GOVERNING CHINA
IN THE 21ST CENTURY

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Urbanization and Urban Governance in China

Issues, Challenges, and Development

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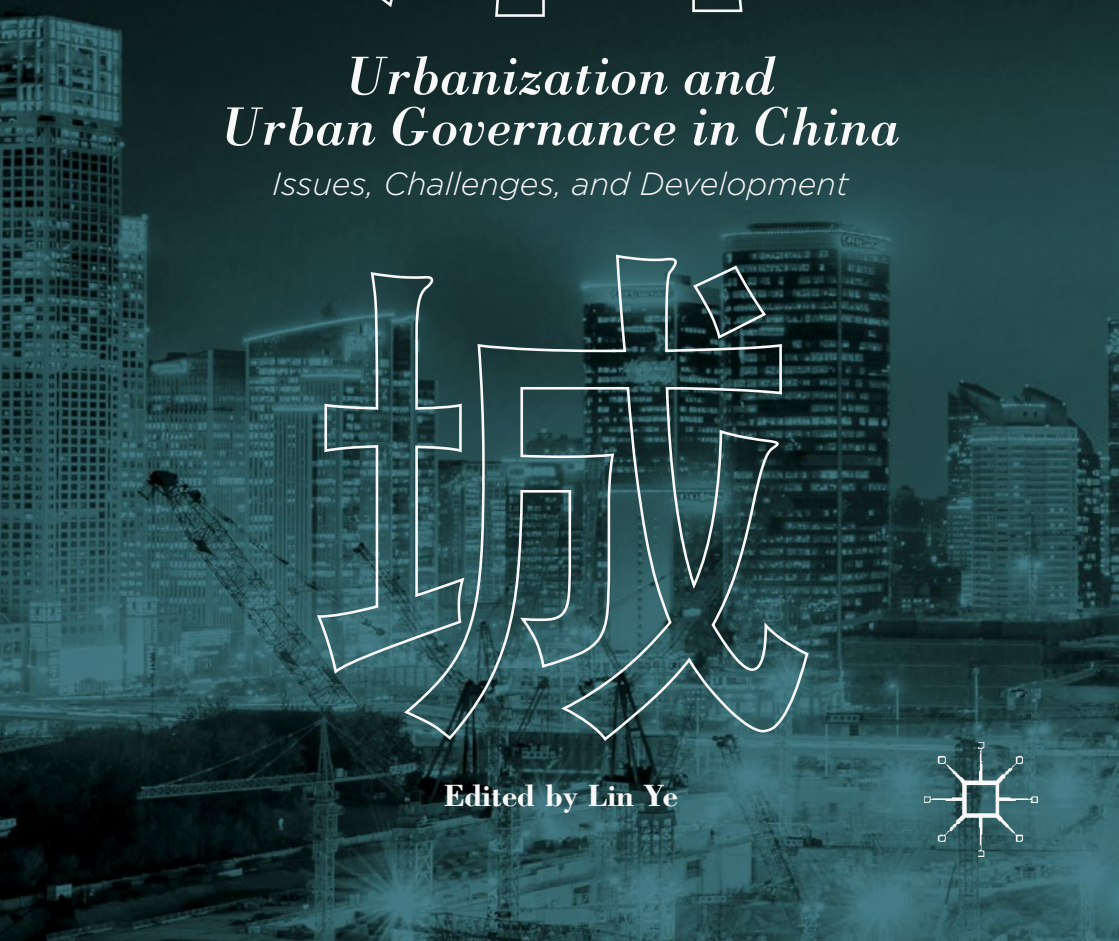

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Governing China in the 21st Century

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Since 1978, China's political and social systems have transformed significantly to accommodate the world's largest population and second largest economy. These changes have grown more complex and challenging as China deals with modernization, globalization, and informatization. The unique path of sociopolitical development of China hardly fits within any existing frame of reference. The number of scientific explorations of China's political and social development, as well as contributions to international literature from Chinese scholars living and researching in Mainland China, has been growing fast. This series publishes research by Chinese and international scholars on China's politics, diplomacy, public affairs, and social and economic issues for the international academic community.

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Preface

Urbanization is a complex phenomenon occupying a busy intersection of many policies: those on property rights, on land laws and markets, on social services, on residential status and welfare entitlements, on public finances and financial markets, and on environmental goals and controls.

Three transformations have shaping China's urbanization over the past three decades: economic, social, and environmental. Now these transformations are at crossroads, as China moves into a new phase of development based on:

- improving agricultural productivity;
- shifting output to higher-skill manufacturing and services;
- restoring equity, increasing consumption, and building a large international middle class;
- adopting greener production technology and consumption.

China's leadership recognizes that it can promote these aims through efficient, inclusive, and sustainable urbanization. Yet conferring these qualities on a country's urbanization path—making urbanization quick, kind, and clean—is not a simple task. It has been arduous even for Singapore, a city state of 5 million people and 700 square kilometers. It is far more challenging for hugely populous China, with its 10 million square kilometers.

Directed at scholars, students, policymakers, officials, and the general reader who wishes to understand urbanization in China, this edited volume consists of 11 chapters covering critical issues in urbanization from several

perspectives—economic, political, sociological, and environmental—by established researchers from greater China, the United States, Germany, and Sweden.

The volume is divided into four parts. The opening, introductory chapter details the urgency of the task at hand—the reasons that the policies driving urbanization during the last three decades will not support China's next push to become an advanced urban economy—and offers a new approach to urbanization. Part I has three chapters, which deal with the agglomeration economies of city clusters in the regions of the Pearl River Delta and the Upper Yangtze River Delta, with a look into the new direction of China's urbanization. Part II's four chapters deal with disparities and urban ills (e.g., housing affordability) in metropolises, on one hand, but also examine the dynamism (e.g., creative energy) that metropolises have to offer in the field of urban redevelopment, city branding and city creativity. Part III includes three chapters that explore the political, economic, and cultural richness that metropolis and megalopolis can provide, delving into the nuts and bolts of governance and service delivery in metropolitan areas. They discuss China's institutional setup, public participation and governance structure, which affect public service provisions and governing capacity.

World Bank, Former lead economist for China, Mongolia, and South Korea — Chorching Goh

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CHAPTER 1

Introduction: A New Path of Urbanization and Urban Governance in China

Lin Ye

Urbanization in China: A Brief Review

China has undergone a remarkable process of urbanization since the mid-1980s. The speed, scale, and size of this process has received world-wide attention (LeGates 2014; Savitch et al. 2014). Figure 1.1 shows the growth of the urban population in China between 1950 and 2015. In 2011, China's urban population exceeded the rural population for the first time in the country's history. In 2015, over 56% of the total population in China resided in urban areas. The rapid reduction of the rural population since 1995 occurred for two reasons. The first is the vast number of migrants moving from the countryside to cities. The second is so-called "localized urbanization" (*jiu di cheng shi hua*), which refers to the phenomenon whereby rural residents obtained urban household registration after the collectively owned village land was taken over by the municipalities. In both cases, it is difficult for these previously rural residents to receive equal social welfare as urban residents, which poses a significant challenge for urban management (Ye 2011).

An even more important indicator of China's urbanization is the exponential development of land and the expansion of urban areas.

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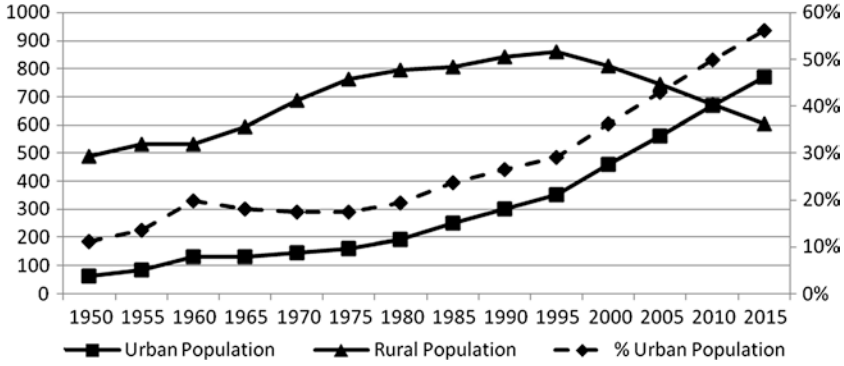

Fig. 1.1 China's demographic urbanization, 1950–2015
Data source: *China Statistical Yearbook*, various years

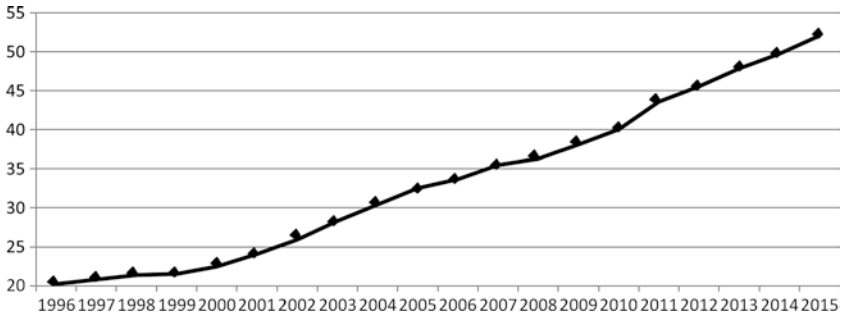

Fig. 1.2 The expansion of urban areas in China, 1996–2015
Source: *China Statistical Yearbook*, various years

Figure 1.2 shows the growth of built-up areas in Chinese cities. In 1996, there was 20,200 square meters of built-up areas in China. The figure grew to 52,100 in 2015, recording a 160% increase in under two decades. Such land-centered development has been the most prominent pattern in China's urbanization.

China's urbanization was driven by a network of endogenous and exogenous forces and thus formed unique spatial patterns, which has made governing urban regions both a challenge and an opportunity for carrying out new modes of governance (Xu and Yeh 2010; Ye 2014; Zhang 2007). In his thematic book, Friedmann (2005) characterizes

China's urbanization an "endogenous development," which was driven by high rural population density, excess supply of labor, historical pursuit of industrialization, resourceful local leadership, entrepreneurial talent, and high saving rates for infrastructure investment (pp. 38–50). In the meantime, intertwined factors including globalization, technological change, demographic movements, and market and political development all contributed to the urban development of a transitional economy such as China's. The country's new-found globalism is especially significant because nation-states often achieve world status through the economic capacity of their city-regions. Cities now find themselves as spearheads of global processes—whether by promoting financial services, by serving as shipping ports, or by producing material goods (Savitch et al. 2014).

Under the dual forces of globalization and urbanization, mega urban regions in China extend their boundaries well beyond the traditional central–suburban agglomeration into rural areas along inter-metropolitan corridors, making up several mega-regions such as that of Beijing-Tianjin-Hebei, the Yangtze River Delta, and the Pearl River Delta (Ye 2013). Under the strong drive for urban expansion and development, local governments in China perform an entrepreneurial role and actively engage in economic growth matters, establishing a complex web of public collective enterprises, town and village enterprises (TVEs), and rural collective cooperatives (Walder 1995). Municipalities have exploited land as a source of capital formation, acted as the representatives of the state to control urban land and its commodification processes, and produced urban-oriented accumulation through the commingling of labor intensive industrial production with heavy investment in the built environment (Shin 2014; Ye and Wu 2014).

China's urban growth is occurring not only in large cities but also in peri-urban areas, such as expanding villages, towns, and small cities. It is important to understand the scale and tempo of growth in these varied areas across China and to envisage what form cities with populations of different sizes might ideally take (LeGates 2014). These clusters of contiguous cities, connected by small swathes of land that have been developed to house millions of people working in and around the urban areas, give rise to extended metropolitan regions (Ye 2009, 2014). The development of these metropolitan regions has been an important part of China's burgeoning urban development (Wu and Zhang 2007; Xu and Yeh 2010; Ye 2009; Zhang 2006). From the 1990s to the 2010s, these regions underwent significant transformation due to market reform, globalization, and rapid urbanization.

Governing such urbanized regions poses complex challenges for all levels of the Chinese government. In 2014, China formally adopted the national New Type Urbanization Plan 2014–2020, intended to fully explore the opportunities of urbanization by clarifying goals and avoiding risks throughout the process of intensified urbanization. One of the key strategies that was established by this strategic plan was the people-oriented urbanization model, which emphasizes equality within and sharing the benefits of urbanization. With regard to the spatial development of urbanization, more coordinated planning of urban regions is required to optimize land utilization, encourage compact development, and improve land use efficiency. The integration of urban and rural areas should help maintain the identity of the countryside, while promoting tailored local development cultures for cities with varying characteristics.

In order to pursue such objectives, administrators of Chinese cities have tried to develop innovative governance approaches. As early as the late 1990s, decentralization of decision-making power enabled leading Chinese cities such as Shanghai to adopt a rearranged structure in their urban management, addressing the dynamics between the central and provincial/municipal governments, between municipal and district governments, and between district and subdistrict governments of street offices. A significant number of urban management authorities were delegated to the lower levels of government, namely at the urban district level. In Shanghai, a district government can not only collect revenue from district-owned enterprises but also share tax revenues with the municipal government (Zhang 2007, pp. 120–121). In addition, non-governmental actors such as the Property Owners Association (POA), Business Owner Association (BOA), and other social organizations are invited to participate in urban management issues in the city. This type of bottom-up urban governance reform gradually took place in other Chinese cities as well.

Outline of the Chapters

So, it can be seen that a top-down formation of urban regions and a bottom-up reform of urban governance jointly shape urban transformation and direct the new type of urbanization development in China. The chapters in this book focus on these two dimensions by providing both theoretical construction and empirical tests.

Part I of the book describes the regional outlook and urban transformation in China over the last three decades. In Chap. 2, the authors examine

the changing pattern of industrial development in the nine Pearl River Delta (PRD) cities since the late 1990s. The PRD region is one of the most developed in China and showcases its rapid urbanization process. Its previous model of development, focusing on export-processing based on cheap labor and light industrial manufacturing, is no longer viable for the long run. The "Outline of the Plan for the Reform and Development of the Pearl River Delta, 2008–2020" laid the foundations for future development since early 2009 by partnering with Hong Kong and successfully lobbying the central authorities. Hence, the external situation and policy environments confronting the PRD are undergoing major changes and offer both serious challenges and opportunities for existing paths of development. The governmental responses to the challenges of industrialization have been highly visible and direct. The PRD cities have all been urged to adopt a variety of policy measures to address their industrial problems and to coordinate among themselves as well. This model of regional governance entails both strong vertical directives and horizontal cooperation, which is enlightening for other regions in China.

Chapter 3 focuses on one of the upcoming regions in central China. The authors consider how this emerging urban-region is affecting the state's rearticulation in space formation on the regional scale. In the Upper Yangtze River Delta, the central state reasserts its sophisticated functions in building national economic coherence in a global system, enabling entrepreneurial local states to brand their locales as strategic nodes with perceived new ranks in the hierarchical national urban system. With resource allocation increasingly based upon regional plans, a more realistic entrepreneurial strategy for individual locales to survive inter-urban competition is to coalesce with one another to construct city-regions and be incorporated into regional plans made by the central state. Thus, building urban-regions becomes a new form of urban entrepreneurialism that unfolds on the provincial scale.

In Chap. 4, the authors argue that the extended metropolitan regions (EMRs) have become the core platforms in China's urbanization. This chapter analyzes the main characteristics of the unfolding global economy and explores its impact on China's urbanization. It brings an understanding of the possible new urbanization of China, which would likely be embedded in a low-carbon economy and various local forces in the context of the country's transition into being a major global economy.

Part II of the book focuses on the issue of urban redevelopment, inequality, and city place-making, before new urban governance experiences are

carried forward. In Chap. 5, the author examines the changing landscape of urban redevelopment in China from the early 1990s to the present. The chapter discusses the shifting target of redevelopment from the formal city of urban neighborhoods to the informal city of ViCs (villages-in-the-city, *chengzhongcun*). The redevelopment of ViCs entails different socio-political dynamics from the "Shanghai model" of urban renewal. The changing policy and regulations have made the "Shanghai model" of large-scale displacement unfeasible, and extended better protection for residents' rights to housing. But the current era of ViC redevelopment has produced new forms of inclusion and exclusion, as the former agrarian class of peasants is included as de facto ViC landowners, while migrant tenants—the majority of the ViC population—are excluded from the redevelopment process.

In Chap. 6, the authors utilize Chinese data for the years 1998, 2000, 2005, and 2008 to trace the growth of the creative economy and the increasing income inequality of China's urban economy. While the creative sector now makes up close to 30% of China's urban private employment, industry-based earnings disparity has also increased substantially. Provinces with larger creative economies also tend to have higher levels of wage inequality among workers within the creative sector, the working sector, and the service sector. Several other factors, especially internal migration flow, size of manufacturing output, and ownership structure in the local economy, are found to be significantly linked to inequality as well.

In Chap. 7, the author analyzes urban development and branding strategies for emerging global cities in China. The starting point is that there has been a shift from a focus on economic dimensions toward a global city discourse in which various dimensions are at play—such as economic, cultural, social, and environmental. It is proposed that multidimensionality, and hence being a center of not only economic development and finance but of multiple elements (such as those that are cultural, social, and environmental) increasingly defines emerging global cities in China.

Chapter 8 further analyzes the housing problems in China after more than three decades of profound urbanization. On one hand, Chinese cities accumulated a huge stock of housing surplus. On the other, ironically, the housing problems of a large number of people remain unsolved, with unbelievably high housing prices in evidence. Such a mismatch is argued to be largely due to unwise housing policies, over-commodification of the housing market, and local governments' over-reliance on land revenue. Therefore, future institutional reform is needed to further decommodify housing and breakdown the institutional coalitions among (local) governments, property developers, and banks.

Part III discusses new urban governance experiences and proposes innovative models for Chinese cities. In Chap. 9, the authors adopt an informal and experimental governance approach to study the vertical devolution between the central and the local levels of government, and the horizontal competition among cities. A trend toward recentralization of power, which can be noted since the 2000s, shows that the consequences of the rapid urbanization of the past decades cannot be predicted and even less easily be controlled by centralized planning. The development of mega-cities leads to a tremendous increase in urban complexity and a certain amount of inequality both in socio-economic and in spatial terms. In the past, the associated challenges were addressed through a series of governance innovations. By analyzing urban development in the southern Chinese city of Shenzhen in a broader context, this chapter argues that there is a strategy behind the innovation process that builds on experimentation and informality. Contrary to widespread understanding, informality in this context neither indicates the loss of control over spatial development nor a simple exploitation of *guanxi* relations for the sake of a selected powerful few. Rather, it can be interpreted as a crucial element in the reform strategy that can be used intentionally for a flexible response to the challenges of development. In a context of gradual consolidation of rapidly growing mega-cities, the system of urban governance is constantly evolving. It consists of a complex spectrum of governance arrangements that are suited for different degrees of deliberation, planning rationalities, and priorities. This allows for a certain amount of experimental governance in times of uncertainty with respect to planning routines, in transitory spaces and in insecure institutional terrain. Informality is therefore intentionally used to create leeway for the governance arrangements associated with those settings—to produce new spatial and functional settings, a range of procedural approaches that can be chosen from when there is a need for mainstreaming, and to direct the attention of urban development forces into or away from certain types of neighborhood and planning challenges, at least temporarily. Thus, urban development is, contrary to some expectations, driven by a patchwork of governance styles rather than an overarching governance arrangement but nevertheless is characterized by a degree of flexibility that does not seriously challenge the managing authority of the party state.

Chapter 10 investigates local government fragmentation and fiscal disparity across Chinese cities. Utilizing city-level data in China, the authors find that local government fragmentation is positively associated

with fiscal disparity both longitudinally and cross-sectionally, whereas the percentage of public expenditure for urban districts and counties to the total public expenditure of the city is not associated with fiscal disparity. Cities with a higher number of urban districts and counties are associated with higher fiscal disparity, and cities with increased numbers of urban districts and counties are also associated with higher variations of fiscal capabilities among them. Urbanization is flourishing in China and has become the engine for economic growth. The authors conclude that the local administrative structure affects the variations in fiscal capability among local jurisdictions, which would ultimately shape the urban landscape through public service distribution. The changing intra-city administrative structure deserves more attention vis-à-vis equal public service distribution in the massive urbanization process.

Finally, in Chap. 11, the author uses the analysis framework of a participation-responsiveness model, drawing on several cases, and analyzes the behavioral logic of the government response to internet-based political participation to answer questions about how and why the government responds to this phenomenon. The exploratory multi-case study reveals the effect of mechanisms of internet political participation on policymaking at the government level, in terms of power, information, and communication. The author goes on to analyze four modes of government response: ostrich mode, cuckoo mode, queen bee mode, and mandarin duck mode. Based on the network participation theory and empirical analysis, an attempt is made to construct a simple theory of the government response to internet political participation. The findings help to realize such participation in an orderly and legal way, as well as enhance the effectiveness of governance.

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PART I

Regional Outlook and Urban Transformation

CHAPTER 2

The Changing Industrial Transformation in the Pearl River Delta: Issues, Challenges, and Intergovernmental Coordination

Peter T.Y. Cheung and Evans Y.M. Leung

Introduction

This chapter examines the changing pattern of industrial development in the nine Pearl River Delta (PRD) cities since the late 1990s. Guangdong province, especially the PRD, has spearheaded economic reform and opening up in China and achieved spectacular growth since 1978. However, with the rise of Shanghai and the Yangtze River Delta (YRD) and other regions in China, and the transformation of the global economy, the province has been under increasing pressure to upgrade its industrial structure and technological capacity, and to go beyond its labor intensive manufacturing and export-oriented model of development. The previous model of development in the Delta, focusing on export-processing based on cheap labor (often called the "front shop, back factory" model) and light industrial manufacturing, is no longer viable in the long run. On the other hand, the granting of the Closer Economic Partnership Arrangements (CEPA) by the central government since 2003 has aimed to foster close economic relations between Hong Kong and the PRD. Guangdong has also been able to secure the approval of a major reform document, the "Outline of

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the Plan for the Reform and Development of the Pearl River Delta, 2008–2020" (Outline Plan), as its blueprint for future development since early 2009 by partnering with Hong Kong, and successfully lobbying the central authorities. Hence, both the external and policy environments confronting the PRD are undergoing major changes and offer both major challenges and opportunities for the existing path of development.

This chapter explores the following central questions: What are the key policy measures initiated by the provincial and municipal governments in promoting the economic and industrial transformation of the PRD? What are their special features and limitations? What are the impacts of the Global Economic Crisis in 2008 on the economic and industrial transformation in the PRD? Has it facilitated or constrained the ongoing industrial upgrading? What are the most critical challenges facing the PRD in promoting industrial development and technological upgrading? The answers to these questions will have important implications for understanding the transformation of China's city-regions.

Literature Review on the "Pearl River Delta Model" of Development

Guangdong has been a leader in China's economic reform drive since 1978 and is one of the most developed provinces of the country. Primarily utilizing foreign direct investment (FDI) and developing export processing, Guangdong's development has been characterized as an export-driven industrialization process and termed as the "Pearl River Delta Model" or "Guangdong Model" by various scholars (Oi, 1995; Eng, 1997; Johnson and Woon, 1997; Sit and Yang, 1997; Cheng, 1998; Mulvad, 2015). Nonetheless, others have claimed that it mainly evidences the developmental state at work. As Chang argues, a strong state is indispensable in guiding economic development in four areas, namely coordination for large-scale changes, provision of "entrepreneurial" vision, institution building, and conflict management (Chang, 1999:188). Instead of relying upon market institutions, the role of government in allocating capital plays the key role in the East Asian newly industrialized economics (Johnson, 1982; Wade, 1990).

The economic performance of the cities in the PRD varied significantly. Although the initial industrialization of both the eastern and the western wings of the PRD began at roughly the same time, and both experienced rapid economic growth with a period of vibrant rural industrialization led by the township and village enterprises (TVEs) (Lin, 1997), cities on opposite banks took very different paths after the TVE sector was phased out in the 1990s (Shen et al., 2006). The east coast cities further industrialized

and urbanized following Deng Xiaoping's Southern Tour in 1992, while the west coast cities lagged behind in many aspects. The general pattern of a strong east coast and a weak west coast has persisted. This chapter will first look at the three tiers of cities in terms of their developmental stages, and then examine recent efforts by these municipal governments to address the challenge of industrial restructuring, and then analyze the major developments in each tier systemically in the later sections.

Patterns of Development of the PRD Cities

The Global Economic Crisis of 2008 has profoundly impacted on Guangdong's export, and affected its economic growth in various ways. As many observers have pointed out, the economy of the PRD has already passed the stage of primary capital accumulation with its initial growth led by labor intensive industries since the late 1970s, and has now reached a critical threshold. Further development of the PRD depends on successful economic restructuring.

While some of the contributing factors of the early stage of industrialization of the PRD continue to promote its economic development, others have become constraints to further economic growth. Hong Kong capital has been the most important source of FDI in the PRD region since 1978. Since Hong Kong investors mostly invested in labor intensive manufacturing industries, Guangdong's economic base has not developed a strong foundation (Wen et al., 2010). Hence, the source of capital and the relevant sectors for such investments will shape the direction of industrial restructuring.

Since Guangdong had never been selected by the central government as a key region for heavy industrial development in the pre-reform era, this has become an inherent limiting factor for its industrialization (Lau, 2000). It was not until the late 1970s that a few heavy industries were developed in PRD cities. Realizing such a deficiency, the Guangdong provincial government has decided to emphasize heavy industrial development through setting development goals and strategically diverting investments to heavy industry since the mid-1990s. It is believed that a strong heavy industrial sector would help to promote long-term development of a whole chain of related industries and improve its industrial structure (Cheng, 2000; Xiang, 2006; Liu et al., 2010). Figure 2.1 shows that output value of heavy industry enterprises started to surpass that of the light industry enterprises in 2000, and the gap between the two has gradually widened.

Unlike the eastern part of the PRD, which has become an important manufacturing base that contributes heavily to China's exports, the western

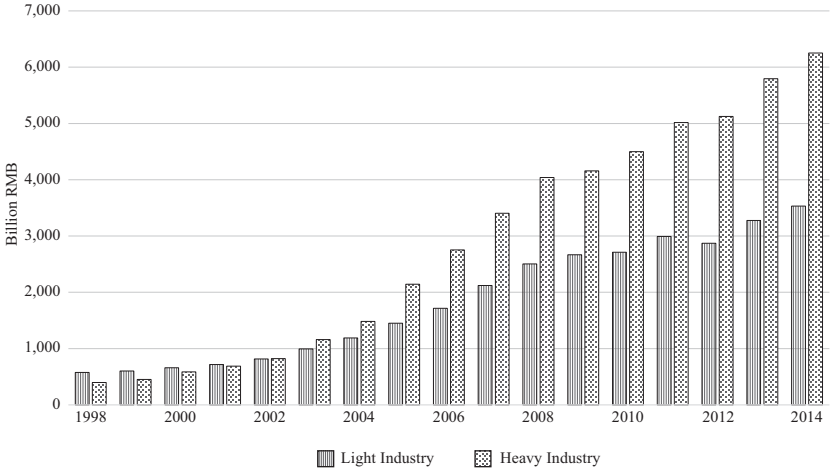

Fig. 2.1 Output value of industrial enterprises in the PRD (1998–2014)
Source: *Guangdong Statistical Yearbook*, various years

region focused primarily on domestic market sales in the late 1980s (see Fig. 2.2). As other regions of China began to catch up, cities on the west bank of the PRD have slowly lost their competitive edge in the domestic market, and the sale of their products to other provinces dropped. This has further aggravated a regional divide between cities on the opposite sides of the Pearl River. Market diversification is therefore one of the key factors shaping not only the slow development of the western part of the PRD but also the long-term development of the eastern Delta (Shu et al., 2008).

Such an east–west divide was exacerbated as the Shenzhen-led eastern region diversified its industrial base through the development of hi-tech manufacturing with continuous inflow of foreign investments (Shu et al., 2008). While some argue that the eastern part of the PRD has experienced industrial clustering because of the industrial relocation from Hong Kong to the neighboring cities within the "magic three hours" zone (Zheng et al., 2006),[1] others believe that it was the niche that helped the emergence of specialized towns (Wu, 2006). The major hi-tech industrial clusters in Guangdong were located largely on the Guangzhou–Shenzhen eastern corridor, while clusters on the western part focused primarily on traditional industries. In any event, clustering is more conducive to technological innovation, which is the key to industrial upgrading, due to the

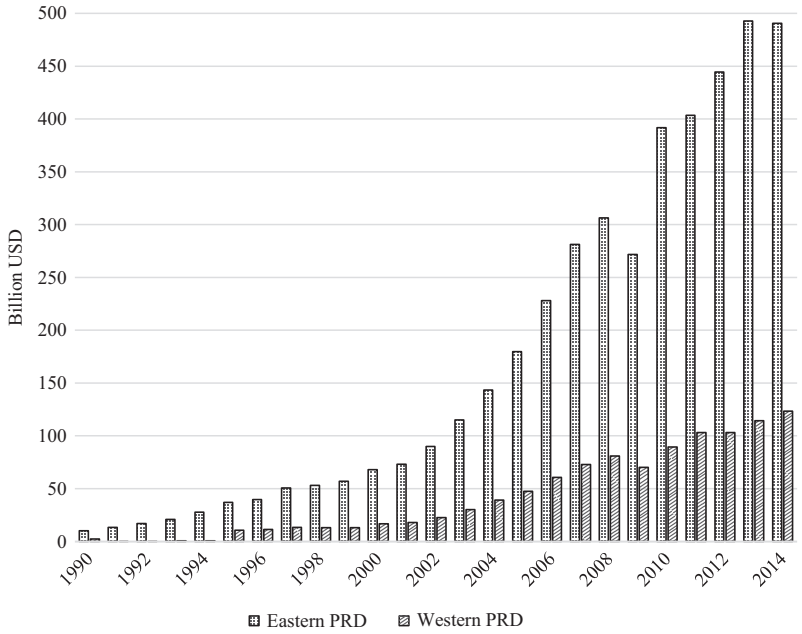

Fig. 2.2 Total export of eastern PRD and western PRD (1990–2014)
Source: *Guangdong Statistical Yearbook*, various years

resultant keen market competitiveness, especially after China's accession into the World Trade Organization (WTO) in 2000 (Zheng et al., 2006).

One of the major characteristics of the PRD model was the presence and rapid development of the non-state sector (Xu et al., 2011). Besides foreign enterprises, privately owned firms have contributed significantly to the Guangdong economy. The share of the private sector in Guangdong's industrial output rose steadily from 72% in 2000 to 86% in 2014.[2] Nevertheless, the non-state sector of the PRD also has its own inherent limitations, such as the over-dependence on overseas markets, the low level of value-added industries, and the lack of efficiency and competitiveness among its industrial enterprises (Wen et al., 2010). These deficiencies have constrained its capacity to sustain growth, and made private enterprises less competitive when compared to their counterparts in the YRD. Together with the steady appreciation of the RMB from 2008 to 2014, the non-state sector is also facing mounting pressure in industrial upgrading.

While the "strong-east weak-west two-coast" pattern seems to have been an appropriate depiction of the differences among cities for many years, a more nuanced picture can be identified if we look into the special features of each city. Three tiers of PRD cities have been identified by policymakers according to a wide range of criteria in recent years. The first tier refers to the provincial capital of Guangzhou, and the special economic zone (SEZ) of Shenzhen. These two have been the pioneers of economic reform and industrialization since 1978, and have been moving steadily away from the manufacturing industry to the service industry (see Fig. 2.3). The second tier refers to Foshan and Dongguan, which have been leading not only in their manufacturing industries but also in terms of the scale of their economies (see Figs. 2.4 and 2.5). Facing the challenges from both global and domestic markets, these two cities are under great pressure to restructure and upgrade their industry. Zhuhai, Huizhou, Zhongshan, Jiangmen, and Zhaoqing belong to the third tier; they are comparatively less successful than their counterparts in the PRD region in terms of the scale and pace of industrialization but share more or less the same challenges (see Fig. 2.6).

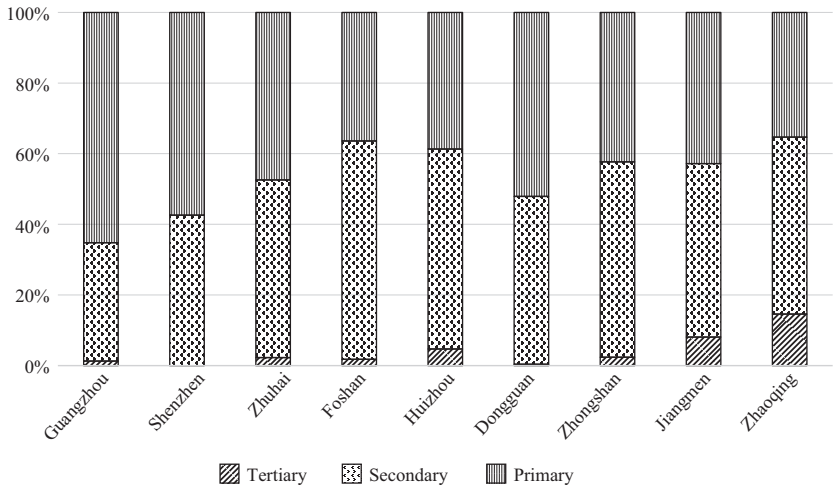

Fig. 2.3 Composition of GDP in the PRD (2014)
Source: *Guangdong Statistical Yearbook*, various years

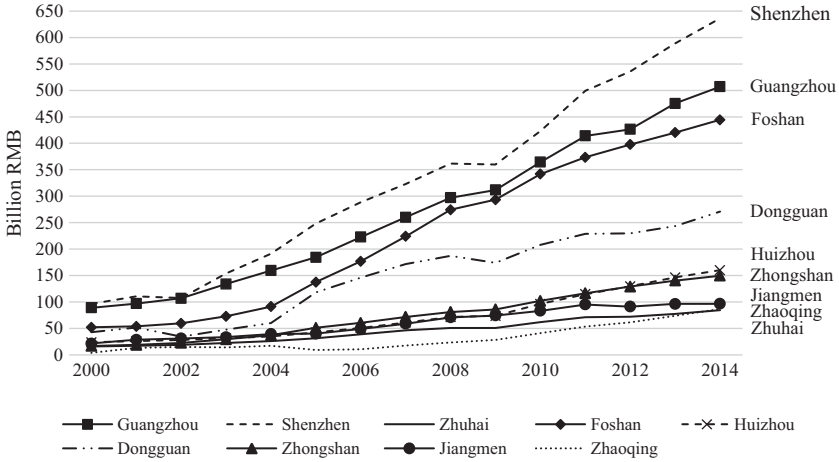

Fig. 2.4 Value-added by industry in the PRD (2000–2014)
Source: *Guangdong Statistical Yearbook*, various years

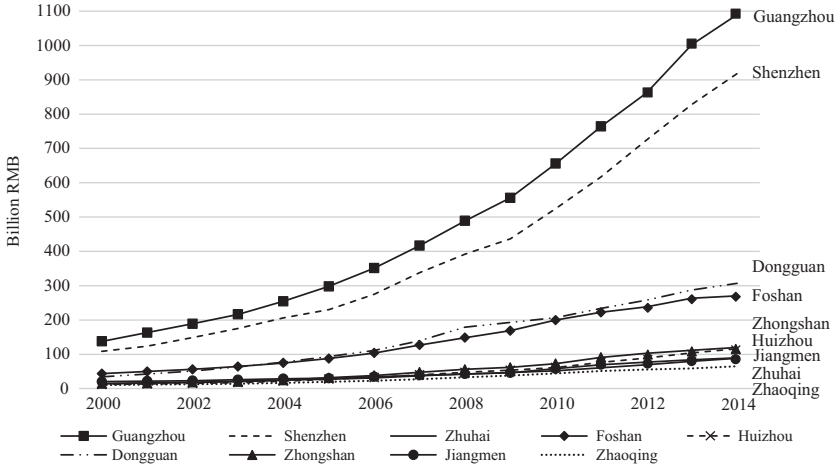

Fig. 2.5 Value-added by tertiary industry in the PRD (2000–2014)
Source: *Guangdong Statistical Yearbook*, various years

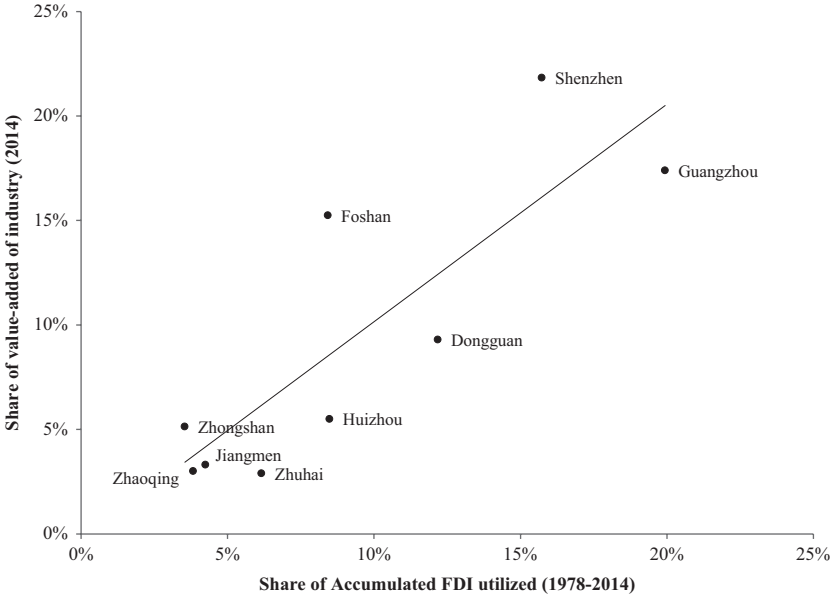

Fig. 2.6 Relationship between share of accumulated FDI and share of total value added by industry by city in Guangdong
Source: *Guangdong Statistical Yearbook*, various years

The Role of the Guangdong Provincial Government and Its Policies

One of the hallmarks of Guangdong's early reform period is not just the decentralized model of development but also the highly fragmented administrative configuration. The lack of coordinated economic governance and planning in the Greater PRD is reflected in the fierce competition among such jurisdictions over attraction of foreign investment and industrial development, and the apparent duplication of infrastructure. The presence of cities with diverse administrative status in the Delta—one deputy provincial city (Guangzhou), two SEZs (Shenzhen and Zhuhai), and six prefectural cities (Foshan, Dongguan, Huizhou, Zhongshan, Jiangmen, and Zhaoqing) with varying levels of economic development—further complicates collaboration. The existence of such a multitude of jurisdictions and their contrasting views about regional

development has prevented effective intra-PRD coordination in urban planning and infrastructural development.

Insufficient coordination and vicious rivalry over industrial and infrastructural development between the nine cities in the PRD are still evident. As early as the mid-1990s, the provincial government promoted economic coordination among the cities in the PRD and aimed to build up a PRD economic zone through the promulgation of the "Modernization Plan for the PRD Economic Zone (1996–2010)," which was not effective owing to competing interests and lack of mechanisms for implementation (Ma, 2012). In 2005, the "Urban Cluster Coordinated Development Plan" (UCCDP) of the PRD highlighted the critical role played by Guangzhou and Shenzhen but also proposed the formation of three metropolitan areas, namely the central cluster, the eastern bank area, and the western bank area (Chan and Yao, 2010; Ma, 2012). The Pan-PRD development initiative, which fostered cooperation among nine provinces, Hong Kong, and Macau, championed by former Guangdong Party Leader Zhang Dejiang, could be interpreted as an ambitious effort in inter-provincial cooperation in 2004–2007. However, this plan not only failed to get central-level support and soon elapsed after his promotion to the central government but also did not alleviate the continuing fragmentation within the PRD. It was not until the arrival of Wang Yang as party secretary that a serious effort came to jumpstart collaboration within the PRD after he secured central government's endorsement and the support of the National Development and Reform Commission in approving the Outline Plan.

The promotion of coordinated development through the Outline Plan and the corresponding integration plans that aim to achieve better policy coordination and intergovernmental collaboration among the nine cities in the PRD area have been the most ambitious measures initiated by the provincial government so far. The Outline Plan sets out general strategies and principles on developing the PRD region into a "world-class base for advanced manufacturing and modern service industries." The Outline Plan not only endorsed a division of labor between Hong Kong and the PRD but also aimed to expedite greater integration (*yitihua*) within the PRD. This is the first time the central government considered cooperation within the Greater PRD as a national strategy and will oversee its implementation. The provincial authorities sought to use such central-level endorsement to create incentives and conditions to achieve better coordination within the PRD (Cheung, 2012). The provincial government can also use this central policy endorsement to impose greater control over cities in the PRD, to

attain better coordination over economic and infrastructural development, and to mitigate rivalry and duplication. Such incentives and disincentives are enforced through administrative reviews of the implementation of the Outline Plan and integration plans, and performance appraisal of individual cities (and hence their leadership) in achieving the plans.

The current integration initiative from the provincial government envisions overall economic prosperity through collaboration among the PRD cities. However, there is bound to be conflicts of interest between these different cities in the PRD, given their different locations, industrial structure, and stages of economic development. Thus, there is likely to be more enthusiasm from the less developed cities as they aspire to benefit from the spillover efforts of economic development, whereas the more developed cities are more cautious about allowing investment flows into the relatively more backward areas where costs of land and labor would be cheaper. In view of the diverse interests and levels of economic development, three economic circles in the PRD were designated so that each of these circles could allow coordination to be championed and undertaken under a leading city with its neighboring counterparts: (1) Guangzhou-Foshan-Zhaoqing; (2) Shenzhen-Dongguan-Huizhou, and (3) Zhuhai-Zhongshan-Jiangmen. Such a grouping aims to facilitate more effective coordination between these cities and better monitoring by the provincial authorities, because they focus on more clearly defined spatial parameters and represent different modes of development. Annual assessment of the relevant municipal governments in carrying out these integration plans have been undertaken by the provincial government to ensure effective implementation. The Guangdong Academy of Social Science, the Institute of Reform and Development in the PRD at Sun Yat-sen University, and other research units have been tasked to coordinate and organize this assessment exercise involving both government agencies and experts.

