001, 2002).

There are also comprehensive studies on PRD and Pan-PRD on regional development and governance (Lin 1997; Wong and Shen 2002; Yeung and Shen

2008a). Rapid economic development in PRD has much to do with the local state entrepreneurial governance, with a close relationship between the local state and enterprises. Xue and Wu (2015) revealed the limits of a developmental approach and how this approach led to a severe fiscal crisis, especially at the village level, following the global financial crisis.

The previous studies have revealed significant urbanization, regional development and spatial transformation under the influences of internal and external economic forces and changing modes of regulation and governance. There is a clear tendency of polarized urban development so that major urban centers are dominating the Chinese spatial economy. Table 1.4 shows the indicators of four major cities in mainland China. In terms of population, it was more than doubled in Guangzhou, Shenzhen, Shanghai and Beijing in the period of 1980–2015. Shanghai had the largest population in the whole period, while Shenzhen had the most rapid population growth.

Shanghai had the highest GDP per capita in 1980, well above other cities. By 2015, Shanghai had a smaller GDP per capita than Shenzhen, Guangzhou and

	_				
China	Beijing	Shanghai	Shenzhen	Guangzhou	Year
				illions)	Population (m
987.05	9.04	11.57	0.33	5.02	1980
1,143.33	10.86	13.32	1.68	6.30	1990
1,267.43	13.64	16.21	7.01	9.95	2000
1,340.91	19.62	23.03	10.37	12.71	2010
13,74.62	21.71	24.15	11.38	13.50	2015
		)	vuan per person	ta (current price, y	GDP per capit
463	1,544	2,719	835	1,160	1980
1,644	4,635	5,891	8,724	5,418	1990
7,858	24,122	29,786	32,800	25,626	2000
29,992	75,943	76,074	94,296	87,458	2010
49,992	106,497	103,796	157,985	136,188	2015
	ent)	fixed price, perc	GDP (based on j	al growth rate of (	Average annua
9.3	8.8	7.4	35.7	11.8	1981-1990
10.3	11.0	12.3	23.2	16.6	1991-2000
9.9	12.0	11.9	16.3	13.8	2001-2005
11.2	11.4	11.2	13.2	13.5	2006-2010
9.7	7.5	7.5	9.6	10.1	2011-2015
	8.8 11.0 12.0 11.4	7.4 12.3 11.9 11.2	35.7 23.2 16.3 13.2	11.8 16.6 13.8 13.5	1981–1990 1991–2000 2001–2005 2006–2010

*Table 1.4* Demographic and GDP indicators of Guangzhou, Shenzhen, Shanghai, Beijing and China, 1980–2015

Data sources: Compiled or calculated using data from BMBS (2006, 2016); GDPBS (1992, 2006); GMSB (2006, 2011, 2016); NBS (2006, 2016); SMSB (2001, 2006, 2011, 2016); SSB (2006); Guang-zhou Economic Yearbook Editorial Committee (1983).

Note: All population data refer to usual residents, except the 1980 figure for Guangzhou, which is based on the *hukou* population. The 1990 figure for Guangzhou is from the 1990 census (GDPBS 1992: 132).

Beijing, while its GDP per capita was still 100% more than the national average. This is the result of different economic growth rates among these cities. Shenzhen and Guangzhou led the GDP growth rate in the period of 1981–2005 and 2006–2015, respectively. The GDP growth rate in Shanghai was the lowest in all periods except 1991–2000. The GDP growth rates in all cities slowed down to around 7.5%–10% a year in the period of 2011–2015 as they moved toward quality growth, emphasizing innovation and advanced services.

### **Regional development and governance**

Along with the growth of major cities, there has also been increasing concern over inter-city competition and cooperation, such as the relationship between Shanghai and other cities in YRD (Zhang 2006; Li and Wu 2013; Luo and Shen 2008, 2009). Wu (2016) argued that the Chinese government adopted administrative annexation, spatial plan preparation and regional institution building to cope with regulatory deficit at the regional level.

The GPRD region is an outstanding case, as the region is very complicated in terms of administrative systems. It has nine cities from the Guangdong province, plus Hong Kong SAR and Macao SAR. "One country, two systems" have been introduced between Hong Kong and mainland China, and Macao and mainland China. Hong Kong and Macao are separated from PRD by clear boundaries regulated by official immigration control and custom procedures.

The economic, social and political relations between Hong Kong and mainland and Shenzhen in particular are outstanding cases of cross-boundary regional integration (Chu et al. 2002; Cheung 2005; Yang 2005; Shen and Luo 2013) that have been taking place in Europe and America. According to Ratti (1993), a border has two functions: as a dividing line with a separation function and as a contact zone for exchange and cooperation. With the emergence of a cross-border production system, its function as a contact zone will be enhanced. The main hypothesis on cross-border regions proposed by Brunet-Jailly (2005) is, if each analytical lens enhances or complements one another, what emerges is a borderland region that is culturally emerging and is integrating. But Brunet-Jailly also pointed out that a borderland that is economically, politically and culturally emerging, and integrating is an ideal case. Barter (2006) argued that regional economic integration and cooperation, not to say political and social integration, have never been a smooth process. Sparrow (2001) concluded that the relationship between San Diego-Tijuana is driven by factors of economics not friendship or trust. Following over 100 years as neighbors, the two cities are still learning to coexist with each other. Similar competition tension exists in the development of airports, container ports, convention centers and cross-boundary infrastructure in the Hong Kong and PRD regions (Shen 2008).