Provincial Policies on Industrial Restructuring

Since its initial inclusion of industrial restructuring as a development goal by the Guangdong Government in the 10th Five-Year Plan (FYP),[3] and the announcement of the "Guangdong Province Industrial Restructuring Implementation Plan"[4] in 2001 (Greater Pearl River Delta Business Council Industrial Restructuring in Guangdong Task Group, 2006), over 30 policies on industrial upgrading, transformation and relocation at the provincial level were made (Hong Kong Economic and Trade Office in Guangdong,

2015), indicating the government's strong determination to cope with the slowdown of industrial growth since the mid-1990s. However, the results of these earlier efforts have not been very effective. In response to the global economic slowdown and other negative impacts brought about by the international environment, the Guangdong provincial government has expedited the process of industrial restructuring by launching a number of major policy measures. The initiative from Guangdong's leadership under Wang Yang has aimed to promote the "double-transfer" strategy since 2008—the simultaneous relocation of industries and labor. There are two main objectives: (1) to promote industrialization and growth in the less developed regions of Guangdong by relocating the traditional labor intensive industries from the more developed PRD cities, in order to minimize the gaps between various regions; and (2) to reorganize the distribution of industrial clusters in order to maximize productivity and efficiency of industrial chains, and to make room for the development of hi-tech and high value-added industries.

The Guangdong government understood too well the weaknesses of its export-oriented economy. To better cope with the turbulent international environment in the wake of the 2008 Global Economic Crisis, the provincial government also launched the "double-upgrade" policy in August 2009—improving both competitiveness of industries and capacity for innovation (Development and Reform Commission of Guangdong Province, 2011: 120–128). An important aspect of this policy is to attract FDI to the hi-tech and high value-added industries in the PRD region. Local governments of the periphery, however, have been designated to compete for FDI in the traditional labor intensive industries, with the discretion to provide preferential treatment to foreign investors. Yet, as Wen (2004) has argued, the coastal regions of China have been successful in attracting FDI not only because of the preferential policies but also because of their geographical proximity to regional export ports. Hence, whether these measures can be effective remains a big question.

The Guangdong government also provided strong administrative guidance to promote and strengthen the development of the three major economic circles of the PRD, namely, the Guangzhou-Foshan-Zhaoqing, Shenzhen-Dongguan-Huizhou, and Zhuhai-Zhongshan-Jiangmen circles, each having its own competitive advantages at the core, while its periphery becomes the extension of industrial clusters of major industries supported by the government (Development and Reform Commission of Guangdong Province, 2011: 128–140). Industrial clusters first emerged endogenously in the PRD in the form of "specialized towns" as a result of locally

organized production systems under decentralization (Bellandi and Di Tommaso, 2005). The reorganization of economic circles and the construction of industrial parks in the periphery, facilitated by policies of preferential treatment given to enterprises that choose to relocate, are some of the provincial and municipal government initiatives to replicate the success stories of the specialized towns and to promote industrial and technology transfer.

The Guangdong government promulgated the first major industrial policy document under Wang Yang's leadership, the "Decision on Expediting the Establishment of the Modern Industrial System" in early July 2008. Aiming to move up the value chain and achieve industrial upgrading, this decision identified six core industries: modern services, advanced manufacturing, hi-tech industry, traditional industry, modern agriculture, and basic industry (Guangdong Provincial Government, 2008). A major area of work among the eight proposals in this policy document was to establish a hi-tech industrial belt and advanced manufacturing bases in the PRD to facilitate the strategy of "Emptying the Cage for New Birds."[5] Industrial transfer parks would be established in the eastern and western parts as well as the mountainous region of the province to accommodate the less advanced industries from the PRD. The National Demonstration Zone for the Transformation and Upgrading of Processing Trade would help with innovation in the development of foreign trade by attracting transnational corporations to set up regional headquarters, R&D centers, and purchasing centers, and by realizing the "Coming In" and "Going Out" strategies through the development of the domestic market.

In early April 2009, the Guangdong government announced a plan to implement the Outline Plan through a phased implementation: "one-year good opening," "four-year major development," and "ten-year great leap." It also proposed the setting up of leading and working groups and the creation of coordination and monitoring systems. An annual system of assessment and evaluation would be designed as an important reference in the performance appraisal of cadres (Guangdong Provincial Government, 2009). This is indeed the first time such a systematic administrative monitoring system has been established to enforce the implementation of a subnational industrial plan.

The provincial Economic and Information Commission was tasked as the key agency for industrial coordination. Four action plans for upgrading the traditional industry were promulgated in partnership with the Foshan, Huizhou, Zhongshan, and Jiangmen municipal governments in 2010–2011. The related documents defined the minimum expenditure on R&D and selected a list of projects for implementation. Both the

Commission and the municipal governments would provide financial support to the selected projects. A steering group (*zhidao xiaozu*) would be set up by the Commission to coordinate and formulate policy measures and projects. Each of the cities would set up a leading group (*lingdao xiaozu*) to organize and make decisions on the work of upgrading, as well as to supervise and monitor progress (Foshan Municipal Government, 2010a; Huizhou Municipal Government, 2010; Zhongshan Municipal Government, 2010; Dongguan Municipal Government, 2010).

The "Overall Plan for the Establishment of the Modern Industrial System in Guangdong (2010–2015)" is the most comprehensive and systematic strategy adopted by the province in industrial upgrading in the post-2008 period. Published on September 28, 2010, this document identified the "500 projects scheme" and the development of new strategic industries as the two most important tasks (Guangdong Provincial Government, 2010a). Its contents and key themes were reiterated and embedded in the overall coordination plans since the introduction of the Outline Plan. In October 2010, the provincial government released the "Work Plan for the Realization of Four-Year Major Development" with objectives to be completed by 2012 in order to introduce elaborate measures to implement the Outline Plan. Each city should select and develop one or two major projects among the strategic new industries (Guangdong Provincial Government, 2010b).

In short, aside from devising a comprehensive strategy to develop a new industrial system, the provincial government has used various integration plans to push forward the Outline Plan in order to achieve industrial upgrading and economic development through better intergovernmental collaboration under strong provincial administrative monitoring since 2008. Such an integrated approach to policy implementation had never been attempted in Guangdong before, and given its comprehensive scope and tight administrative implementation schedule, these two policy prongs provide the most important policy context for understanding the industrial transformation of individual cities, which will be examined separately below.

Tier One

Guangzhou has long been an important manufacturing and trading hub, having always focused on a more balanced sectoral development—in other words, on developing both manufacturing and service industries. Since the Song Dynasty, Guangzhou has been an important trading port for the country. The China Import and Export Fair, also called the "Canton

Fair," which has been held twice a year since 1957, has long been the most important trade fair in the country.

Guangzhou

Traditionally, Guangzhou has a strong light industrial base, which was largely constructed before the reform era. For a long period in the 1990s, the policy objectives of the Guangzhou government focused on heavy industrial development. As a result of these government policies, automobile, electronics, and petrochemicals have become the pillar industries today, and these have achieved significant growth since the early 2000s (see Fig. 2.7). In 2014, these industries together contributed RMB 865.7 billion which accounted for 48% of the city's total industrial output. Foreign trade is still crucial to the city and the province, with its total value accounting for 12.1% of the provincial total.

In response to the challenge of the Global Economic Crisis, three policies for the emerging strategic industries, namely the information industry, biomedicine, and advanced materials, were offered to seek new sources of economic development in 2009. Such development was strengthened through a comprehensive plan for the emerging strategic industries, to strengthen the city's position as an innovation hub in the PRD in 2012. The creative industry, new energy industry, and electric vehicles were also

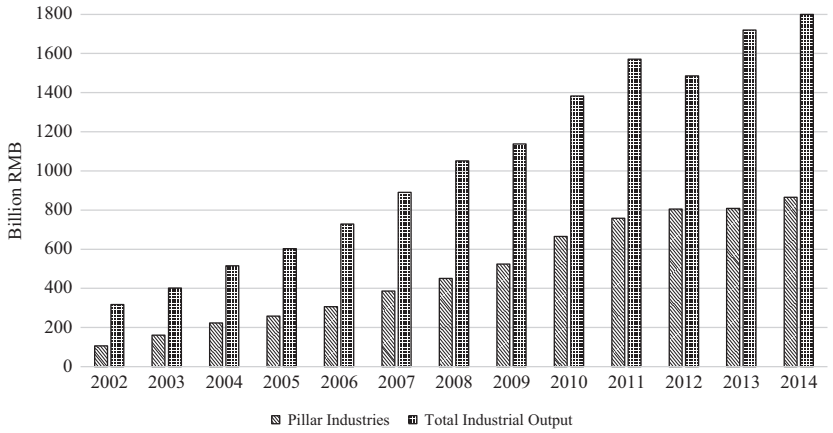

Fig. 2.7 Total output of pillar industries in Guangzhou (2002–2014)
Source: *Guangdong Statistical Yearbook*, various years

included in this plan. The municipal government pledged to maintain a designated amount of growth in the expenditure on technological education. An investment of RMB 7.8 billion was given to support privately owned enterprises. Preferential policies on taxation, government procurement, interest discounts, trade promotion, and the protection of intellectual property were also provided (Guangzhou Municipal Government, 2012).

As a result of the provincial "double transfer" objectives, most of Guangzhou's manufacturing operations have been pushed out to its suburbs and other cities to make room for tertiary industry with its higher returns. Guangzhou is currently promoting the financial sector and modern logistics as future key industries. In 2014, secondary and tertiary industry accounted for 33.5% and 65.2% of the city's GDP respectively, reflecting a clear development trend toward being a services hub.[6]

Shenzhen

Shenzhen, on the other hand, has been relatively successful in climbing up the value chain through continual industrial restructuring. As a SEZ, Shenzhen began its industrialization in the late 1970s as the initial destination of FDI, especially through manufacturing firms from Hong Kong. In an interview with government officials and researchers of government think-tanks in Shenzhen, they suggest that the first wave of industrial restructuring began in the mid-1990s.[7] By then, Shenzhen officials realized the limits of labor intensive industries and the potential benefits hi-tech industries could bring after witnessing a boom of local private firms producing more technologically advanced products in areas like Huaqiang Bei (which houses a cluster of small hi-tech firms in the downtown area) thanks to the spillover of technology. Government officials then quickly grasped the potential of a hi-tech product market, and adopted policies that promote its development.[8]

After Deng Xiaoping's southern tour in 1992, Li Youwei, then Shenzhen mayor, pushed for structural reform by relocating some labor intensive, low value-added, and highly polluting industries out of the SEZ to neighboring cities such as Dongguan and Huizhou. Instead of continued promotion of Shenzhen as the destination of FDI, Li proposed policies to promote the development of hi-tech industries. In 1996, the Shenzhen Hi-tech Industrial Park was formed to house enterprises in computer software, electronics assembly and manufacturing, and telecommunications equipment, along with other high value-added industries. In 2001, the Shenzhen Software Park was designated to support the development of the software industry.

Since the strategic decision to become a national innovation city in 2006, Shenzhen's knowledge-intensive industries and services have been expanding even more rapidly. Shenzhen aimed to become an international industrial base for electronics, to build a nationally leading biomedicine industry, and to develop globally competitive advanced materials and new energy industries (Shenzhen Municipal Government, 2009a; b). Subsidized loans, investment in R&D, and favorable land policies were given to boost innovation. Two action plans were promulgated to promote the automobiles, biomedicine, and hi-tech industries in 2010. These totaled RMB 2.1 billion of investment. A further 50% subsidy on land prices was granted to strategic emerging industries, including the advanced materials, new energy, biomedicine, and hi-tech industries, in 2013.

By now, Shenzhen is not only home to the country's most successful hi-tech firms, such as Huawei, ZTE, and Tencent, to name just a few, but is also the base of many foreign hi-tech companies operating in China. Its hi-tech industry has attained remarkable growth since 2000 (see Fig. 2.8). Aside from the development of strategic emerging industries, the latest policy priority has been the appropriate coordination of industries because shortage of land has severely restricted its further development. In this sense, Shenzhen's primary objective is to become a service industry-driven economy, with the targeted ratio of second to tertiary industry set as 30:70, which is similar to that of Guangzhou. Shenzhen officials argue

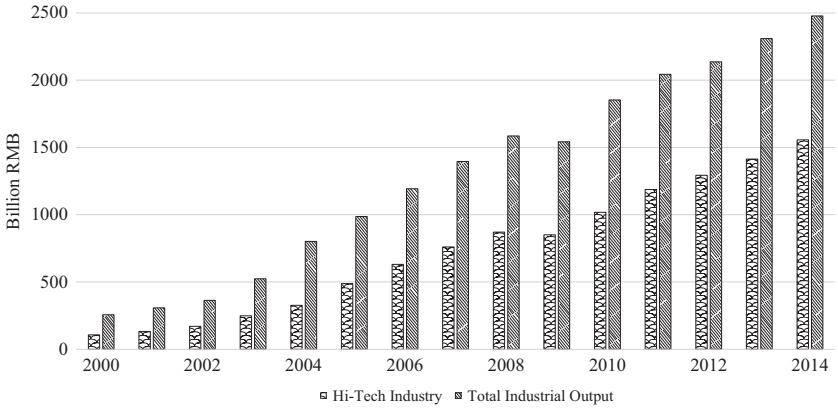

Fig. 2.8 Total output of the hi-tech industry in Shenzhen (2000–2014)
Source: *Shenzhen Statistical Yearbook*, various years

that industrial restructuring of the city has been a continuous process, and that their industrial policies are a reflection of newly emerged industries, compared to other more interventionist local governments.[9]

Tier Two

Both Foshan and Dongguan are among the second tier of PRD cities, yet they have embraced very different developmental paths since 1978. Foshan is little known outside of the PRD, but it has been a surprisingly successful case of industrial transformation. By 2014, its GDP per capita reached RMB 101,617, higher than that of Shanghai and Beijing.[10]

Foshan

Foshan positioned itself as a manufacturing center, hence it is different from the first-tier cities, which began to shift their attention to the service industries, and this is reflected in the secondary to tertiary industries ratio of 61.6 to 36.5 in 2014. Its traditional industries include construction materials, furniture, metal products, plastic products, and textile and garments. Among them, metal products and construction materials are the two most important pillars. As shown in the graph (see Fig. 2.9), the total output of these two industries rose significantly since 2005 but both have been negatively affected by the financial crisis in 2011 and 2012.

In the midst of the Global Economic Crisis and rising protectionism, the Foshan government has taken a number of measures to foster its industrial development. It aimed to become an international industrial base for home appliances, display panels, and ceramics, and a national industrial base for nine other industries (Foshan Municipal Government, 2009). Planning, land use, investment and financing measures were provided to support these key industrial areas and specialized zones for agglomeration. Financial guarantees were provided to 300 leading small and medium-sized enterprises (SMEs) (Foshan Municipal Government, 2010b).

As Foshan's focus is on manufacturing, upgrading and restructuring have become the key to overcome the current challenges brought by slowing economic growth. Several features distinguish Foshan from other PRD cities. First, the Foshan government has been less intrusive in terms of steering economic development. Instead of responding to the central government's policy of building new and strategic industries, Foshan focuses on its traditional pillar industries. Second, it has transformed itself from a collective economy to one that is dominated by the private sector. Special policy programs were implemented to provide private entrepreneurs with

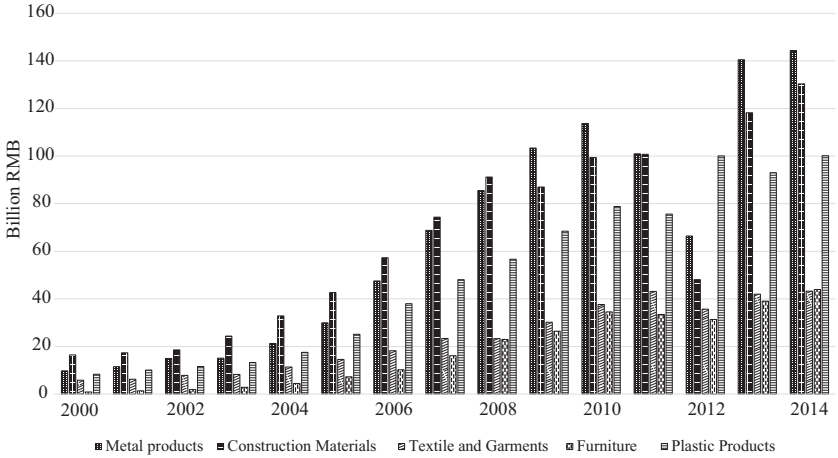

Fig. 2.9 Total output of traditional industries in Foshan (2000–2014)
Source: *Guangdong Statistical Yearbook*, various years

assistance in terms of capital, resources, information, and services. By 2014, 61.2% of Foshan's GDP came from the private sector (Foshan Municipal Statistical Bureau, 2015). The third feature of Foshan's economy is that it has transformed itself from an export-driven economy to one that targets primarily the domestic market. Foshan's export contributed 46% to its total GDP in 2008, and slowly decreased year by year to 39% in 2014. Compared to Shenzhen's 109% and Dongguan's 101%, Foshan is one of the PRD cities that has shifted its focus to the domestic market (Statistics Bureau of Guangdong Province, 2015).

Dongguan

Dongguan, on the other hand, has been relying primarily on FDI. Even today, attracting foreign investment is high on its policy agenda. Like Foshan, it has positioned itself as a manufacturing base for the country and the world (see Fig. 2.10), instead of competing with the tier-one cities on service industries. Export processing has been and will remain its economic pillar. Dongguan officials frankly admitted that Wang Yang's strategy of "Emptying the Cage for New Birds" was considered a failure in Dongguan because the early policies worried many investors and resulted in a wave of factory closures. It took them a few years to come to the conclusion that "old birds" ought to be kept to maintain economic stability, while "new birds" of the kinds they demanded would still be actively pursued.

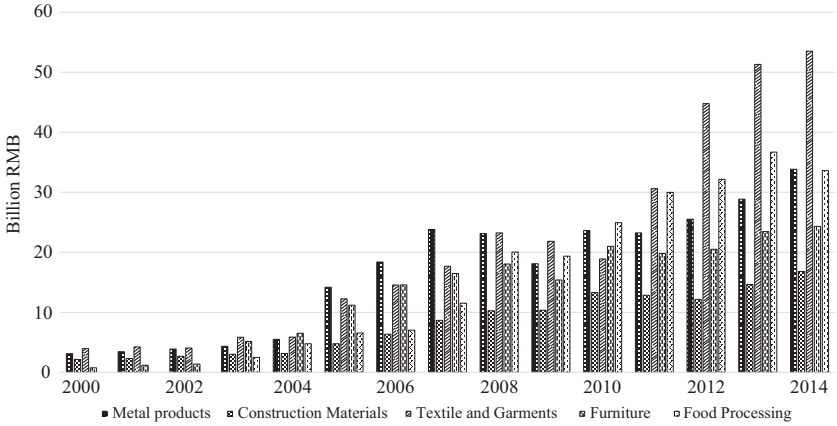

Fig. 2.10 Total output of traditional industries in Dongguan (2000–2014)
Source: *Guangdong Statistical Yearbook*, various years

The upgrading of processing of trade was one of the key features of Dongguan's industrial restructuring, such as by creating industrial parks for newly attracted foreign enterprises to set up operations, while giving tax breaks, subsidies, and other fiscal incentives would remain tools readily available to the local government. The "Technology Dongguan" project invested 2 billion yuan per year since 2010 to speed up the progress of industrial upgrading through the promotion of capital- and knowledge-intensive trade (Dongguan Municipal Government, 2010). Despite the fact that many cities have explored the opportunities of industrial restructuring to develop e-business and promote the use of robots to replace labor, officials in Dongguan showed relatively less enthusiasm.[11]

There are several obstacles to this industrial upgrading strategy. First, most of the enterprises that are facing the pressure of industrial upgrading are foreign firms, which have been locked into the global production chain for over 30 years. To them, innovation is simply too costly, not only in terms of investment in technology but the cost of the necessary changes to their management structure. Second, most of their enterprises are small and medium sized, and they simply cannot afford to invest in new technology and R&D. Last but not least, there is a wide range of industries in Dongguan, which complicates the task of upgrading. In this sense, its government may face great difficulty in picking the industries that should receive government support. Constrained by its relatively low administrative level and the limited resources under its command, the

Dongguan government appears less adaptive to the changes in market conditions, which favor more innovative forms of production and sales.

Owing to the sluggish international market, and the reindustrialization policy of many foreign governments, Dongguan does not have too many options. Attracting hi-tech enterprises to move their production plants from other cities such as Shenzhen to its jurisdiction may be one easy way out, as most big cities like Shenzhen face land constraints. But even Dongguan officials know that eventually they will face the very same difficulty themselves.[12]

Tier Three

The four cities in this tier share many similarities, such as the size of their economies, their industrial output values, second-to-tertiary industries ratio, and the share of FDI in their economies. With less impressive growth rates than their first- and second-tier counterparts, they have been considered the weaker links in the PRD economy. Zhuhai and Zhongshan are moving ahead by focusing on high value-added industries promoted by the provincial government, such as electrical machinery and equipment manufacturing industry, and both have witnessed outstanding growth in the past decade. Both acted as the recipients of industries relocated from the core cities in the PRD, as they are at the lower end of the value chain and depended on the textile and clothing industries. Keeping up with the pace of growth while climbing up the value chain through future industrial development and hi-tech applications in production and sales will be the major challenge for cities in this tier.

Zhuhai

Early in the 1980s, Zhuhai positioned itself as an export-oriented city with a focus on industry. Being highly dependent on foreign trade, Zhuhai was struck deeply by the Global Economic Crisis. To restore the volume of foreign trade, a project fund of RMB 3 million for enterprises to expand overseas was provided in 2010, creating growth of 16% in total value of import and export for the following year. A cooperation plan between Zhuhai, Hong Kong, and Macau was also put forward in 2012 to promote high-end trade in the international market. Zhuhai's trade value slowly recovered to the 2008-level only in 2012.

In 2014, over 50% of the city's industrial output was in machinery and electronics equipment manufacturing. Zhuhai also strived to develop the port and aviation industries through the Gaolan Port and industrial parks. Investment from state-owned enterprises (SOEs) launched a major aircraft project in 2009, and a massive oil and gas project in 2010. Nonetheless, the overall share of the secondary sector is contracting. In Zhuhai's development strategies, much attention has been given to the tertiary industries, particularly to trade services, financial services, and real estate.

Over the years, Zhuhai's influence in its economic circle has been in decline, since it is outperformed by both Zhongshan and Jiangmen in term of GDP. It cannot take up the same kind of leading role as Guangzhou or Shenzhen in the region. Zhuhai's recent development is constrained by various factors. The city is highly urbanized, land supply is becoming inadequate, and the demand for energy conservation is growing. The reliance on a few large corporations also gives the city extra vulnerability to external economic risks. Therefore, in 2012, the city also provided incentives for firms to get publicly listed and designed a scheme to promote the private sector, in order to diversify its ownership structure.

Huizhou

Since the late 1980s, Huizhou has emphasized its industrial development and export-oriented economic relations. Gifted with a long coastline and through attraction of foreign investment in processing trade, the city has achieved rapid industrialization. Positioning itself as an international petrochemical base, the government-led development in the petrochemical industry is critical to Huizhou's heavy industrial growth, as shown by a 34-times growth of output value from 2008 to 2014.[13] A major investment project in petrochemicals was the partnership between China National Offshore Oil and Shell, beginning in 2002, which was the largest joint venture in China at that time.

Housing the headquarters of the electronics giant, TCL, Huizhou's communications equipment manufacturing is the backbone of the city's economy. This sector alone contributed 44.5% of the total industrial output in 2014.[14] The electronics giant also placed Huizhou as the most valuable FDI destination in this tier. A series of policies aimed to support the development of the electronics and LED industries were promulgated by Huizhou, including a new innovation fund for startups and new products, and credit guarantees for SMEs in 2011 and 2012, and a five-year fund with a value of RMB 60 million from 2011 to 2015.

The expansion of SOEs has greatly contributed to Huizhou's industrial development. The output share of state-owned companies rose from 1.4% in 2002 to 17.4% in 2014, or in other words, jumping from the second lowest in the PRD to the highest.[15] Huizhou's industry is also highly uneven, as it has two of the largest corporations in the region but the total amount of large enterprises is relatively small. In order to cluster the bigger firms with those of a smaller size, the city also has a long-term plan to develop an agglomeration zone for the petrochemical and electronics industries in the port area. The key limitation to Huizhou's growth will be developing heavy industries along the coastline while meeting environmental requirements.

Zhongshan

Zhongshan was an industrial city specializing in light industry and food processing as early as in the late 1950s. Since the reform and opening up, machinery, electronics equipment, chemical products, metal products, and textiles gradually developed and became the key sectors of its economy. Zhongshan's GDP expanded remarkably from RMB 140.9 billion in 2008 to RMB 282.3 billion in 2014, representing an average annual growth rate of 12.2%. A rapid expansion is observed in the tertiary sector, with its share of GDP rising from 36.5% in 2008 to 42.3% in 2014.[16] Even though the tertiary sector has become more and more important, processing trade is still the key economic activity of the city. The ratio of export value to import value remained strong with an increase from 2.59 in 2008 to 3.01 in 2014.[17] Similar to Zhuhai in the same economic circle, machinery and electronics manufacturing are the leading sectors in Zhongshan.

The Zhongshan government has played an active role in steering industrial development in the past decade. In 2009, it designated an industrial catalogue for supported and restricted sectors. The electronics, machinery, equipment manufacturing, health and new energy industries were highlighted as key areas for promotion. Specifically, preferential policies were given to the renewable energy and LED industries in 2010. The catalogue was revised in 2011 to encourage development in metal and chemical products as well.

A key feature of Zhongshan's industry is that most of the industrial output is contributed by specialized towns. These specialized towns are clusters of firms, and each town specializes in one industry only. Industrial structure is highly fragmented, as firms in Zhongshan are large in number but small in size. With fewer large-scale enterprises to attract foreign investors,

Zhongshan has the least FDI inflow in the PRD. The lack of resources to invest in technology remains the major challenge to industrial upgrading.

Jiangmen

Jiangmen has a long history as a hometown of overseas Chinese. Over 30% of enterprises were invested in by Hong Kong, Macao, and Taiwan. Total investment in fixed assets increased considerably from RMB 37.8 billion in 2008 to RMB 111.2 billion in 2014.[18] The city's attention to industrial development was associated with its objective to build a national advanced manufacturing base (Jiangmen Municipal Government, 2011). Heavy industrialization has been a major goal in recent years. A long-term development plan was put forth in 2014 to strengthen advanced manufacturing, particularly equipment manufacturing.

After the Outline Plan was promulgated, a series of policies provided incentives for upgrading and phasing out of individual industries. Subsidies were given to demolish and relocate the unwanted industries, such as cement in 2009 and electroplating in 2010. Jiangmen also stepped up the development of its industrial transfer parks to upgrade the metal products, equipment manufacturing, machinery, electronics, and textile industries. During 2010–2013, policy measures were introduced in the area of labor protection, tax revenue sharing, land provision, financial support, and reduction of administrative procedures.

A challenge to Jiangmen's industrial policy is its heavy reliance on the traditional industries, which are labor intensive and have lower innovative capacity. These industries are sometimes affected by unfavorable national policies on environment and labor protection. Regional and global competition for export of labor intensive products are also intense. The sheer economic size of the city is insufficient to support ample input in R&D as well. To climb up the value chain is the most critical task for Jiangmen's industrial restructuring.

Zhaoqing

Industrial development of Zhaoqing started relatively late in comparison with its PRD counterparts. The "industry over agriculture" strategy in mid-1980s transformed small-scale workshops of the past, such as match-making and brewing, to a wide range of factories nowadays, such as those involved in textiles, machinery, and construction materials. The city is still experiencing the process of industrialization. Together with Jiangmen, it is the other city in the PRD which has a growing share of

the secondary sector. Such a trend is highly associated with the accommodation of industries relocated from other PRD cities. It has three industrial transfer parks in cooperation with Foshan and Zhongshan. The land, labor, and natural resources available have facilitated the agglomeration of electronics, metal processing, and the biomedical industry, which are also the most important industries of the city.

A major thrust of economic development in Zhaoqing is the hi-tech development zone established in 1993, which was later recognized as a national hi-tech development zone in 2010. The development of this hi-tech zone has been the main focus of Zhaoqing's industrial policy. Some measures provided for the zone included an RMB 500-billion development plan and an aggressive expansion from 9 square kilometers to 30 square kilometers in 2011. Being the least developed city in the PRD, Zhaoqing explored new areas of growth based on its relative advantage through low-cost production with the establishment of a new development zone in 2012. An overall development plan and an industrial development plan for this zone were promulgated in 2012 and 2013 respectively, to develop the low-carbon and green industry, in particular to manufacture eco-friendly equipment (Zhaoqing Municipal Government, 2012; 2013).

Compared with other PRD cities, the industrial development of Zhaoqing lacks large corporations to take the lead. The relatively small size of this city's economy and its location make it a less favorable destination for investment. The agglomeration of smaller firms in its development zones has become indispensable to Zhaoqing's development. But these firms, which are mainly undesirable industries from other PRD cities with high energy consumption and pollution, are at the same time obstacles to the city's industrial upgrading.

General Observations: One Delta, Three Tiers, and Multiple Models

As analyzed in this chapter, while there is only one delta, there is a diversity of local industrialization models. The previous designation of a "Pearl River Delta Model" is no longer capable of describing the development trajectories in the Delta. There are several important trends that merit attention. The following tables provide a general overview of some of the overall changes in the PRD. The PRD still remains the economic core of

	PRD	Provincial Share
Population	57.6 (million)	53.7%
Gross Domestic Product	5,765.0 (billion RMB)	85.0%
Investment in Fixed Assets	1,754.2 (billion RMB)	67.7%
Utilized FDI	24.9 (billion USD)	92.5%
Total Export	613.8 (billion USD)	95.0%
Total Import	415.4 (billion USD)	96.5%

Fig. 2.11 PRD in the provincial economy (2014)
Source: *Guangdong Statistical Yearbook*, various years

Guangdong province (see Fig. 2.11), contributing about 85% of GDP, 68% of investment in fixed assets, 95% of foreign trade, and 93% of FDI in 2014. Despite the impact of the 2008 Global Economic Crisis, the nine cities have been able to rebound, although the highest growth rates are achieved only by the four leading cities in the region, namely Guangzhou, Shenzhen, Foshan, and Dongguan (see Fig. 2.12).

Given the limitation of space, this chapter can only attempt a brief overview of some of the outcomes of industrial upgrading in the PRD. The overall growth of expenditure in R&D as a share in the GDP of the Delta has been notable, rising from 1.6% in 2008 to 2.2% by 2013. Nonetheless, such expenditure on R& D in industrial enterprises has been uneven, again concentrating in the four leading cities (see Fig. 2.13). If the outcome of such investment is examined through, for instance, the number of patents granted in the PRD cities, the data show a rapid increase within a timespan of just five years between 2008 and 2013 (see Fig. 2.14). In the area of foreign economic relations, Shenzhen has exhibited exceptional growth in exports, despite the impact of the 2008 Global Economic Crisis, whereas the growth has been much more modest in other PRD cities (see Fig. 2.15). Similarly, the growth of FDI again reflected the three-tiered pattern, led by Guangzhou and Shenzhen, followed by Dongguan and, to a lesser extent, Foshan (see Fig. 2.16).

In short, there is one delta but three tiers and multiple models. First, there are at least three tiers of cities adopting divergent models of development in view of their own traditional advantages and path dependence in terms of economic development. Second, hi-tech industry and services experience notable growth only in Guangzhou and Shenzhen. Nonetheless,

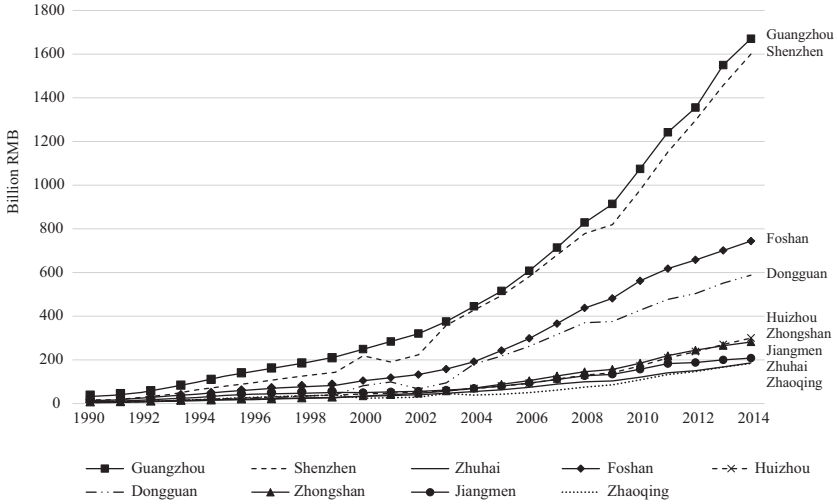

Fig. 2.12 GDP of PRD cities (1990–2014)
Source: *Guangdong Statistical Yearbook*, various years

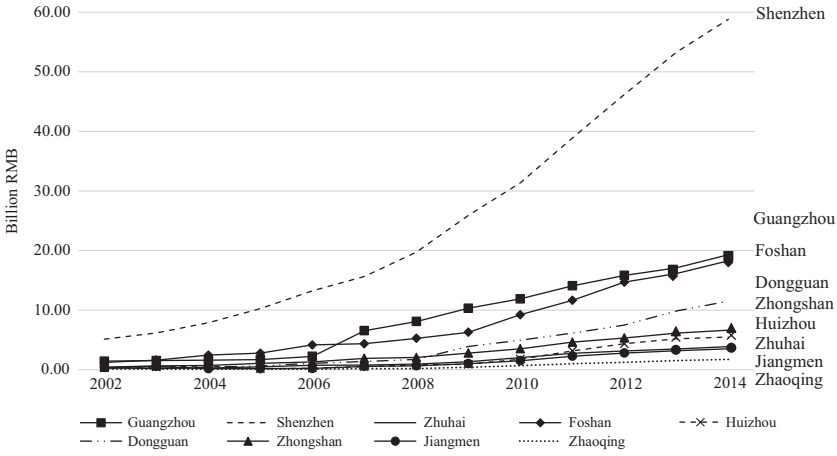

Fig. 2.13 R&D expenditure of industrial enterprises in the PRD (2002–2014)
Source: *Guangdong Statistical Yearbook*, various years

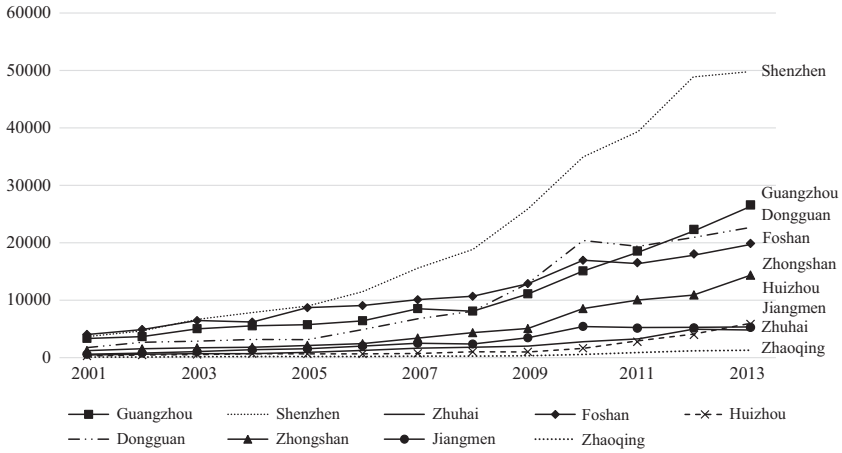

Fig. 2.14 Number of patents granted in the PRD (2001–2013)
Source: *Guangdong Statistical Yearbook*, various years

if compared with the past, there has been major improvement in R&D indicators across the PRD. Third, heavy industrial development has been most prominent in Guangzhou, Shenzhen, and Foshan. Last but not least, foreign investment and trade still remain important, although industrial sales in the domestic market have increased in recent years.

The governmental responses to the challenges of industrialization have been highly visible and direct. Since the 9th Five-Year Plan, Guangdong has already taken steps to address the challenge of industrial upgrading, but more concerted efforts came only after Wang Yang assumed leadership in late 2007. His efforts to compel the PRD cities to take on rigorous administrative monitoring of the *yitihua* plans are unprecedented in Guangdong's history. While this chapter cannot evaluate the outcome of this effort or the implementation of these plans, it is obvious that the PRD cities have all been urged to adopt a variety of policy measures to address their industrial problems and to coordinate among themselves as well.

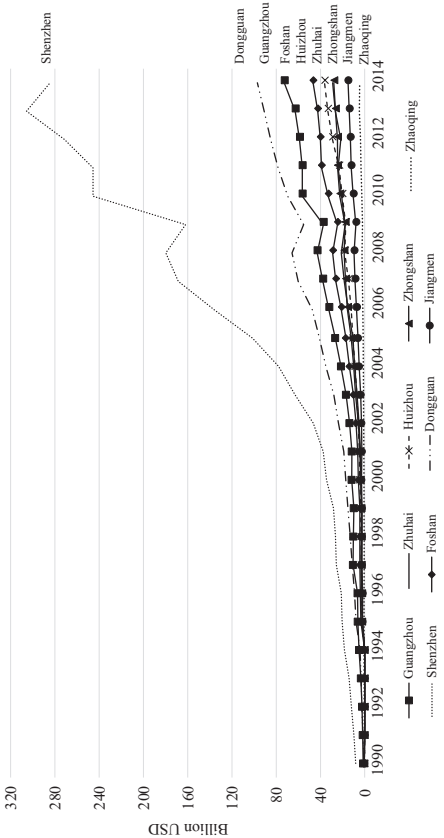

Fig. 2.15 Total exports of the PRD (1990–2014)
Source: *Guangdong Statistical Yearbook*, various years

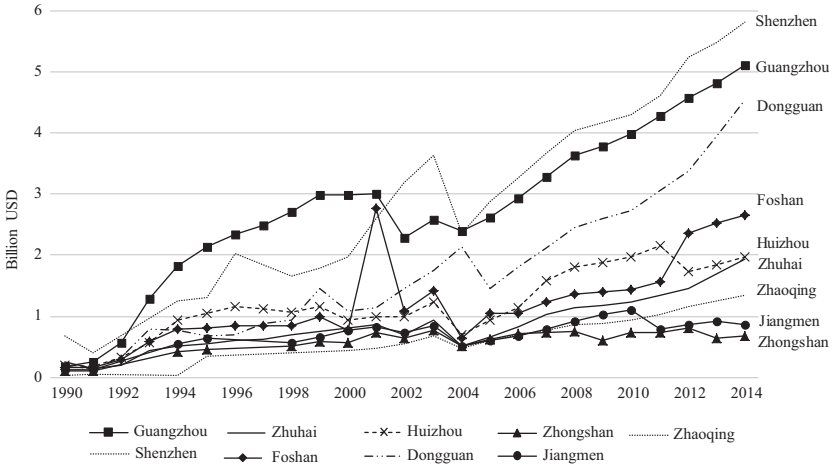

Fig. 2.16 Utilized FDI in the PRD (1990–2014)
Source: *Guangdong Statistical Yearbook*, various years

Concluding Remarks

Various obstacles haunting the industrial transformation in the PRD are still obvious. First, as most of the cities are not that big in terms of size and output, there are limitations as to the kind of policy instruments they can manipulate in their industrial policies. For instance, heavy investment in R&D as well as in human capital may well be the key responsibility of the province, rather than at the prefectural level or county level of cities/districts. The protection of intellectual property rights needs central-level regulation as well as provincial coordination and enforcement. Second, the impact of path dependence cannot be underestimated. The legacies of rapid growth based on export processing and labor intensive manufacturing have made it difficult for the PRD cities to build up their own capital-intensive industrial base, given the importance of revenue and employment of traditional manufacturing for the local governments. Lastly, despite the major efforts to attempt industrial coordination since 2009, initial data showed that the goals of coordinated industrial development are yet to be achieved. For instance, the key indicators of the industrial coordination plans tend to focus on industrial performance indicators, not coordination indicators. The division of the three economic circles for implementation

of this plan is also not without problems. While the Guangzhou-Foshan-Zhaoqing economic circle may be more effective as it reflects a gradated pattern of development, it is far more difficult for the Zhuhai-Zhongshan-Jiangmen circle to coordinate, given these cities' relatively similar levels of development. The Shenzhen-Dongguan-Huizhou circle has experienced both competition and cooperation, but these cities all have their own unique developmental challenges. Despite the effects by the provincial government to promote coordination through strong administrative guidance, the similar industrial structure and competing interests among the different cities has also made it difficult for them to achieve a sound division of labor in industrial development upgrading. The industrial transformation of the PRD hence remains a work in progress for the foreseeable future.

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Notes

1. The "magic three hours" effect was first suggested by Michael Enright and his co-authors (2005).
2. Figures were compiled from Guangdong Statistical Yearbooks, 2001–2015.
3. The draft of the 10th Five-Year Plan was presented to and endorsed by the National People's Congress of Guangdong on February 11, 2001.
4. Four key tasks listed in the Implementation Plan, including product mix adjustment, technology structure adjustment, industrial structure adjustment, and geographical distribution adjustment.
5. This is an industrial policy which aims to move the low-end and labour-intensive manufacturing industries to the peripheral areas of Guangdong province and attract the agglomeration of advanced manufacturing, modern services and high-end industries in the Pearl River Delta.
6. Figures were compiled from Guangdong Statistical Yearbooks, 2000–2015.
7. Interviews were conducted with officials of different departments of the Shenzhen Government in the summer of 2015, as well as the scholars of the China Development Institute (CDI), who participated in drafting industrial policies for the Shenzhen Government. For Shenzhen, the pressure for industrial restructuring came as early as the mid-1990s, because of the limited space within the SEZ that was reserved for industrial use. At the

same time, Shenzhen also witnessed rising competition for FDI from neighboring areas that could provide more attractive policies to investors. Interviews in Shenzhen, August 2015.

8. Shenzhen officials and CDI scholars admitted that the policies were made in response to the statistics that showed an emergence of hi-tech clusters and aimed at further strengthening the growth of such clusters. They argued that industrial policies were supposed to serve the changing market, instead of guiding it. Interviews in Shenzhen, August 2015.
9. Most Shenzhen interviewees believed that the government's role in the development of hi-tech industries was secondary to the market.
10. According to the Guangdong Statistics Yearbook 2015, GDP per capita of Foshan was RMB 101,617, while that of Beijing and Shanghai were RMB 99,995 and RMB 97,343 respectively. Foshan's GDP per capita first surpassed the other two in 2008, when it reached RMB 68,033.
11. The interviews with officials of various economic departments show that the primary task would still be to attract investment, both foreign and domestic. The government has provided some funding and policy measures to promote industrial upgrading, but officials argued that it was up to the entrepreneurs to make the decision whether or not, when, and how to upgrade. Interviews in Dongguan, August 2015.
12. In the interviews with Dongguan officials in the summer of 2015, it was pointed out that land use has been closely watched and audited by the Ministry of Land and Resources. The Dongguan Government itself has become more cautious on attracting and retaining investment projects that would use much of their increasingly limited land resources. There was a clear consensus across different policymaking bureaus, ranging from Development and Reform, Economic and Information, Trade and Economic Cooperation, to Urban Planning, that the city should attract mainly new investment projects for capital intensive, hi-tech, or energy efficient industries. Interviews in Dongguan, August 2015.
13. Guangdong Statistical Yearbooks, various years.
14. Figures were compiled from Guangdong Statistical Yearbooks, various years.
15. Figures were compiled from Guangdong Statistical Yearbooks, various years.
16. Figures were compiled from Guangdong Statistical Yearbooks, various years.
17. Figures were compiled from Guangdong Statistical Yearbooks, various years.
18. Figures were compiled from Guangdong Statistical Yearbooks, various years.

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CHAPTER 3

Emerging Urban-Regions in Central China: The Case of the Upper Yangtze River Delta

Lei Wang

Introduction

China's remarkable urban growth has been conceptualized as the outcome of globalization, decentralization, and marketization that asymmetrically improve local autonomy at the expense of weakened central interventions (Wei 2007). The resultant intensified inter-urban competition, however, has combined with the rise of other negative consequences such as regional disparity, economic fragmentation, and environmental degradation (Wang 2014), which prompts the central state to reassert its functional importance with regard to local governance. The past decade witnessed a blossoming of regional plans in China that fundamentally transformed the country's spatial landscape from the conventional divisions according to administrative jurisdiction or geographical boundary into a mosaic type based upon urban-regions. Between 2007 and 2011, more than 30 regional plans have been formulated by the National Development and Reform Committee (NDRC) and then officially promulgated by the State Council as guidelines to regional development practices in China. These plans aim to achieve coordinated development, and their substantive contents usually include allocation of infrastructure and industries between

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cities within their geographical boundaries. More recently, the 12th National Five-Year Plan and Main Functional Area Plan both explicitly stipulate China's future spatial development as concentrated in urban-regions along five nationwide strategic corridors. These include the Yangtze River and Euro–Asia railway on the horizontal dimension and the coastal line, and Haerbing-Beijing-Guangzhou and Baotou-Kunming from the north to the south.

It is in this context that China's emerging urban-region making is read as the state's rearticulation in space formation on the regional scale. From this state perspective, increasing numbers of studies have proposed in-depth analysis of the contested political contents of China's tiered government system that molds the production of urban-regions. By and large, these studies can be grouped into two broad categories, with the focus on the central or municipal scale respectively. One category discusses the demarcation disputes between the NDRC, the Ministry of Housing and Urban-Rural Development (MHURD), and the Ministry of Land Resources that has overlapped functions in regional plan making (Xu 2008; Li and Wu 2013)—reflecting the fragility associated with institutional structures for China's regional governance. The other category deals with conflicts between local governments arising from their different administrative ranks and resource allocations. Administrative annexation implemented through political orders (Zhang and Wu 2006) and city-to-city cooperation based upon economic benefit-sharing (Chan and Xian 2012) are deemed as the two major forms of local initiatives through which urban-regions take shape. Although these state-led theoretical approaches focus on conflict-ridden urban-region making processes on either central or local scales, relatively little attention has been paid to coalition-building efforts in constructing urban-regions, especially those initiated by key actors on the medium level of China's political system, such as provincial governments.

This chapter proceeds as follows. The next section briefly reviews the evolution of city regionalism in the capitalist West from the perspective of spatial regulation. As a mode of regulation, regionalism is situated within the transformation of the regime of accumulation and becomes the effective scale used to improve territorial competitiveness in today's global era. Within this framework, this chapter then shifts to examine changing regional governance in transitional China, moving from a socialist command economy to a post-socialist market economy. Regional governance through plan-making is not a reverse toward state socialism. It is rather

understood as rearticulation of state function on the regional scale to regulate unfettered urban growth on one hand and to improve global competitiveness on the other, which transforms provinces into entrepreneurial entities to construct urban-regions. The following section then examines the process of making a mega urban-region in the Upper Yangtze River Delta (UYRD), with an emphasis on the proactive roles of provinces in building coalitions among themselves. By investigating the motivations, actions, and outcomes of this strategic urban-region building, it demonstrates a new form of entrepreneurialism emerging on a regional scale. The chapter concludes with a discussion of the consequences of regional plan-making and potential future trends of regional governance in China.

Evolution of City Regionalism in the Industrialized West

The concept of regionalism originated in industrialized western countries as an ecological approach to balancing the needs of the industrialized society with those of the natural ecosystem, and it has been in evolution ever since. This origin and history prompts scholars to advocate learning from West in regional governance (Liu 2001). Intellectuals, however, have warned of the risks associated with uncritically borrowing institutions from experiences in other contexts (Storper 1995). To gain a deeper understanding of the nature of regional governance and its applications in China, it is useful to situate the evolution of regionalism in the particular socio-economic environments in which it emerges and mutates.

Regionalism was founded initially by Sir Ebenezer Howard (1902) in his design of the garden city as a solution to urban problems in then-industrializing Britain. He realized a single city of 30,000 residents was too small to provide the full measure of diversity that a genuine city must have, but the sheer increase of its size or density would spoil his ideal of peaceful life. As a compromise, he proposed in a diagram town clusters composed of six garden cities arranged in a circle around a larger city center. As for the process leading to this geometry, Howard simply believed that the cities should eventually organize themselves into clusters. Called the "Social City," each cluster of towns was connected by a rapid-transit system, separated by green belts, and the sum of all this represented his advanced conception of the marriage of town and country. According to early pioneers such as Howard, the ideal balance between urban prosperity and rural peace can be achieved on the scale of region as constituted by the cluster of towns.

Despite its appealing amenities, the ideal of a Social City was soon submerged under the sweeping forces of industrialization that introduced the new technology of electric power and motorized transport into cities. The outcome of this was the rapid expansion of urban space that agglomerated together as a polycentric "conurbation," a term coined by Geddes (1915) in his book *Cities in Evolution*. In the first half of the twentieth century, when suburbanization took place in the West, Lewis Mumford, Clarence Stein, and others advanced an anti-sprawl conception of the regional city by channeling the out-migrating population into suburban towns that were functionally interconnected at the regional scale. The goal of state intervention in the form of a regional regulatory body was to establish a consolidated regulatory framework that guides outward urban expansion, achieves planned decentralization and regional balance, and reaches efficiency in infrastructural provision. These large-scale, technocratic, and bureaucratized forms of metropolitan political organizations served as a key institutional pillar within the nationalized system of spatial Keynesianism that prevailed throughout the western world from the early 1960s until the late 1970s.

If regional governance aims to achieve administrative equalization and the efficient delivery of public services that supports the reproduction of both capital and labor under the Fordist condition, the systemic crisis of this regime of accumulation in the 1970s required new regional governance that met the demands of global forces. As supra-national entities such as multinational corporations and international organizations play increasing role in local development, the significance of the national state declines and the restructuring of many cities and regions may be directly connected to global forces. Competition between countries becomes more crystallized on regional scale, which can be rhetorically represented by the emerging mosaic of uneven regional development patterns. A tendency toward territorial competition and unprecedented networking has appeared in regional development and governance respectively. Hierarchical and functional planning that used to be widely implemented in the Fordist-Keynesian period is being replaced by horizontal and network-based coordination. Interactive approaches such as intercity cooperation, public–private partnerships, and other forms of institutional innovation have become very popular in regional governance (Rusk 1995).

Over the whole of the twentieth century, regional governance in the western world passed through three phases successively: a concentration on

the physical means of core–periphery spatial design, government-led rational plan-making, and network-based interactive participation of multiple agents. The changing regime of accumulation called for a new mode of regulation that usually took on a spatial dimension. The garden city approach represents nostalgia for a traditional society through which the impacts of early industrialization could be minimized. The regional government solution stands as a remedy to problems associated with large-scale urban and industrial expansion, so that social reproduction can be secured. And the network governance pattern is an expression of ongoing processes of rescaled state spatiality through which territorial competitiveness is being promoted and innovation is emphasized on a regional scale. Regional governance, therefore, is a regulatory framework in which corresponding accumulation occurs. It is based upon this theoretical perspective that Brenner (1999, 2003) argues that changing of state spatiality upwards toward supranational levels of regulation and downwards toward subnational levels has contributed to the resurgence of regionalism, which emphasizes a more interactive process in a multilevel governance environment.

City Regionalism in Transitional China

Unlike recent urban-regions in western countries that have arisen from global economic restructuring and changing politics of scale, the emerging city regionalism in China over the past decade is based upon complex processes intended to reassert state function on the regional scale in order to sustain its accumulative regime. In a post-socialist developing country such as China, this complexity lies in the tension between the demand of rational resource allocation and the legacy of state socialism on the one hand, and network-based territorial competition and a decentralized market economy on the other. In fact, regionalism in China is not completely new. It appeared as early as the socialist period and has experienced great transformations since then along with the changing accumulative regime.

Regionalism in the Socialist Period and the Early Years of Reform

In the pre-reform period before 1978, China operated a centrally planned economic system dominated by vertical administration implemented through sectoral bureaucracy. Spatial production was organized primarily at the national scale, to maintain both national security and the rationally designed economic systems. Regional and local development was largely

based on the command economy and quotas sent down from central ministries to individual work-units. The regional plan at that time was project-oriented and determined at the discretion of the central state. Local governments did not have their own independent interests and were understood as instruments of central state command. Regionalism under this socialist regime of accumulation was largely disconnected from urbanism. For example, in stark contrast to the period of rapid industrial growth, the proportion of urban population had been lingering at around 18% between 1965 and 1980.

The transition toward a more market-oriented economy has created new conditions for regional institutions. With economic decentralization, the central government no longer possessed as much leverage over local government, and investment grew as localities obtained greater initiative for developing their local economies. However, China's fiscal regime before the mid-1990s created significant incentives for local government to establish firms under their jurisdictional control or even ownership. The reason for this was that localities with better financial conditions had to deliver a higher share of their budgetary revenues to the center. To avoid this, they concealed revenues by making illegal tax concessions to enterprises in order to register lower revenue figures on budgetary accounts, and then collected ad hoc fees from those firms which were deposited into extra-budgetary accounts. As a result, many state-owned enterprises (SOEs) and collective town and village enterprises (TVEs) were established by local governments that operated these businesses, in urban and rural areas respectively. Most of these firms grew under the protectionist umbrella provided by their parent governments and obtained monopoly power over the local market (Naughton 2003).

This economic fragmentation caused central concerns over market integration. In contrast to Central and Eastern Europe, where shock therapy has been implemented, China preserved state institutions in its gradual reform toward marketization. Rather than completely retreating from urban and regional development, the state promotes a rearticulation of functions and reasserts a more sophisticated structure in local economic governance. The 1980s saw a renewed interest in establishing economic regions in order to explore the advantages of inter-urban coordination across jurisdictional boundaries. More than 100 economic regions were established, including the Shanghai Economic Region (SER) in 1982 (Wu 2006). These centrally mandated but loosely organized and informal government coalitions and alliances were expected to be key institutional

pillars of market formation. It was a political attempt by the center to use the market to break out of the hierarchical system of production and planning in order to create an impetus for territorially integrated growth. These efforts to build integrated regions, however, offer no concrete measures to base the planned spatiality upon the enforcement of development control or any tangible socio-economic policies, such as a restructuring of the fiscal system. By the mid-1990s, the economic regions established in the 1980s had been widely discredited.

Reforms Leading to Unintended Regional Disparities

In conjunction with the introduction of a series of reform packages, a major transformation is taking place toward a regime of accumulation that highlights cities as strategic sites to overcome the constraints on accumulation through supply-side spatial intervention such as capital investment, space commodification, and global linkage building. Past accumulative regimes, whether through central allocation of projects in the socialist period or locally controlled firms in the 1980s, did not require urbanism. Sparking this transformation is the fiscal scheme restructuring of 1994 that directly relates the prospect of local revenue generation to its ability with investment promotion. The tactic of revenue concealment became obsolete under the normalized tax-sharing scheme. Local revenue increasingly relies upon expanding market activity, thereby spurring entrepreneurial local interventions to lure industrial—and especially manufacturing and real estate—capital that can generate immediate municipal revenues through goods production and land commodification. Specifically, local governments manage to raise property and industrial capital by exerting command over land supply. On the one hand, land for commercial development has been tightly controlled by municipalities in order to raise prices and further investment in physical city building. On the other hand, land costs have been made artificially low for manufacturing projects that may generate constant revenue flows for localities. This hyper-competition for mobile capital not only causes repetition and redundancy of industrial capacities but also tends to widen the existing disparities between regions.

Until a new round of state interventions initiated in the first decade of this century against rising regional inequality, China's regional economic dynamics did not follow an inverted-U curve as predicted by neoclassical economists, who hold that under the premise of constant returns to scale, the regional gap is likely to rise in the early stages of development and then

tends to decline in the long run. Despite the variety of data sources and methodologies used, the growing volume of studies on China's regional inequality has been quite consistent in the observation that the gap between coastal and interior regions has been rising since 1978, when the former gained a first-mover advantage and has since experienced more rapid growth under the triple processes of globalization, decentralization, and marketization (Chen and Fleisher 1996; Fujita and Hu 2001; Yu and Wei 2003; Fan and Sun 2008). Distinct from the shock therapy that dismantled all pre-existing economic institutions in Eastern European countries, China's transition followed a gradualist approach that initiated its opening and reform from the coast, with its wider interior regions left largely intact. In a few years following the establishment of the four "special economic zones," almost all coastal provinces were granted similar preferential policies in the mid-1980s. In 1990, one year after Tiananmen Square Incident, China decided to open and develop the Pudong area in Shanghai, from which Shanghai, as well as the Jiangsu and Zhejiang provinces that jointly constitute the triangle-shaped territory of the Yangtze River Delta (YRD), started to take the leading role in China's growth. According to official Chinese statistics, before reaching a peak of 55.2% in 2006, the proportion of gross domestic product (GDP) across all coastal provinces and municipalities in terms of the national total had been increasing since 1978, with a faster pace in the early 1990s and early years of this century (National Bureau of Statistics 2014).

Regional Planning as Rearticulated State Function

China's widened regional disparity is also echoed by the new development of economic theories as well as the entrenched core–periphery model encountered in many transitional and developing economies. Instead of envisioning convergence between regions, the new economic geography has provided strong evidence for the reverse, by positing that the widely witnessed core–periphery economic landscape across the world is deeply founded on the advantages of economies of scale and geographical agglomeration, and tends to be self-reinforcing until a new contingency breaks this path dependency (Krugman 1999; Wei 2015). Theoretical rigor and empirical evidence has warned Chinese central leaders of the risks of an uneven development policy and market mechanism. As early as 1985, Deng Xiaoping, the chief architect of China's reform and opening up, commented on his policy design of uneven development as "some areas

and some people can get rich first, lead and help other regions and people, and gradually achieve common prosperity." This vision, however, can hardly be realized if regional inequality is not addressed.

State policy has been critical in bringing about regional selectivity in China (Fan 1995). In order to deal with regional inequality arising from market logic and the negative consequences associated with unfettered urban entrepreneurialism, regionalism has reappeared in China since 2000. In place of the ideology of growth being of overriding importance, the concept of coordinated development was put forward as the goal of China's future development during the Third Plenary Sessions of the Sixteenth Central Committee (October 11–14, 2003). This posits that a socially fair, economically efficient, and environmentally sustainable mode of development be advocated by the central state to replace decades of uneven development and growth-first mentality (Fan 2006). In the following decade, many regional plans were developed as a spatial device to pursue this state objective. These plans can be broadly grouped into two categories that aim to trigger local development and promote national integration, respectively. The first group includes those plans for economic development in backward regions, institutional reform in pilot places, and integration into the global economy at more developed cities. Built on the basis of these development-oriented plans, the most recent plans start by focusing on mega city-regions that usually stretch across provincial boundaries, with the purpose of building a nationally integrated economy. Because both categories stipulate infrastructure and industrial projects as well as institutional innovations that serve the larger goals, regions included in these plans are more likely to be patronized by flowing capital and gain advantages in intense competition between regions. Chinese provinces that used to be a managerial body of the government became entrepreneurial in constructing mega city-regions, both discursively and substantively.

The revival of regionalism in China reflects the evolution of state spatiality from the national scale, through the localities to the regional level. During the socialist economy, the highly centralized decision-making and fiscal system facilitated the making and implementation of a unified national and regional policy. In the first two decades of economic reform, regionalism designed to build an integrated market had largely been vain in the wave of decentralization. It had not gained proper attention until the articulation of centrally orchestrated strategies to achieve economic rationality and enhance the structural competitiveness of China as a

whole. This rearticulation of state function, however, should not be read as the same as the state socialism that operated in China before 1978. There has been a substantial change in the nature of such an intervention as regional planning. First, the triple processes of decentralization, marketization, and globalization have transformed the Chinese state from an anti-market totalitarian one into a pro-business authoritarian state, which means that the primary state concern and the employment of state power has shifted from class struggle to economic development. Second, unlike socialist regional plans that directly stipulate individual projects for particular places, recent regional plans only make clear key sectors with eligible projects to be approved by local authorities. Third, the regional plan is no longer determined solely by the central state but is largely an outcome of local efforts to demonstrate the prototypical significance of this region and its development through entrepreneurial discourses and substantive actions. Thus, regional governance through such plan-making procedures and content sophisticatedly reasserts state function to maintain economic rationality without compromising local initiatives. The next section will examine how an urban-region is constructed in the UYRD.

Constructing an Urban-Region in the UYRD

The longest river in China, the Yangtze stretches 3974 miles from Tanggula plateau in Western China, through eleven provinces and municipalities, to the East China Sea at Shanghai. As a convention, the Yangtze River is divided into three sections, among which the upstream Yangtze is the section before the city of Yichang in Hubei province with a length of 2798 miles, the middle reach winds over 594 miles between Yichang and Hukou in Jiangxi province, and the downstream part covers 582 miles below Hukou. Geologically, the middle and lower reaches are a swampy plain that is made up of alluvial deposits from the Yangtze and its tributaries, making it suitable for crop production and human settlement. Over hundreds of years this broad region has developed into one of the most densely populated areas of the world. Analogous to the YRD, which is the most developed area in the lower reaches, the UYRD consists of southeast Hubei, northeast Hunan, and northwest Jiangxi provinces that comprise the region with highest population density in the Yangtze's middle range.

Historical Foundations of the UYRD

Despite their geological similarity, the middle and lower reaches have developed distinct courses since the nineteenth century, when major Chinese cities, Shanghai and Hankou (then core part of today's city of Wuhan) included, were opened to foreign trade as a result of wars and ensuing unequal treaties with industrialized western countries. Designated as a port city in 1843, Shanghai quickly flourished and grew into the primary city of China by the end of the nineteenth century, with inflows of foreign capital and manufactured goods. In 1919, its population reached 2.4 million, which was 800,000 more than at the next largest city of Guangzhou. In contrast to the swift industrialization at Shanghai, Hankou became a port city in 1861 and flourished mainly as a trading post of agricultural products, such as tea shipped from surrounding rural areas and abroad. Except for limited machinery industries and financial institutions serving the product processing and trading business, the substantial influence of foreign capital on industrialization that was present in Shanghai was largely absent from Hankou.

As the primary cities of the Yangtze's middle and lower reaches, Hankou and Shanghai epitomized the general conditions in these two regions respectively. To a large extent, the middle reach region remained an indigenous society, while the lower reach was transformed by foreign capital. Furthermore, the penetration of foreign capital and industrial commodities widened the gap between China's coastal and interior areas, not only through its geographical concentration on the former but also with the severely interrupted and then re-emerging handicraft industries, such as textiles and food mills, that were closely linked to agricultural production in rural China. As a result, flourishing coastal cities contrasted sharply with bankruptcy in broader rural areas across China, which is a logical development of the contradiction between the hegemony of colonial capitalism on the top and the vulnerability of social structures at the bottom. The Nationalist Party (NP), then headed by urban elites, failed to mediate this contradiction. This gave rise to socialist revolution under the leadership of the Chinese Communist Party (CCP), which was originally founded at Shanghai but gained wider social support from the impoverished peasants and was met with weaker oppression by the ruling NP and western colonists in the rural interior.

The confrontation between the CCP and the NP intensified from 1927 to 1937, when the growing strength of the former posed a threat

to the latter. Under a succession of military attacks by the NP, the CCP established 17 revolutionary bases for the socialist regime, a majority of which were located in the middle region of China. Three bases can be found in Jiangxi and Hunan provinces, respectively, and five were in Hubei. During the Japanese colonization from 1937 to 1945, the CCP set up 18 more bases with military forces under its directorship in broader inland areas including Hunan, Hubei, and Jiangxi provinces. With vast acres of cropland and a huge concentration of peasants in poverty, the middle reach of Yangtze had been a battlefield in both China's civil and anti-invasion wars for decades, which economically disadvantaged this inland region even when the CCP won national victory.

As socialism emerged from the contradiction between industrialized western economies at the core and underdeveloped colonial economies on the periphery, the socialist state was overwhelmed by the challenge to industrialize under the constraint of severe capital shortage. In order to concentrate capital in the production sphere, the state took restrictive measures, such as suppressing household consumption, planned allocation of production materials, and mandatory purchase of agricultural products. Thus, industrialization did not require urbanization, and spatiality of development such as agglomeration is largely absent from the organization of the socialist economy. The inland region was prioritized by the state over coastal areas as the host areas for many heavy industrial projects.

Embracing the vision of state-led industrialization, the 1st Five-Year Plan stipulated 156 key industrial projects across China. Most were located in inland provinces, among which the four projects in Hunan all sat in Zhuzhou, seven out of the eight projects in Hubei were located in Wuhan, and all three mining projects in Jiangxi were in the mountains where they originated. None was located in the coastal provinces of Shanghai, Jiangsu, Zhejiang, and Guangdong. These key projects, in association with their suppliers, laid out the basic skeleton of industrial production system that holds even up to now. For example, among the 34,365 manufacturing firms that were located in Hubei, Hunan, and Jiangxi provinces by the end of 2013, 5.5% were state owned or state holdings. This proportion was much less than the 2% for Jiangsu and Zhejiang or the 2.7% for Guangdong (National Bureau of Statistics 2014).

Unlike Fordist production that is based upon mass production and mass consumption, the socialist economy is characterized by production prioritized over consumption. The over-accumulation crisis that is seen

by the Keynesian state in capitalist society is largely avoided in socialist China because of the extensive state involvement in directing the organization of production. By allocating capital, labor, and land between different SOEs, the state managed to divert surplus produced by one enterprise into materials for another in the absence of a market. In reality, however, the integrity of state planning was usually undermined by the pervasive informal bargaining networks between government organs and SOEs that were hungry for investment but were plagued by inefficiency, such as personnel redundancy. Besides, the absence of spatiality in a command economy makes transportation costly and innovation difficult. As marketization became the dominant mode of regulation in early 1990s, places where SOEs take a significant share of the local economy gradually fell behind those otherwise. The joint proportion of Hubei, Hunan, and Jiangxi provinces within the total national GDP had been maintained at around 11% between 1955 and 1990, after which it declined to the lowest ratio of 8.6% by 2006 (National Bureau of Statistics 2014).

Marginalization of Middle China in Central Regional Policy

One of the most immediate challenges China faces in the twenty-first century is the widened inequality between its coastal and interior regions. The share of joint GDP across ten coastal provinces had been around 45% in the decade from 1980 to 1990, but steadily rose to 52.5% at the end of 2000 (National Bureau of Statistics 2014). In contrast, the economic weights of the 12 provinces in Western China, six provinces in Middle China, and three provinces in the northeast all declined in the 1990s, which prompted the central state to rebalance regional development through policy interventions that used to confer advantages on coastal region two decades ago. Due to the vast territory and adverse natural conditions in West China, it has been prioritized by the Chinese central state in its regional development strategy. In 2000, China launched the Go West program with the premier at the time, Zhu Rongji, as its chief. In three years, "Revitalizing the Northeast" was listed on China's central policy agenda under the leadership of Premier Wen Jiabao. Both programs are institutionally supervised by two corresponding departments in the NDRC.

The preferential policies granted exclusively to the west and northeast urged localities in Middle China to lobby the central state for commensurate treatment. Discourses with pessimistic visions such as "Sinking

Middle" and "Not East, Not West" were widely circulated among scholars and governmental officials, which reflected widespread anxiety about the future of this region and how it might hope survive in China's intensified inter-urban competition. In 2006, the central state promulgated an official document on "Promoting the Rise of Middle China," two years after its first mention by Premier Wen in 2004. Instead of a package of substantive policy treatments, this turned out to be no more than a statement of the central government's attitude of support in order to appease the discontent from Middle China. Without substantive policies tailored to their specific needs, 26 cities in Middle China that used to be industrial bases in socialist period and 243 counties/districts that have been in poverty since the revolutionary era were simply eligible for the same policies as formulated in the Go West and Revitalizing Northeast initiatives. Unlike the two preceding programs, which are implemented solely by the Departments of Western Region Development and Northeastern Region Revitalization in the NDRC, the Middle Rise program is only part of the functions of the Department of Regional Economy that is in charge of nationwide regional development issues.

The marginalization of Middle China in the country's overall regional development strategy is based upon two main factors. One is its relative advantages over the west and northeast regions in the eyes of the central state. Although agricultural production, military history, and socialist industrialization all render economic growth in Middle China less not so outstanding as that in coastal region since China's opening up, the easier access in all directions, as well as abundant natural resources such as water, have convinced the central state that the more disadvantaged west and northeast of China deserve greater priority in terms of aid allocation. Compared to this evident rationale, a less explicit reason is Middle China's lack of primary cities/provinces. Unlike the coast, the west, or the northeast, where policies and capital are heavily concentrated in well-established core places, it has been a topic of controversy which provinces or cities in Middle China are eligible to claim leading status and thus deserve more policy attention. For quite a long period, Henan has been the province with the largest population and total GDP, while Hubei has been the one with the highest GDP per capita. On the level of cities, although Wuhan has dominated the other four capital cities in most economic indicators, it has been confronted by Zhengzhou in Henan and Changsha in Hunan, both of which claim the superior strength of urban clusters around these two cities. The close contest between provinces and cities in Middle China

makes it difficult to deploy substantive region-wide strategies that usually posit key places as cores and attenuate the significance of other places.

As a compromise between policy stimulus and regional egalitarianism, the central government has approved one regional plan since 2006 for each province in Middle China. In Hubei and Hunan, the urban clusters around Wuhan and Changsha-Zhuzhou-Xiangtan were appointed in 2007 as state-level pilot Zones of Comprehensive Reform (ZCR) for resource-saving and environmentally friendly society. At the end of 2009 and the start of 2010, central government approved the Poyang Lake Ecological Economic Regional Plan and the Plan of Wanjiang River Belt for Undertaking Industrial Shift as state-level regional plans for Jiangxi and Anhui provinces respectively. In 2010, Shanxi, the province with most abundant coal resources in China, was wholly appointed as another ZCR for resource-dependent economic transformation. The state then approved the Central Plains Economic Region Plan in 2012, which completely covers Henan as well as portions of the adjacent provinces. The immediate effect of these intra-provincial regional plans is the expedited economic growth of each province and intense competition between them. The joint share of their GDP in the national total has increased from 18.6% in 2006 to 20.2% in 2013. Except Shanxi in 2008 and 2013, all six provinces have maintained a two-digit rate of growth across the eight-year period when the nation at large slowed down from its highest growth rate of 14.2% in 2007 to 7.7% in 2013. Hubei grew most rapidly with an average rate of 13% and therefore gained advantages over the 11.6% of Henan in the competition for core status (National Bureau of Statistics 2014). More importantly, the central state officially approved in 2010 the Master Plan of Wuhan (2010–2020), in which Wuhan is explicitly repositioned as the "central city" in Middle China. Compared to the phrase "important central city" that was stipulated for Zhengzhou the same year and used to be applied to Wuhan ten years ago, the latest position of Wuhan puts an end to the long-standing controversy over which is to be the flagship city in the Middle China.

Realigned Province–City Relationships and Local Motivations for an Integrated Region

The repositioning of Wuhan is not due to a moment of arbitrary rephrasing. It is largely based upon both the glorious past of the city and motivated by its recent revitalization following the lost decade since

early 1990s. With a 3500-year-long history, Wuhan is one of the most ancient cities in China. Its location at the junction of the Yangtze River and its largest tributary, the Han River, render this city one of the four famous towns renowned for flourishing domestic commerce in the early nineteenth century. When the city became a treaty port in 1861 according to the Tianjin Treaty, and especially when Zhang Zhidong, a major proponent of the Westernization Movement in the late Qing Dynasty, took office in 1889 as viceroy of Hubei and Hunan, foreign trade from Wuhan surged in volume, quickly surpassing Guangzhou and becoming next only to Shanghai in the first decade of the twentieth century. Along with the prosperous trade business, industrial development was emerging in Wuhan under the auspices of the viceroy. Zhang Zhidong pioneered the construction of industrial plants including those for steel, weapons, machinery, and textile mills. The number of plants operating in Wuhan at one point reached 46, far more than at second-place Shanghai, with 21. Transformed from a traditional river port to a modern industrial and commercial city, Wuhan was referred to by the Japanese Consul General Mizuno Yukiyoshi in 1908 as "the Chicago of China."

Most heavy industrial plants had been moved westward before Wuhan was occupied by Japanese troops in 1938. The city was left with merely some privately owned textile mills and tobacco factories. As a legacy of this, light industries made up 92.5% of the total output value across all manufacturing industries by 1949. Because of its interior location, however, Wuhan accommodated important industrial complexes such as Wuhan Heavy Duty Machine Tools, Wuhan Boilers, Wuhan Shipbuilding, Wuhan Iron and Steel, and Wuhan Yangtze River Bridge, and became one of the key industrial bases in socialist China. In most of the years between 1950 and 1970, the proportion of fixed-asset investment in heavy industries was as high as 50–70%, while the weight in light industrial sectors had been lower than 8% (Solinger 1996). As industrial development in socialist China does not require urbanization, state investment anchored in heavy industrial SOEs had been a powerful engine of economic growth at Wuhan in both the socialist period and the first decade since China's reform and opening up in 1978. This maintained the advantages of Wuhan over most other Chinese cities for 40 years. Its GDP ranked sixth among all cities in mainland China in 1949, and remained in that position between 1979 and 1989 without major changes.

Wuhan started to lose advantage over its competitors from the mid-1980s, when it became one of the four separate listed cities in the State

Plan in 1984. As an experiment in China's gradualist reform, this policy bestowed on those cities a set of economic powers equal to those of a province and insulated the rest of China from adverse impacts caused by any changes. In many aspects, including approving foreign investment projects, disposing funds appropriated by higher-level government, and receiving planning quotas, Wuhan was able to proceed directly to the central government without having to go through the Hubei provincial government, which would no longer derive any benefits from the development of Wuhan. The strains between Wuhan and its provincial leadership became worse when the province directed prospective investments as well as the distribution of raw materials such as iron and electricity toward its subordinate cities other than Wuhan. As Wuhan was deprived of some of the interaction it used to have with the provincial government and other related cities in its vicinity, both the city and the province were disadvantaged in their competition with the coastal regions, which began their rapid growth in the 1990s. In 1990, Wuhan's GDP fell to tenth within China and did not get back into the top ten until it regained momentum in the first decade of this century.

The negative consequences of the conflicts between Wuhan and Hubei suggested that their relationship ought to be realigned to benefit them both in the growth race with peer cities and provinces. In 2001, Yu Zhengsheng, then minister of construction, was appointed the party secretary of Hubei province and was further promoted to a member of Central Politburo one year later in the 16th National CCP Congress. Given that Politburo members used to include only central leaders and leaders of provinces with strategic significance, such as Guangdong, Xinjiang, and the four municipalities directly under the central government, this appointment implied a comprehensive examination of the appointee's political caliber, while suchlike is usually an explicit prelude to his promotion to national leadership. In this circumstance, Wuhan became the focus of the Yu administration for the sake of its primacy in Hubei and considerable potential for growth. In order to accomplish this goal, Yu had the incremental portion of tax revenues Wuhan collected be shared with the province so that the latter became willing to lend its full support to Wuhan's development instead of posing barriers as it used to do. On the basis of this realigned relationship, Yu promoted an interchange between cities in Hubei that was largely absent before, due to the conflicts illustrated above. For example, the Second Auto, one of the large industrial projects established in socialist period, was moved from northwestern

mountain areas to Wuhan. Hubei's tobacco industry, which used to be spread across many cities, was now concentrated under one corporate umbrella based in Wuhan. Zhongbai, a large commercial retail enterprise in Wuhan, was encouraged to open stores in other cities that had previously boycotted trade with the capital city.

The realigned relationship not only paved the way to rapid economic grow for both Wuhan and Hubei but also contributed to the emergence of the UYR mega urban-region. Since Yu left for his next term at Shanghai in 2007, the position of Wuhan's GDP rank has steadily improved and the growth rate of Hubei has outpaced other provinces in Middle China. The rapid growth of Hubei, Hunan, and Jiangxi all call for an integrated market that cannot be geographically confined within the boundary of an individual province, which has been widely observed in less developed interior regions. For example, the tobacco industries in Hubei and Hunan both established their own non-trade barriers, such as distinct quality inspection standards, to prevent the entry of cigarettes from the other. Such blockades used to protect local firms that needed a shield from competition from foreign rivals and did not have the capacity to export either but faced challenges from firms that had gained the strength to stand against such competition with their products being sold abroad as well. Among the three provinces, Hubei has the most pressing need to build an integrated regional market, for two reasons. One is the fast growth of Wuhan and Hubei in Middle China, which suggests more firms in Hubei are seeking a broader market. Hubei would be the largest beneficiary of regional integration and its firms would be more durable in face of competition. The other motivation is that unlike Hunan and Jiangxi, which may take advantage of their proximity to the Pearl River Delta region for opportunities, Hubei has not been included in any plans for the developed urban-region and has to proactively construct an integrated regional market to survive in competition.

Reoriented Regional Policy and the Emergence of the UYR City-Region

Hubei's efforts to build an integrated region are also aided by a new orientation of central regional policy. During the first decade of this century, dozens of regional plans across China have helped broad interior regions achieve rapid growth and narrow the gap between them and the coastal developed areas. When the interior regions became more competitive and

less worried about the possible flight of resources after they were connected to the more developed regions, it effectively reduced their objections to integration on a larger scale and allowed the focusing of regional plans on mega urban-regions, or even national corridors such as major water or rail lines that usually cover broader territories. In the Plan to Promote the Rise of Middle China that was promulgated in 2009 as the official regional plan for Middle China, cities and industries along the four transportation corridors of the Yangtze River as well as the Langzhou–Lianyungang, Beijing–Guangzhou, and Beijing–Hong Kong railways were not only given great importance but also viewed as key nodes to establish a nationally integrated infrastructure and market network. In 2010, China promulgated the Main Function Area Plan, which stipulated 21 mega urban-regions along two horizontal and three corridors, on the latitudinal and longitudinal directions respectively. For the first time, the UYRD was officially put forward as one of the three major city-regions on the Yangtze River corridor, which suggested the recognition of its national significance through the form of a regional plan.

The central guidelines and local motivation jointly gave rise to the emergence of a mega urban-region. Local initiatives started with path-breaking communications between provincial governments. In 2011, a Hubei delegation led by its governor and department heads visited Hunan and Jiangxi in order to build consensus on constructing the UYR urban-region. This proactive action of Hubei was quickly echoed by the other two provinces that were not officially included in the core areas of the PRD, and have only a marginalized position in the Pan-PRD region. Mutual visits between three provinces quickly took the place of the long-standing blockade over the next few years. In the meantime, discussions were also had about the conception of the UYR urban-region, which included a growing volume of academic literature and research, increasing exposure by media and press, as well as more frequent interactions between market agents through business exhibitions and summits of entrepreneurs. With acquaintance and trust built upon these government and societal actions, the First Conference on the UYR Urban-Region was held in Wuhan in February 2012. With the purpose to facilitate flow of goods, capital, and population, the three provinces agreed on a comprehensive framework of cooperation that ranged from transport and telecommunication, to inter-provincial trade and quality inspection, to housing and social security funds and medical services. With the support of the provincial governments, early integration started to work at the local level in

order to gain experience and demonstrate model effects. In April 2012, the three cities of Xianning, Jiujiang, and Yueyang that border one another from each province initiated a cooperation scheme as the pilot for cross-province cooperation. Similar actions were also taken thereafter between the pairings of Huangshi in Hubei and Jiujiang in Jiangxi, Pingxiang in Jiangxi and Zhuzhou in Hunan, and Jingzhou in Hubei and Changde, Yueyang, and Yiyang in Hunan that all surround Dongting Lake.

The process of building the UYRD urban-region promoted economic growth in the three provinces. The share of their joint GDP in the national total increased from 8.6% in 2006 to 10.1% in 2013. This effect encouraged the provinces to involve more cities in the official regional plan of the UYRD urban-region before it was finally released by the State Council on April 13, 2015. Initially, with a coverage of the nine cities in the Wuhan urban cluster, eight cities in the extended Changsha-Zhuzhou-Xiangtan urban cluster, and three cities and parts of six other cities in the Poyang Lake Ecological Economic Region, the approved UYRD city-region was eventually enlarged to include four more cities in Hubei as well as one more city and the rest of four of the six incomplete cities in Jiangxi. With a territory of 317,000 square kilometers, a population of 121 million, and a total GDP of 6 trillion yuan in 2013 (National Bureau of Statistics 2014), the size of the UYRD region has reached a level that is parallel with or even higher than that of the YRD, PRD, or Beijing-Tianjin-Hebei regions. The fourth engine of China's economic growth was suggested as the new direction of development for the UYRD as a whole in its competition against other emerging city-regions such as Chengdu-Chongqing in Southwest China.

Concluding Remarks

This chapter has investigated how China's mega urban-regions emerged from the interactions between local development quests and rearticulated central functions. The operation of market logic in China over three decades has generated unintended disparities and fragmentation. Both of these factors adversely affect the social stability and economic competitiveness of the nation, and have started to be addressed by reasserted state function in the form of regional planning. Rather than a unidirectional top-down command, this state reassertion is an interactive process that accommodates local interests to a large extent. First, local development initiatives proposed on the basis of their comparative advantages are

endorsed by the central state through official plans that aim to promote development based upon local particularities. Second, when the gap with more developed regions is narrowed and fragmentation as protectionist strategy becomes obsolete, the central state moves toward planning along major transport corridors to improve the competitiveness of the regions and the nation as a whole. Furthermore, the boundaries of these plans have been made porous to allow local quest of involvement until their final release by the central state.

Its interactive character distinguishes recent urban-region building from regionalism in either the socialist period or that of industrialized western countries. In China, regionalism used to be a concept without spatial meaning under the production-oriented socialist regime. A region is merely an industrial complex with material input-output relationships between different localities, which executes production commands as commanded by the center. The absence of local initiatives in the socialist region-building process made the region an inefficient aggregate of localities. In the context of capitalist societies, regionalism has been advocated as a means to achieve spatial rationality in the Fordist-Keynesian period, or global competitiveness in today's world. In stark contrast to the dominant market ideology, the former usually rested on professional consultancy instead of mandatory policies. In the latter case, the post-Fordist conception of regionalism is built upon the premise of greater regional evenness and is characterized by intensive horizontal networking that has not yet been accomplished in a transitional China where the central and multiple layers of local government are indispensable to the making of urban-regions.

The Chinese example provides important lessons for large developing economies that face the dual challenges of domestic unevenness and global competition. As a state-led project, however, the process of urban-region building is not without problems. One is the conflicts of interest between local and central states in which local growth has to be sacrificed to maintain ecological and agricultural security for the nation. Another is the fluidity of the boundary of an urban-region that is usually a product of negotiations between local and central states. The consequence of this is the enlargement of urban-regions to include more cities and weaker functional ties between some of them, which may discredit central policies and render them less efficient in practice. The root of these problems lies in the present function of the urban-region as a growth tool for local governments. As further reforms proceed, the focus of China's regional policies

is expected to shift from being project based and growth oriented to public service equalization across areas and infrastructure, and institutional interconnections throughout the nation, which would greatly encourage environmental conservation and fundamentally improve the mobility factor. Urban-regions built upon the triple foundations of state regulation, market operation, and community participation would become more efficient, just, and sustainable.