In GPRD, Hong Kong has been a leading world city and has played an important role in the development of the PRD region since 1978 via massive investment and trade. During the period 1997–2003, Hong Kong's economy suffered from the Asia financial crisis, while PRD cities caught up with Hong Kong quickly

in terms of GDP per capita and GDP (Figures 1.2 and 1.3). In the 1980s and 1990s, GDP per capita in Hong Kong was far above that of mainland cities. But Shenzhen's GDP per capita as a percentage of Hong Kong increased from 11.4% to 59.8% in 1997–2015. By 2015, GDP per capita in Shenzhen and Hong Kong were US\$21,866 and US\$42,433, respectively. In terms of GDP, Hong Kong was overtaken by Shanghai in 2009 and by Beijing in 2012. Guangzhou's GDP as a percentage of Hong Kong's GDP increased from 11.5% to 93.9% in 1997–2015. Shenzhen's GDP as a percentage of Hong Kong's GDP increased from 8.9% to 90.8% in 1997–2015



Figure 1.2 GDP per capita in Hong Kong and four main cities in mainland China 1981–2015



Figure 1.3 GDP in Hong Kong and four main cities in mainland China 2000-2015

Hong Kong was a British colony before 1997, and it was returned to China peacefully in 1997 according to the Sino–British Joint Declaration signed in 1984. While close economic relations have been building up since 1978 when China adopted its reform and open door policy, the political relationship between Hong Kong and mainland China was weak. Before 1997, many Hong Kong people had little confidence in China, which is a socialist country ruled by the Communist Party of China. Even after 1997, some officials of the Hong Kong SAR government (many also served in the former colonial government) and others did not want to develop a close social and political relationship with mainland China. They were also not enthusiastic about enhancing economic integration, while the chief executives were keen on close economic integration.

The situation was changed during 2003–2008 when the Chinese central government rolled out a series of policies to stimulate Hong Kong's economy, including the CEPA (Mainland and Hong Kong Closer Economic Partnership Arrangement) and the "individual visit scheme" for mainland tourists to visit Hong Kong (Yeung and Shen 2008b). The year 2008 was the peak time that Hong Kong people and society were in favor of close economic integration and had the most positive perception of the central government.

The tension between some stakeholders in Hong Kong and mainland China has increased significantly because of three significant developments since 2009. First, tens of thousands of mainland women came to Hong Kong to give birth, as their children would get the right of abode in Hong Kong according to the existing ruling of Hong Kong's Court of Final Appeal in 2001. Some Hong Kong women had difficulties finding hospital beds to give birth. Second, a new policy was introduced in April 2009 allowing Shenzhen residents with local hukou to apply for multiple-entry travel permits to visit Hong Kong. Third, the high number of shoppers from the mainland resulted in a shortage of baby formula in Hong Kong. Some Hong Kong residents demonstrated on the streets and questioned the capacity of Hong Kong to accommodate large numbers of mainland tourists (40.75 million in 2013 [CSD 2016]).

The HKSAR government has taken measures to solve these problems. First, it set up a quota for mainland women coming to give birth from 2010 to 2012, and it set the number to zero for 2013. Second, it introduced a new regulation on 1 March 2013 to limit the export of baby formulas to a maximum of 1.8 kg per each individual in a period of 24 hours. Third, it also asked the central government to change the travel policy for Shenzhen residents. A new travel permit was adopted and announced by the central government on 14 April 2015 with immediate effect. A Shenzhen resident with the new travel permit can only travel to Hong Kong once a week. The number of mainland visitors to Hong Kong declined by 3.0% in 2015 and 6.7% in 2016. It fell from 47.25 million in 2014 to 42.78 million in 2016 (CSD 2016; Hong Kong Tourism Board 2017).

The situation has been further complicated by the political struggle on the 2014–2015 Hong Kong electoral reform regarding the universal suffrage election arrangement for the chief executive and the subsequent "occupying Central" event during 28 September to 15 December 2014. The Legislative Council rejected the

government electoral reform proposal on 18 June 2015. A new chief executive was elected on 26 March 2017, using the previous method via an election committee of 1,200 members, for the term 2017–2022. The situation was complicated by the emergence of radical groups and protesters, some of them seeking Hong Kong independence. Hong Kong society has been polarized politically, and the new government is attempting to reunite various political and social groups that may have different standings on political, economic and social relationships with PRD and mainland China. These conditions will certainly have major implications for Hong Kong's role and development in the new context of the Guangdong-Hong Kong-Macao Bay Area and the One Belt One Road initiative proposed by the Chinese government.