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CHAPTER 4

The New Global Economy and the New Direction of China's Urbanization

Lizhu Dai

Introduction

Since 1950, globalization has exerted a remarkable impact on urban development in many parts of the world. Friedmann (1986) reckoned that by the 1980s a global hierarchy or a world urban system had emerged from one of the major processes of globalization, that is, the new international division of labor (NIDL), under which labor intensive and low value-added segments of production had shifted from the developed countries to selected newly industrializing economies (Cohen 1981). Referring to the First Global Shift, Dicken (2007) said that this process first benefited the four "dragon" economies of Korea, Taiwan, Hong Kong, and Singapore; next the ASEAN countries of Malaysia, Thailand, Indonesia, and, to a lesser extent, the Philippines and Vietnam; and finally, China. China has, in this period, experienced large-scale industrialization and urbanization, especially in areas around major cities, which are called extended metropolitan regions (EMR) by McGee (1991). Many scholars have concurred that foreign direct investment (FDI) and export-oriented industrialization have been the major forces behind China's urbanization since 1980 (Sit and Yang 1997; Pannell 2002; Webster 2002), and that the EMRs had emerged in coastal regions as the major locales of China's

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globalization and urbanization in the period (Zhou 1991; Hu et al. 2000; Yao et al. 2001; Sit and Cai 2003; Sit 2005; Wu 2008).

However, the Global Economic Crisis of 2008 has led to new economic dynamics and ushered in, for China and the rest of the world, a Second Global Shift (Sit 2010). This shift is taking place at both international and domestic levels, and will likely exert astonishing effects on China's future urban development. After the Asian Economic Crisis of 1998, followed by the more recent Global Economic Crisis of 2008, the Chinese government has increasingly realized that its former strategy for achieving economic growth through exports and foreign investments will be neither safe nor sustainable in the new global environment (Wang and Wang 2013). According to China's 11th Five-Year Plan, developing local demand is emphasized as a crucial new national development strategy. At the same time, cities in China are also facing big challenges in the face of the global call for a low-carbon economy. Under these circumstances, the pre-2000 pattern of China's urbanization will give way to the rise of a new urban, industrial, and cultural restructuring as new rounds of industrial shifts, development policies, and environmental conservation measures are put into place. This study argues that EMRs will remain as the main platforms in this era for China's continued industrialization and urbanization, as coastal EMRs formed since 1980 will have to develop ways to accommodate these new driving forces, and inland EMRs will be further boosted and continue the rapid growth seen from 2008 to the present. The new duality of domestic demand and globalization will thus direct China toward a more spatially balanced urbanization in the coming years. Therefore, it is imperative to probe into the possible characteristics, trends, and challenges of this new and still unfolding period of urbanization in China.

While much effort has been made in seeking paradigms and formulae to explain China's urbanization since the country's opening up in 1978 (Ma 2002; Lu et al. 2006), the approaching major changes in the global economy and China's new national development strategy impart an urgent need to systematically understand how such dynamics will alter the nature and pattern of growth of China's cities and towns.

China's Urban Development (1978–2010)

Between 1978 and 2010, China registered continuous and rapid urbanization, as the country had become increasingly integrated into the global capitalist economic process (Sit 2005). Its population grew from 962.5 million to 1371 million. Almost all of this increase took place in urban

areas, evidenced by the growth in urban population from 152.3 million to 669.8 million, with a high average annual growth rate of 6.96%. Urbanization levels increased dramatically from 15.8% to 50%. Among the provinces, Guangdong has shown the most rapid growth of its urban population, averaging 10.1% per year. Zhejiang, Shandong, and Jiangsu also have undergone intense urbanization, with 9.8%, 9.7%, and 8.9%, respectively, of urban population growth rate.

The three broad regions of China—the eastern, central, and western regions—have shown sharp disparity in urbanization level and urban growth speed since the 1990s. In 1985, the urbanization level was similar across the three regions of China, in the range of 13–18%. However, since 2000, a striking imbalance has appeared. Of the population of East China, 52% lived in urban areas, while in Central and Western China, only 33% and 26% did so. Since 2010, the disparity has narrowed, due to a series of preferential measures granted to Central and Western China in order to boost growth there. The urbanization level of East China has only increased 8% from 2000, in comparison to 12% in the central region and 14% in the western region (Table 4.1).

Table 4.1 Urbanization level in the eastern, central, and western regions of China (%)

Year	*Eastern region*	*Central region*	*Western region*
1962	16.61	13.29	10.55
1965	15.72	13.2	10.19
1970	13.5	12.24	9.74
1975	13.39	12.47	9.38
1978	13.78	12.85	9.77
1980	15.15	13.93	10.57
1985	18.25	17.04	12.99
Average (1962–1985) growth rate per year	–	–	–
1995	41.42	28.89	27.32
2000	52.28	32.96	25.79
Average (1978–2000) growth rate per year	–	–	–
2001	53.73	33.75	25.84
2010	59.90	45.31	40.45
Average (2001–2010) growth rate per year	–	–	–

Sources: Data from Wang 1996; Gu et al. 2008; *China's Compendium of Statistics* 1949–2004; *China's Statistical Yearbook* 2005–2011

Indeed, this regional disparity has narrowed since 2000, as made evident by the speedier urban growth in Western China, which recently has become comparable to that of Central China. Figure 5.2 in Chap. 5 illustrates that the urbanization level before 2000 rose sharply in the eastern provinces of Shandong, Guangdong, Zhejiang, Jiangsu, Henan, Hubei, Fujian, and Hunan. Conversely, Fig. 5.3 in Chap. 5 reveals that, in 2000–2010, western and central provinces such as Jiangxi, Henan, Shanxi, Anhui, Hunan, Hubei, Sichuan, Ningxia, Chongqing, Guangxi, Yunnan, and Gansu had a higher urban growth rate than the national average. Such a reversal of spatial urban growth since 2000 illustrates that new spatial dynamics have taken shape to affect the country's urbanization pattern.

There has also been a change in the spatial spread of urban clusters, that is, the EMRs, as a result of the change in the migration pattern. Since the 1980s, the Beijing-Tianjin, Shanghai, and Hong Kong EMRs were formed (Sit 2005). They experienced rapid economic development and a region-based urbanization, with major coastal urban cities acting as the gravitational nodes (Zheng 2009). After 2000, several inland EMRs have emerged, both due to increased domestic demand and policy inclination of the central government, which favor the central and western provinces. Notable among these are the Chenyu EMR, Wuhan EMR, Changzhutan EMR, and Guanzhong EMR. As has been pointed out already, much of the new urbanization has originated from changes in the government's spatial economic policies and the evolving global economic environment. The 2008 Global Economic Crisis has brought these factors to greater pertinence and will likely sustain the new spatial pattern in the years to come.

The New Global Economy

China has been economically welded to the world since the 1980s and has thus increased its influence on the world economy. This section will examine the macro spatial shifts in the global economy in the last decade as a basis for interpreting the urban transition that is unfolding in China and for recommending policies concerning China's future urbanization.

A new global economic pattern has taken shape gradually from 2000 onwards, becoming clear by 2010. As revealed in Table 4.2, of the 2010 global GDP (taking into account purchasing power parity), the BRICs accounted for 24.2%, and had thus become the largest economic bloc in the world. Member countries in the bloc, except Russia, had all grown at a

Table 4.2 GDP of major global economies in 2010 (Trillion USD)

	BRICs	*USA*	*Western Europe, four countries*[a]	*Japan*	*World*	*China*
GDP (official exchange rate)	11.50 (18.20)	14.42 (22.82)	10.14 (16.04)	5.49 (8.69)	63.20	6.19 (9.79)
GDP (purchasing power parity)	18.49 (24.23)	14.58 (19.11)	9.40 (12.32)	4.33 (5.67)	76.30	10.44 (13.68)
Growth rate (%)	4.30–10.30	3.00	1.70–4.20	4.40	4.30	10.40

(%): Proportion in global economies
[a]England, France, Italy, and Germany

Source: World Bank Data

speed much higher than the global average (4.3%): from 7.5% to 10.3%. Of the countries in the West, only the United States' GDP was close to the BRICs', while the others had stagnated. Contrarily, China (including Hong Kong and Macau),[1] stood as the second-largest economy in the world after the USA in 2010, with a high average annual growth rate of 10.3%—much higher than the average world growth rate. This shows that China has a strong propensity for further high-speed economic growth. The National Institute of Economic and Social Research in England supported this by claiming that China will outpace the United States to become the largest global economy in a few years' time (Wenweipo, August 25, 2010).

From the perspective of economic structure, among the leading nations, China possesses the largest capacity to develop its tertiary sector. Table 4.2 makes evident that China has a unique economic structure as compared to developed countries such as the USA, where over-consumption has been a common issue and a significant source of problems. Furthermore, in these countries, the GDP per capita is already very high. For example, it reached $46,612 USD in the USA in 2010. Accordingly, it is not very likely that the domestic demand of these countries could serve as their engine of economic growth in the future. Conversely, China's low consumption and high savings rates mean that there will be much scope for domestic purchasing power to increase, giving rise to a fairly promising new global market of 1.3 billion people even at the level of economic development of $4,601 USD GDP per capita. Thus, China's domestic market will be a crucial powerhouse to propel economic growth both in the domestic and global markets. In terms of GDP composition (Table 4.3), the tertiary sector in most developed countries, especially in the UK, accounts for a

Table 4.3 Economic structure of selected developed and developing countries in 2010

	China	*India*	*Brazil*	*USA*	*Japan*	*Germany*	*UK*
GDP (Trillion USD)	6.19	1.68	2.14	14.42	5.49	3.28	2.27
Yearly growth rate (%)	10.3	9.6	7.5	3	4.40	4.30	10.4
GDP per capita (Trillion USD)	4601	1375	10,993	46,612	43,063	40,164	36,256
GDP Composition (%)							
Agriculture	10.1	17.7	5.3	1.2	1.2	0.9	0.7
Industry	46.7	27.1	28.1	20	27.4	27.9	21.6
Tertiary sector	43.2	55.1	66.6	78.8	71.4	71.2	77.7

Source: World Bank Data

conspicuously large proportion of the local economy, implying a sizeable hidden bubble. The "financial tsunami" of the 2008 crisis unraveled this serious "virtualization" in that economy. Consequently, the developed countries have already pledged more regulation of their tertiary industry—above all, their financial sectors. This would increase the industry's costs, followed by a decline of the industry and an ensuing aggregated economic downturn. Comparatively, China still has much potential to develop its tertiary industry, which will attract foreign and domestic investors, and which will become a new engine for the growth of China's economy.

As the economy and market demand of western cities will take a long time to recover after the 2008 financial crisis, especially given that their assets have already shrunk radically, the Second Global Shift has taken shape. The advantages of low labor cost, a large amount of territory, the custom of high savings, potentially the largest home market, and its distinct "socialist market system," will most likely enable China soon to overtake the USA as the largest global economy (China Economy Net, April 7, 2011). Faster development of tertiary industries, especially the financial sector, as well as the growth of new high-technology and high value-added products and durable goods in China over the coming years will effect a "shift" away from developed countries. This shift will likely be extensive and profound, from a single industry to a series of them within an industrial chain, from coastal-focused locations as production platforms and markets to a more spatially equal distribution with the rise of economies in the interior and western provinces (Xinhuanet, October

27, 2010; Yang 2014). With China's increasingly vital role as one of the world financial centers in the near future, other sectors, particularly capital-intensive manufacturing and capital goods sectors, will also benefit as the country develops into an important global exporter of those products and their related services.

For instance, in 2000, China produced around 2 million cars, accounting for 3.5% of the total in the world and ranking as the seventh largest country for car production. Due to increasing demand from the rising middle class, production has now exceeded 13 million units, accounting for nearly one quarter of the world total, and China has become the biggest country for car production. Moreover, China's car ownership rate per 1,000 people is still very low (17 in 2008), meaning that there is still great potential for China's car industry, although it does not pretend to anything like the USA's ownership rate of 765 in 2008 (Sit and Dai 2012). Aside from car production, China's production of notebook computers and aerospace technology, as well as high-speed railway materials, have all shown its capacity to embody a new phase as the "world's factory" of durable goods based on its low-cost and high-efficiency production, after the process of introduction, digestion, and re-innovation (Fig. 4.1).

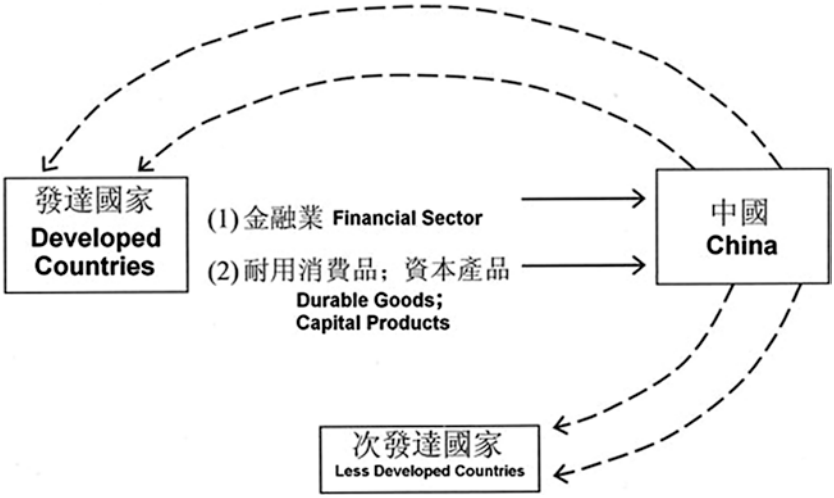

Fig. 4.1 The Second Global Shift
Sources: Adapted from Sit 2010

The recent and increasing global call for energy consumption reduction in response to climate change will also have an impact on China's new urban development, moving it toward a low carbon path. About a decade ago, most countries in the world joined the United Nations Framework Convention on Climate Change (UNFCCC) and began to consider what can be done to reduce global warming. Prior to that, in 1997, the Kyoto Protocol had been signed. Its related powerful and legally binding carbon reduction measures came into force on February 16, 2005. In 2009, the United Nations Climate Change Conference concluded with the Copenhagen Accord, which adopted the notion of a low-carbon economy as a common goal. In the same year, China pledged that by 2020 it would reduce carbon intensity per GDP by 40–50% (from the 2005 level). China is now in pursuit of this target through enforcing energy saving measures and by using more clean energy. In light of this, technology improvement, international cooperation, and the establishment of a competitive market for carbon trading have been underway. All of these developments will pose challenges to as well as create opportunities for China's industries and economy.

In short, China's rise, facilitated by its traditional economic structure and other inherited features, will cause it to become the fastest growing economy in the world in the years ahead. As recession will continue to plague developed countries for several more years, the Second Global Shift is likely to carry on unabated. How much influence this will exert on China's urbanization, as compared to the First Global Shift, requires further examination.

The New Trend of Urbanization

With the development of the domestic market and increasing attention given to the potential of a low carbon economy, the new urbanization in China in the Second Global Shift will be expected to manifest astonishing differences compared with that of the immediate past (Yang 2013). The nature and characteristics of this new phase of urbanization may be better understood by a comparison of the drivers, growth patterns, and growth features as well as the challenges it may face, as a basis for future monitoring of the process and growth and for honing relevant policies (Table 4.4).

In terms of the drivers and growth patterns, China's urbanization over the previous period, 1980–2000, mainly took place in the coastal areas and was largely driven by the FDI and exports of the First Global Shift.

Table 4.4 Post-2000 urbanization and urbanization of the reform era compared

	1st Global Shift dynamic (1978–2000)	*2nd Global Shift dynamic (post-2000)*
Drivers	Export-driven	Domestic market
	FDI-induced	FDI and local investment
	Opening policies	
Pattern of growth	Coastal areas	More regional balance:
	Port cities	Transport nodes
	Open areas	Administrative centers
	Hong Kong-oriented	Coastal port cities
Growth features	Uncoordinated	Coordinated
	Wasteful use of land	Pre-planned to minimize
	Low value-added industries	Land Consumption
	Large amount of unskilled immigrant labor	Higher value-added new industries
		More skilled labor
	Trade generative	More inter-regional interaction
		Low level of trade generative
Stresses	Internal price competition	Competition on quality
	Social problems	Intellectual content
	Environmental problems	Welfare and labor concerns
	External market protectionism	Environment: low-carbon test
	Low value-added, without brand name	Inadequate up–downstream supplies
	Lack of market control	Comprehensive development
		Inadequate services
		Market protectionism

These developments had been led by the reforms and open policies in effect since 1978. As a result, China was able to offer a large amount of low-cost labor, and efficient access to global markets facilitated by both policies and built infrastructures in many coastal cities, such that substantial foreign capital and out-processing industries were shifted into East China (Shen et al. 2002; Sit 2005). These areas, therefore, saw the most rapid economic development in the country. Within the broad region of East China, such developments had been forecasted around the three coastal urban clusters and their neighboring rural and semi-rural areas, leading to the formation of the EMRs. These EMRs have subsequently improved their infrastructure, and competed among themselves for more FDI and a larger role in the global economy (Sit 2005). But their formation had obviously increased the regional imbalance of the country (Lin 2002). In the most developed and earliest emerging of these, the Pearl River Delta EMR, FDI arrived mainly through using the venues of Hong Kong and Macau (Leung 1993; Lin 1997; Sit 1998; Shen et al. 2002).

The influence of Hong Kong, in particular, has been argued by Lin (1997) as one of the three major processes that has contributed significantly to the rapid economic development of East China.

Along with the government's new emphasis on new world economic circumstances since 2000, new drivers and growth patterns are already in evidence. The Second Global Shift has become much stronger since 2008. As a major strategy to fight the ill-effects of the 2008 Tsunami, which had led to a depressed export market, the Chinese government invested 625 billion RMB to boost China's domestic market (Xinhuanet November 9, 2008). In addition, China adopted a policy shift in long-term development, in which the domestic market will play a critical role as one of the major drivers of demand. For some time in the future, FDI will still have an impact on urbanization but its intensity will be less than before (Yao and Guan 2000; Sit 2004; Yang 2013; Dai et al. 2015). As the investment structure changes, China's regional development will likely become balanced in terms of spatial distribution, as more policy incentives will be given to Central and West China. Indeed, such changes had already started before 2008; for instance, the Western Development Policy was initiated in 2000 and the Central Rise Strategy was first put forward in 2004. The urbanization levels of these parts of China had already registered the positive impacts of more investments, having risen from 9.2% in 2001 to 11.4% in 2008. China's unfolding high-speed train construction plan, in particular, has designated four horizontal lines and four vertical lines to link East China with the southwest, northwest, and central parts of the country. Henceforth, the transport nodes of the new network, the administrative centers, and the coastal port cities will be the three types of conurbation likely to experience rapid development triggered by the huge domestic market and new advantages deriving from fast transportation.

Moreover, it may be pointed out that the distinct growth features of the past and future phases of urbanization are likely to be different. In the First Global Shift, urbanization in China was characterized by: (1) A large amount of unskilled internal migrant labor from those attracted by work to leave their villages to move into coastal cities. In 1997, 28.5 million internal migrants were registered as temporary population in different coastal cities (Shen 2000); (2) A rapidly growing export-oriented economy in coastal cities characterized by low value-added industries and wasteful use of land; (3) The development of substantial numbers of small- to medium-scale, labor intensive, and low-skill processing industries such as textiles, garments, toys, footwear, consumer electrical and electronics, and computer parts and peripherals that defined the development of China as the global factory of

the last 30 years (Sit and Yang 1997; Sit 2001, 2005); (4) It has precipitated dramatic land-use transformation in East China—in the Songjing district of Shanghai alone, by 2001 there were 26 development zones and industrial parks scattered over 19 townships, engaging considerable road networks and other infrastructure construction (Wu 2008); (5) As a consequence of the rapid and largely not well-planned development, urban sprawl arose at an astonishing scale, such that the EMRs that had been formed may be equated, to some extent, with a severe loss of cultivated land for the country in general (Lin 2002; Lu et al. 2006). According to Tian's 2005 study, during 1990–1995, China's average amounts of urban land in the Pearl River Delta, Yangtze River Delta, and Beijing-Tianjin-Tangshan EMRs had increased respectively by 60.1%, 54.3%, and 42.2%, mostly due to the expansion in industrial production. City expansion in these three mega urban regions accounted for around 40% of the national total urban area expansion in the period.

In comparison, urbanization development in the Second Global Shift will be expected to be more regulated by policies (Wu 2008; Ma 2012). The Chinese government has already put forward plans and strategies to promote the development of urban and rural areas with an eye on improving the environment. For instance, the State Council and National Development and Reform Commission has designated the EMRs of Chongqing, Chengdu, Changzhutan, and Wuhan as Experimental Reform Zones for measures to achieve a new form of urbanization that will be resource-conserving and environmentally friendly. Secondly, there is already a revised industrial development policy, moving away from the previous reliance on labor intensive and resource intensive out-processing to higher value-added industries such as electronics and biological medicine, with energy saving, land efficiency, and being environmentally friendly and as characteristics (Zhu 2009). For instance, to promote industrial upgrading, the Guangdong government has launched a "dual track transformation" policy; that is, to relocate low value-added and high-polluting production to outside of the Pearl River Delta (PRD) while replacing them with high-end industries (Xinhuanet, March 30, 2009).

Thirdly, coordination and cooperation among cities in EMRs in terms of planning for land use, population, transport, industrialization, and governance are stressed and enforced. The Hong Kong and the Guangdong governments have understood the urgency for closer coordination, cooperation, and joint effort in formulating EMR-oriented policies and regulations. The new Closer Economic Partnership Agreement (CEPA) arrangement granted Hong Kong and Macau permission to serve as a channel for the formation of

a pan-regional institute for these two provincial-level special administrative zones, and the neighboring Guangdong province, to allow positive economic and infrastructure planning to exploit both Chinese and global markets. This may also help to minimize intra-EMR rivalry, while enhancing the EMRs' international competitiveness (SBGP 2002). Furthermore, the high-speed train and highway construction that has been ongoing in the mega-urban region will also contribute significantly to solidifying inter-regional economic interaction between the Hong Kong EMR and other parts of China.

As a result, the new urbanization that started in 2000 is facing different stresses and challenges compared with that of 1980–2000. During the 1980s and 1990s, urban development was driven by foreign investment and export-oriented industries. At that time, price competition prevailed in nearly every category of such export-oriented industries (Choi and Nailer 2005). The input of low-skill labor, exemption of local tax and land rent incentives became major elements of local competitiveness. Hence, these industries forged ahead with overwhelming quantities of low-skilled immigrants, while "professional" and skilled people were not generally in demand. The large-scale immigrant labor into the coastal port cities where these export industries were concentrated generated a massive amount of immigrant "second-class" citizens in the EMRs, who are spatially and socio-economically distinct and segregated from the "permanent" (or largely local) population. This has caused social problems as well as concerns around the security and stability of the delta (Sit 2005; He et al. 2006). Environmental aspects such as increasing noise pollution, air pollution, and the decline in the quality of both coastal, pond, and river water bodies are other logical areas for concern in such forms of industrialization and urbanization, as have been treated by many authors (Lin 2000; Pun 2001). On the demand side, market protectionism, lack of brand names, and market control are also serious problems in the increasingly fierce competition between cities and countries that adopt this sort of development path, as posed by the question of whether such development will be viable and sustainable in the long term (Gilley 2001; Bai et al. 2004; Zhou 2000).

In the current era that dates from 2000, the new urbanization will also create new pressures. Technology transferred through international investment and trade, and the Chinese government's encouragement of industrial upgrading and innovation will shift things from price competition to intense competition on quality (Azhar et al. 2008). Brand name construction is deemed a major future strategy to foster products' competitiveness.

Social issues will focus more on welfare and labor concerns (Cai et al. 2012). President Hu Jintao and Premier Wen Jiabao have already stressed the importance of balancing the country's development and building a people-oriented society, along with considerable emphasis on China's social stability (Rutten 2010). Global environmental concerns have also been brought into play as China has become party to major international agreements, and the US government has the responsibility to enforce a low-carbon economy and a low-carbon living environment (DTI 2003). However, inadequate development in the services, in the upstream and downstream of the industrial chain, as well as market protectionism in the global market, will remain handicaps for the country's economic development and will challenge its long-term future cooperation with other countries.

Conclusion

Based on the changing pattern of China's urbanization since 1978, and its post-2000 rise and potential development beyond other countries in the global economy, it is believed that the Second Global Shift has already taken shape. Accompanied by heightened domestic demand and an urgent effort to foster a low carbon economy, it is argued that in the future, China's urbanization will be distinct from its pre-2000 phase. This chapter has provided a broad stroke scenario of the unfolding new urbanization process, which obviously needs to be tested by further experience and time-series data.

In conclusion, this chapter acknowledges the fact that EMRs will continue to be China's major platforms for urbanization, with the emergence of inland EMRs since 2000. However, in the new phase of urbanization, the EMRs will be driven by the dual forces of domestic and external demand. As a consequence, the spatial distribution of development in the country will be more balanced than before (Fan and Hui 2013). It is expected that transport nodes, administrative centers, and coastal port cities will witness rapid urbanization in the new era. Unlike the "old" urbanization, which was uncoordinated and involved the wasteful use of land, and was characterized by clusters of low value-added industries with a large amount of low-skill labor, the new urbanization will be much more organized, more efficient in land consumption, more planned, and with higher value-added, high-tech industries. Therefore, it will pose a challenge to the country in terms of the education and training of skilled labor.

As high-speed rail and new expressway construction will effectively link East, West, and Central China, more inter-regional interaction will be expected to take place. Yet the new urbanization will still face pressures, such as low carbon technologies, intellectual property challenges, and competition on quality, which the country is unused to as yet.

This chapter has basically been descriptive; the possible future developments and various features of the new urbanization that it has proposed are difficult to substantiate, as many are yet to be realized. Nevertheless, it is hoped that highlighting and discussing these possibilities will serve to encourage proactive research and policy formation regarding such important social processes within the future largest global economy, and is intended to act as an initiator for more investigation on the issue.

Note

1. The data on Taiwan is not available in the World Bank Data, although it is included in the world aggregate figures.

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PART II

Urban Redevelopment, Housing Inequality and City Branding

CHAPTER 5

A Genealogy of Redevelopment in Chinese Cities

Xuefei Ren

Two Cities, Two Tales

Shanghai was at the peak of its aggressive urban renewal program (*jiucheng gaizao*) from the late 1990s to the mid-2000s, with many inner-city neighborhoods bulldozed and millions of residents relocated from the city center to outskirts. Xintiandi, one redevelopment project I studied up close, is a paradigmatic example of the "Shanghai model" of urban renewal. During its first phrase in 1998, more than 3,000 families were relocated in less than two months—some persuaded and others coerced by the city government—to make land available for a private developer to build high-end residential and commercial property. By 2005, the traditional *lilong* neighborhoods in the area were nearly completely demolished, with only a dozen families holding out in the midst of the debris and wastes, and the city government had relocated everybody by the end of 2006. The last family who refused to move was ultimately pulled out of their house and carried away in ambulance under police escort (Ren 2008). Today, the former *lilong* neighborhood has become the top entertainment and shopping district in the city, a must-see site for both foreign and domestic tourists to get a taste of global Shanghai.

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Almost a decade later, in 2014, I was in Guangzhou, researching Xiancun, one of the largest urban villages (i.e., village-in-the-city, or *chengzhongcun*), which sits at the heart of the city's central business district (CBD). Xiancun is one of the flagship redevelopment projects planned by the municipal government of Guangzhou, which hoped to demolish existing structures and make the land available for a mixed use, high-end commercial property project before the 2010 Asian Games. But the Xiancun project has stalled for more than seven years now, and neither the city government nor the developer can use force, like a decade ago, to evict the resisting "nail households." The city government of Guangzhou has stepped back from the project and let the developer negotiate directly with the resisting villagers. Seven years is a long time for Chinese cities undergoing rapid makeover, and the partially demolished Xiancun has become a semi-permanent feature in the ultra-modern landscape of Guangzhou's CBD. Today, the densely packed apartment buildings of Xiancun, many of which are gutted from inside out, are engulfed by boutique hotels, office skyscrapers, and brand boulevards (Fig. 5.1). Drawn by cheaper rents, migrants started to trickle in—construction workers, street vendors, food-stall owners, and recyclers have reinhabited the remaining buildings in Xiancun. But they have little attachment to the place, going about their daily routines in the spectacular ruins, and do not seem to care about the fate of their "arrival village" (Fig. 5.2).

The stories of Xintiandi and Xiancun, from two cities and ten years apart, highlight the changing socio-political dynamics of redevelopment in China over the past decade. The redevelopment work in Shanghai was swift, whereas in today's Guangzhou it is slow and highly contested. The Shanghai city government played an active role in relocating residents, officially partnering and co-investing with the private developer in the redevelopment project, whereas in Guangzhou, the city government does not participate directly and it largely shifts the responsibility of relocating residents to developers. Moreover, the affected populations and their rights to compensation also differ. One may assume that residents with urban *hukou* (that is, urban citizenship) have more bargaining power when facing evictions. But residents of Xintiandi—Shanghai urban *hukou* holders—were in a powerless position when negotiating with the city government and the developer; by comparison, villagers at Xiancun, rural *hukou* holders—turned out to be powerful negotiators, largely because their rural *hukou* status entitles them to collective land ownership. The standard of

Fig. 5.1 A migrant worker pulling a cart in Xiancun, an urban village in the center of Guangzhou's Central Business District

resettlement and compensation has changed from a decade ago too. In Shanghai in the mid-2000s, residents demanded in-situ resettlement but it was simply not an option, because developers wanted all of their land and the city government was eager to help in this endeavor. Contrastingly, in-situ resettlement is now the rule for urban village redevelopment, and the government has made concessions by recognizing the illegal constructions of villagers and made them eligible for compensation too.

Fig. 5.2 A vegetable market catering to migrant tenants in the half-demolished Xiancun, Guangzhou

Urban redevelopment in China has been well documented, but most research to date is based on fieldwork, case studies, and surveys in one city and at a single time period.[1] As China's market reform has entered its fourth decade, redevelopment should be examined in a historical perspective. The two snapshots here—from Shanghai in 2005 and Guangzhou in 2014—reflect both regional variations and the changing socio-political dynamics of redevelopment. The "Shanghai model" of urban renewal, characterized by large-scale demolitions and evictions, has become infeasible even in the non-democratic regime of China. As the *oeuvre* of global city-making in Shanghai has nearly been completed, the focus of redevelopment has shifted to other cities and other sites, which entail different socio-political dynamics. The narrative of "strong growth coalitions versus weak citizens," which accurately summarized redevelopment a decade ago, has become inadequate to capture the changing urban politics in China today (Ye 2013). The redevelopment work we witness now, as will be discussed in this chapter, exhibits new forms of inclusion and exclusion.

Moving Targets: From Urban Neighborhoods to Villages-in-the-City

Large-scale redevelopment began in the early 1990s, first in Beijing and Shanghai, as these two cities declared ambitious plans to remake themselves as China's global cities. As early as 1990, the Beijing municipal government began the "Old and Dilapidated Housing Renewal Program," aiming to redevelop 3 million square meters of old urban housing stock by 2005. The target of this first wave of redevelopment was inner city neighborhoods. In 1993, the then Xicheng district government began to construct a financial district within the second ring road—the heart of historical Beijing, razing many historical *hutongs*. Driven by inter-district competition, soon other district governments followed suit to build their own flagship projects. Oriental Plaza, a massive shopping and office complex invested by the Hong Kong business tycoon Ka-Shing Li, began construction in 1993, and more *hutong* neighborhoods vanished, in spite of opposition from residents and preservationists (Wang 2003; Zhang and Fang 2004; Johnson 2005). Shanghai experienced massive demolitions of inner-city neighborhoods as well, beginning in the early 1990s. In 1992, Shanghai municipal government announced the "365 plan," declaring that by 2000 the city would finish demolishing 365 hectares of housing stock that was in dangerous condition (i.e., *weifang*); the plan was accomplished in 1999 with heavy government subsidies extended to developers.

For both Beijing and Shanghai, city governments actively sought investment from the private sector to push forward their ambitious urban renewal programs. Private developers were subsidized for their participation in urban demolitions—by receiving direct subsidies, having taxes and fees waived, and they were also given development rights by the city government for land parcels in central locations. The 2008 Beijing Olympics and the 2010 Shanghai World Expo further fueled the machinery of urban renewal, and in both cities, millions of residents were displaced from inner-city neighborhoods to outskirts without fair compensation. By 2010, the work of urban renewal was mostly completed, with inner-city neighborhoods rapidly gentrified and getting ready for foreign tourists, high-income global professionals, and the two mega-events of the Olympics and the World Expo (Ren 2011). The middle class and the migrants, unable to afford the skyrocketing housing costs and rents, had to move out to the sprawling peripheries of Beijing and Shanghai. Urban scholarship has well documented this phase of redevelopment and the

consensus is that the "growth machine" of local governments and private developers was leading the urban renewal programs and that a large power imbalance developed between the private-public growth coalition and urban residents (Zhang 2002; He and Wu 2005; Chen 2009).

Since the late 2000s, another type of settlements began to draw attention from local governments and developers: urban villages. These are former agricultural villages where the land has been expropriated by city governments; in order to make a living, entrepreneurial villagers built high-density apartment buildings on the remaining land and rent out rooms to migrant workers (Wang et al. 2009; Chung 2010; Lin et al. 2011). Urban villages are China's homegrown version of informal settlements, easily distinguishable from the "formal city" with their high-density, low-quality construction, overcrowded conditions, and lack of infrastructure. Urban villages are a uniquely Chinese phenomenon. Different from the slums in India and *favelas* in Brazil, there are no squatters in urban villages as villagers have collective land ownership and their rights to the land are safeguarded by numerous national laws and local policies. Although urban villages can be found in many Chinese cities, it is in cities of South China where they have reached the most intense version in terms of population and building density. For example, while urban villages in Beijing are mostly on the outskirts and contain at most two-to-three story buildings, urban villages in Guangzhou often have four-to-seven story buildings, and urban villages in Shenzhen—the least "regulated" Chinese city—often have buildings exceeding ten stories.

The urban villages with central locations have become targets for the current cycle of redevelopment. In Guangzhou, the city government announced a plan in late 2009 to redevelop 138 urban villages, and 52 of them were scheduled to be redeveloped in the next three to five years—by 2015—because they sit within areas that are seen as strategic for the city's growth.[2] The shift of redevelopment focus, from demolishing housing stocks sitting on urban land to urban villages on rural land, is well reflected in the shifting trends of scholarly publications. Figure 5.3 shows separate search results of Chinese-language journal articles with title keyword "旧城改造" (urban renewal)—a phrase typically used to refer to demolitions of urban housing stocks, and "城中村" (urban villages), respectively. A title keyword search with urban villages yielded only one result in 2000, as then urban villages were still a relatively new phenomenon and demolition programs targeted mostly inner-city neighborhoods. After the mid-2000s, however, as urban villages became the new target for redevelopment, the topic garnered serious research attention—the number of journal publications on urban villages increased to 132 in 2005 and

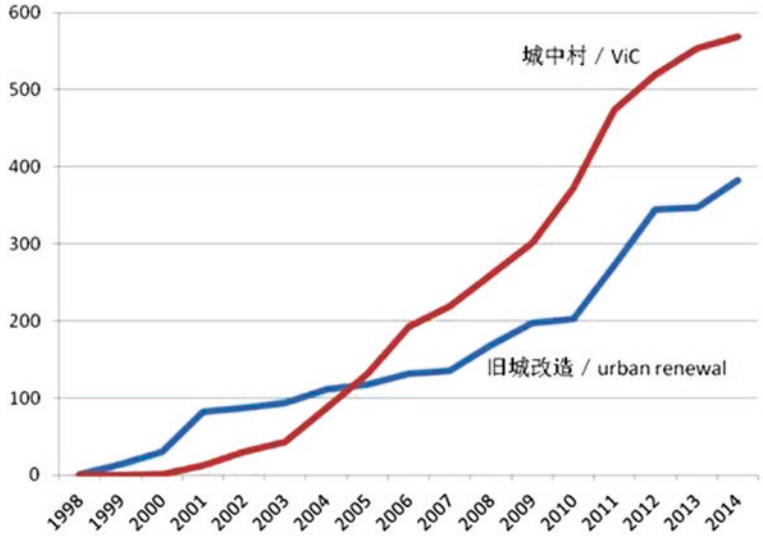

Fig. 5.3 The number of Chinese journal articles published between 1998 and 2004, with "urban renewal" and "urban village" in their titles

kept rising to reach 569 articles in 2014. Many articles focus on urban villages in cities in the Pearl River Delta—not only the well-studied Shenzhen and Guangzhou but also smaller cities such as Dongguan, Zhuhai, and Foshan.[3] Some of the largest, oldest, and most spectacular urban villages in Guangzhou and Shenzhen, such as Liede, Shipai, Sanyuanli, and Baishizhou have received intensive research coverage.[4] The Chinese scholarship on urban village redevelopment covers a wide range of cities across the country, including second-tier inland cities such as Wulumuqi, Wuhan, Kunming, Taiyuan, and Xi'an.[5] The English-language publication on urban villages, which has also grown rapidly in recent years, is more focused on cities in the Pearl River Delta, especially Guangzhou and Shenzhen (De Meulder et al. 2014; Al 2014).

Demolitions of urban housing in inner-city neighborhoods characterized the first phase of redevelopment up to the mid-2000s, and Beijing and Shanghai led the pack by launching their large-scale demolition campaigns. The current phase of redevelopment is more centered on urban villages, and especially those in cities in South China. Urban village redevelopment exhibits both continuity and change compared to the large-scale urban renewal of the earlier phase. The demolition-and-rebuild model still dominates but,

compared to the earlier period, it is no longer feasible to forcibly remove residents and offer monetary compensation below the market value of their property. The pace of urban village redevelopment is much slower, as property owners have more bargaining power over compensation. The better protection of rights to housing—for the propertied urban village residents at least—reflects the changing regulations over redevelopment, which is to be discussed in the next section.

Changing Regulations

The regulatory framework for housing demolitions has evolved gradually over the past three decades. For redevelopment of housing on urban land, there has been a series of national-level legislations, and the current regulations forbid forced demolitions and require majority consents from residents before any redevelopment project can take place (State Council 2011). For the redevelopment of properties on rural land, such as urban villages, so far there has not been any national-level legislation, because the main interest groups—municipal governments, the private sector, village shareholding companies, and villager-landlords—can all benefit from the absence of regulation, and deals are made case-by-case for each urban village through intense negotiations and contestations.

Law and Policy on Urban Housing Demolitions

The year 2011 marked a turning point in the regulations concerning urban housing demolitions, as the State Council passed new legislation on the acquisition of housing on urban land (State Council 2011). This is the third national-level policy on urban renewal, demolition, and compensation, and it ended the era of "forced demolitions." The new legislation, provides better protection of rights to housing for urban households.

Prior to 2011, forced demolitions without the consent of residents were legalized with the two sets of Regulations on Urban Housing Demolitions in 1991 and 2001 (State Council 1991, 2001). I have documented elsewhere in greater detail the specific mandates in these demolition regulations (Ren 2014, pp. 1086–1088). To briefly recapitulate, the 1991 and 2001 regulations formally legalized the practices of redeveloping neighborhoods without residents' consent and also the practices of carrying out forced demolitions by administrative order. Residents could

appeal to the People's Court, but the court cannot put a stop to the order, and the regulations clearly state that demolitions should not be delayed during the appeal if residents are provided some form of compensation or temporary housing. Mass demolitions in the 1990s led to widespread protests, and the central government eventually revised the regulations in 2001. This tightened the control over developers but the fundamental power relationships did not change, that is, municipal governments were vested great power to acquire housing from residents by administrative order, and residents were excluded from the decision-making process of urban renewal programs.

The 2001 regulations were replaced by new legislations in 2011, the most significant change being to forbid practices of forced demolitions such as by cutting off water, heat, and electricity or by using violence to force people out (Article 27). Marking a departure from the previous laws, the consent from the majority of residents is now required for any urban renewal project to proceed (Article 11). This State Council order did not specify the required percentage of consenting residents and left it to local governments to decide. The compensation standard is also specified and it includes the market value of the acquired property, relocation costs, and other loss incurred for the affected (Article 17). An independent third-party real estate agency is required to assess the market value of the property and these assessors will be fined between 50,000 to 200,000 RMB for flawed practices. Both monetary compensation and in-situ resettlement, or a combination of both, are offered to affected residents to choose from.

Aside from these more protective measures, the 2011 regulations remain ambiguous over what is "public interest." "Public interest" is broadly defined as encompassing a variety of projects: from defense and diplomacy, infrastructure, to "social enterprises," such as facilities for education, culture, health, environmental protection, affordable housing, and renewal of old and dilapidated urban neighborhoods. There is also a final category of unspecified "other needs that serve public interest." Secondly, the 2011 regulations introduced new measures to punish "nail households"—those who resist demolitions and redevelopment. If the resisting residents do not file an administrative litigation and refuse to relocate within the period specified by authorities in charge of demolitions, then municipal governments can file a case with the local court for a compulsory demolition order (Article 28). Furthermore, the new regulation authorizes the police to punish resisting residents if they use violence to disrupt demolition and also to punish developers if they use violence to

intimidate residents (Article 32). In reality, however, as some have observed, the police are more likely to crack down on protesting residents than on demolition crews hired by developers (Biddulph 2015, p. 120).

The 2011 regulations reflect the changing power relations among the main stakeholders in redevelopment processes. Although municipal governments are key decision-makers over urban renewal programs, their power is no longer unchecked. Rights to housing are better protected today than in the 1990s and 2000s. It is no longer feasible to initiate large-scale urban renewal programs without consent from residents, as the state is increasingly concerned about social unrest. The Shanghai bylaw of the 2011 regulations, for example, requires 90% of residents' consents for any urban renewal project to proceed, after which, 80% of residents need to agree with the compensation terms for demolition to take place (Shanghai Municipal Government 2011). However, even with 90% of initial approval rates and 80% of contract signing rates, it is still difficult to carry out a redevelopment project today if the rest object.

Local Policy Experiments on Urban Village Redevelopment

To date, there are no national-level policy regulations for demolitions and compensations of urban village properties sitting on rural land. Municipal governments, especially in the Pearl River Delta, have experimented with various urban village redevelopment policies. The policy experiments are often ad hoc, contradictory, and large gaps exist between policies and implementation. If the proposed compensation is too low and does not recognize illegal construction, then such policies and regulations are simply ignored by urban village builders; and if the government makes a concession and offers compensation for illegal construction, then it often spurs another wave of illegal construction (Wang et al. 2009). Recognizing the complexity of urban village redevelopment, the Guangzhou municipal government has recently recommended "one village, one policy (*yi cun, yi ce*)" to let village collectives find the best suitable redevelopment plan to meet their needs, and in reality, every urban village project is intensively negotiated among key stakeholders.

The city of Guangzhou offers a leading example of policy experiments in an attempt to regulate urban village redevelopment. The various bureaus of the city government have passed a large number of policies in an ad hoc manner since the mid-2000s, and these regulations typically have a short lifespan of two to five years before being replaced by new sets of regulations. From the 1980s, the city had already begun to expropriate land

from villages for various infrastructural projects, but it was not until 2007 that the city government finally released the first set of policies regarding demolitions of property sitting on collective (i.e., rural) land, including but not limited to urban villages.[6] According to the 2007 policy, the compensation offered to rural households can be monetary or provision of resettlement housing—either in-situ or at a different location. However, for either type, the compensation is limited to no more than 40 square meters of property per person (Chap. 2, Article 14). This implies that most of the self-constructed apartment buildings are not counted and ineligible for compensation. No consents are required for demolitions to take place and rural residents have only 15 days to voice their disagreement. A meager amount of 500 RMB is suggested to cover relocation costs. The effective period of this policy was five years, from December 2007 to December 2012. The policy was completely ignored, since by 2012 only the Liede village was redeveloped, and in this case, the government made considerable concessions by handing over a large portion of land profits to village collectives so that the project could proceed (Li et al. 2014).

Facing a diminishing land reserve, in late 2009, the Guangzhou city government announced the "three old [*sanjiu*]" program, planning to reclaim land currently occupied by "old factories, old city neighborhoods, and old villages" (Guangzhou Municipal Government 2009). The "three old" program attempted to strike a delicate balance: on one hand, driven by the scarcity of available land, ambitious goals were set to acquire land from current land users, and on the other hand, anticipating the difficulty over land expropriation, the city government made major concessions by relinquishing some of the profits from land conversion. The goal laid out in the "three old" program could not be more ambitious: in the next three to five years, the city aimed to finish redeveloping 52 urban villages in strategic locations, and by 2020, it hopes to finish redeveloping a total of 138 urban villages sitting within the jurisdiction of the city. But to date, little progress had been made and most urban villages remain intact. Eighty percent of villagers' consents were required for redevelopment to take place—this was later raised to 90% in 2012. The "three old" program offered both "carrots and sticks" to push urban village redevelopment forward. For "nail households" who refuse to relocate after the majority signs compensation and resettlement contracts, village governments can file litigation with the local court. But the city government also allows 60% of the profit from land leasing to be retained by village corporations, and the rest of the 40% is split between municipal and district governments at a ratio of 8:2.

Comparing regulations over redevelopment on urban and rural land, there has been gradual progress in the sphere of redevelopment on urban land, and residents' rights to housing are much better protected—on paper at least—with the set of regulations from 2011. As for rural properties, local policy experiments have been chaotic, contradictory, and largely ineffective. Powerful interest groups ranging from municipal governments, village officials, to the private sector have prevented any effort at the national level to regulate redevelopment of properties on rural land, such as the case of urban villages.

New Forms of Inclusion and Exclusion

The current phase of redevelopment of urban villages also entails new forms of inclusion and exclusion that are different from those in the earlier phase of urban renewal. For earlier urban renewal programs, local governments and private developers often formed strong coalitions to acquire urban land and relocate residents—many of whom were residents with full citizenship, that is, urban *hukou*. By comparison, for the current urban village redevelopment in south China, the alliance formation has altered, as the former agrarian class—village shareholding companies and villagers as collective rural landowners—have joined the growth coalitions to benefit from redevelopment. Migrant tenants, who often comprise the majority of the urban village population, are entirely excluded from the decision-making process and compensation.

The different alliances of interest groups over urban and rural housing redevelopment gave rise to two distinct phases of housing rights activism—the first led by urban homeowners with full citizenship rights and the second by villager-landlords with partial urban citizenship but collective rural land ownership. Up until the mid-2000s, city residents with full urban citizenship organized powerful housing rights movements when their properties were expropriated during urban renewal programs. Housing reform created a class of property owners, and most of the affected residents of urban demolition campaigns were homeowners as they already purchased their apartment units with government subsidies. Full urban citizenship (i.e., as urban *hukou* holders), together with the newly acquired homeownership, enabled residents to use a variety of strategies and tactics to fight back over the demolitions of their neighborhoods.

For urban village redevelopment, however, resistance is mostly from villager-landlords with rural *hukou*, who demand compensation for their

private properties built on collectively owned rural land. Migrant tenants, the majority of the resident population in urban villages, are excluded from decision-making and are indifferent about the protests and negotiations led by villagers. Although an alliance between villager-landlords and migrant tenants has been suggested (Shin 2013), such an alliance is unlikely to form in the current social environment of urban villages, which is marked by sharp inequality between villagers and migrants in everyday life. It is only conceivable if migrant tenants are given some form of legal protection from redevelopment and compensation for their loss—in rents and business income. What is common between housing rights activism led by urban homeowners and that led by urban village landlords is their focus on compensation, in other words, economic rights, in both types of resistance; no claims are made to expand civil, political, and social rights.

Yearning for a Cosmopolitan Chinese City

This chapter has discussed the emergent trends in redevelopment politics in urban China over the past decade. It argues that redevelopment should not be treated in the singular form and that more attention should be paid to changes over time and regional variations. As the peak of large-scale urban renewal has passed, the focus of redevelopment has shifted from the "formal city" to the "informal city," such as urban villages. This shift, in turn, has entailed new forms of inclusion and exclusion—such as the instant rise of a new propertied class of villager-landlords, who can reap massive profits if they happen to have the good fortune to be in central locations and are well-resourced to fight with developers; by comparison, migrant workers become the silent majority excluded from compensation. The regulatory landscape has changed as well, with new national level regulations on urban housing acquisition and local policy experiments on the redevelopment of rural properties. Finally, regional variations must be taken into account to fully understand the locality-specific politics of redevelopment: the "Shanghai model" of urban renewal has not worked in many other cities, such those in the Pearl River Delta, where municipal governments have taken a more concessional stance, and are even beginning to consider alternative models of redevelopment such as conservation and upgrading (Urbanus Research Bureau 2014). These changes over time and regional variations suggest that, for scholars researching redevelopment in a single city and at a single time period, it is critical to adopt a historical and comparative perspective, and situate individual case

studies, surveys, and ethnography in a broader context, to recognize both continuity and change in the politics of redevelopment.

Xintiandi and Xiancun, the examples mentioned at the beginning of the chapter, offer two different possibilities of making a cosmopolitan Chinese city. In Xintiandi after redevelopment, one sees brand-name shops, cinemas, wine bars, nightclubs, and galleries catering to a wealthy clientele of tourists and locals. By comparison, in urban villages in Guangzhou—even in the half-demolished Xiancun—one encounters different dialects, different cuisines, and a busy street life both during the day and at night—all happening in an organically evolved, mixed-use, and pedestrian-centered urban block. Xintiandi-style cosmopolitanism costs billions in investment to make it happen, and erases what was there before, in this case *shikumen* houses and *lilong* life that date back to colonial Shanghai. Urban village cosmopolitanism, however, is homegrown and developed organically by villager-landlords and migrant tenants without state supervision or large sums of investment. For a truly cosmopolitan Chinese city that is unique, authentic, and diverse, we need more urban villages than Xintiandis. The delay of the Xiancun project highlights the shifting tides in the politics of redevelopment in urban China, and it signals the beginning of a new era, when the "Shanghai model" has become a memory of the past.

Notes

1. There is a large scholarship on urban demolitions and redevelopment over the past three decades. Examples of publications include: Fang (2001), Zhang and Fang (2004), Zhang (2008), Shin and Li (2013) on Beijing; Xu and Yeh (2005), Ye (2011, 2013), and Shin (2013) on Guangzhou; Wu (2000), Zhang (2002), He and Wu (2005), Ren (2008), Chen (2009), and Samara (2015) on Shanghai.
2. Guangzhou Municipal Government (2009).
3. Due to the large number of publications, specific journal articles are not listed here. The bibliography search was conducted through the database of Chinese Journals Online provided by Wanfang Data, with the Chinese word "城中村 (*chengzhongcun*)" as the title keyword.
4. Ibid.
5. Ibid.
6. Guangzhou Municipal Bureau of Land Resources and Housing Management (2007).

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CHAPTER 6

Creativity and Inequality: The Dual Path of China's Urban Development

Cathy Yang Liu and Wen Xie

Introduction

This chapter seeks to answer three interrelated questions. Firstly, how did "creative" or knowledge industries grow in the overall economy across regions in China? These include, among others, finance, insurance and real estate (FIRE), arts, culture, and scientific research. Secondly, how did earning inequality as measured by inter-sector wage distribution change over time across regions? Inequality indices will be calculated to capture the earnings differential inequality among creative sectors, working sectors, and service sectors. Lastly, regression analysis will be conducted on the provincial level to examine whether a more creative regional economy has an impact on inter-sector income inequality when other relevant factors are controlled for. We use data from *Chinese Statistical Yearbooks* and other sources to answer these questions. We believe that discerning the interrelationship between economic restructuring and resulting social consequences can provide insights into the making of development and social policies in China's urban economy.

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Recent decades witnessed the rise of a creative economy or knowledge economy across the globe. A creative class or high-skilled talents are argued to be the driving force of economic development in this new economy (Florida 2002). Concurrent with the growth of the high-skilled workforce is the growth on the other end of the spectrum—low-skilled labor. As shown in Saskia Sassen's book *The Global City* (2001), the bifurcated skill-based wage structure in urban labor markets partly accounts for the increasing income disparity in global cities. Donegan and Lowe (2008) have found that cities with more creative talents tend to have higher earning inequality between high-skilled professions and low-skilled professions.

China has witnessed fast economic growth in recent years, especially in urban areas. According to an OECD report, its average annual GDP growth was 13% between 2000 and 2008, and 7.8% in 2009 (OECD 2010). The national economy is transforming itself into an urban-industrial economy and, to a lesser extent, a service economy. The proportion of agriculture in employment decreased from more than 70% in 1978 to about one half in 1999 (Dahlman and Aubert 2001). Two significant trends are worth noting in this rapid development: the rise of a knowledge/creative economy and increasing income disparity within urban areas.

China has explicitly expressed its objectives of transforming and upgrading its economic structure. According to Wu (2007), in the period of 1995–2004, more than 62% of newly generated jobs in China were in the service sector. The share of service-sector GDP in overall GDP increased from 34.3% to 40.7% between 1995 and 2004 (Wu 2007). In the newly released 12th Five-Year Plan (2011–2015), China strives to achieve a 4-percentage point increase in the service sector value-added output of GDP, from 43% in 2010 to 47% in 2015, and transform its coastal regions from being the "world's factory" to a hub for R&D and high-end manufacturing and services (Xinhua 2011b). As expressed in the Medium- and Long-Term Plan of Science and Technology Strategic Development (2006–2020), building an innovation-oriented country is a major strategy for the future development of China. The Creative Economy Report documents the remarkable development of China's creative economy and indicates that the production is shifting from "Made in China" to "Created in China" (UNCTAD 2008). With a share of 19% of the total global export market, China became the biggest exporter of creative goods in 2005. China has set the goal of building an innovation-oriented economy and becoming a major science and technology power in the world by mid-twenty-first century (State Council 2006).

At the same time, China is considered as one of the most unequal economies in the world. Its Gini coefficient increased from 0.33 in 1980, to 0.45 in

2001, and 0.47 in 2009 (World Bank 2004; Sisci 2005; Xinhua 2011c). The top 10% of families in China own more than 40% of all assets in the society, while the bottom 10% own less than 2% (Asian Times 2005). Scholars have suggested that wage differentials along dimensions of enterprise ownership, skills, and industries help explain the widening income gap (Xu and Zou 2000; Knight and Song 2003; Deng and Li 2009; Chen et al. 2010). No study, however, has explicitly tested whether a more "creative" urban economy is associated with greater income disparity in China's unique context and how such a relationship varies across time and geography.

Theory and Previous Research

Creativity and Inequality

Examination of the rise of the new economy in the industrialized world is not new (Solow 1956; Romer 1990; Lucas 1988; Glaeser et al. 1995; Simon 1998; Florida 2002; Powell and Snellman 2004). The new economy is characterized as "production and services based on knowledge-intensive activities that contribute to an accelerated pace of technical and scientific advance, as well as rapid obsolescence" (Powell and Snellman 2004, p. 201). In this new economic configuration, the major forces driving economic development are the advancement in information and communication technology (ICT), human capital accumulation, and the concentration of talent. Florida (2005b) has pointed out that about one third of the workforce in advanced industrial countries is engaged in the creative sector and that this sector generates about half of total wage and salary income in the United States.

A disturbing trend parallel with the rise of the creative economy is increasing income inequality. There has been a growing concern with this issue, and scholars have put forward different explanations for the broadening income gap (Galor and Moav 2000; Katz and Murphy 1992; Acemoglu 1998; Florida 2005a; Donegan and Lowe 2008). The research on this issue could be roughly sorted into two groups. First, technical changes tend to disproportionately increase productivity of, demand for, and rewards for high-skilled labor (Galor and Moav 2000; Katz and Murphy 1992). Based on an endogenous growth model, Galor and Moav (2000) theoretically demonstrate that rapid technological progress raises the skills premium and increases the average wage of skilled workers, while temporarily reducing the average wage of unskilled workers, thus leading to increasing wage inequality.

The second group of scholars approach this issue from a structural angle (Ikemoto and Uehara 2000; Sassen 2001; Florida 2005a; Donegan and Lowe 2008). The view that structural changes tend to enlarge wage inequalities can be traced back to Kuznets (1955). Sassen (2001) shows that economic restructuring generates large numbers of both high-wage and low-wage jobs but erodes the share of manufacturing workers, who are generally in the middle of the wage distribution. Such structural dynamics could benefit workers at both the low end and the high end of the income spectrum, though the income gap between the two has broadened substantively, especially in global cities (2001). Florida (2005a) states that increasing income inequality is an unpleasant byproduct of the shift toward a creative economy. There is a strong positive relationship between a region's creativity and its inequality, and it is suggested that creative centers are also among the most unequal places. He attributes this trend to the consumption habits of the creative class: the creative class or high-skilled workforce tends to consume low-end services instead of doing the work themselves, and so the growth of the high-skilled workforce is accompanied by growth at the other end of the skills spectrum—low-skilled labor. Empirically, Donegan and Lowe (2008) report that the concentration of the creative class in US metropolitan areas significantly widens the income gap between high-skilled professionals and low-skilled workers after controlling for other relevant variables.

The Case of China

Numerous studies have identified a series of explanations for the expanding income gap in China. Echoing the findings from research on developed countries, research utilizing individual-level data shows that the new economy rewards more to skills and human capital and has led to increasing wage inequality (Fleisher and Wang 2004; Park et al. 2003; Knight and Song 2003). Fleisher and Wang (2004) examined the marginal product of labor and wages for production workers and TAS (technical, administrative, and staff) workers and found that "the wage gap" (marginal product minus wages) tends to be greater for TAS workers than for production workers. Using annual urban household survey data for six provinces from 1988 to 1999, Park et al. (2003) demonstrated that the wages of the rich and the well-educated rose rapidly and that the rise in returns to unobservable skills can explain much of the increase in overall inequality during this period. Based on Chinese Household Income Project Survey (CHIPS) data of 1988 and 1995, Knight and Song (2003) con-

ducted a decomposition analysis of China's urban wage structure and pointed out that returns to education and occupation-specific skills have increased from 1988 to 1995. Skilled workers were substantively better remunerated while unskilled workers' wages barely rose.

Several other factors, based on the unique Chinese context, are argued to have played a role in regional variation in inequality. These factors include the size of the manufacturing sector, representation of state-owned enterprises, the magnitude of internal migration, as well as foreign trade in the local economy. As an important industry in this transition, manufacturing's overall impact on wage inequality is not clear in China's case. Unlike in the developed countries, manufacturing workers in China are paid on average a minimum wage level. As estimated by Banister (2005a), the average hourly remuneration of manufacturing production workers in both urban and rural China was $0.57 in 2002, approximately only 3% of that in the United States and many other developed countries. China has gradually upgraded its manufacturing and achieved competitiveness in some semi-skilled manufacturing industries in addition to its traditional competitiveness in low-end labor-intensive manufacturing industries (Banister 2005a). With such upgrading, the distribution of manufacturing earnings has widened. However, the low-end unskilled workers have not gained much due to large-scale rural–urban migration flooding the labor market and overseas buyers' intense efforts in seeking low-cost labor.

The enterprise reform or privatization progress is argued to be another important contributor to widening income inequality (Chen et al. 2005; Xing and Li 2011; Putterman 1992; Chen et al. 2010). In terms of the impacts of enterprise reform and wage inequality, there are two contrasting arguments. On the one hand, privatization broke up the formerly egalitarian wage determination system and enlarged wage inequality. During the planned economy, almost all urban workers were employees of state-owned or collective-owned enterprises, and their income was equalized under a national scale for wages for state employees (Chen et al. 2005). Since the 1990s, especially after 1996, the state reformed state-owned enterprises in a radical fashion, resulting in large-scale labor relocation and widespread unemployment. Accompanying the privatization process, wage determination mechanisms changed and rewarded more to skills, which further led to increasing inequality (Xing and Li 2011). On the other hand, remaining state-owned enterprises (SOEs) are still protected and allowed to offer wage premiums above the market level (Putterman 1992). Some researchers argue that the extent of competition differs across industries. For instance, certain state-owned

monopolistic industries were little affected by marketization, such as financial industries and telecommunication industries. The status of monopoly increased the wage premium in these industries, which helped increase inter-industry wage dispersion, a critical component of urban income inequality (Chen et al. 2010).

Internal migration is another important contributor to widening urban income inequality. With its *hukou* system established in 1958, China has been regulating its population's mobility. Since the 1980s, such restrictions have been lifted, due to increases in agricultural productivity and the growing demand for cheap labor in cities (Chan 1996). The rural–urban migration became a remarkable phenomenon in the mid-1990s (Davis 1992). In 1997, the central government launched huge reforms of the *hukou* system. Some provinces abolished the rural/urban distinction in 2001–2002 (Wang 2004), which made it easier for rural migrants to get a local *hukou* in some cities and towns. Massive rural–urban migration then accelerated competition in the urban labor market. Such intensification of competition was particularly manifested in industries with lower barriers to entry (Chen et al. 2010). Rural–urban migration increased the pool of less-skilled workers employed in industries with low entry barriers and decreased their wages relative to those sectors requiring high-skilled workers.

Other researchers point to the openness of local economy as playing an important role in increasing inequality. A study by Xu and Zou (2000) found a positive correlation between increasing receptivity to foreign trade and urban income inequality from 1985 to 1995. They attributed this positive relationship to the disproportionate profit the rich and the powerful garnered from international trade. Xing and Li (2011) showed that increasing openness may bring about technological change resulting in increasing inequality, and greater openness will attract more companies to enter the market, thus increasing competition and decreasing total revenue and wage levels at low-productivity firms.

However, no study has explicitly examined the association between the ongoing economic restructuring and the rise of the creative economy in China and industry-based income inequalities. Talent, innovation, and entrepreneurship are playing increasingly important roles in regional economic performance in China (Qian 2008; Li and Florida 2006; Florida et al. 2012). Yet talent and technological innovation have an uneven geographic distribution across provinces (Li and Florida 2006), and talent is highly concentrated in cities (Qian 2008). Given each urban area's different rate of transition into the creative economy, their creativity-induced

inequality should be expected to vary as well. This chapter will trace the development of the creative economy over the last decade across regions and test whether the more rapid transition into a creative economy in certain areas also brings about greater earnings disparity among workers in different industries when other relevant factors are controlled for. This inquiry will contribute to the existing knowledge on China's economic transformation and labor market dynamics, and broaden the debate on the creative economy to incorporate industrializing countries as well.

Data and Methodology

Data

The basic objective of this paper is to document the growth of China's creative economy and industry-based income inequality, as well as to explore their interrelationships. The literature presented in the previous section provides a clear framework for evaluating the relationship between creativity and inequality. The overall research strategy of this study is as follows. Firstly, all sectors of employment are classified into the creative sector, working sector, and service sector. Secondly, several inequality measures are adopted to trace wage inequality among these sectors of employment over time. Finally, regression models are constructed to explore any association between creativity and income inequality.

We have constructed a panel dataset covering observation years of 1998, 2000, 2005, and 2008 for 31 provinces in China. The primary data on employment and wages refers to on-post staff and workers in urban units, which are readily available in *China Statistical Yearbooks* for 31 provinces. "Urban units" cover most types of ownership and exclude the urban self-employed. The reported wages refer to "total remuneration payment including wages, salaries and other payments, to the staff and workers" (NSB 1999). Since 1998, only wages of fully employed or on-post staff and workers are reported. We selected 1998 as the starting year and 2008 as the ending year to trace a decade of change. In the recent decade, due to rapid socio-economic change, the Bureau of Statistics made major alterations in methods of industrial classification. To make the industries as consistent as possible, we classified them into three sectors: creative, working, and service. We also chose two interim years of 2000 and 2005 in order to follow the changes more closely.

Most of our data come from *China Statistical Yearbooks* provided by the National Statistics Bureau, which is the most consistent data resource

in China. While it would be ideal to use a dataset on the city level instead of province level, many of our key variables are unavailable on city level across the selected timespan. For example, statistics on the number of employees per industry, as well as average wage per industry, are only found on the province level. In order to better capture urban employment, we exclude primarily rural industries, including agriculture, forestry, animal husbandry, fishing, and mining, in our analysis. We also restrict the analysis to private sector employment by excluding public sector employment, that is, public management and social organizations.

Creative Sector and Inequality

We have classified employment in different industries into creative, working, and service sectors based on the characteristics of each industry. While industrial classification in China varies from that of the United States, we defined the creative sectors in China with reference to Florida's definition in the US context (Florida 2005b). According to Florida (2005b: 3), workers employed in creative sectors are those engaged in "science and engineering, research and development, and the technology-based industries, in arts, music, culture, and aesthetic and design work, or in the knowledge-based professions of health care, finance, and law." In China's case, this includes financial intermediation and insurance, real estate activities, education, culture and arts, radio, film and television, scientific research, and polytechnical services for the years 1998 and 2000. For 2005 and 2008, it includes financial intermediation, real estate, leasing and business services, education, culture, sports and entertainment, scientific research, technical services, and geological prospecting, information transmission, computer services, and software. While education is not within the range of industries delineated by Florida (2005b), we include it because it is grouped with culture and arts before 2002 in the Chinese statistical yearbook data. Detailed listing of industries is provided in Table 6.1.

Three different measures of income inequality are constructed. First, we calculated a Theil's T index, which is proper to compare income across groups, in order to capture inequality among the creative, working, and service sectors. As individual-level data are not available in our analysis, we calculated the between-group component of Theil's T statistic, which can be used as a lower bound for the index in the population. Second, we derived a ratio between industries with the highest and lowest average wage. Third, as a robustness check, we also calculated a Theil's T among all industries to examine the overall wage dispersion patterns. All three measures are tested as dependent variables in regression models.

Table 6.1 Industrial classification in China, 1998–2008

	Year 1998 and 2000	*Year 2005 and 2008*
Creative Sector	Financial Intermediation and Insurance	Financial Intermediation
	Real Estate Activities	Real Estate Leasing and Business Services
	Education, Culture, and Art, Radio, Film, and Television	Education Culture, Sports, and Entertainment
	Scientific Research and Polytechnical Services	Scientific Research, Technical Services, and Geological Prospecting Information Transmission, Computer Services, and Software
Working Sector	Manufacturing	Manufacturing
	Electricity, Gas and Water Production and Supply	Production and Supply of Electricity, Gas and Water
	Construction	Construction
	Transport, Storage, and Communications	Transport, Storage, and Post
Service Sector	Geological Prospecting and Water Conservancy	Management of Water Conservance, Environment, and Public Facilities
	Wholesale and Retail Trade and Catering Services	Wholesale and Retail Trade Hotel and Catering Services
	Social Services	Services to Households and Other Services
	Health Care, Sporting, and Social Welfare	Health, Social Securities, and Social Welfare

The Theil's T index (T) for the population consists of two components: the between-group component (T'_g) and the within group component (T^w_g).

$$T = T'_g + T^w_g$$

The between group component can be algebraically expressed as:

$$T'_g = \sum_{i=1}^{m} \left\{ \left(\frac{p_i}{P} \right)^* \left(\frac{y_i}{\mu} \right)^* \ln \left(\frac{y_i}{\mu} \right) \right\}, \tag{6.1}$$

Where i indexes the group, p_i is the population of group i, P is the total population, y_i is the average income in group i, and μ is the average income across the entire population. A higher Theil's T value denotes a greater income inequality across groups. The first Theil's T is between-sector Theil's T while the second Theil's T is between-industry. Since we classified all industries into three sectors (creative, working, and service), the Theil's T for the three sectors is expected to be lower than the Theil's T for all industries.

Model and Variables

Ordinary Least Squares (OLS) regression models are estimated that regress the inequality measures on share of the creative sector in a province, as well as other relevant variables. The model is expressed as

$$\text{Inequality}_{it} = \alpha_i + \beta \times \text{Creative sector}_{it} + \gamma X_{it} + \varepsilon_{it}, \tag{6.2}$$

Where i denotes year, t stands for province, and X_{it} is a series of explanatory variables employed in our analysis. These include:

- Creativity measure—the percentage of workforce employed in the creative sector in the local economy; this is included to test the creativity hypothesis. It is hypothesized that the more creative the local economy, the more likely it will experience a larger income gap among urban workers. As elaborated in the previous section, the magnitude of manufacturing employment, high-tech output, foreign trade, state-owned enterprise employment, and migration might all have an effect on the inter-sector income disparity in the regional economy. All these factors are entered as independent control variables.
- Manufacturing measures—the percentage of workforce employed in manufacturing industries. Although it is desirable to unbundle manufacturing industries according to products made, such data are not available at the local level. We simply use overall manufacturing employment in the model. Evidence from western countries indicates that the share of middle-income manufacturing jobs helps compress income inequality. Evidence based on China's context is not clear. High-tech is calculated as the ratio of gross output of

high-tech industries to gross regional industrial product; it captures the effect of technical change on inequality. Migration is measured by the percentage of the local population without official registration (*hukou*) in each region. Those without a *hukou* are mostly migrants from other jurisdictions. The share of population without local *hukou* is a proxy of migration dynamics in each province. The effect of migration is expected to be positively correlated to inequality, as migrants are likely to increase the supply of low-skilled labor and contribute to competition of industries with low entry barriers, while exerting little influence on industries with high entry barriers, and thus enlarging inter-industry wage dispersion. Trade is calculated as the ratio of total value of imports and exports in gross regional product. International trade is argued to disproportionately profit the rich and powerful and to favor high-productivity firms in an increasingly competitive market. It is hypothesized that a more open economy will broaden the income gap.

- SOE is defined as the share of state-owned enterprise employment in total provincial urban employment. It is introduced to investigate the effects of enterprise reform on urban inequality. Evidence is ambiguous on the direction of such effects, as higher concentration of SOE employment can help compress the income gap with stable middle-class jobs but can also enlarge the gap since SOE employees enjoyed wage premiums that are protected against competition. Descriptions of these variables as well as their corresponding data sources are presented in the Appendix.

As there are four time points in our panel dataset, three time dummies representing years of 2000, 2005, and 2008, are included to control for any year-specific fixed effects. Descriptive statistics of the independent variables by year are shown in Table 6.2. The ratio of gross output of high-tech industries to gross regional industrial product increased steadily from 19.7% in 1998 to 28.1% in 2005 and remained constant since then. The same pattern is observed for the ratio of imports and exports to gross regional product as a measure of openness of the economy. During the same period, the share of employment in SOEs decreased sharply from 69% to 53% as a result of privatization reform. Share of migrants peaked around 2000 at 13% but slowly declined afterward, probably due to increasingly loose policies to grant *hukou* to migrants.

Table 6.2 Descriptive statistics of variables

	1998		*2000*		*2005*		*2008*	
Variables	Mean	Std. dev	Mean	Std. dev	Mean	Std. dev	Mean	Std. dev
Theil's T (three sectors)	0.0039	0.0025	0.3868	0.2561	0.9537	0.9535	1.2042	1.0937
Wage ratio (highest to lowest)	2.1178	0.3636	2.1458	0.3407	2.9813	0.5910	3.3767	1.1268
Theil's T (all industries)	1.9712	1.0496	2.0713	1.1463	3.1416	1.6366	3.7616	1.9919
Creativity	0.2150	0.0369	0.2393	0.0428	0.3120	0.0631	0.3214	0.0713
Manufacturing	0.3551	0.0753	0.3326	0.0808	0.3133	0.1034	0.3067	0.1102
Migration	0.0602	0.0318	0.1352	0.0777	0.1290	0.0916	0.0990	0.0946
Trade	0.2236	0.3019	0.2643	0.3544	0.3727	0.4870	0.3597	0.4486
High-tech industries	0.1971	0.1992	0.2364	0.2522	0.2810	0.3298	0.2712	0.3354
State-owned enterprises	0.6903	0.0893	0.6771	0.1051	0.5678	0.1442	0.5298	0.1535
	N=31		*N*=31		*N*=31		*N*=31	

Source: Authors' calculations based on *China Statistics Yearbook* data

Table 6.3 presents the correlation matrix for all selected variables, which provides evidence on their association. Indices of creativity, migration, trade, and high-tech all have significant positive association with three inequality measures, while SOE employment has a significant negative association. The relationship between manufacturing and local inequality is subtle, as it is only negatively correlated with the wage gap measure at the 0.1 level.

When we take a closer look at the association between creativity and other measures, we find several interesting results. First, the creativity measure is the only variable that is positively correlated with share of SOE employment, which indicates that the creative sectors remain dominated by SOEs. These findings are consistent with the fact that the financial sector is still dominated by state actors (Yue et al. 2010) and public research institutes have been playing a more important role than the private sector in China's innovation system (Wu 2007). Second, local creativity is significantly negatively correlated with manufacturing activities, which might indicate that the creative sectors are not complementing manufacturing activities. Third, creativity is not significantly correlated with migration,

Table 6.3 Correlation matrix of variables (1998–2008)

		1	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*
1	Theil's T (three sectors)	1.000								
2	Wage ratio	0.691 ***	1.000							
3	Theil's T (all industries)	0.817 ***	0.829***	1.000						
4	Creative sector	0.253 **	0.466***	0.299***	1.000					
5	Manufacturing	0.055	−0.157*	−0.104	−0.792***	1.000				
6	Migration	0.443 ***	0.392***	0.368***	−0.082	0.221**	1.000			
7	Trade	0.425 ***	0.398***	0.348***	−0.131	0.345***	0.838***	1.000		
8	High-tech industries	0.396 ***	0.412***	0.338***	−0.088	0.282***	0.770***	0.910***	1.000	
9	State-owned enterprises	−0.546 ***	−0.431***	−0.390***	0.166*	−0.537***	−0.551***	−0.649***	−0.540***	1.000

Source: Authors' calculations based on *China Statistics Yearbook* data
*p<0.1, **p<0.05, ***p<0.01

echoing the finding that with higher entry barriers, these sectors do not absorb migrant workers (Yue et al. 2010). Last, non-association between creativity and high-tech industry development might indicate that scientific research is not utilized in industrial output.

The share of manufacturing is strongly associated with migration, trade, and high-tech industries. These findings indicate that manufacturing industries are attracting migrant workers; localities with a strong manufacturing base are more open to trade; manufacturing industries tend to coexist with concentrations of high-tech industries.

Findings

Growth of Creative Employment

The growth of the creative sector in China between 1998 and 2008 is documented in Table 6.4. The size of the creative sector grew steadily from 20 million to over 27 million during this period, now accounting for 29.2% of the total urban private employment as compared to 20.3% of ten years ago. This figure is already fairly close to Florida's estimate

Table 6.4 Number of employees (in 10,000s) and share by sector in China, 1998–2008

	1998		*2000*		*2005*		*2008*	
	Number	Share	Number	Share	Number	Share	Number	Share
Creative sector	2009	20.3%	2050	22.8%	2518	28.9%	2725	29.2%
Finance	301	3.0%	294	3.3%	295	3.4%	326	3.5%
Leasing and business service	–	–	–	–	199	2.3%	247	2.6%
Working sector	5597	56.6%	4924	54.8%	4824	55.3%	5180	55.5%
Manufacturing	3769	38.1%	3239.5	36.0%	3097	35.5%	3329	35.7%
Construction	846	8.5%	744.2	8.3%	854	9.8%	971	10.4%
Service sector	2291	23.1%	2019	22.5%	1384	15.9%	1431	15.3%
Wholesale and retail trade, hotel and catering	1256	12.7%	977	10.9%	675	7.7%	665	7.1%
Total employment	9897	100%	8994	100%	8725	100%	9336	100%

Note: Total employment refers to total urban private employment
Source: Authors' calculations based on *China Statistics Yearbook* data

of the creative share in industrialized economies, at about a third. In comparison, the share of the working sector remained relatively stable at around 55% over the years, while the service sector shrunk from 23.1% to 15.3%. It is evident that the creative economy, or knowledge economy, experienced rapid growth in China.

Due to concerns about the change in classification methods, we also selected and compared consistent industries which are representative of three sectors in four years. We chose finance, as well as leasing and business services, to represent the creative sector, manufacturing and construction to represent the working sector, and wholesale, retail trade, hotel, and catering services to represent the service sector. Share of employment in the finance industry increases steadily from 3.0% in 1998 to 3.5% in 2008. Especially between 2005 and 2008, the number of employees increased—from 2.95 million to 3.26 million, a rise of 11.6%. At the same time, share of employment in leasing and business services increased from 2.3% to 2.6% from 2005 to 2008, and the number of employees increased 24.3% in this period.

Manufacturing is the single largest industry in the national economy. The number of employees and its share of total employment decreased from 1998 to 2005, and then increased from 2005 to 2008. The decrease in manufacturing employment might be due to several factors as summarized by Banister (2005b), especially when shed of surplus workers given the advancement in technology. Although the overall trend in share of manufacturing employment was decreasing, its growth varies across regions. Among the 31 provinces, only five experienced growth in manufacturing employment in the period between 1998 and 2008, including Jiangsu, Zhejiang, Fujian, Shandong, and Guangdong, all of which are located on the east coast. These findings suggest the uneven distribution of manufacturing across provinces and its spatial concentration along the coastal region. Construction employment experienced robust growth since 2000. The share of construction employment increased from 8.3% to 10.4%, with a 30.5% increase in the number of employees, which reflects the booming housing and infrastructure construction markets in China.

Another interesting finding when looking at the employment data is the declining magnitude and share of employment in low-end service industries, represented by wholesale and retail trade, and hotel and catering services. These findings are not consistent with the evidence of economic restructuring in the West that low-end service employment increases with the rise of the creative economy. In China, low-end services declined

at the same time that we observed an increase in the creative sector. One possible explanation could be that the booming manufacturing industries in the coastal provinces and low-skilled construction industries absorbed most rural migrant workers, who should provide a growth engine for low-end service industries.

Wage Inequality

The average annual wages for all urban workers and for the creative sector, the working sector, and the service sector respectively for the four years of observation are presented in Table 6.5. Nominal income increased substantively over the past ten years for all urban workers in China, though the growth rate varies across sectors. Creative workers not only have the highest wages across all groups in all years, their wage growth rate is also the highest among all. The wages of China's working class were in the middle of those for the creative sector and the service sector, and closely resembled the overall average in 1998 and 2000. However, their wage growth slowed down from 2005 and was surpassed by that of the service class.

Table 6.5 Average wage by sector and wage inequality in China, 1998–2008

	1998	*2000*	*2005*	*2008*
	Annual wage (Yuan)			
Average	7624.2	9580.5	18,430.9	29,128.2
Creative sector	8304.0	10,527.8	22,379.5	37,108.7
Finance	10,633.0	13,478.0	32,228.0	61,841.0
Leasing and business service	–	–	20,992.0	31,735.0
Working sector	7638.3	9458.5	16,744.7	25,520.4
# Manufacturing	7064.0	8750.0	15,757.0	24,192.0
# Construction	7456.0	8735.0	14,338.0	21,527.0
Service sector	6993.5	8915.9	17,124.3	26,992.1
# Wholesale and retail trade, hotel and catering	5865.0	7190.0	14,899.5	23,915.8
	Inequality			
Theil's T (Three sectors)	0.004	0.387	0.954	1.204
Wage ratio (Highest to lowest)	2.118	2.146	2.981	3.377
Theil's T (All industries)	1.971	2.071	3.142	3.762

Note: Yearly wage not adjusted for inflation
Source: Authors' calculations based on *China Statistics Yearbook* data

If we refer back to the increase in construction employment, we might infer that the growth of low-wage construction employment drew the overall average wage of the working sector down. In the US context, manufacturing workers were traditionally perceived as a major component of the middle class. However, in China, the average wage of manufacturing is lower than the overall average wage.

The three inequality measures clearly demonstrate expanding income inequality across these sectors during the ten-year time period. The degree of disparity across all three sectors is measured by Theil's T index. In 1998, the Theil's T was a low 0.002, meaning that the three average wages deviated little from the overall average. It then rose steadily over the past ten years and arrived at a high 1.494 in 2008. In 1998, the wage of highest-earning industry (financial intermediation and insurance) was 2.118 times that of the lowest-earning industry (wholesale and retail trade, and catering services). By 2008, the figure increased to 3.377. In other words, the wage of the creative class grew faster than the other two sectors. The between-industry Theil's T was 1.971 in 1998, which was higher than the between-sector Theil's T because of greater variance between all industries. This index also increased to 3.762 in 2008. All this suggests that skill-based or industry-based earning disparity enlarged substantively in urban China in recent years.

Model Results

Beyond national statistics on creativity and inequality, regression analysis is conducted to test whether they are closely related on the provincial level; in other words, do more creative local economies have greater income inequality? Table 6.6 demonstrates the results of regression analysis of wage inequality on creativity and other relevant variables and provides evidence on the extent to which each factor contributes to inequality. As it is a four-year pooled sample of 31 provinces in China, the total sample size is 124. Three sets of regression models utilizing different inequality measures as the dependent variable are estimated. In each set of regression, we estimated three models. One includes all independent variables; the second includes all independent variables plus time dummies to control for any year-specific fixed effects; and the third one includes all independent variables, time dummies, and province dummies to control for both year-specific and province-specific fixed effects. Due to the issue of multicollinearity among independent variables, our results are better interpreted as correlation instead of causality.

Table 6.6 Regression results on inequality index in China, 1998–2008

	Theil's T (three sectors)			*Wage ratio*			*Theil's T (all industries)*		
	Model I	Model II	Model III	Model I	Model II	Model III	Model I	Model II	Model III
Intercept	0.339	0.242	−4.652***	1.812	1.342	2.553	5.101**	4.296*	0.943
Creative sector	5.291***	2.920	8.587***	6.995***	4.107*	8.946***	5.322	1.995	11.832**
Manufacturing	1.133	0.725	15.865***	0.363	0.231	5.330*	−3.452	−3.360	18.728***
Migration	2.772**	3.306*	3.692**	1.425	4.625***	3.142	3.554	8.471**	9.590**
Trade	−0.443	−0.435	0.259	−0.378	−0.751*	0.476	−0.570	−1.168	1.076
High-tech industries	0.400	0.451	−1.763**	0.919*	1.004**	−0.785	0.995	1.093	−3.098*
State-owned enterprises	−2.869***	−1.903**	−3.099**	−2.335***	−0.721	−6.492***	−5.080***	−2.934	−11.077***
Time-fixed effects	N	Y	Y	N	Y	Y	N	Y	Y
Province-fixed effects	N	N	Y	N	N	Y	N	N	Y
N	124	124	124	124	124	124	124	124	124
Adj-R2	0.427	0.427	0.757	0.511	0.562	0.658	0.297	0.318	0.674

Source: Authors' calculations based on *China Statistics Yearbook* data

*p<0.1, **p<0.05, ***p<0.01

The results from these six models tell a relatively consistent story, though the magnitudes of effects vary across different models. The models using both time-dummies and province-dummies have the highest explanatory power based on adjusted R squared value no matter which dependent variable is used, indicating large provincial variations in China. Most of the independent variables show expected signs in line with theory and with our hypothesis. Creativity has a significant and positive effect on inequality: a 1% increase in a region's share of the creative sector will increase the inequality index by 0.09–0.12. This finding is consistent with findings in the USA (Donegan and Lowe 2008) and is attributable to a number of possible explanations. As argued by Sassen (2001), economic restructuring generates large numbers of both high-wage and low-wage jobs and brings about a bifurcated wage structure.

Aside from the creativity argument, the impact of manufacturing employment on inequality is positive and significant, especially in models controlling for both time and geographic fixed effects. The findings suggest that provinces with a higher concentration of manufacturing employment tend to have a larger magnitude of income inequality. Unlike developed countries such as the United States, manufacturing workers in China are not considered as middle class due to the low wages they earn. Low-end manufacturing remains a major job provider for unskilled migrant workers.

Migration is proved to be significantly positively correlated to inequality, which corresponds the theoretical argument that inflow of rural migrants increases the supply of low-skilled labor and drags the average industrial wage down, while exerting little effect on those industries with higher entry barriers. The impact of trade on inequality is positive in models controlling time and geographic fixed effects but not significant. The coefficient of the high-tech ratio is negative in fixed effects models. SOE employment has a significant negative association with income inequality. Privatization reform in China gave rise to large-scale labor relocation and resulted in extensive unemployment. A high presence of SOEs in a local economy tends to compress the income gap by providing relatively stable and homogeneous wages for their workers.

Conclusion and Discussion

This chapter applies a well-debated framework—namely, the dual trajectories of creativity and inequality—to the unique context of China's urban economy. While both the knowledge economy and income inequality in China have attracted academic and policy attention recently, no

study has systematically traced their growth over time and tested their interrelationships. As China establishes its long-term goal of building an innovation-oriented knowledge economy in the future, it is imperative to examine the growth pattern of its creative sector and to explore the possible social consequences of such development.