# **Outline of the book**

Using urbanization, development and governance as key links, this book systematically studies the critical issues for understanding the rapid urbanization in China: the role of state and scale in urbanization, the new process of dual-track urbanization, the changing regional urban systems and sustainable urban development, and the regional development, integration and governance in the Hong Kong–PRD region. The theoretical perspectives of the scale theory of socialspatial transformation, dual-track urbanization, time-space envelopes (TSEs) and theory of borderland studies are applied to the Chinese cases.

The book has nine chapters. Chapters 1 and 9 are the introduction and conclusion. Chapter 2 discusses the scale, state and urban transformation in China, and Chapter 3 introduces the conceptual model of dual-track urbanization for China, providing the national context of urbanization and development in South China. Chapter 4 is a provincial case study of the spatial analysis of the urban system in Guangdong. Chapter 5 is a city case study of urban growth and sustainable development in Shenzhen city. Chapter 6 studies the economic relations between Hong Kong and mainland China under globalization. Chapter 7 examines the crossborder urban governance in Hong Kong. Chapter 8 studies the cross-boundary integration in Hong Kong and Shenzhen. The details of each chapter are introduced in the following.

Chapter 1 provides an overview and background on the following aspects: urbanization and development in China, urbanization and hukou reform, urban and regional restructuring and regional development and governance.

Multiscalar in perspective, Chapter 2 examines the urban spatial transformation and reconfiguration as rescaling and territorialization processes. Globalization has resulted in the change of scalar relations of the state and the city in the contemporary world. The scale theory is developed mainly in the context of capitalist societies. Using a general sociospatial theory, Chapter 2 argues that the general principle of scale theory is also relevant to transitional socialist economies, where scalar configuration has been rearticulated by liberalization and globalization. It is adopted to describe the profound transformations of the state and the city in China. Chapter 3 examines dual-track urbanization in China, consisting of spontaneous urbanization and state-sponsored urbanization. The chapter first develops a consistent interpretive framework of urbanization in pre-reform and post-reform China. The key components in the framework include the mode of industrialization, central and local states, urban and rural economies, urban and rural citizens and the hukou system and global linkages. Dynamic changes in these components and their interactions drive the urbanization process in China. The chapter then examines how each of the two tracks of urbanization contributed to the urbanization process that occurred in China between 1982 and 2000.

Chapter 4 attempts to reveal the emerging urban system hierarchy in the 1990s in Guangdong province under a socialist market economy using rank-size distribution as a yardstick. As there was substantial discrepancy among the rank-size distributions of cities in terms of population and economic indicators especially because of the existence of "temporary population" and the policy of "designating a whole county as a city," the urban system in Guangdong province was analyzed using demographic and economic indicators. The significant role of economic development in urban growth was also identified through crosssectional comparison and correlation analysis of time-series data on economic and urban indicators.

Chapter 5 examines the rapid urban growth in the city of Shenzhen with a particular focus on urban economic growth, population growth, agriculture and environmental changes. With the rapid expansion of population and the built-up area, there is increasing demand for the provision of urban infrastructure. The volume of environmental pollution is also increasing. The problems of environmental pollution and the negative effect on agriculture are also examined in the chapter. Shenzhen's agriculture has undergone a transition from general agriculture to the rise and eventual decline of suburban agriculture. Shenzhen's case indicates that it is possible to move toward balanced development in social, economic and environmental dimensions, even for new large cities such as Shenzhen.

Chapter 6 presents an array of statistical data that place Hong Kong among the world's leading financial, foreign trade and air cargo handling centers. The chapter's main focus is the economic relationship with mainland China, which has grown and expanded since the change of the city's sovereignty in 1997. Included in the presentation is a review of economic integration before and after the handover by the UK to China, the pattern of cross-border investments and foreign trade, the growth of the logistics and tourism industries and the challenges posed by changing economic relations, partly because of the rapid development of Hong Kong's hinterland.

The rapid development in the Hong Kong–PRD city-region has taken place alongside complicated cross-border governance. In Chapter 7, the framework of TSEs is adopted for a study of cross-border governance in Hong Kong, especially in the role of the state – i.e., the Hong Kong government – in cross-border urban governance. This chapter argues that tension-free regional integration has never existed because of a complex governance network. The shift from "cross-border protectionism" to a "cross-border free trade zone" in Hong Kong's cross-border urban governance since 2001 is a result of the rearticulation of the state cutting through the geoeconomic and geopolitical TSEs.

The integration of cross-border regions involves at least three dimensions – economic integration, institutional integration and social integration. The empirical focus of Chapter 8 is the cross-boundary integration of Hong Kong and Shenzhen, two major cities that have played a pivotal role in China's urbanization, development and internationalization over the last three decades. It is revealed that economic integration prevails in the Hong Kong–Shenzhen region. Economic integration has necessitated the institutional integration, which in turn attempts to facilitate economic integration. But both economic and institutional integration lags significantly behind economic and institutional integration. Brunet-Jailly's main hypothesis of the theory of borderland studies is only partially valid in the Hong Kong–Shenzhen has not yet become a twin city.

Chapter 9 revisits the key empirical findings and theoretical insights. Prospectus of urbanization, regional development and governance in China are discussed.

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