The results from this analysis clearly demonstrate the rapid expansion of the creative economy and the creative class in urban China. Employed in the knowledge-intensive and innovation-intensive industries, these workers now make up 29% of all urban private workforces. This figure closely resembles the comparable statistics obtained in the USA and other OECD countries. In terms of earnings, the wage rate of the creative sector is not only higher than for other work in all years but also grows at a faster rate. In 2008, the average wage rate of the creative sector was 1.45 times the average working-sector wage and 1.37 times the average service-sector wage. The rise of the creative economy coupled with its higher wage rates means that it would make increasingly important contributions to total earned income in the urban economy.

Three measures are used to gauge the degree of disparity across wages in these three sectors: Theil's T index for the three broad categories, wage ratio between the highest-earning industry and lowest-earning industry, and Theil's T index for all sectors identified. All three indices rose substantively during period between 1998 and 2008. We further tested the hypothesis that the rise in the creative economy will bring about greater income inequality in urban areas (Sassen 2001; Florida 2002). Similar to results established in the US context (Donegan and Lowe 2008), evidence from China also lends support to the argument that income inequality is a byproduct of an increasingly creative economy. The various theoretical frameworks surveyed earlier all have their validity in explaining the Chinese case. Economic restructuring in China generates large numbers of high-wage and low-wage jobs and forms a bifurcated wage structure. Marketization and technological changes also increase demand for and reward of highly-educated and highly-skilled workers. The consumption habits of these creative workers also create the demand for low-skilled labor to engage in low-end services. All these elements contribute to a growing skill-based and sector-based income gap.

While creativity is positively linked to inequality, other important factors are also evident in our results. Apparently, earnings inequality in

China is a more complicated issue than could possibly be explained by the creativity argument alone. While high-technology presence and trade both have subtle effects on wage inequality in urban China, the three most important factors are manufacturing employment, population mobility, and ownership type. A locality with a larger share of manufacturing employment tends to exhibit higher income inequality due to the low wages that manufacturing workers earn. The concentration of SOE employment tends to narrow the income gap by offering relatively homogeneous wage rates. Those regional economies with deeper marketization and privatization might thus experience greater income inequality.

As China continues its stride toward a knowledge economy, it needs to be mindful of the social consequences which might accompany this process. Regions with high degrees of creativity, manufacturing activity, privatization, and population migration are more prone to the income polarization between high-skilled and the low-skilled workers and to earnings disparity across different industries. This poses an important policy challenge for policymakers to be concerned with the socio-economic well-being of the less privileged segment of the workforce in an increasingly creative and knowledge-based economy. Policies need to be in place to address income disparity and associated issues that accompany rapid economic growth.

While this study provides a first look at the dual paths of creativity and inequality in China's urban development, it is constrained by data limitations in numerous ways. Firstly, provincial data are used due to the unavailability of key statistics at the city level. Although efforts were made to exclude rural and public employment in order to proxy for urban private employment, accurate city-level data would be preferable. Secondly, it is an open question how official data capture the real income of urban workers, and if bias exists, how it varies across different industries. Thirdly, our sector classification is limited by how the statistical yearbook data group various industries together. All these issues point to directions that warrant further research.

Appendix. Description of Variables and Data Sources

Variables	*Description*	*Source*
Inequality index	Theil's T index	China Statistical Yearbooks, 1998, 2000, 2005, 2008
Creative sector	The percentage of urban private employment in the creative sector	China Statistical Yearbooks, 1998, 2000, 2005, 2008
Manufacturing	The percentage of urban private employment in manufacturing	China Statistical Yearbooks, 1998, 2000, 2005, 2008
Migration	The percentage of population without official local registration status (*hukou*)	China Statistical Yearbooks, 1998, 2005, 2008, and 2000 census
Trade	The ratio of total value of imports and exports trade to gross regional product	China Statistical Yearbooks, 1998, 2000, 2005, 2008
High-tech industries	The ratio of gross output of high-tech industries to gross regional industrial product	China Statistical Yearbooks and China Statistics Yearbook on High-Technology Industry 1998, 2000, 2005, 2008
State-owned enterprises	The percentage of urban employment in state owned enterprises (SOE)	China Statistical Yearbooks, 1998, 2000, 2005, 2008

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CHAPTER 7

Urban Development and Branding Strategies for Emerging Global Cities in China

Emma Björner

Introduction

The twenty-first century has been described as an *era of Asia*, an age for Asia's urbanization, and a time when we witness Asia experiencing an increase in urban population (Shanghai Forum, *Economic Globalization and the Choice of Asia: Strategies for 2011–2012*, 2012). The worldwide trend toward urbanization has also been described as especially apparent in China (Yuen and Ooi, *Achieving Liveability and Vibrancy*, 2009). This urbanization process that China is undergoing has been significantly impacted by globalization, China's open door policy, and the country's economic reforms (Li, *China's Urbanization and Urban Planning in the Context of Globalization*, 2006).

The impact of globalization has been strongly felt in Chinese cities (Wu and Ma 2006). Driven by market reforms and globalization forces, large Chinese cities have become increasingly integrated with the global economy and have been established as the spearheads for China to interact with it—especially cities such as Shanghai, Beijing, and Guangzhou (Lin 2004; Wei and Yu 2006). Chinese globalizing cities are not only regarded

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as the largest cities and centers of globalization in China; they are also depicted as "new mosaics of urban transformation" (Lin 2004, p. 151).

Global cities have been described as important command points in the world economy system (Sassen 2001). Globalizing cities are, moreover, seen as complex, dynamic, and constantly changing (Wu and Ma 2006). The discourse around global cities has been criticized for being derived from empirical studies of just a few major cities in developed countries (Wei and Yu 2006). It has also been claimed that the processes and mechanisms of globalizing Chinese cities are different from those for cities in developed countries. Scholars have increasingly aimed to capture the functions and formations of emerging global cities in Asia, such as Shanghai, Singapore, and Seoul (ibid.).

In the context of the global economy, cities worldwide have come to operate in a global marketplace, competing with other cities for investors, tourists, residents, and workforce (Anholt 2007; Cilliers et al. 2011; Kavaratzis 2005; Sevin 2011; Zenker 2009). Cities in China and around the world have also increasingly engaged in creating branding strategies to develop international city identities, with the purpose to attract corporate headquarters, production facilities, and downtown skyscrapers, and to circulate capital, including culture, events, and tourism (Paul 2004).

Places (such as towns, cities, regions, and nations) have of course been branded since colonial times—for example, as governments tried to convince people to move to newly conquered territories (Avraham 2004). Branding is seen as important for places, since it can help them to differentiate themselves from competitors (Tiebout 1956), create competitive advantage (Anholt 2007), enhance economic development (Allen 2007), attract creatives (Zenker 2009), shape the city's identity (Kavaratzis and Hatch 2013), and build relationships with residents (Zenker and Seigis 2012).

In place branding practice and theory, there has been a shift from a major focus on economic elements such as economic development, expansion of export markets, enhancement of industries, and attraction of outside investments (Kavaratzis and Ashworth 2005), toward a focus on developing and branding a place from other angles, including culture, livability, and sustainability. In research on global cities, world cities, and mega-cities there has been a similar shift, from a focus on economic dimensions, and the centrality of large, important cities being financial centers and economic nodes, toward an increasing focus also on those other dimensions of sustainability, livability, and the environment, as well as culture and creativity.

One empirical indication of this can be seen in Shanghai, and in Shanghai's global city vision. Shanghai enjoyed international attention from the

nineteenth century, due to European recognition of the city's economic and trade potential. In the 1930s, Shanghai was the largest and most prosperous Asian city; and in 1936, Shanghai ranked number seven on the list of the largest cities in the world. At that time, no modern Asian city could match Shanghai's cosmopolitan and sophisticated reputation (Yusuf and Wu 2002). Today, Shanghai's vision is to return to the status it once had:

> In the 1920s and 1930s, Shanghai was a global city – just after London, Paris and New York – more famous than Tokyo, and more famous than [it is] today. (Researcher 1, 2014)

The current plan is to reorient Shanghai's future development and, by 2050, for it to once again become a global city (Researcher 2, 2014). The vision is to create a global city among the new generation of global cities. The vision is, furthermore, to not only focus on being an economic and financial center but also put emphasis on culture, the environment, and sustainability, as well as a socially well-developed society (ibid). The aim of this chapter and study is to analyze urban development and branding strategies for emerging global cities in China. The starting point is noting that there has been a shift from a focus on economic dimensions toward a global city discourse in which various dimensions—such as economic, cultural, social, and environmental—are at play. The empirical focus is five large globalizing Chinese cities, described more in the next section.

The Study of Five Chinese Cities

A growing number of Chinese cities rank among the top in the world in terms of economic strength, a central element in order to be considered a global city. In a report from 2012 (Economist Intelligence Unit Report 2012), among the top 14 cities worldwide for economic strength, 11 were Chinese, including the five cities examined in this chapter: Beijing, Shanghai, Shenzhen, Chengdu, and Chongqing.

Ethnographic fieldwork was carried out in these cities by the author between 2010 and 2014. The empirical material includes interviews with government officials, practitioners, and researchers; printed and online materials about city development and branding strategies, such as official documents, brochures, books, and web pages; as well as observations and fieldwork notes from the field. Thirty-eight interview transcripts have also been used for the purpose of this chapter. Interviewees are anonymous and referred to with title, number, and the year of the interview.

Large Chinese cities, and in particular Beijing, Chengdu, Chongqing, Shanghai, and Shenzhen, are pertinent for analysis because these cities increasingly integrate with the global economy and take on powerful positions in the world (Wang and Zheng 2010). Moreover, the five cities studied here have taken the lead in terms of integration with the global economy, encouraged by China's economic reforms and open door policy (Wei and Yu 2006). Large Chinese cities are also regarded as emerging global cities (Wei et al. 2006) and, in the next 10–20 years, are expected to become significant rivals of present global cities, including New York, London, Paris, and Tokyo (Global Cities Index 2012).

The five cities studied are different in terms of their geographic location within China, their history, size, resources, and in their level of urban development and internationalization. Beijing was selected due to its long history, its centrality as a cultural and political center in China, its aim to become a world city, with its branding efforts boosted by the 2008 Olympic Games. Shanghai was selected because it is China's commercial and financial center, and the most modern and international city in the country. Furthermore, Shanghai has set out its vision to become a global city, and thus return to what it used to be. Beijing and Shanghai were also selected due to these cities' impact on the global economy and the international community in terms of economic, political, social, and cultural issues.

Chengdu was chosen because of its position as an important city and engine of China's Western Development Program as well as its status as a leader of China's new urbanization. Chengdu was also selected due to its progressive approach to place-branding, including online city branding aimed at international audiences (Björner 2013). Chongqing was selected due to its huge size, its rapid urbanization, and its position as one of China's emerging mega-cities. Chongqing was also chosen because the city aims to bridge between urban and rural and to drive the realization of wellbeing in West China.

Shenzhen stands out from the other cities studied partly because of its short history as a large city. Shenzhen was one of China's first special economic zones (SEZs), and a "new city" that has grown from a fishing port of 300,000 to a mega-city of more than 10 million over the past 30 years. Today, Shenzhen is a city of migrants, one of China's top cities in terms of economic power, and the technology engine of South China. Shenzhen is also greatly influenced by its neighbor Hong Kong and has set out to become an international and global city.

Large, Important Cities

Large cities have an advantage over smaller cities in a time of globalization, since they can achieve increasing returns and their large-scale machinery and investment can be run more efficiently (Zhao et al. 2003). Large cities also enjoy an advantage since it is easier for them to incorporate land, infrastructure, an investment environment, and skilled personnel (Lucas 1988). Moreover, large cities are clusters of activity, generating a host of synergetic effects (Camagni 2001), and have also always functioned as the most important centers of economic development, social transformation, and political campaigns (Lin 2004).

The largest cities in the world are often referred to as world cities (Doel and Hubbard 2002), global cities (Sassen 2001), and mega-cities (Kraas 2007). Mega-cities are commonly defined as those with more than 10 million inhabitants, and are regarded as cities that have certain characteristics caused by their large size, as well as the enormous challenges this size infers for city management (Fuchs et al. 1994).

Other variables used to define mega-cities include position in the world, financial resources, industrial and commercial structure, educational facilities, and service functions (Bugliaretto 1994). According to the Organisation for Economic Co-operation and Development (OECD) (2015), China has 15 mega-cites, namely Shanghai, Beijing, Shenzhen, Wuhan, Guangzhou, Tianjin, Xian, Hangzhou, Chengdu, Chongqing, Jinan, Nanjing, Changzhou, Shantou and Harbin. Some of the largest cities in China, and specifically Hong Kong, Shanghai, and Beijing, have already been identified as contemporary world or global cities (Green 2010).

The notion of the global city was introduced by Sassen in 1991, and describes cities that are important *command points* in the world economy system. Global cities are such in that they are significant sites for finance and service firms, locations of production and innovation, and platforms where the global flow of money, ideas, and people move and collide in constantly evolving ways (Sassen 2001). Global cities have additionally been described as having capabilities for producing global control (ibid.).

The world city concept was coined in 1915, and is conceptualized as cities where a significant proportion of the world's business is carried out (Doel and Hubbard 2002). Moreover, world cities have multiple roles: as centers of national and international political power, national and international trade, and of financial services and advanced professional activity (Hall 1966). World cities are also described as political power centers and

as centers for the most powerful national and international bodies (Yulong and Hamnett 2002). The major world cities have been listed by Newman and Thornley (2011, p. 4) as London, Paris, Berlin, Istanbul, Barcelona, New York, Los Angeles, Toronto, Chicago, Mexico, Tokyo, Singapore, Hong Kong, Beijing, Shanghai, Abu Dhabi, Dubai, and Mumbai.

In the conceptualization of mega-cities, world cities, and global cities, the focus has to a large degree been on these cities as financial centers and economic nodes, rather than as centers of culture, livability, sustainability, and so forth. However, King (2007) has taken a broader stance in the depiction of the global city, as characterized by the multiplicity of flows of people, goods, services, ideas, and images. Meanwhile, Wu and Ma (2006) have opposed a distinct typology and claimed that the globalizing city is complex, dynamic, and constantly changing.

The position taken in this chapter aligns with King's (2007) and Wu and Ma's (2006) conceptualization of the global city. The thesis here is that a global city is not only a center for economy and finance but a place that also put great emphasis on culture, livability, and sustainability; and this can be seen in urban development and branding strategies for emerging global cities in China.

Rapid Urbanization and the Global March

By the end of 2012, 52% of China's population lived in cities, which can be compared with 26% in 1990 (World Bank 2014). In the past 30 years, China has urbanized at the fastest rate in the world, while a quarter of all cities with a population greater than 500,000 are found in China (Chen and Gao 2011). It is estimated that 70% of the Chinese population will live in cities by 2030 (Economist 2014). China's urban development over recent decades has been a direct outcome of state articulation and reconfiguration, national political strategizing and political ideologies, as well as national development strategies and shifts in global capital accumulation (Zhao et al. 2003).

Chinese urban growth has been described as complex, large, and unique (Zhao et al. 2003). In recent years, China's coastal areas have been faced with increased labor costs, shortage of resources, and decrease of competitiveness. Transnational companies have, as a consequence, started to transfer their production bases to the central and western regions of China (Chengdu Investment Guide 2013). The Chinese government has pushed forward a transformation of the pattern of opening up to the outside world, changing from opening up of coastal areas in the east and south of the country, toward

developing the economy of inland China and promoting the opening of the western region to the other parts of China and the world (ibid.).

For a large part of the twentieth century, China sheltered itself from the global march forward (Berkowitz et al. 2007). In China, the concept of globalization entered political, ideological, and scholarly discourse in the mid-1990s. Since the early twenty-first century, leaders and theorists within the Chinese Communist Party have been increasingly aware of the opportunities that globalization offers (Knight 2008). It has been claimed that China's re-entry into the World Trade Organization and the expansion of the market economy pushed China and Chinese cities into the age of globalization (Wu and Ma 2006). In a report from the Chinese government released in 2003, the strategy proposed was to open up further by integrating tactics of *bringing in* and *going global* (Knight 2008). Today, the Chinese government is trying to create an economy shaped by a desire to participate in the global economy (Guthrie 2012). Moreover, the country taking on an increasingly powerful position in the world (Wang and Zheng 2010).

In contemporary China, opening up to the world has been a deliberate pursuit of modernization, among officials envisioning the future. Almost all Chinese cities, large and small, have experienced major spatial renewal and modernization in the last decades (Ma 2004). Modernization in a Chinese context is, however, not the same as westernization, since China, like many other Asian countries, is becoming more modern, but not automatically western (Ooi 2007). China's globalizing cities have been described as locations where the global meets the local, where the (post)modern interacts with the traditional Chinese, and where the manifestations of this can be seen most clearly and completely (Lin 2004).

China's thriving economy, its growing middle class, and investments in infrastructure are elements pushing the nation and its cities toward greater global presence (Global Cities Index 2012). During the past two decades, along with China's rapid economic development, large Chinese cities have increasingly tried to change their relationship to the global economy, and aimed at becoming international cities (Yulong and Hamnett 2002).

Creating international, global cities is regarded important in furthering China's international status and influence, since such cities can assist China economically, culturally, and politically (Yang and Liang 2012)—economically, in transforming from low to high efficiency of production and influence; culturally, by contributing to promoting the nation and transforming it from being a remote player in terms of world culture into a creator of symbols of global consumption culture; and politically, by helping the nation to move from world periphery to the world core (ibid.).

The creation of international, global cities is taking place in the context of the global economy, which has been described as in transition, and as "a patchwork of place-based economies in a constant struggle for competitive advantage" (Doel and Hubbard 2002, p. 359). In the global economy nations, regions, cities, and communities are not regarded as helpless hostages of international capital but rather as highly capable in controlling their own destiny (Hall and Hubbard 1998). Cities around the globe are said to be taking control, and they do this by engaging in an entrepreneurial style of local economic development (Harvey 1989). They are also active participants in today's international, competitive economy (Hospers 2010).

Urban Development and Branding Strategies

Cities can be seen as operating in a global marketplace, competing with other cities all over the world—for investors, tourists, residents, and workforce (Anholt 2007; Cilliers et al. 2011; Kavaratzis 2005; Sevin 2011; Zenker 2009). To deal with this increased global competition, places (towns, cities, regions, and nations) around the world have recognized a valuable ally in marketing theory and practice; they have adopted concepts from business, marketing, and management, and paid increasing attention to city identity, brand value, and city image (Hospers 2010; Kavaratzis 2005; Wai 2006).

Place branding is not a new phenomenon. Yet, branding strategies are seen as especially important for places today, since—in the context of the global economy—they can help places to differentiate themselves from competitors (Tiebout 1956), create competitive advantage (Anholt 2007), enhance economic development (Allen 2007), attract creative class (Zenker 2009), shape the city's identity (Kavaratzis and Hatch 2013), and build relationships with residents (Zenker and Seigis 2012).

Various frameworks and models have been proposed in terms of place-branding literature, a central one being Kavaratzis' (2004) "city image communication framework," which is composed of three types of communication—primary, secondary, and tertiary. Primary communication is described as unintentional: instead, the nature of the city (i.e., its landscape, infrastructure, and structure) has communicative effects, even though communicating messages is not the main goal. This is all related to urban development. Secondary communication is the intentional communication that often takes place through established mar-

keting practices, whereas tertiary communication is related to word of mouth and to communication by media (ibid.).

Similar to the focus on economic and financial elements in the conceptualization of global cities, place-branding research and practice initially focused on economic elements, and thus the engaging in place-branding activities in order to boost economic development (Kotler and Gertner 2002), expand export markets, enhance industries, and attract investors, tourists, and talent (Kavaratzis and Ashworth 2005; Kong 2012). Place-branding has, however, increasingly also focused on other elements, such as culture, livability, and sustainability. These elements are discussed further in the next section, in the context of urban development and branding strategies for emerging global cities, and related to theory and empirical examples from the five cities analyzed in this chapter.

Economic Elements at the Center

In emerging global cities in China, a focus on economic elements is still very much apparent in urban development and branding strategies. Nonetheless, apropos the other elements, of culture, livability, and sustainability, in Shanghai, a central development goal has been to become China's economic center (Government official 1, 2012), and in Chengdu a major aim has been to attract more tourists and FDI to the city (Practitioner 1, 2012). During the last decade, Shenzhen has similarly worked actively to promote the city internationally as a good place to invest (Government official 2, 2014).

Beijing has transformed its economic industry toward a focus on high-tech, cultural, and creative industries, and increasingly also environmentally friendly and sustainable industries. Likewise, citizens and local companies are increasingly important target groups in Beijing's development and branding. Yet, the *real* audience for Beijing's urban development and branding strategies is still said to be primarily investors, a main reason being the importance that China and Beijing's political leaders put on economic development (Government official 1, 2012).

Place-branding in emerging Chinese global cities is said to play an important role when it comes to investment promotion and construction of place image for potential investors (Researcher 3, 2012). In Chengdu, an important event targeting investors was the Global Fortune Forum 2013, which aimed to brand the city as a good place to invest, and to attract new companies there. Shenzhen is promoted as a place to invest

through the arrangement of meetings and conferences in countries around the world. It has also been branded as an investment location through social media such as Weibo and WeChat (Government official 2, 2014). In Chongqing, companies have been encouraged to acquire and merge with European firms, one purpose being to develop and brand the city as a location in which to invest.

A consequence of the focus on economic elements and attracting investors to the cities studied has been changes in the city landscape. In recent years, softer aspects have also been emphasized in place-branding strategies in these cities, including the development of the local business environment and culture (Researcher 4, 2012). In the cities analyzed, a desire is expressed to attract companies in service industries—areas such as ICT, environment, energy, high-tech, and finance—which relates to China's Premier Li Keqiang, who has mentioned that the demand for services is increasing (Government official 3, 2013).

> In order to be successful today, cities need to come up with new strategies connected to the service economy. (Researcher 7, 2012)

Top leaders in China have stated that China needs more innovation (Researcher 5, 2013), and that emerging global cities in China should be branded as innovative cities (Researcher 6, 2011). One consequence is that considerable budgets are invested in developing innovative, creative, and smart cities (Researcher 7, 2012). Being innovative, creative, and smart is, moreover, regarded as necessary in the creative economy era and the knowledge society (Researcher 8, 2013). The cities studied in this chapter all aim to make themselves attractive toward those who can boost innovation, creativity, and technology. This is in line with those arguing that place-branding to a large degree has been about how to make a place attractive for capital-rich creatives (Therkelsen et al. 2010).

Innovation, creativity, and economic elements of urban development and branding strategies also relate to an entrepreneurial style of cities, and hence a city that pursues innovative strategies (Jessop and Sum 2000). In the cities studied, Shenzhen is the city with the greatest entrepreneurial style, and a bottom-up approach in its governance (Researcher 9, 2014). Shenzhen has also been described as one of the most innovative cities in China, and is the home to high-tech firms such as Huawei, Tencent, and ZTE (Shenzhen Economic and Trade Representative Office 2013).

Hall and Hubbard (1998) have referred to the great cities in their golden age as "cradles of creativity" and "innovative milieus." Florida (2003) has discussed creative centers, stating that these provide integrated ecosystems where different forms of creativity (cultural, artistic, technological, and economic) can flourish. Florida has also stated that creative centers are the "economic winners of our age" (2003, p. 8). Vanolo (2008) has maintained that creative centers as discussed in the work of Florida contribute to multiculturalism, tolerance, diverse cultural stimuli, and culturally open social environments that are rich in opportunities for interaction. It can, however, be questioned whether the work of these scholars applies to the Chinese context, partly because the political system in China is very different from that in the West.

Furthermore, in discussions on neoliberalism in relation to urban development and place-branding strategies in a western setting, the applicability to China can be questioned. Parallels have, for example, been drawn between place-branding, the development of neoliberal policy programs in American and European cities, and the emergence of the entrepreneurial city (Eshuis and Edwards 2012). In Jessop and Sum's (2000, p. 2289) view, entrepreneurial cities have certain features: "an entrepreneurial city pursues innovative strategies intended to maintain or enhance its economic competitiveness vis-à-vis other cities and economic spaces." This is what can also be seen in emerging global cities in China, yet due to different history, culture, and institutional systems, the entrepreneurial style of cities in China take a somewhat different form from what is depicted for cities in western countries.

In this study, some interviewees brought up the increased competition between cities in China and the world, as well as the relation to innovation and entrepreneurial spirit (Researcher 10, 2011). It was stated that there is a fierce inter-city competition in China, and that large Chinese cities compete against each other for talent, technology, education, and cultural institutions. The development is also very rapid:

> Chinese cities rise and develop very quickly, especially in terms of factors like talent, technology, and education. (Researcher 11, 2012)

Linkages between the entrepreneurial city and the global city have been expressed in the literature. Doel and Hubbard (2002) have, for example, maintained that a common aspect of entrepreneurial city narratives is the imagining of the city as a truly global place. Developing and branding a

city as creative has also been related to an ambition to build competitiveness globally (Jensen 2007). In the Chinese setting, city narratives centering on creativity, innovation, and the global are increasingly common.

Culture: The Soul of the City?

Economic and cultural elements are closely intertwined in urban development and branding strategies, partly through the element of creativity. Culture and creativity have become central concepts in place-branding and city planning policies all over the world (Vanolo 2008). Moreover, ideas and stereotypes of culture and creativity are often used in place-branding in order to promote attractive urban images (Vanolo 2008), and cities are often regarded as centers of culture, creativity, art, and experimentation (Scott 2000; Zukin 1997). Many cities also invest heavily in cultural industries and cultural images, using creativity as an important umbrella concept (Vanolo 2008). One example is Singapore, which has been rebranded as a creative city aiming to become an important player in the global creative economy (Ooi 2008). Cities focus on culture and creativity in order to find greater sources of differentiation and to develop city uniqueness (Kong 2012).

Among the interviewees, it was maintained that culture is the soul of the city, and that an excellent city brand includes culture and spirit (Researcher 12, 2013). It was also stated that a place brand could not be separated from city culture (Government official 4, 2014). The cultural dimensions in urban development and branding strategies take various forms in the five cities analyzed, partly due to their dissimilar historical pasts. Beijing is naturally, as the capital, is an old cultural center, whereas Shanghai's culture is influenced by its international past. Shenzhen is creating new culture on the basis of being a young city with residents from all over China and the world, and through its ambition to be an international city.

It has been maintained that place-branding "should be more *cultured*, knowledgeable, and critically aware of traditions of cultural expression" (Bianchini and Ghilardi 2007, p. 285), and that this can be accomplished by rooting place-branding in the internal *and* external place image, in the place's cultural life and cultural representations, and in the place's history and socio-economic realities (ibid.). Kalandides (2011) has described how Bogotá developed a vision as a cultural capital. Giovanardi (2011) has used Johnson's *Circle of Culture* to develop a cultural approach for studying internal audiences, and the production and representation of

event-marketing representations in an Italian community. The cultural dimensions of places thus relate to the identity of the place and also to the residents of the place.

In the Chinese setting, the intersections between cultural and economic policies are apparent. An example is the national 12th Five-Year Plan, which put emphasis on development of the cultural and creative industries as a key target for China as nation and for Chinese cities. To develop culture and creativity has, as a consequence, become a main task for Chinese cities (Researcher 7, 2012) and performance assessment and success indicators have been steered toward cultural elements.

In Beijing, a focus on cultural and creative industries has been added to the city's master plan, and since the 2008 Olympics, Beijing has used cultural and creative industries as its main drivers to become an international city (Practitioner 2, 2012). In Shanghai, cultural and creative areas such as Red Town and 1933 Shanghai have been developed in old factory spaces, relating back to the city's past. Shenzhen has set out a vision to forge a city of culture that admires creativity and encourages diversity (Merrilees et al. 2014).

To promote its own culture, Beijing has arranged cultural festivals and has bought an opera house in the USA to show Chinese performances overseas. Beijing has also used a selection of cultural stories and cultural products in its place-branding, with the aim to "present a masterpiece" and show the best culture of Beijing and China (Researcher 13, 2012). Chengdu has arranged lantern festivals abroad, and used images representing Chengdu on the lanterns, such as pandas and the Three Kingdoms (Practitioner 3, 2012). Arranging cultural events for the purposes of international and cultural exchange can be interpreted as a political move, and has by some interviewees been related to the concept of soft power (Researcher 7, 2012).

Cultural dimensions can be seen in the development and branding of the cities studied in this chapter in the associations made to a historical culture and in their promotion of both the historical and the modern. Chengdu has emphasized its traditional Chinese culture in its branding as the "Real China." Shanghai's city landscape is a mixture of foreign and Chinese architecture and design, hinting at its international past. Beijing's urban development and branding strategies are influenced both by the city's history as an ancient city of Asian tradition, and its present status as a modern, rapidly developing city. Urban development and branding strat-

egies for emerging global cities in China draw on the past and the present, as well as on the local and the global (Government official 5, 2012).

> All Chinese mega-cities have places that mix traditional and modern; local and global. For example, in Beijing we have Sanlitun, we have Dong Cheng District. Dong Cheng District has the hutongs and is an old, traditional place, but with a fusion, a very good lifestyle; with art and local people. (Researcher 14, 2012)

Intersections between culture and economy have during the past years become more and more evident, and cultural elements are taking increasingly prominent positions in urban development and branding strategies in the five cities analyzed. The Chinese government emphasizes, recognizes, and treasures its local values and Chinese culture—something that also comes to permeate the cities studied and their strategies (Researcher 13, 2012). Even though the economy is still at the center, especially among political leaders, culture is playing an increasingly important role.

Beijing is, for example, branded as a cultural, not an economic, center (Researcher 13, 2012). In Shanghai, decision-makers pay increasing attention to cultural aspects, but the economy is nevertheless always at the center (Researcher 15, 2012). However, the emphasis on economic elements by Shanghai's leaders does not resonate with Shanghai's residents' emphasis on Shanghai as a cultural city (Researcher 15, 2012), resulting in different ideas regarding development and branding among leaders versus residents. Official visions, ideas, and messages are still dominating urban development and branding strategies in China; yet, residents are increasingly listened to and focused on, a fact which elaborated on more next.

Internal Audiences: The Social Dimension

In place-branding research and practice, attention in recent years has to an increasing extent been drawn to residents (Therkelsen et al. 2010). Urban authorities have also started realizing that internal audiences (such as residents) and internal markets are of great importance (Kavaratzis 2008). Kemp et al. (2011) have studied the impact that place-marketing has on internal stakeholders (and specifically residents), how commitment and loyalty is created, and how residents are becoming "brand evangelists" for a place. Ind (2004) has emphasized internal branding, and the public, private, and civil society "living the brand"; whereas Govers (2011) has

discussed the importance of building the place brand based on the identity of the local population and actors in the city.

Some scholars have stated that place-marketers should primarily focus on making the city a good place to live for residents (Zenker et al. 2013). Relatedly, there have been calls for more humanistic and people-centered place-branding strategies, and claims that residents and communities in the city should be given more chances to express their desires and imaginations (Bianchini and Ghilardi 2007). It has also been claimed that citizen satisfaction is one of the most significant results of place-management (Insch and Florek 2008) and place-branding (Zenker and Martin 2011). By engaging in urban development and branding strategies focused on internal audiences, residents can be granted influence over the symbolic representation and the desired identity of their city (Eshuis and Edwards 2012).

In the five cities studied, interviewees claimed that place-branding in China has mainly focused on audiences other than residents, and that residents have largely been neglected. However, it was also stated that it is important to include the needs of the local residents in place-branding (Researcher 16, 2012), and that urban development and branding strategies should be based on residents' needs (Researcher 17, 2013).

> Marketing and branding involves listening and hearing; you must know the needs of residents, tourists, and investors. (Researcher 3, 2012)

It was also remarked that the government needs to pay more attention toward making people in the city feel proud, and that place-branding can help in this (Researcher 3, 2012). Furthermore, it was claimed that the very first aim for any city should be to make it livable, healthy, and spiritual for ordinary people (Researcher 18, 2012).

In urban development and branding strategies for emerging global cities in China, there is currently an increasing focus on local residents and local companies. In Chengdu, like in Chongqing, efforts have been made to integrate the countryside and the city, and to create a city for all (Practitioner 5, 2012). Chongqing's city logo *Renren* is designed to symbolize that the city was created by everyone, and that the creations of the city should be enjoyed by all (Government official 6, 2011).

Mega-events such as Shanghai's World Expo 2010, with the theme *Better City, Better Life* can also be regarded as a step toward creating a city for all. Furthermore, this theme ties into the creation of a sustainable,

environmentally friendly city. Beijing has also made efforts to make the city healthier and more livable, through better city environment, transport, and garbage recycling systems (Government official 1, 2012). The connection between a focus on internal audiences and caring for the city environment and sustainability is apparent in all five cities studied.

The word *inclusive*, included in the city spirits of Beijing and Shanghai, can be interpreted as a reinforcement and legitimization of all city residents. In the words of a government official in Beijing's Publicity Department," the *Beijing Spirit* was the spirit of Beijing people, of their dreams and visions" (Government official 7, 2012). Another government official similarly stated that all Beijing citizens should have a dream of their city, and that all those dreams together form China's dream (Government official 4, 2013). There are, however, varying views regarding to what extent city spirits such as *Beijing Spirit* really reflect the spirit of the people and thus of the city's residents. Some of the interviewees voiced more critical views, and stated that what is taking place is rather propaganda campaigns directed by the government. Such statements align with claims that place-branding in China is closely tied to political propaganda that has an ideological and disciplining character (Svensson 2014).

In Chongqing, the "Mutual Wealth" and "Five Chongqing" projects were rolled out under the leadership of the former Party secretary Bo Xilai, and were said to be about creating fortune and wellbeing for everyone in the city. The projects were meant to be directed at people born in the city and people who had moved to the city, as well as Chongqing's rural and urban populations (Practitioner 8, 2011). Bo used mass media to capture the national imagination (Callahan 2013) and received support from various groups. With hindsight, Bo's efforts can be interpreted more as his own high-profile political campaign for a seat in the Politburo Standing Committee of the Chinese Communist Party, rather than an urban development and place-branding campaign truly aimed at Chongqing residents.

Some urban development and place-branding projects and campaigns can be related to the official policy of building a "harmonious society," a concept that was developed under the former President Hu Jintao (Svensson 2014). A purpose of the harmonious society concept was to create stability in China (Researcher 7, 2012). The concept can also be related to urban development and branding strategies, and a view of place-branding as being about handling change and creating certainty and order in an otherwise rather chaotic world (Mommaas 2002). A focus on internal

audiences in urban development and place-branding can consequently be regarded as tools that the government uses in order to deal with the challenge of social instability and with the aim to create harmony.

Appadurai (1996) has elaborated on the potential of information technologies to create landscapes of collective aspirations and identities (Cayla and Eckhardt 2008). In the cities studied in this chapter, it was argued that the internet gives freedom to residents to express their opinions online, and that this in turn creates influence regarding the way emerging global cities in China are developed and branded. An interviewee stated that the government listens, monitors, and sometimes responds to the views of people in online environments (Practitioner 4, 2011). This could be regarded as a step toward influence from others than the *official* voice when it comes to visions, ideas, and communication related to urban development and place-branding strategies. Yet, it can be questioned whether and to what extent the controlled online environment in China actually give freedom to residents' expressions.

Sustainable and Environmentally Friendly?

Cities in China and around the world are increasingly made attractive by development and branding strategies focusing on being sustainable, smart, and environmentally friendly. Place-branding researchers have maintained that sustainable development has emerged as a distinctive marker of a place and its identity (Gustavsson and Elander 2012). It has also been stated that certain environmental quality standards can prove to be significant in order to create a distinct place brand. Place-branding has, moreover, been regarded as playing and important role in the sustainable development of a place, and in turn, "these sustainable developments help promote the place and thereby create stronger place brands" (Maheshwari et al. 2011, p. 198).

During the period of reform in China, the eastern, coastal region has transformed into a vast area of factory sites that came to be called a "world factory" (Wu and Ma 2006). But China's economic success has come at a significant cost to its environment, with levels of land degradation as well as air and water pollution among the highest in the world (Economy 2013). Today, Chinese leaders routinely cite the environment as one of the nation's most challenging concerns, and recognize the scale of the environmental challenges they face (ibid.).

In the cities analyzed in this chapter, the environment, sustainable development, and lowering carbon emissions are increasingly in focus; and concepts like ecology, the environment, and energy were terms and topics mentioned by the interviewees when discussing urban development and branding strategies in the five cities. Interviewees stated that Chinese cities have become more selective when they meet foreign investors, and demand more from foreign companies interested in China, due to instructions from the central government to avoid attracting polluting industries:

> If they [foreign companies] don't have good products, good quality and good development, they will have no chance. (Practitioner 9, 2012)

The industries that Beijing is especially interested in attracting today are mainly companies focusing on infrastructure projects, energy, the environment, and ICT. The 12th Five-Year Plan influences the types of company that Beijing wants to attract, and includes companies focusing on environmental technology, energy-efficient solutions, and new materials (Practitioner 10, 2012). Manufacturing industries have been pushed out of Beijing (Researcher 13, 2012), and focus has shifted to service, high-tech, and environmentally friendly industries (Practitioner 9, 2012) as well as toward creating a livable, healthy, and smart city.

To come to terms with the polluted environment, Beijing municipal government is working with changing Beijing into a "livable city," focusing on transport, the environment, and water (Government official 1, 2012). Beijing's livable city objective has been regarded a manifestation of a potentially environmental friendly and socially harmonious Beijing (Zhang and Zhao 2009). The livable city vision was raised among interviewees also described it as a struggle for Beijing, since the capital city is dealing with heavy traffic and pollution, noise, and a very large population. According to interviewees, air pollution is a big problem for Beijing's image, and has the consequence that foreign visitors refrain from coming to Beijing, for work or for leisure (Practitioner 11, 2014; Researcher 19, 2014).

Shenzhen has set the goal to achieve a shift from *Shenzhen Speed* to *Shenzhen Quality* and, "to build an innovative and environmental-friendly city where people can live happily and make dreams come true" (Shenzhen Government Online 2015). Shenzhen has thus set the target of undergoing a transformation from a city known for its speed to one known for its quality, striving for well-rounded, scientific growth to build

a solid foundation for the future and achieve comprehensive, stable, and sustainable development (Shenzhen book 2014).

From 2014 onward, Shenzhen has been taking steps to realize internationalization, marketization, and legalization and to change its modes of economic development, with a central element in this being the development of the Qianhai strategic platform (Shenzhen Government Online 2015), advocating green and clean transport modes with an eye toward protecting the environment. The aim in Qianhai is to build a sustainable, low-carbon, and intelligent urban district that connects with the world via fiber, wi-fi systems, and intelligent urban control systems (Invest in Shenzhen 2014).

In Chongqing, various districts have been supplied with a different focus. The priority for the Chongqing Northeast Ecological Conservation and Development Area and the Chongqing Southeast Ecological Protection and Development Area is ecological protection and conservation. Focuses for these two areas are also environmental protection, developing an eco-economy, and conserving the water in the Three Gorges reservoir area (International Daily 2013). Bishan District in Chongqing is being developed and promoted as an environmentally friendly district that is paying careful attention to environmental protection:

> We do this in order to avoid the smog, pollution, and environmental problems that cities like Beijing have experienced. (Government official 8, 2014)

Multidimensionality in Emerging Global Cities

Over the years, various scholars have been critical of the focus on economic elements that has infused place-branding research and practice, and have called for a more multidimensional logic, including also social, cultural, political, and other elements (e.g., Mommaas 2002; Kavaratzis 2008; Therkelsen et al. 2010; Van Ham 2008). Literature on global cities has similarly been permeated by a focus on economic and financial elements, and has not paid sufficient attention to other dimensions, such as culture, livability, and the environment. In emerging global cities in China, a multidimensional logic is apparent in urban development and branding strategies. The focus on economy and finance is still predominant; yet livability, culture, and the environment are becoming increasingly central.

The various dimensions (economic, social, cultural, and environmental) at play in urban development and branding strategies for emerging global

cities in China are very much intertwined, something that has been elaborated by other scholars. Place, culture, and the economy have been described as symbiotic (Scott 2000; Vanolo 2008), and place brands have been termed social constructs with both social and political implications (Freire 2005). The promotion of world-renowned sites has also been depicted as permeated by a strong social *and* political element (Kavoura 2012). The social and economic dimensions go hand in hand, as local authorities recognize that more money ought to be invested in improving quality of life, and at the same time, improving the city's attractiveness with regard to business, new immigrants, and investments (Avraham 2004). Furthermore, it has been stated that place-branding should be part of long-term economic and social development (Zhang and Zhao 2009). Integrated place-branding (Kalandides 2011) incorporates economic relations, cultural exchange, and people's lives, and as such can be interpreted as an attempt to integrate a multidimensional logic in place-branding.

Various types of events, such as the Olympic Games, World Expositions, conferences, business events, and cultural exhibitions (Hiller 2000) can also be regarded as examples of place-branding activities that incorporate various elements: economic, social, cultural, environmental, and political. Emerging global cities in China, such as the five analyzed in this chapter, engage in arranging various events. Some examples include the Summer Olympics in Beijing 2008 and the upcoming Winter Olympics in the same city; the World Expo 2010 in Shanghai; and the Global Fortune Forum 2012 in Chengdu. These mega-events have been multifaceted in that they have focused on boosting the economy, caring for the environment, showcasing Chinese culture, and/or creating a livable city for residents.

In this chapter, it has been proposed that multidimensionality, and hence being a center of not only economy and finance but of multiple elements (such as those pertaining to culture, social factors, and the environment) increasingly defines emerging global cities in China, as well as tomorrow's global cities. Sassen (2001, p. 6) focused on global cities' practice of global control and aimed to displace the focus of attention on the power of large corporations over governments and economies. By doing so she opened the way for a broader analysis of global cities, incorporating a wider spectrum than the power of large corporations. This chapter has aimed to build further, and also to incorporate other dimensions in the conceptualization of global cities.

Kavaratzis (2005, p. 329) has stated that: "cities, regions and countries all over the world are faced with the effects that economic and cultural

globalization, and other major trends pose to the environment that these places operate in, and are challenged by changes in their economic, cultural and social mosaic." This can be regarded as especially prevalent in emerging global cities in China, exemplified by the five cities analyzed in this chapter, due to the speed of development in the cities, their vast size, and the great challenges that they face.

Urban development and branding strategies for emerging global cities is an area of research that will require continued attention in years to come. In further research, it would be interesting to study the role that internal audiences such as residents play in urban development and place-branding in emerging global cities. It would also be pertinent to analyze political elements influencing emerging global cities in their development and branding, and in connection elaborate on concepts such as power and ideology.

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CHAPTER 8

Housing Challenges in Chinese Cities Under Urbanization

Xiulian Ma

Introduction

China has been enjoying unprecedentedly fast economic development since its reform and opening-up in 1978, with an average annual GDP increase of nearly 10% for three decades. Meanwhile, rapid urbanization has also taken place, with the urbanization rate going up from 17.92% in 1978 to 54.77% in 2014, and correspondingly, with the urban population increasing by 577 million (from 172 million in 1978 to 7.49 million in 2014). How to house such a hugely increased urban population has become one of the primary challenges for China's urbanization.

Any attempted solution is saddled with the legacy of a planned economy. After the People's Republic of China was founded in 1949, the Chinese government adopted a socialist planned economy, which not only led to economic poverty but also caused shrinking housing supply, declining living space per capita, as well as deteriorating urban living condition resulting from a decommodified housing system. Urban living space per capita decreased from 4.5 square meters around 1949 to 3.6 square meters in 1978. The total urban residential area was only 1.4 billion square meters, triggering a housing shortage for 8.69 million urban households, which accounted for 47.5% of the total urban households (Ye et al. 2006, p. 51).

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Therefore, China's reform and opening-up in 1978 also started with housing commodification. Housing supply has turned from welfare-oriented direct allocation under the planned economy into commercial exchange based on monetary solvency and price under a market economy. Thereby, housing development is able to complete its reproduction and expanded reproduction process i.e., recouping the investment (with profits) and then produce more houses. However, during the process, an affordable housing system in which social and commercial attributes of housing were balanced and prices were comparable to urban residents' income had progressively given way to a complete commodification. As result, investment in the real estate industry had been growing nearly twice as fast as the increase of GDP. Consequently, a residual welfare system for urban housing came into being where government provided support for a small portion of residents, while the majority has to be satisfied (or incompletely satisfied) through the market.

According to the Sixth Population Census, which provides relatively comprehensive and up-to-date data for housing in China, the current housing stock in urban areas has reached 18.84 billion square meters and per capita urban living space is 31.93 square meters. This means an increase of 13.5 times and 8.7 times, respectively, compared with 1978 (Liu et al. 2013), indicating abundant housing supply and greatly improved living conditions.

However, China has also become a country with one of the highest house price-to-income ratios in the world. It is facing various challenges, including the unsatisfied housing demands of 128 million migrant workers (according to the census of 2010), young people, urban low-income groups, and other sandwich-class groups. Urban villages, "ant clans," "rat tribes," group renting, as well as cramped living space and high housing expenditure burdens are the reality of the difficult living situation for so many.

In order to clearly illustrate the history of housing system reform in China, as well as current urban living conditions, this chapter is divided into three sections. First, it introduces housing system reform and the formation of a residual welfare model in China. Second, it describes the current living situation and existing problems in China. Third, it concludes with some analysis as well as looking at future challenges.

Housing Reform After 1978

After the founding of People's Republic of China, as part of the newly established planned economy system, an in-kind welfare-oriented supply system of housing was implemented in urban China. Houses were built by work units, funded primarily through the budget of the central government

and then were directly allocated to employees for free according to certain standards. Only a nominal rent was charged, which accounted for less than 1% of urban household incomes and would not even cover maintenance and administrative costs. Moreover, such houses were banned from entering market; in fact, there was no market mechanism in the process from funding, building, and allocation to management and administration. Decommodification discourages reproduction (which means, to recoup the investment and put into building more houses), leading to the consistent shrinking of housing construction in urban areas. For three decades until the opening-up, the annual build of new houses amounted to less than 50 million square meters, and the total allocated funds for housing development was only 1.8 billion yuan per year. At the same time, the residential housing construction fund was only a 7.4% share of the total capital construction investment and only 1.5% of gross national product (GNP). Consequently, there was a severe housing shortage in the city, and per capita living area even declined 20% within 30 years. This finally turned out to be a vital driving force of market-oriented reform after 1978.

Public Housing Reform (1978–July 1998)

The first period of housing reform ranges from 1978 to July 1998, when the Chinese central government issued the mandate to completely stop in-kind housing distribution. The primary objective during this period was to gradually restore the commercial attribute of housing, progressively returning rent and sale prices of public housing to cost level and even market price levels. At the same time, commercial housing started to develop. On these two bases, the conceptualization of developing a housing system predominantly emphasizing affordability started to emerge.

Rent Reform and Public Housing Sales

The commodification of public housing went through three phases, namely pilot sales of housing (1979–1985), rent increases and subsidies (1986–1990), and sale facilitating renting (1991–1994).

During 1979–1985, China experimented the pilot sales of public housing but only to find that new public housing could not be sold at cost price or even a third of the cost. This was because rent and purchasing prices were imbalanced, and residents lacked motivation to purchase houses when the low-rent system of old public housing was unchanged. Therefore, the ensuing reforms started to focus on both the reform of the low-rent system and the sale of public housing.

Firstly, the government addressed rent increases and subsidies (1986–1990). Funds allocation system was reformed. The formerly implicit subsidies were explicitly incorporated into employees' salaries. At the same time, the rent situation was gradually improved to three levels consecutively: (1) simple reproduction level by 1995, with rent including expenses for maintenance, administration, and depreciation; (2) cost renting level, with the rent now including the former three expenses plus investment interest and property tax, and accounting for 15% of the household income for an income-earning couple; (3) the commercial renting level in the long run, where rent includes the former five items plus royalties, insurance premiums, and profit.

The next phase, commencing in 1991, entailed the sale of public housing. Purchase of public housing at different prices by urban residents was encouraged: limited property rights were granted if purchased at standard price, while full property rights were granted if purchased at market price. The standard price included construction costs, compensation for land expropriation, and demolition (comparable to the rent at single production level as the previous paragraph specified). The price of a new flat of 56 square meters should be three times the annual income of a dual-career couple in 1994.[1] According to the reform plan, housing prices should gradually increase from standard price to cost price, with the latter including seven components, that is: (1) land expropriation and demolition, (2) survey, design, and preliminary engineering expenses, (3) construction, (4) complex infrastructure construction expenses, (5) administrative fees, (6) loan interest and (7) tax. Put together, this is equivalent to cost rent of public housing. To facilitate the sale of public housing, China established a housing accumulation fund in 1994, requiring work units and individuals to deposit into an individual account no less than 5% of their average monthly wage of the preceding year. Employees might make use of the account to purchase, construct, renovate, or decorate houses.

Development of Commercial Housing

Meanwhile, commercial housing development also took initial steps forward. In 1984, "Dong Hu Li Yuan," China's first commercial residential complex located in Shenzhen, with a total of 574 commercial householders, was completed. However, large-scale development of commercial housing did not emerge until the land system reforms in 1988. China revised its Constitution and Land Administration Law and issued "Interim Regulations of the People's Republic of China Concerning the Assignment and Transfer of the Use Right of the State-Owned Land in the Urban Areas" in 1990.

Compensatory transfer of land use rights within certain time limits was introduced, on the premise that urban land was still owned by the state, represented by the State Council. The maximum term allowed for the transfer of residential land use rights was 70 years. Reform of the land system unleashed the potential of commercial housing development. China's urban housing investment increased from 52.3 billion yuan in 1991 to 230.9 billion yuan in 1994, among which the proportion of commercial housing investment went up from 27% to 60%, although commercial housing only accounted for 37% for total space newly built (Wang and Murrie 1999, p. 1480; Real Estate Management Department of the Ministry of Construction 1995).

From the very beginning, the cost of commercial housing development was much more expensive than non-commercial housing, for reasons such as the extra costs of land. The price of commercial housing was far outside the income range of ordinary families. Wang and Murrie (1999) found that an apartment of moderate standard (70 square meters, inside the third ring road, in a tower block with a lift) would cost a couple the equivalent of 35 years of income. Therefore, less than half of newly built commercial housing was sold directly to employees; the main purchasers were petty traders, private proprietors, private consultants with high salaries, and employees of foreign enterprises and units. In 1990 and 1993, 85% and 75% of commercial housing was sold to work units respectively (Shanghai Statistical Bureau 1994, p. 66).

The Development of an Affordable Housing System

Since a lot of households were excluded from the public housing system and work units, and meanwhile could not afford commercial housing either, the Chinese government proposed the concept of economic-comfortable housing (*Jingshifang*) and an affordable-oriented housing system. "Decision of the State Council on Deeply Advancing Housing System Reform in Urban Areas" in July 1994 put forward for the first time the idea of establishing a housing system that provides economic-comfortable housing for low- and middle-income households and commercial housing for high-income households. According to this plan, economic-comfortable housing should account for 20% of the total housing developed by real estate developers annually.

Such economic-comfortable housing was sold at government-guided prices determined in accordance with the principle of "cost compensation" and "marginal profit." The land was supplied through allocations. The cost of affordable housing included seven components: (1) land expropriation, (2) survey, design, and preliminary engineering expenses, (3) construction,

(4) infrastructure, (5) administrative fees, (6) loan interests, and (7) tax and profit margin (less than 3%). Such a price was equivalent to public housing sold at cost price (plus 3% profit). For example, for public housing, the price of a flat of 56 square meters should be three times the average family income of a dual-earner couple in 1994; for economic-comfortable housing, for a flat of 60 square meters, the average price to income ratio is four. Therefore, public housing is one kind of economic-comfortable housing, though only enjoyed by those that are employed in work units.

Complete Commodification (July 1998–July 2007)

The second period of housing reform ranges from the cessation of in-kind housing distribution in July 1998 to the introduction of "Suggestions of the State Council on Solving Housing Difficulties of Urban Low-income Families" in August 2007. During this period, housing in urban China was completely commodified, as characterized by (1) the complete cessation of housing distribution in kind and the introduction of monetized market distribution; (2) commercial housing replacing affordable housing to become the predominant form of housing supply in China, while the real estate industry had become of the engine of China's national economic growth; (3) soaring house prices.

Monetization of Housing

However, in order to strengthen domestic demand after the Asian Financial Crisis in 1997, the State Council issued its "Circular of the State Council on Further Deepening the Urban Housing System Reform and Accelerating Housing Construction" (No. 23 [1998], the State Council). Therein, it decided to "completely cease the housing distribution in kind and gradually establish monetized housing allocation; speed up housing development and encourage the real estate industry to become a new economic growth pillar." Decree No. 23 completely put an end to public housing reform, pushing Chinese housing provision from being a dual system (welfare plus market) to a singular system of the market. Yet, it still strived to uphold to the affordable-oriented housing provision system by offering a differentiated supply policy for households with different incomes. That is, the lowest-income households rent the cheapest rental (*lianzufang*) flats provided by the government or their work unit; the low- and middle-income households purchase economic-comfortable housing; high-income households buy or rent commercial housing at market price. However, according to some estimations, while "lowest-income households"

and "high-income households" merely accounted for 5% and 10% of urban households respectively (Shen 2006), economic-comfortable housing has never exceeded 20% of the overall space constructed whether before or after the cessation of housing distribution in kind (Ye et al. 2006, p. 54). Hence, it was unrealistic to support most families through economic-comfortable housing (Fig. 8.1).

The Real Estate Industry as Growth Engine

The first national conference on the real estate industry was held in Beijing in 2003, proposing for the first time that real estate had emerged as a pillar in China's national economy. The "Circular of the State Council on Promoting the Continuous and Healthy Development of the Real Estate Markets" was issued subsequently (No. 18 [2003] of the State Council). The role of the real estate industry in economic development was repositioned and the original development of the housing system was revised in decree No. 18, namely, from "establish and refine a multilevel urban housing supply system with economic-comfortable housing as the mainstay" to "most families gradually purchase or rent ordinary commercial houses." The circular required that "effective measures shall be adopted to accelerate development of regular commercial housing and enhance its provision proportion in market." At the same time, affordable housing was repositioned to be "safeguard to commercial houses."

After the introduction of Decree No. 18, housing demands for most families should be satisfied through the commercial housing market. Thus, China's housing policy shifted from a welfare-oriented housing system to a market system.

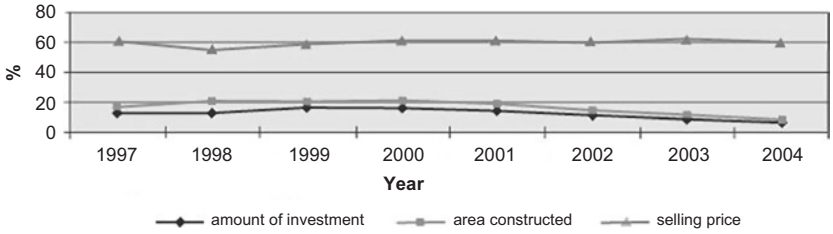

Fig. 8.1 Amount of investment, area constructed, and selling price of affordable housing
Source: Ye et al. 2006, p. 54

Soaring Housing Prices and Responsive Regulation

Fung et al. (2010) argue that China had experienced the largest real estate craze in the world from 1998 to 2007. The annual growth rate of real estate investment was 22.1% (and even more than 30% from 2003 to 2007), twice that of GDP (9.4%). The share of real estate investment to total fixed-asset investment has been going up steadily since 1998 (18.78% in 2004, 20.98% in 2005, and 22.93% in the first quarter of 2006), at a rate far beyond the international standard of 10%. Additionally, the internationally acknowledged share of real estate investment in GDP should be no more than 5%, but China's has reached 9.6% since 2004 (Liu Junmin 2006). The real estate industry had become a pillar of national economy as desired.

As a result, housing prices soared. As Fig. 8.2 shows, the constant quality price index for newly built private housing in 35 major Chinese cities depicted the escalation of housing prices during the period (Wu et al. 2010). After mild growth during 2000–2002, housing prices in China increased rapidly from 2003 to 2007, and by the end of 2007 the index reached 1.75 times that of the year 2000. News coverage and anecdotes told of more outrageous growth, such as, "Housing price soaring from less than 2000 to more than 10000 within ten years in Dalian."[2]

Exploding housing prices led to a series of responsive regulation measures. The General Office of the State Council issued a "Circular on Effectively Stabilizing House Prices," presenting eight suggestions ("Guo Ba Tiao") to stabilize housing prices in March 2005. A State Council executive meeting presided by Premier Wen Jiabao on April 27 of that year further strengthened macro-regulation and proposed eight measures to regulate the real estate market ("new Guo Ba Tiao"). In May 2005, the State Council once again introduced six measures to stabilize housing prices and rectify the real estate market ("Guo Liu Tiao"). Subsequently, the government continued to take various regulatory measures, though in vain, to halt the soaring real estate price.

Rebuilding the Low-Income Housing System (2007– Now)

In light of increasingly pronounced housing difficulty for low-income households due to the rocketing housing prices, in 2007, the State Council introduced "Suggestions on Solving Difficulties of Urban Low-income Families in Housing" (No. 24 [2007] of the State Council). This marked a return to developing low-income housing under housing marketization.

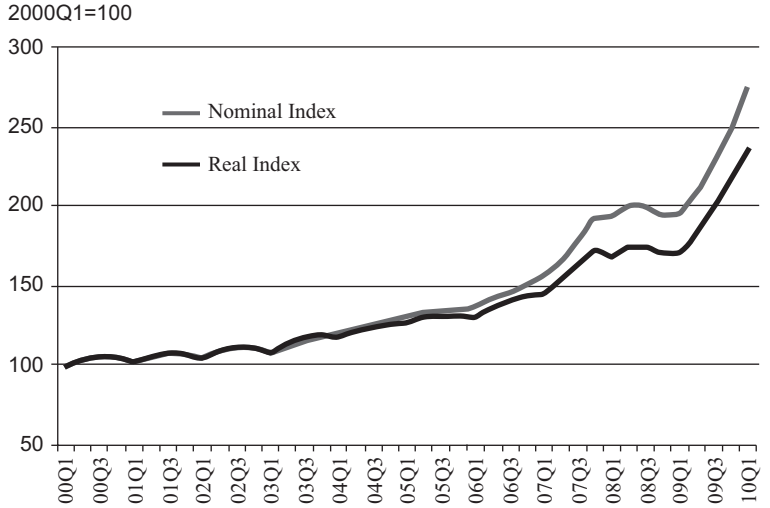

Fig. 8.2 Constant quality price index for newly built private housing in 35 major Chinese cities, 2000(1)–2010(1)

Decree No. 24 required that "the fundamental purpose of urban housing system reform and the development of real estate industry shall always be to improve people's living conditions." The decree required that the annual supply of land for low-income homes (including cheap-rental housing and economic-comfortable housing) and price-and-size capped commercial housing shall account for no less than 70% of total residential land supply. Decree No. 24 marked a milestone in China's housing reform, indicating a shift of the government's regulatory ideas to establish a multilevel housing supply system by supplementing low-income housing to the market provision.

Rebuilding the Low-Income Housing System

There have been three forms of low-income housing involved in rebuilding the low-income housing system, namely economic-comfortable housing, cheap-rental housing, and price-capped housing. Among them, cheap-rental housing was designed for the lowest-income families at the very beginning but gradually expanded to also accommodate low-income families having housing difficulty. It was introduced

in 1998 and renters only had to pay nominal rent. The economic-comfortable housing was targeted at the next tier of income group. It was created earliest but had experienced a transformation from leading the housing system (1994) to being "provided for medium-low-income families with housing difficulty" (2007). Price-capped housing targeted an even higher income group. It originated in a temporary move to restrain high housing prices in 2006 as "size-and-price-limited" commercial housing. Gradually, it developed to be owner-occupied low-income housing for middle- (and below) income urban households. Apart from the three forms above, China launched public rental housing in 2010. The purpose of this was to meet the demands of the "sandwich groups" who cannot afford commercial housing nor qualified for price-capped housing, economic-comfortable housing and cheap-rental housing either. These groups mainly include "the middle- and low-income urban families having difficulty in housing, new employees without houses, and migrant workers with stable jobs in urban areas."

Since the beginning of the 12th Five-Year Plan (2011–2015), two changes have taken place for the low-income housing system. One is the expansion of scale: 36 million low-income houses would be built during the 12th Five-Year Plan on the basis of 10 million units already built from 2008 to 2010. As a result, the share of low-income housing will reach 20% by the end of this period. The other is to push rental as the main form of low-income housing. The 12th Five-Year Plan explicitly proposed that "*We will implement the low-rent housing system for urban low-income families with housing difficulty, and adopt the public rental housing for lower-middle-income families. At the same time, we will adopt the system that combines lease and purchase of commodity housing for middle and high-income families*". Subsequently, the "12th Five-Year Plan for National System of Basic Public Services" (2012) laid out that the government would "*focus on the development of public rental housing, and gradually make it the main form of affordable housing and unify it with low-rental housing under overall arrangements.*" With the unification of public rental housing and cheap-rental housing and the withdrawal of owner-occupied affordable housing (such as economic-comfortable housing and price-capped housing), public rental housing has become the main form of low-income housing in China.

Establishment of the Residual Housing System

So far, China has gradually established a residual welfare system for housing. In as early as 2008, scholars pointed out the residual welfare nature of China's housing system. For example, Zhu Yapeng (2008) argues that "through 30 years' reform, China's housing system has been turned into a residual welfare system from one of welfare-oriented universal distribution based on the work unit." Under the residual welfare system, the private market plays the leading role and individuals and families take major responsibility. The government only plays a complementary role and bears the safety-net responsibilities for low-income urban families and vulnerable groups through supplementing the market system. With respect to the Chinese housing policy specifically, housing demands for high-income families are satisfied through purchasing (and renting) commercial housing, while the needs of middle-income families and those below are fulfilled in sequence through various forms of low-income housing (including price-capped housing, economic-comfortable housing, and cheap-rental housing).

During the 12th Five-Year Plan, China's housing system assumed a more residual welfare form. Now there was the public rental housing for urban low-income and lower-middle-income families with housing difficulties, and commercial housing through renting or purchasing for middle- and high-income families. China's housing provision is divided into market supply and government supply (which claimed to be 20%). In spite of this claimed scale, low-income housing has obviously retreated, from the coexistence of owner-occupied and rental before the 12th Five-Year Plan to only one form of rental. China's housing system has thus consolidated into a more functional residual welfare system (Table 8.1).

Table 8.1 China's housing provision before and after the 12th Five-Year Plan

Household Income	*After*	*Before*
Middle and high	Commercial housing (buy or rent)	Commercial housing (buy or rent)
Lower middle	Public rental housing	Price-capped housing
		Public rental housing
Low		Economic-comfortable housing
		Cheap-rent housing

Urban Living Conditions: Achievements and Problems

Great Improvement in Housing Conditions

The commodification of housing leads to sharp increases of investment in real estate in China. Figure 8.3 compares real estate investment (total amount and growth rate) and GDP growth. Real estate investment increase was significantly faster than the rate of GDP growth, and was 1.7–2.5 times during 1998–2013.

One result of this huge investment in real estate is the great improvement of China's urban housing conditions. Data from the Sixth Population Census (2010) shows that urban housing stock has reached 18.84 billion square meters, an increase of 13.5 times compared with that in 1978. Per capita living space reached 31.93 square meters in 2010, compared with only 3.6 square meters in 1978, marking an 8.7-times growth. The Sixth Population Census also shows that housing ownership rates in urban China have reached 78.95%, exceeding that of the USA (66.9%, 2010), which enjoys one of the highest housing ownership rates in developed countries. This indicates the Chinese people's strong preference for owning their own houses. The degree of housing marketization has also been significantly boosted since China's market-oriented policy was designed in 1998, and the market supply of urban housing reached 76.5% in 2010. With respect to housing quality, 90.04% of family housing is equipped with kitchens, 84.39% with toilets, 79.84% with gas and electricity as cooking fuels, 86.5% with running water, 71.8% with bathing facilities—all reflecting relatively high quality of housing (Liu et al. 2013).

Higher House Price-to-Income Ratio

However, housing affordability has become problematic. Fung et al. (2010, p. 76) point out that because house price increases faster than income (especially since 2003), house price-to-income ratio has reached 11 in 2006, up from 9.79 in 1997. Yao (2011, p. 27) finds that housing price-to-income ratio has increased on average by 1.52 times, from 11.4 in 2000 to 17.3 during 2007–2009. The 20% lowest-income households face a worse situation. The housing price-to-income ratio rise was as high as 19.1 in 2000, but reached 35 during 2007–2009, having increased by 1.83 times compared with 2000 (Table 8.2).

Fig. 8.3 Real estate investment and GDP (1996–2014)

Table 8.2 House price-to-income ratio in Beijing (2000–2009, by income group)

Year	*Mean*	*Bottom 20%*	*20–40%*	*40–60%*	*60–80%*	*Top 20%*
2000	11.4	19.1	15.4	12.2	10.6	7.3
2001	10.9	18.2	14.2	11.4	9.8	6.8
2002	9.6	19.7	13.3	10.5	8.4	5.1
2003	8.6	14.1	11.5	9.2	7.4	4.8
2004	8.4	16.0	11.2	9.2	7.1	4.7
2005	7.9	14.7	10.8	8.7	6.9	4.5
2006	8.6	15.9	11.5	9.4	7.7	5.2
2007	14.9	28.3	20.2	15.9	12.9	8.7
2008	15.7	32.8	22.4	18.4	14.1	9.6
2009	21.4	44.0	28.8	22.4	19.4	12.6

Source: Author's (Yao 2011, p. 27) calculations based on data from the *Beijing Statistics Yearbook* (2001–2010)

Because of the lack of data comparing across counties/cities, we use data from Numbeo to make up for this deficiency. Numbeo is the world's largest user-contributed database; it provides a consumer price index, perceived crime index, health care quality, and other statistical indicators. Numbeo data rank China as one of the countries with the highest housing price-to-income ratio in the world. A number of Chinese mega-cities, such as Beijing, Shanghai, Guangzhou, and Shenzhen, frequently appeared among the list of the top ten most expensive cities in the world (Table 8.3).[3]

Table 8.3 Rank of China and Chinese cities in terms of housing price-to-income ratio

Year	*China's country ranking*		*Chinese city ranking among top ten*		
	Rank	*P/I ratio*	*Chinese cities*	*Rank*	*P/I ratio*
2009	15/54	15.01	Beijing	6	22.29
2010	11/68	17.13	Beijing	10	22.29
2011	6/104	29.59	Shanghai	6	40.26
			Shenzhen	8	39.29
2012	3/106	29.78	Shenzhen	3	41.15
			Shanghai	10	30.36
2013	4/103	25	Shenzhen	3	35.14
			Beijing	5	30.13
			Guangzhou	6	28.72
			Shanghai	8	28.41
2014	5/115	26.13	Beijing	5	34.38
			Shanghai	9	28.57
2015	6/121	26.42	Beijing	6	33.06

Data Source: Numbeo

Housing Poverty by Groups

Higher housing price-to-income ratio results in the exposure of middle-class families to high housing costs, burdening them with mortgage payments or cramped living conditions. At the same time, it also leads to prevalent housing difficulties for low-income groups. The housing poverty issue is particularly prominent among floating populations, especially for two groups: migrant workers and the youth population. Correspondingly, residential poverty referred to as "ant clan" (*Yi Zu*), "rat tribe" (*Shu Zu*), and group renting (*Qun Zu*) have emerged.

Housing Problems for Migrant Workers

According to census data, urban populations in China increased by 207 million, from 495 million in 2000 to 666 million in 2010, among which natural growth accounts for 11% (23 million), and increase due to city expansion and migration with *hukou* 27% (56 million), while increase without *hukou* (i.e., migrant workers) is 62% (128 million). Accounting for 19.2% of the total population in 2010, migrant workers have become a vital part of urban populations.

Migrant workers are usually subject to discrimination in various aspects, including employment (with lower pay than urban residents even for the same work), working environment (bad safety conditions, excessively long working hours), and a lack of social security (employment injury insurance, unemployment insurance, retirement security, and vocational retraining). Their housing needs are usually met via market or through some informal means, and their overall living conditions tend to be bad due to low wages and inaccessibility of government-provided urban low-income housing.

An investigation into the housing of migrant workers in Zhengzhou (Chen and Xu 2013) discovers that migrant workers rarely buy a house (7.4%) or rent an apartment independently (9.6%). They usually rent apartment with colleagues, county fellows, or family members (7.4%), or live in dorms (28%), shacks (7.4%) or the homes of relatives (3.7%). The per capita living space for two thirds of the migrant workers interviewed is below 10 square meters, much lower than national or city (Zhengzhou) average (31.93 and 26.08 square meters, respectively). The homeownership rate of migrant workers in the city (7.4%) is less than one tenth that of urban residents (78.9%). Moreover, most dorms are not equipped with basic facilities for everyday life (for example, cooking is forbidden). In some poor rental housing, migrant workers cook with charcoal and share a toilet and bathroom, but sometimes even toilets and bathrooms are not equipped. The condition of temporary shelters is even worse, with migrant workers sleeping on the floor in dozens in rooms as large as 30 square meters, let alone with any ancillary facilities.

Ant Clans

Housing problems for the young in big cities have become pronounced as well. A 2013 survey of living conditions of the young in Beijing shows that up to 76.4% do not live in owner-occupied houses, and their average monthly rent is 1993.4 yuan, about 37.1% of their monthly household income per capita. Such rent becomes a great burden (Lian Si 2014).

The housing problems for young college graduates have also grown more pronounced. China has expanded university enrollment since 1999, with the plan to increase college enrollment to 15% of all college-age people. In the past decade (2005–2014), 5.8 million college students graduate in China annually. A large proportion of them choose to stay in big cities, lured by the opportunities and lifestyle there, even though they do not have local *hukou* or stable jobs. There are about 4 million floating young people aged 18–35 without *hukou* but who have been living in

Beijing for over half a year. Of them, 22% (900,000) have a college degree (Lu Yijie et al. 2015). The "ant clan" phenomenon has emerged among these floating graduates (Lian Si 2009), with the term depicting their condition of having low incomes, living in crowds, and being unemployed or semi-unemployed. As the survey shows, ant clans in Beijing mainly congregate in urban–rural interfaces or inner suburbs with average per capita rent of 377 yuan and per capita residential floor space less than 10 square meters. Ant clans are regarded as the fourth vulnerable group after farmers, migrant workers, and laid-off urban workers.

The Rat Tribe and Group Renting

Apart from urban villages, dormitories, and shacks, air-raid defense shelters underground and group renting in high buildings are two other ways to solve housing difficulties for urban floating populations, especially for migrant workers and new college graduates.

The rat tribe phenomenon is especially common in Beijing, where basements are abundant. Of the estimated 7.7 million migrants living in Beijing, nearly a fifth live either at their workplace or underground, according to state news agency Xinhua, Ruters report pointed out.[4]

Zig-zagging left and right through a maze of dark, narrow corridors in a high-rise's basement, 35-year-old kitchen worker Hu has joined the many thousands of Chinese fleeing fast-rising property prices by heading down—down underground.

Hu lives here beneath an affluent downtown apartment building, in a windowless, 4 square-meter (43 square-foot) apartment with his wife. For 400 yuan ($65.85) a month in rent, there's no air-conditioning, the only suggestion of heat is a pipe snaking through to deliver gas to the apartments above and the bathroom is a fetid, shared toilet down the hall.

"Procedures of Beijing Municipality on the Administration of Safe Use of Civil Defense Projects and Ordinary Basements" (Decree of Beijing Municipal People's Government, No. 236) issued in July 2011 required that uninhabited basements be banned from being rented, set up as hotels, kindergartens, or hospitals, and so forth. Obviously, this has failed to get rid of basement-dwellers and rat tribes.

The new underprivileged population in Shanghai used to live in old houses in the inner city. For instance, 71.6% of floating population in the low-end service industry in Luwan District inhabit older houses built

before 1949 and the monthly rent for 66.9% of them is below 200 yuan. However, as these old houses are demolished in urban renewal, group renting has begun to be popular because Shanghai, by tradition, has fewer basements and urban villages. "Group renting" refers to the practice of dividing apartments into smaller rooms or even cubicles so as to recruit more tenants.[5] "I saw for myself that a flat of about 160 or 170 m^2 was divided into 14 rooms. A household with four people of three generations lived in the smallest room which can only accommodate one bed. The son and daughter-in-law slept in the daytime, while the old mother and her grandson slept at night as they young couple are on night shift." So recounted Fang Suoying, director of the Owners' Committee at Zhongyuan Liangwancheng complex in Shanghai.[6] Shanghai has launched a campaign against group renting for safety reasons, and this became an administrative action at the national level in 2011. "Administrative Measures for Commodity House Leasing," revised in 2011, regulates that "*Where a house is leased, the originally designed room shall be the minimum unit for leasing, and the average building area for lease shall not be less than the minimum standard determined by the local government.*" Subsequently, Shanghai and Beijing introduced regulations that minimum living space per capita for lease "*shall be no less than 5 m^2 and the maximum number for each room shall be no more than 2 persons.*" However, the group renting phenomenon continues in spite of repeated prohibition.

Prospects and Future Challenges

Reflection on the Institutional Coalitions

A paradox can be observed in market-oriented housing reform in China during the process of urbanization. On one hand, huge housing stocks have been accumulated, and urban living conditions are greatly improved due to the boom in the real estate industry. On the other hand, there is a huge gap between housing prices and income, and housing demands for various urban groups (including 180 million migrant workers, young college graduates, and other sandwich groups) are unmet. These facts reveal the negative consequences of commodification. Thanks to commodification, not only simple reproduction but also the expanded reproduction becomes feasible. Stimulated by the high profits to be made in housing, investment flows to the real estate industry at a pace double of that of GDP. The concept of affordability has been abandoned during the reform process, which originally designed an affordable housing system with a

housing price-to-income ratio of 3–4. This gradually gave way to complete commodification of housing and land and their profit maximization. Although Chinese housing policy has been returning to its affordability stand since 2007, it still based on the established ground of market provision as the predominant form. The newly established low-income housing system is merely designed to improve and supplement the already existing residual welfare system. This, to some degree, proves the validity of Harloe's (1995) argument in *People's Home*—namely, when housing can be commodified/residualized, it will not be decommodified or provided for a larger mass.

Vital institutions have shaped the formation of China's market-oriented housing system. They represent a coalition among governments (local government in particular), real estate developers, and banks, reaping huge profits from the monopolized supply of urban housing and land. Among them, governments monopolize the urban land supply. The local government monopolizes the primary land market through reserving land via land banking and depriving the provision rights of others (such as work units and rural villages), so as to become the sole land provider for urban commercial housing development. The land bidding, auction, and listing system adopted around 2000, as well as the aforementioned supply of commercial and residential land, has also significantly boosted land price. All these practices are intended to increase the land revenues flowing to the government, and indeed, the sale of land contributes up to 30–50% of local government revenues (Wang 2012). At the same time, real estate developers monopolize commercial housing supply, and they were conferred this privilege by Decree No.18 in 2003, while alternatives such as self-built, cooperative housing or working units raising fund to build houses were all banned. Finally, the banks provide capital for both demand and supply sides. Real estate loans have accounted for more than 50% of banks' credit business. The governments-developers-bankers coalition is the foundation on which China's residual housing system has taken form.

Future Challenges

By 2015, housing supply in China had entered an era of structural surplus, and the pressure of destocking and house price decline mounted. The clearance cycle of housing stock increased to 47.8 months, and the inventory level has reached a historical high.[7] The "Annual Report on Housing

Development" released by National Academy of Economic Strategy affiliated with the Chinese Academy of Social Sciences in 2015 provides further evidence in this direction. It argues that the growth rate of real estate investment plunged in 2015, contributing almost nothing to economic development in China. At the same time, the property sector faced great pressure to destock; the total surplus commercial housing in stock hit a record high of 2.1 billion square meters, which will need 23–24 months to clear.[8] The actual housing surplus may be much more serious than the released figures, because national statistics only include completed commercial housing that is on sale, which means the exclusion of huge amounts of houses that are under construction or completed but have not yet gone into the sale process.

Ironically, on the other hand, the housing problems of a large number of people remain unsolved. These problems mainly fall into two dimensions, namely, *hukou* and age, among which the housing problems of floating populations and the young are the most salient. In terms of *hukou*, on one hand, China has become a mobile country and rural–urban or urban–urban migration is now prevalent. On the other hand, the old *hukou* system still exists and the newly established low-income housing system has not gone beyond the scope of *hukou* to cover the floating populations. For economic development purpose, currently, the low-income housing system in different regions has started to include high-skilled talents in their coverage, but the housing problems of many other floating populations, especially the rural migrant workers, still remain unresolved. In terms of age dimension, the housing problem of the young has become increasingly marked. Newly entering the employment market, young people are at the first stage of their upward social mobility. They are comparatively weak in terms of their purchase power in the market where commercial housing prices are outrageously high. Besides, they have diverse demands for housing; for example, they are inclined to live in big cities and purchase houses for the sake of marriage and child-bearing.

All this results in unsatisfied demands for housing. Therefore, future institutional reform is needed. To whatever problems mentioned above, the final solution is decommodification of housing and the breaking-down of institutional coalitions among (local) governments, property developers, and banks.

Notes

1. *The Decision to Deepen the Urban Housing System* by China State Council (NO, [1994]43).
2. *Housing price soaring from less than 2000 to more than 10000 within ten years* http://news.dl.fang.com/2010-06-09/3429522.htm.
3. http://www.numbeo.com/property-investment/
4. http://www.reuters.com/article/us-china-property-basement-idUSBREA040GD20140105
5. http://www.xinhuanet.com/city/zt/csht/2.htm
6. Dorm-like apartments replace group renting (上海宿舍式公寓取代群租). Sun Xiaojing, *People's Daily*, June 3, 2014.
7. Housing Problems of third- and fourth-tier cities may result in 10-year trouble, *Anbound Economic Daily*, No.4956.
8. Total stock reached 2.1 billion sqm—The coming of structural surplus era. http://nanchong.house.sina.com.cn/news/2015-12-04/0956607836087580131954 1.shtml?wt_source%20Lnews_xwph_m03.

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PART III

Urban Governance and Informal Dynamics in the New Age

CHAPTER 9

Informality in Governing Mega Cities in China: The Example of Shenzhen

Uwe Altrock and Xiaohong Tan

Introduction: Governance, Informality, and the State in China

The economic success of the People's Republic of China has fascinated many observers since Deng Xiaoping's first set of reforms in the late 1970s. In the West, the Cold War era and its end was characterized by a premature belief that liberal market economies in democracies would serve best to trigger economic growth. Even in non-democratic states, the rise of an increasingly prosperous middle class would inevitably lead to a swelling call for democratic reforms, and thus—according to the liberal westerners' belief—one of the best strategies to promote democratic values in the world would be to support economic growth and international trade. While this hope came true in some states, it was frustrated in others that did not even achieve economic success. However, a number of states turned out to be economically successful without showing the assumed parallelism of economic success and democratic reform. China has probably been the most interesting laboratory in this respect, as many of its development trends in the late twentieth century seemed to confirm the

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belief in democratization closely accompanying economic reforms and economic growth. Nevertheless, the twenty-first century has brought about considerable evidence that the leadership of the Chinese Communist Party (CCP) by no means follows an easy western democratization path but rather it was able to reinforce the political control it had obviously given away in the first decades of reform—and yet the economic success of the country continued unabatedly. For a better understanding of this success story, one has to turn to the relation between political control and economic reform, which is much more complex than believed by some westerners. This chapter argues that the reform process, profoundly rebuilding the institutional system far beyond the economy, makes strategic use of local freedom for experimentation, intentionally widening and narrowing the leeway for informal practices besides formal control from above. With this strategy, continuous learning processes are initiated which mainstream new practices that prove useful, only temporarily loosening political control.

In the following, we focus particularly on the systematic relationship between the state and informal practices in the context of the "fragmented authoritarian state" of China (Lieberthal and Lampton 1992; Heberer and Schubert 2009; Heilmann 2011). By introducing the concept of "conceded informality," it is possible to explain why and when the Chinese state selects particular coping strategies in a wider reform context and why there is much more to observe than just a simple dichotomy of temporary tolerance versus demolition and eviction of informal settlements that one might assume from an authoritarian state.

The discussion of informality builds on the newer literature that has overcome the older distinctions between "legal" and "illegal" and between "regulated" and "unregulated" and has claimed that informality unfolds in a "deregulated" system (Roy and AlSayyad 2004; Altrock 2012). Contrary to some third-world countries where informality is often related to the absence of effective state regulation, informality in China unfolds under relative control by the party-state and is in part a coping strategy to deal with the challenges of complex societal transformations. In the course of the reform process, the Chinese party-state is forced to create a binding legal system, necessarily taking place in a reactive rather than proactive way. The transformation from a state-led system toward an economy based on private initiative and its associated reforms create inconsistencies, institutional gaps, and room for experimentation. In this context, very authoritarian and formalized practices coexist with forms of self-organization, autonomy, and informal practices (cf. Fewsmith 2000; Zheng 2010).

They depend on policy implementation deficiencies, individual political leadership qualities, informal network structures, and unregulated new land use phenomena, and the limited regulatory power of the formalized environment.

For the analysis, we draw attention to urban regeneration policies and especially the upgrading of *chengzhongcun*, that is urban villages that can be defined as socio-spatial enclaves of formerly natural villages having been surrounded by the horizontally expanding mega-cities. Urban villages serve as cheap residential areas for floating and low-income populations. Due to their legal situation as rural entities granting certain rights of self-administration, these enclaves were traditionally not part of municipal urban planning and do not fit into the surrounding urban fabric (Wu et al. 2013). Step by step, parts of the former village territory is integrated into the city by expropriating and developing agricultural land and by restructuring the physical fabric of the urban villages themselves (Altrock 2009, 2011; Altrock and Schoon 2011; Schoon and Altrock 2014). Urban villages share a lot of features that are often found in so-called informal settlements that have been widely discussed in the literature on developing countries, especially when it comes to the analysis of shanty towns, squatter settlements, and the like (Wu et al. 2013). They are characterized by very densely built-up smaller high-rise buildings, often called "kissing buildings" as the alleys that separate them leave hardly any public space and hardly let in any natural light. The high concentration of temporary, low-income residents makes and the general living conditions in them have made such places an early target for social stigmatization and for urban renewal ideas.

Urban Growth and the Evolution of the Urban Regeneration of Shenzhen

Shenzhen: A Laboratory of the Reform Process

The municipality of Shenzhen neighboring Hong Kong can be considered as the epitome of the rapidly growing Chinese coastal mega-city, which has emerged as a result of the reform process initiated in the late 1970s by Deng Xiaoping (Zacharias and Tang 2010). Once a sparsely populated rural backwater, its development took off when it was declared one of the first special economic zones in China. This special status allowed for the experimental application of a number of reforms. The international orientation of Shenzhen has also made it a showcase for the sophistication of planning and

governance reforms (Ng 2005; Ng and Xu 2014). Policy innovations have always represented the will of the government to proactively tackle the phenomenon of the rapid urbanization that accompanied its economic success. Therefore, the story of planning in Shenzhen is often told by presenting the series of master plans trying to regulate its urban growth and the infrastructural mega-projects and major developments that manifest it (for an overview, see Ng and Xu 2014). Here, we rather focus on the ways the party-state dealt with the consequences of the rapid growth of the region and for which the traditional centrally planned state had neither a blueprint nor the capacity to perfectly control it. In this sense, the four stages we identified demonstrate the long way from a rather uncontrolled urban growth setting to a relatively mature planning system that is able to cope with differentiated urban development and redevelopment challenges and the interaction of a variety of stakeholders in a governance arena that has taken a great step away from the centrally planned pre-reform age.

Stage One: 1978–1991

With the "Open Door Policy," a comprehensive program to modernize the socialist Chinese economy introduced by Deng Xiaoping in 1978, an increase in foreign trade and investment, a decentralization of economic decision-making, and a gradual legalization of land transactions was initiated. In 1980, four special economic zones (SEZ) were established in Guangdong Province: Shenzhen, Zhuhai, Shantou, and Xiamen. All of the reforms were meant to accelerate economic development through a better response to market forces and an import of technology and capital (Chung et al. 2001, p. 39). Shenzhen SEZ had a total area of 375 square kilometers and comprised a long east–west stretch of flat land south of a mountain range facing the Shenzhen Bay that separates the western part of the city from the New Territories of Hong Kong. State-owned enterprises were appointed to undertake comprehensive urban planning, construction, and management in the early years of development. For example, Shekou Industrial District was owned and developed by the China Merchant Steam Navigation Company (蛇口招商局).

Starting from predominant urban growth strategies after the policy of reform and opening up, the first two decades of rapid urban growth in Shenzhen were characterized by uncontrolled development bringing about the phenomenon of urban villages in the urban core, despite early regulations for the development of villages dating back to the 1980s and thereby preceding the major waves of immigration (Wang et al. 2009,

p. 960). Planning efforts were mostly led by a general economic orientation of urban development. Urban regeneration and redevelopment took place at a project-based level, with hardly any effective development control, resulting in widespread illegal land development (Ng and Tang 1999, pp. 13–15, 22; Wang et al. 2009, p. 961).

First steps to establish a system of urban development adapted to the gradual integration of non-state actors were prepared in the late 1980s. In 1987, the first land auction in China took place in Shenzhen and land transaction mechanisms were introduced (Ng and Tang 2004a, p. 187; Ng and Tang 2004b, p. 203). The Shenzhen Urban Planning and Land Administration Bureau was established in 1989, integrating planning, housing, and land administration (Ng and Tang 2004b, p. 205). In that line, Yeh and Wu (1998, pp. 177–179) speak of a "Recovery and establishment of the urban planning system (1978–1989)" (Yeh and Wu 1998, p. 178) after the cultural revolution for all of China, and see the City Planning Act of 1989 as a milestone in reforming the planning system (Yeh and Wu 1998, p. 207). They also explain very clearly how only through this act could direct development control by land use planning be established (Yeh and Wu 1998, pp. 191–192, 194). Shenzhen should be seen as a forerunner of those reforms that, however, due to its rapid growth and small size before the reforms, could not resort to an established planning system in the early 1980s. Early master plans, among the first of their kind in the country, tried to regulate the modernist growth of the city in the 1980s and 1990s, incorrectly predicting moderate population growth (Ng and Tang 2004a, p. 191f), and not yet adequately introducing strategic elements for the incorporation of non-state economic actors in a less statist system.

The so-called urban villages (*chengzhongcun*) gradually formed during this period. The state started to expropriate former agricultural areas in the villages pave the way for urban development. In parallel, former peasants were able to conduct a lot of self-construction activities on the territory they still controlled. They intended to earn profit by renting out rooms to accommodate the increasing amount of migrants and floating population coming as laborers to the city when industrial development started to flourish in Shenzhen. In 1982, the first official document concerning urban villages in Shenzhen, which is called the "Interim Regulation of Building Land of Villages in Shenzhen Special Economic Zones (No. 185)" (Shenzhen Municipal Government 1982a) was issued by the government. According to this document, it was required that the constructions of villagers had to be based on comprehensive planning and design

after being approved by the municipal planning bureau. The policy stated that the land area per household is 150 square meters and the basal building area per household is limited to 80 square meters in new villages. It indicated that the old villages would be expropriated by the government when new villages were planned and built, but the villagers were still allowed to use them temporarily. In 1982, "Provisions of Forbidding Illegal and Private Construction of Houses in Shenzhen Special Economic Zone" (Shenzhen Municipal Government 1982b) were issued in order to prohibit unauthorized self-construction. Although the chaotic illegal construction activity in the SEZ decreased slightly, private occupation of land and private illegal construction frequently still took place. Therefore, a document entitled "Supplementary Provisions of Forbidding Illegal and Private Construction of Houses in Shenzhen Special Economic Zone" (Shenzhen Municipal Government 1983) was issued in 1983.

After Deng's visit to Guangdong province in January 1984, several coastal cities and the island of Hainan received the status of special economic zone. The visit strengthened the success of the SEZs, and of Shenzhen in particular (Chung et al. 2001, p. 41). In 1986, the Shenzhen government therefore published a policy called "Notice of Further Reinforcement of Village Planning in Shenzhen Special Economic Zones" (Shenzhen Municipal Government 1986), which claimed that private buildings in villages should normally not be more than three floors in height, and per capita floor area should be less than 40 square meters. Based on this policy, construction lines were demarcated in Futian District, but the required follow-up work was not completed due to various reasons. Suspending construction approval contributed to a direct result that illegal construction activities were intensified, though within a certain demarcated range of areas, and most buildings were no more than five floors. To deal with the problem of illegal construction, the government tried to issue a series of related policies. In 1987, a policy called "Interim Management Methods of Illegal Land Use and Building Construction in Special Economic Zone" (Shenzhen Municipal Government 1987) was released, defining the situation of illegal land use and construction, and promoting penalties. In 1988, this was followed by a regulation called "Decisions on Problems in Managing Illegal Land Use and Land-use Registration by Shenzhen Municipal Government" (Shenzhen Municipal Government 1988). Compared to the regulation from 1987, it defined the illegal land use types more specifically and set out corresponding penalties concerning illegal land use by state institutes, administration and

enterprise units, private entities, and villagers. According to the regulation, the year 1982 when No. 185 regulation was issued served as crucial point in the identification of illegal land use in urban villages.

In 1987, land-use reform was initiated in Guangdong province. It deregulated property development, albeit within the confines of the socialist system. The state retained ownership of land, but land use rights could now be transferred or leased to developers. "In consequence, urban land was to be owned by the state, but leased and controlled by the planning bureau, whereas agricultural land to be owned by a peasant collective selling land use rights to developers, turning many into millionaires overnight" (Chung et al. 2001, p. 41). The government could still expropriate or demand rights to use collectively owned land, but it had to reasonably compensate peasants. Land-use taxes started to be charged from users. In 1989, the Law of Transfer of Land-Use Rights in Shenzhen furthered the split between ownership and land use. Land-use rights for one hectare of land were allocated to each villager's household, "prompting a burst of speculative real-estate development" (Chung et al. 2001, p. 42). The land value of urban villages immediately skyrocketed, and the expropriation compensation standard also increased rapidly. In 1989, the government started comprehensive land expropriation in Shenzhen with the promulgation of two regulations called "Provision of Land Expropriation in Shenzhen Special Economic Zone" (Shenzhen Municipal Government 1989a) and "Demolition and Compensation Methods of Shenzhen Special Economic Zone" (Shenzhen Municipal Government 1989b). The latter provided compensation standards for various projects. Those types of regulations and land expropriation by the state caused villagers to panic and resulted in a rush toward mass illegal construction. As a consequence, the government came up with a document called "Emergency Notification on Suppression of Illegal Land Use and Unauthorized Land Lease in Villages" (Shenzhen Municipal Government 1989c) in November 1989.

The dynamic growth that had taken place during this stage could easily be accommodated by an expansion of the built-up area. The road infrastructure allowed for city development north and west of the historic core of Shenzhen next to the Hong Kong border and around the port area in Shekou, only gradually overburdening the historic center in today's Dongmen area in Luohu district. Despite the widespread illegal construction in the villages, no major efforts to upgrade or redevelop the existing parts of the city were undertaken.

Stage Two: 1992–1999

In 1992, Deng Xiaoping's "second tour" of the Pearl River Delta reaffirmed the importance and status of the special economic zones. "The visit sparked a renewed surge in development throughout the region" (Chung et al. 2001, p. 42). Meanwhile, measures to promote the urbanization and transformation of urban villages were carried out since the early 1990s. In 1992, a regulation called "Interim Regulation of Urbanization of villages in Shenzhen Special Economic Zone" (Shenzhen Municipal Government 1992) was issued. According to this regulation, the urbanization of urban villages was to be implemented in social, political, administrative, and economic terms. Villagers were granted local citizenship by transforming their rural villager *hukous* into urban citizen status. Land ownership was transformed from collectively owned land administered by the villagers to state-owned land. The original village committee, which was responsible for both the economic development of the village collective and villagers' self-organization, was transformed into a so-called joint stock company that has a focus on managing the economic assets of the village, while community management was taken over by newly established residents' committees and street offices. In 1994, the Municipal Planning Department stopped issuing approvals for private building construction, and during this period there was a management vacancy concerning private and industry construction in urban villages. With the rapid and intensive development of real estate, illegal construction expanded from within the area of the SEZ to two newly established districts called Bao'an and Longgang outside SEZ in 1993. Now, illegal buildings might have even seven or eight floors. In 1999, there followed a policy called "Decision on Prohibition Against Illegal Construction of the Standing Committee of the Shenzhen Municipal People's Congress" (Standing Committee of Shenzhen Municipal People's Congress 1999), which defined the types of illegal building specifically, but the respective disposal measures were not specific enough, and workable implementation details about private housing construction management are still lacking. Another round of illegal construction blossomed, and the problems of urban villages became even more severe (see also Wang et al. 2009, pp. 959, 962f). As illegal construction penalties were not implemented strictly according to the 1999 policy, most of the villagers carried out illegal construction at great speed from 1999 to 2001, referring to this as "catching the last bus" of illegal construction. Some buildings reached up to 12 floors, and meanwhile, the village environment deteriorated. Besides, villagers refused to give up using the old villages or hand them over to the government after

the construction of new villages was completed. Nevertheless, although the situation could obviously not be controlled in the short run, the city government did not give up its general attitude toward illegally built houses, which were exempted from compensation schemes laid down for the demolition of houses in the "Measures of the Shenzhen Special Economic Zone on House Demolition" (Shenzhen Municipal Government 1998) from 1991, and revised several times throughout the 1990s.

Even during this stage, urban development was dominated by a vast expansion of its built-up area. Consequently, stage two has seen only one major regeneration project, the redevelopment of Dongmen Old Town Area (1998–2001). The historic core of the city, with a population of around 30,000, had traditionally served as a provincial border town and trading center before 1978. With the growth of the SEZ in stage one, it became the heart of a commercial center that did not serve the needs of the bustling city anymore. Apart from this project, urban regeneration only developed to an embryonic state, while key decisions for the major developments in the SEZ such as the new Central Business District (CBD) in Futian District were already prepared.

Stage Three: 2000–2008

Comprehensive reforms, the subsequent transition toward a more "demand-constrained economy," mainly in the second half of the 1990s, and the introduction of the Shenzhen Urban Planning Ordinance (SUPO) in 1998 changed the structure of urban planning substantially, which now took professionalized planning procedures, development control, and citizen participation more seriously (Ng and Tang 2004a, pp. 195, 198). Ideas to restructure the economy toward becoming a more high-tech industrial city, to improve housing conditions, and to include quality of life and city beautification issues came up after the first waves of in-migration and the Asian Financial Crisis, in an effort to promote overseas investment in the city, gradually turning strategic land-use planning into a sophisticated tool supporting the vision to become a "world city" (Ng and Tang 2004a, pp. 176–180, 189–190, 193). Development control was finally seen as a planning task to cope with the "challenge of 'liberating' urban spaces, 'locked' by central and or illegal ownership, in order to accommodate the level of growth generated by demand" (Ng and Tang 2004a, p. 190).

The planning for the development of a new city center in Futian District that was to represent the ambitions to become a "world city" with Chinese roots symbolically took place in this period (Cartier 2002).

The growth-orientation dominant at that time governed much of the approach toward early redevelopment. At the same time, a "spiritual civilization campaign" supported the "world city" rhetoric and the efforts to mobilize political support (Cartier 2002, p. 1526) for redevelopment strategies intended to modernize the traditional rural culture.

With the third "Master Layout Plan" of 2000, the issues mentioned above were included in a first plan for the extended city area after the incorporation of outlying city districts not yet part of the SEZ at that time (Ng and Tang 2004b, pp. 203–206). For the first time, the plan also broached the issue of heritage conservation. Urban regeneration and a restructuring of the existing urban fabric now condensed in a wider context for at least two reasons. First, it satisfied the need to prepare the city for a service economy and therefore to improve its soft location factors, trying to make it a model ecological city, improving its infrastructure, and to provide attractive parks and open space, to promote symbolic architecture and the like. Second, a line of thought evolved that has been important until today: that of the limitation of the available land resources that could only be overcome with the incorporation of the outlying districts but which continued to be a pressing issue after having arisen for the first time with the boom in real estate in the late 1980s, intense foreign investment in the 1990s, fierce population growth, the development pressure on the existing CBD in Luohu, and the reluctance of the central government to allocate a sufficient amount of land for development. The situation later became increasingly serious in this respect, since the possibilities for further annexation of land came to an end, the steep topographic in some areas of the city limited the land resources available for development, and non-built-up areas became more and more valuable in ecological terms over time. Land scarcity is also a budgetary issue because the lease-out used to serve as important source of income for the municipality. An intensification of the densities in already built-up areas with the help of urban regeneration and redevelopment is therefore considered crucial (Wuttke 2012, pp. 147–149; Wuttke et al. 2010).

In this context, two important regulations were issued in 2001, called "Provisions of Dealing with Illegal Historical Production and Business Buildings in Shenzhen Special Economic Zone" (Shenzhen Municipal Government 2001a) and "Provisions of Dealing with Illegal Historical Private Buildings in Shenzhen Special Economic Zone" (Shenzhen Municipal Government 2001b). According to the two regulations, builders of the illegal historical buildings constructed before the policy called "Decision on Prohibition against Illegal Construction of Shenzhen

People's Representative Committee" was issued in 1999, are encouraged to register and obtain legitimized property rights again after a survey and paying a fine. District governments were to deal with the respective cases. Although the provisions kept up the will to punish unwilling land abusers, they show a first sign of flexibility in terms of amnesty and belated legalization. However, another round of illegal construction happened after the two regulations were issued. As villagers had already successfully carried out illegal construction activities for several years, they gradually found that the government's penalty on illegal construction was not implemented strictly according to the issued policy for very long. Besides, they also perceived a lot of concessions and tolerance from the government, demonstrated by the continuous adjustment of the definition of illegal buildings in the issued policies. Villagers obeying the rules lost a lot of profit compared to those who broke them. Some illegal buildings grew as high as 15 floors and had lifts. Interestingly, the provision dealing with private buildings stated in great detail that smaller private houses up to four floors and a total of 480 square meters constructed by villagers were even to be exempted from fines, while excessive stories and second homes were to be fined incrementally.

In order to carry out the redevelopment of urban villages, the first Reconstruction Bureau was established in Futian District in 2003. Meanwhile, urbanization of urban villages in Longgang and Bao'an was carried out in 2003, and illegal construction in the two districts was accelerated for a few months. In the autumn of 2004, comprehensive urban village redevelopment was launched through holding the Mobilization Meeting of Urban Village Redevelopment and Illegal Construction Inventory (城中村改造暨违建清查动员大会), and later, municipal and district urban village redevelopment bureaus were established. "Decisions on Prohibitions of Illegal Construction and Land Use by Shenzhen Municipal Government" (Shenzhen Municipal Committee of the CPC, Shenzhen Municipal Government 2004) were issued, claiming that strict measures would be taken to demolish illegal buildings erected after 1999. In the same year, the government issued "Interim Regulations of Urban Village [old village] Redevelopment in Shenzhen" (Shenzhen Municipal Government 2004), which encouraged redevelopment of urban villages and provided a series of incentivizing policies. In order to explore more effective measures to deal with urban village problems, Shenzhen's Futian District government initiated a joint research project on urban villages in participation with five research and planning institutes in 2005, conducting investigations on 15 urban villages in the district. The final report from this research

proved to be significant as it provided comprehensive analysis from various perspectives and summarized the rather critical standpoint on urban villages. A policy called "Implementation Opinions on Interim Regulations of Urban Villages" (Shenzhen Municipal Government 2005) was put in place in Shenzhen in the same year. The so-called "Master Planning Guidelines for Urban Villages [old villages] of Shenzhen City (2005–2010)" (深圳市城中村(旧村)改造总体规划纲要(2005–2010)) were completed and published too. The plan indicated that one feasible measure for transforming the illegal and ambiguous into legitimate property rights would be through comprehensive redevelopment of urban villages. Meanwhile, industrial district upgrading also attracted more attention from the government. In 2007, "Master Planning Guidelines of Industry District Upgrading of Shenzhen City (2007–2020)" (深圳市工业区升级改造总体规划纲要(2007–2020)) were completed and published. In 2008, the municipal government decided to initiate industrial district upgrading, and the Municipal Industrial Upgrading Office was merged into the Municipal Urban Redevelopment Office. In 2008, Shenzhen government published "Opinions on Promoting Industry District Upgrading Experimental Projects in Shenzhen" (Shenzhen Municipal Government 2008) in this respect.

With the first major reorganization of the functional and infrastructural layout of the SEZ being implemented, Futian District had become the key link between the two initial hotspots of urbanization in Luohu and Shekou, in which the new CBD, planned in several stages since the late 1980s, began to take shape. The areas influenced by the old center in Luohu and the new CBD in Futian District also became important arenas for urban regeneration.

The Huaqiangbei upgrading project started in 1998 between the two centers, converting the area into a major commercial hub was among the first, followed by the redevelopment of Caiwuwei west of Dongmen area after 2003. In the development axis south of the new CBD, the urban village of Yunong was demolished to make way for a new commodity housing project after 2004, while Gangxia village east of the new CBD was redeveloped, after long preparations since 2004, starting in 2008 with a first effort to actively involve the villagers in the redevelopment process. It was also in stage three that the regeneration of brownfield sites started to gain momentum with the comprehensive upgrading of Overseas Chinese Town (OCT), started in 2005 (cf. www.octloft.cn).

Stage Four: Since 2009

Since 2009, urban regeneration in Shenzhen has been accelerated, and the tasks of urban regeneration shifted from urban village and industrial district upgrading to comprehensive urban regeneration across the whole of Shenzhen, also including old residential and business area regeneration. In 2009, Guangdong province promulgated a policy called "Several Opinions on Promoting Three Olds Redevelopment to Increase Land Use Efficiency" (Guangdong Province Government 2009). "Three olds" here refers to old towns, old factory sites, and old villages. Three olds redevelopment became the experimental and innovative urban regeneration strategy especially applied in Guangdong. Based on this policy, Shenzhen issued the well-known "Urban Regeneration Methods of Shenzhen" (Shenzhen Municipal Government 2009a), which provide specific guidance for carrying out comprehensive urban regeneration as the first official systematic regulation on urban regeneration in China and can be seen as a significant step forward in terms of establishing a professionally managed urban regeneration strategy. With the urban regeneration measures, the city made an attempt at "standardizing" its regeneration activities. In particular, they define urban problems (Art. 2) as a prerequisite, foresee renewal processes to comply with general planning principles (Art. 3, 4), provide funding (Art. 6), allocate responsibilities for implementation (Art. 7, 8), and give urban renewal an area-based foundation with the definition of renewal units (Art. 11, 12). Different types of renewal (comprehensive improvement, functional change, demolition, and reconstruction) defined in Chaps. 3, 4, 5 of the Decree tailor the respective renewal strategies to the local requirements. In 2010, a series of supporting policies and regulations was issued, including "Opinions on Further Promoting Urban Regeneration" (Shenzhen Municipal Government 2010), "Basic Practical Procedures of Urban Regeneration Projects of Demolition and Reconstruction Type" (trial) (Shenzhen Planning and Land Resource Committee 2010a), "Guidelines on Plan Making and Application of Urban Regeneration Units in Shenzhen" (trial) (Shenzhen Planning and Land Resource Committee 2010b), and "Provisional Regulations on the Proportion of Affordable Housing in Urban Regeneration Projects in Shenzhen" (Shenzhen Planning and Land Resource Committee 2010c). In 2010, a programmatic document called "Special Planning of Urban Regeneration (Three Olds Redevelopment)

in Shenzhen (2010–2015)" (深圳市城市更新("三旧"改造)专项规划 (2010–2015)) was completed, coordinating urban regeneration at the municipal level and providing guidance to delineation and comprehensive planning for urban regeneration units. In order to provide more detailed specific guidelines for practical urban regeneration in Shenzhen, in 2012, more regulations were issued, including "Specific Rules on the Implementation of Urban Regeneration Methods in Shenzhen" (Shenzhen Municipal Government 2012a) and the "Notice of Management Measures on Strengthening and Promoting Urban Regeneration Implementation in Shenzhen" (Shenzhen Municipal Government 2012b). These further promoted the standardization and operability in urban regeneration practice. According to the specific rules, land that is to be provided by the regeneration unit to the government in order to construct municipal infrastructure, public facilities, and projects should now amount to less than 15% of the whole scope of regeneration but comprise more than 3000 square meters. In 2013, an official guiding document called "Opinions on Optimizing Space Resources Allocation to Promote Industries Upgrading and Transition" (Shenzhen Municipal Government 2013) was issued, followed by six supporting documents thereafter. In 2014, based on a reflection on the limitation of existing policies, a new official document called "Management Measures on Strengthening and Promoting Urban Regeneration Implementation in Shenzhen (No. 8)" (Shenzhen Municipal Government 2014) came out, sharing the same name with the policy issued in 2012 and making clearer amendments based on the old policy. According to this update, concerning the urban regeneration units that apply for the demolition and reconstruction, the proportion of clear legal land tenure area should be no less than 60% within the demolition scope; and concerning the old industrial areas that apply for comprehensive improvement, the proportion of clear legal land tenure area should be no less than 50% within the whole scope. Besides, concerning the demolition and reconstruction of illegal buildings or land use, it is required that they contribute no less than 32% of land to the government as land reserved for public facility construction, while only 15% of the land contribution is required for the regeneration of legal building or land use. Therefore, the stakeholders, including developers and villagers, are stimulated to transform their property rights from obscurity to clarity more actively, as they could not initiate redevelopment without meeting the preconditions mentioned above. Interestingly, this stage was also characterized by yet another change in the legal status of informal construction, as stated in

the "Decision of the Standing Committee of Shenzhen Municipal People's Congress for Handling Illegal Buildings Left over from the Process of Rural Urbanization" (Shenzhen Municipal Government 2009b) from 2009. It referred to the transformation of urban villages that had taken place in the late 1990s and early 2000s and intended to survey all respective buildings not complying with formal rules within one year, allowing the municipal government to "differentiate the extent of offense of illegal buildings … and handle these buildings in batches step by step separately by affirming property right, dismantling or confiscating according to law or allowing temporary use according to these decisions" (No. 5). Demolition was now foreseen for illegal buildings seriously hampering orderly development (No. 9), confiscation for those that comply or do not seriously violate planning regulations (No. 10), notwithstanding the possible permission for temporary use (No. 11). A particularly striking fact is that the regulation foresees compensation and subsidies for the demolition of illegal buildings and requires proper consideration of the interests of villagers and their collective organizations (No. 12). With the help of the more complex regulations, the city has not only continued its work on urban villages but also prepared for the redevelopment of huge former industrial sites.

A Flexible Answer to the Challenges of Rapid Urbanization: The Evolving System of Urban Regeneration and Its Changing Attitude Toward Informality

For the interpretation of the changing urban development and regeneration strategies, we notice that the series of reforms is mainly conducted at the local level of Shenzhen. Despite the number of policies issued to regulate development, it can clearly be seen that the dynamics of economic and urban development leads to a situation in which the policies cannot be properly implemented for years. This is due especially to the fact that the distinction between de facto land ownership in urban and rural settings leads to a clear prioritization of policy implementation on development on the one hand and on controlling the urban context on the other, at least in stages one and two. One may interpret the loosening of control over development in the urban villages as a dramatic increase in informality, typical of states in which the administrative system is overburdened by the sheer dynamics of urbanization and keeps on producing plans and

policies that, over time, diverge considerably from the reality on the ground, without ever having the resources to implement them.

However, the situation in Shenzhen is different in that its economic success, depending on the influx of migrants and floating workers, can hardly be achieved without the informal housing production of the urban villages, but it leads to a gradual recovery of the institutional system and moves from hesitant first regulatory attempts in stage two to more substantial efforts to regain control over urban development in the urban villages in stage three, with the complete enactment of reforms that transform villages and integrate them fully into the city, not only physically and economically but also socially and politically. With the evolution of policies to integrate villages into the city, the regulatory framework for their redevelopment is also refined. Whereas the first attempts aimed at simple development control without taking the socio-economic situation in the dynamically growing SEZ on the ground properly into account, dealing with the informal settlements in urban villages that sprang up mainly in the 1990s and afterwards and solving their urban problems requires a sophisticated institutional framework which allocates resources, creates incentives for investment that make up for the demolition of kissing buildings and other obsolete structures that have to give way for new buildings and other structures, makes sure that the livelihood of the villagers that are no longer farmers is guaranteed, and transforms the physical structure of the villages in a way that can be considered as orderly development.

When analyzed in detail, it can be observed that the city of Shenzhen establishes a fully-fledged system of urban regeneration for that purpose. One of the interesting aspects about it is that through the experience gathered with the first redevelopment efforts of informal settlements, the approach toward solving the problem of urban villages itself changes substantially. This concerns especially the ambition with which the outright physical transformation of villages is formulated—from a strategy of comprehensive renewal to a much more differentiated selection of sites for complete and gradual redevelopment in the long run, increasingly incorporating legitimate stakes of villagers into the process by means of more collaborative planning and a certain degree of autonomy granted to the villages when it comes to negotiating their future.

A look at the implemented development projects over time confirms both the selective approach and the gradual increase in strategic sophistication. Upgrading the Dongmen area, the historic core of pre-SEZ Shenzhen that had become its bustling commercial center, secured its

success as a shopping and entertainment destination (CAUPD 2015). With the pedestrianization of the central part, a face-lift for public spaces, and a major improvement of the local infrastructure, the general attractiveness of the commercial area was significantly improved, its commercial profile strengthened, and its historical identity accentuated, albeit somewhat superficially, without having to deal with the urban problems that had aggravated—and been neglected—in the urban villages at the same time.

Only with the prominent demolition of illegal houses in Yunong did the redevelopment of urban villages take off at a greater scale. Despite it being framed as a fight against illegal construction activities (News Guangdong May 23, 2005; Bach 2010, p. 439f), however, it was no coincidence that the very densely built-up agglomeration of high-rise buildings close to the strategic border crossing to Hong Kong at Lok Ma Chau in the district of Futian was chosen—an area with clear sight toward the neighboring special administrative region that had been handed over only a few years before and relatively close to the site of the new CBD in Futian. The close ties that began to intensify the linkages between Hong Kong and Shenzhen were used to turn Yunong into a highly profitable, extremely dense agglomeration of commodity housing, attractive to Hong Kongers, easily making the demolition of buildings that had already grown to about twice as high as the average kissing buildings in Shenzhen worthwhile and financially viable.

The redevelopment of Gangxia (Altrock and Schoon 2011; Research Group 2005, Interview with district officer, October 12, 2007) marks the start of a more comprehensive regeneration effort in the district of Futian, following a strategy building on a thorough analysis of the situation in the SEZ and the district in particular, and enacted by a specialized district regeneration office after complex and delicate household-by-household negotiations with the villagers to assure their consent for the redevelopment and compensation scheme. It proposed a complete demolition of the urban village located in close proximity to the new city hall and forming a part of the wider CBD area around it. The hopes for private real estate investment at an enormous scale, made attractive by the master planning for a superblock internally organized around a pedestrianized shopping mall with a direct link to the new subway station, justified the selection of Gangxia as a pioneer for the new era of redevelopment, still characterized by top-down planning but already carefully incorporating at least the villagers into the process. Promoting the redevelopment as a step

toward a "better tomorrow" for the village can be understood as an attempt to gain support for the relatively complicated intervention. It conceals, however, the fact that the strategic location of an urban village that threatened to disturb the shiny prospects of the new CBD by its sheer existence, the redevelopment of which promised enormous real estate profits, making its redevelopment financially viable, constitutes a major reason why the village was selected as pioneer—despite the fact that the housing situation and living standards alone in many other urban villages would have legitimized immediate action to bring about a "better tomorrow" as well (Research Group 2005, Vol. 3: 59).

The current stage is characterized by an intensification of the regeneration efforts according to the elaborated legal framework. Thus, regeneration is no longer limited to flagship or pioneer projects but gradually establishes a broader set of mainstream strategies that suit to the challenges on the ground. The aim is to encourage and support the participation of market and property owners to carry out urban regeneration through providing effective institutional arrangements. This is indicated by the maturing policymaking on land price, volume rate calculation, regeneration unit application and approval, and so forth. The city has also engaged in a complex redevelopment of its relatively dated stock of former industrial sites next to the historic center in Luohu and the port area in Shekou, many of which have long become derelict brownfield sites in excellent locations. They can only be mobilized for redevelopment with the help of relatively complex regeneration processes and a considerable amount of financial and administrative resources. Since 2009, the strategy of demolition and reconstruction, which is applied when converting large amounts of industry sites into residential buildings, is more popular with developers. But the government has recently shown much concern over such practices for several reasons, including the possible shortage of land for industrial use in Shenzhen in the future and the high cost of demolition and reconstruction. Therefore, the upgrading strategy of comprehensive improvement is especially emphasized and encouraged by the government in a policy document concerning "Management Measures on Strengthening and Promoting Urban Regeneration Implementation in Shenzhen (No. 8)" (Shenzhen Municipal Government 2014). The limitation of available land, which is present in the discourse about future urban development, despite the enormous expanse of the municipality, has spurred a further intensification of existing land

uses and therefore makes the regeneration of urban villages an important issue. Xiasha village in Futian district can be seen as a good example of how the practices in stage three have already brought about a differentiated set of approaches toward their regeneration, allowing for a substantial increase in density but at the same time flexibly exploring the possibilities to improve the housing stock (Interview with CAUPD planner, March 10, 2009). There, the recent regeneration plan, following an earlier infrastructural upgrading of the village center and the addition of a series of new high-rise buildings in the early 2000s, concentrated demolition and densification on the north-eastern part of the village, occupied by old factory buildings that seemed no longer worthy of their strategic location next to a major thoroughfare connecting the western and the eastern part of the SEZ. While a huge, podium-based commercial district was developed in this area, the low-rise core, consisting of kissing buildings around a spacious public square, was retained and upgraded with the addition of a parking garage, improved cultural and sports facilities, and a substantial facelift for the existing housing stock. The regeneration strategy, which was strongly influenced by the local village head, realized a number of elements that strengthen the heritage bonds of the local community, making the village an attractive destination for visitors but also livable for both the affluent residents of commodity housing schemes and the tenants of the kissing buildings. At least for the time being, this careful strategy stabilizes the physical structure of the urban village as it has developed in recent decades and seems able to overcome its stigmatization as a breeding ground of urban problems. The strategy of comprehensive improvement is increasingly taken care of by the government. An official document, "Guidelines of Urban Regeneration Development Planning in Futian District" (Futian District Urban Village (Old Village) Redevelopment Office 2012), issued in 2012 holds that if "demolition and reconstruction means would be cautiously applied in urban regeneration in Futian, instead the strategy of environmental improvement with lower cost and less environmental impact would be deployed mainly" (cf. p. 8 of the respective document). According to the report "The Twelfth Five Years' Urban Regeneration Planning in Futian" (Futian District Urban Village (Old Village) Redevelopment Office 2010), it was planned to carry out comprehensive improvement projects of 557 hectares, demolition and reconstruction projects of 222 hectares, and function change projects of 107 hectares from 2011 to 2015 (cf. Table 4-3 in the respective document).

Mastering Rapid Transformations: Reform Politics, Learning Arrangements, and Conceded Informality

Understanding the nature of reform politics requires exploring the ways the Chinese state deals with spatial practices and participates in the process of their renegotiation, modifying informal practices if possible and necessary. The course of experimental governance followed in this context strongly builds on a flexible approach toward informal land use phenomena that are considered "illegal" but tolerated to a certain extent. The state is nevertheless unable to completely formalize development in a period of rapid urbanization and continuous reform activities, the result of which cannot clearly be predicted. However, it does not give itself up to the flourishing of informal practices as in the case of some of the least developed states in the global south. The experimental nature of land use governance that can be observed particularly in the case of urban regeneration allows for temporary arrangements and a step-by-step approach in an attempt at containing informality and to solve urban problems. In this environment, it can be fruitful for the state to use its limited resources for a differentiated and selective or even strategic approach toward informality. We summarize the entirety of those approaches "conceded informality" (Schoon and Altrock 2014) in order to identify it as a result of deliberation accumulated over time.

While the way the public administration deals with urban management can to some degree be seen as informal and flexible as such, there are five different major strategic approaches the party-state (at all levels) makes use of when it comes to dealing with informal spatial practices and informal developments (see Table 9.1), depending on the assessment of costs and benefits, resources and political implications. We have discussed these

Table 9.1 Conceded informality and the party-state

The party-state	Actively supports	Informality, when
	Promotes	Institutional gaps are successfully closed
	Utilizes	It produces new strategic knowledge
	Tolerates	Flexible guiding principles serve as strategy
	Overcomes	It serves development
		Economic (or other) interests are prevailing

strategies in more detail elsewhere (Schoon and Altrock 2014). For the argument of this chapter, we will confine ourselves to illustrating three of them by resorting to the case study of urban regeneration in Shenzhen.

The Party-State Actively Supports Informality When Institutional Gaps Are Successfully Closed

Informal arrangements as a form of self-organization are increasingly used to activate participation at the grass-roots level. Especially when it comes to urban village upgrading, municipal and district governments turn to the village communities to increase their rental incomes, to ameliorate their living environment, or even to improve the image of the *chengzhongcun*. The integration of *chengzhongcun* into the overall urban management structure requires a kind of relationship of trust and responsibility with the city and the district administration (Schoon 2012). Municipal and district governments grant far-reaching autonomy to successful *chengzhongcun* within the limits of experimental urban governance. Traditional village structures, even though considered "informal", independently explore ways of integrating themselves into the city through upgrading and restructuring. In the case of Xiasha Village in Shenzhen (Schoon 2012; Zhao et al. 2011), the village head proved to be a partner in proactively upgrading the urban village over more than 15 years, enhancing the public square with temples, recreation areas, an underground parking lot, swimming pool, museum, and so on—all initiated, financed, and realized by the *chengzhongcun* itself. As explained above, demolition and redevelopment did contribute to increasingly maximizing the assets of the village but did not affect the informal buildings. The partial autonomy of strong and proactive *chengzhongcun* can be partly explained by insufficient financial capacities of municipal governments that accompany, qualify, and control those activities. The aim is to explore feasible modes of transforming *chengzhongcun*. The development of the respective regeneration tools (regeneration measures, three olds strategy) in stage four can be seen as a result of mainstreaming those modes where they proved successful (Schoon 2013).

The Party-State Tolerates Informality When It Serves Development

Modernization and restructuring of the whole state in the reform process requires flexible coping strategies to encompass dynamic change. While development has the highest priority, side effects are tolerated or ignored

so as not to hinder development. In this context, informally built substandard houses in urban villages served—and still serve—as welcome reservoirs for the cheap labor that was needed to feed the "factory of the world." Migrant workers and the floating population had no chance of getting access to more expensive apartments in the regular market. The existence of urban villages both reduced the need to provide housing opportunities and kept up the functionality of the *hukou* system, according to which migrants had no right to public services in the city, allowing public expenditure to be contained in a growing city (Wang et al. 2009, p. 967). Therefore, the hesitance to enforce development controls and to restrict the expansion of illegal construction in urban villages right from stage one is part of an overall tolerance of informality serving development, resonating even today, when redevelopment is increasingly accelerated in the city center, and keeping in mind the abundance of urban villages in the outlying districts of Longgang and Bao'an that have not been touched so far. Even early attempts to redevelop inner-city villages and to push migrants out of the central city to those outlying districts was sometimes intentional, and aimed, among other things, at promoting economic development in those districts (Wu et al. 2013, p. 1932). However, examples of the tolerance toward informality, sometimes even coupled with support of informality, can also be noticed in other recent scenarios. They are related to mega-events such as the Summer Olympic Games in Beijing 2008, the Expo in Shanghai 2010, the Asian Games in Guangzhou 2010, and the Universiade 2011 in Shenzhen, initiated to stimulate further development, increased competitiveness and triggered urban upgrading and restructuring in major coastal mega-cities in the early twenty-first century. In this context, the improvement of the public image of the respective cities was one key issue in the accompanying development strategies. Among other things, it led to the government campaign of "dressing and capping" kissing buildings that was implemented both in Guangzhou and in Shenzhen around the Universiade 2011. It can be seen as an official concession toward at least temporarily accepting the informal housing stock and investing in its upgrading as late as stage four.

The Party-State Overcomes Informality When Important Economic (or Other) Interests Are Prevailing

The current steps toward a more thorough reform of urban villages serve as an example for how the predominance of quick urbanization in the early stages of the reform process, with all its informal arrangements and

practices, gradually give way to more complex development goals. Contrary to common belief spread in international media, demolition and redevelopment are not enacted at an unlimited scale even in affluent coastal cities in the authoritarian yet economically unfettered Chinese state, constrained in their future development by land scarcity. Instead, the priority sites selected for formalization understood as demolition and redevelopment in this context have been chosen very deliberately. Yunong and Gangxia, as the pioneers in this respect, show this very clearly. In Yunong, the location close to the border crossing into Hong Kong made the land extremely valuable and a high-density luxury apartment complex seemed economically more feasible than migrant housing. The extreme height of the kissing buildings that had exceeded ten floors at the turn of the century seemed to justify a relatively quick response, at last showing that the state was still willing to contain illegal construction activities. Gangxia was already affected by the more careful approach fueling strategies one and two that was gradually evolving in the early 2000s. It was redeveloped as development profits allowed for ample compensation of villagers' claims and as the symbolic importance of the new CBD required action to implement one of the major mega-projects relevant for the self-conception and reputation of the ascending city.

Conclusion

Both the enactment and the gradually increasing sophistication in urban upgrading policies in Shenzhen are clear signs of a maturing mega-city that has shifted its main focus of spatial development away from mere spatial expansion to accommodate growth. With an increasing complexity of the spatial structures and socio-economic, political, and cultural changes comes a differentiation of spatial development policies that increasingly and ever more professionally and comprehensively cover policies to deal with the existing stock. However, urban regeneration in Shenzhen is clearly characterized by a particularly flexible attitude toward informality, predominant in many urban villages over the whole period of rapid growth, that can be interpreted as a strategic combination of experimental governance, learning arrangements, and conceded informality.

The presented strategies are based on of negotiation, bargaining, and concession-making, but they also rely on the ultimate possibility of coercion. They build on the necessity to involve stakeholders with resources in decision-making. This particularly concerns experienced developers that are providing financial means and villagers who represent parts of society

whose rights must not be infringed upon and whose interests must not be ignored under the new guiding principles of rational development.

It turns out to be more effective and efficient to take an intermediate approach that takes the circumstances, resources, transaction costs, and benefits of policy intervention carefully into account, rather than to try to exert full control over all parts of society. The crucial prerequisite of this approach is that the state is generally able to influence formalization and informalization processes. Allowing for and conceding to informality is a pragmatic means to deal with the changing circumstances that are moving from a dominant party-state to one seeking legitimation and that includes non-governmental actors in the process of experimental urban governance. One should not forget, however, that the degree of inclusion is clearly limited to stakeholders that bring in legal claims, financial means, communicative skills, or professional expertise. Urban regeneration processes that accept all residents of a neighborhood, especially tenants, as legitimate participants in decision-making, do not loom on the horizon. And even the participation of long-term residents or neighbors standing up for the livability of their residential environment often can be achieved only after arduous struggle.

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CHAPTER 10

Local Government Fragmentation and Fiscal Disparity Across Chinese Cities

Huiping Li, Qingfang Wang, and Chunrong Zheng

Introduction

Following China's fiscal decentralization in the 1990s, local urban governments, including urban districts and counties, have gained substantial power to promote business and to provide public services (Wu 2002). Fierce competition among local governments has substantially increased urban stratification through public service provision and the housing markets (Li et al. 2015; Zheng and Kahn 2008). Existing studies have documented that a decentralized system has worsened fiscal disparity while facilitating China's economic growth (Bird and Wong 2005; Jin et al. 2005; Zhao 2009). The literature has mainly focused on the dimensions of central-provincial fiscal decentralization and inequality from the coastal–inland, rural–urban, and inter-provincial perspectives. Intra-city inequality at the subprovincial level has not gained much attention owing to lack of detailed data. Further investigation targeting this type of inequality is vital

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because intra-city inequality is closely related to households' residential location, which determines people's job opportunities and quality of life.

The literature within the US context, examining the relationship between local government structure and government fiscal capacities, has been extensively influenced by Tiebout (1956), who states that a fragmented metropolis is a marketplace for residents to shop for tax and service packages offered by numerous local governments. Thus, competition among local governments in metropolitan areas forces local bureaucracies to operate efficiently, thereby constricting their budgetary growth (Schneider 1989). Yet, other scholars argue that fragmented local governments are institutional arrangements to promote and protect the uneven distribution of population groups and scarce resources (Hill 1974; Swanstrom et al. 2002). Many communities have introduced zoning and other development controls to arrest population growth and to price out lower- and middle-income families whose housing would not yield sufficient revenue to the community through property tax to cover the cost of services provided to these households. In this way, a fragmented metropolitan government system facilitates the maintenance and perpetuation of class and status group privilege (Downs 1994).

Although these perspectives have been developed mainly based on the US experiences with fragmented local governments, they provide a useful framework to understand the relationship between local government structure and fiscal disparity across Chinese cities. The administrative structure of Chinese cities is very centralized compared with that of the USA. Residential communities do not have local political jurisdictions associated with them. Most cities are governed by a single municipal government and some urban districts/counties have financial independence. These urban districts/counties have gained substantial fiscal independence and a vast array of administrative powers over the past several decades, including in planning, public works maintenance, approval of local foreign trade, and commercial administration (Wu 2002). They compete fiercely to promote economic growth because public expenditure is based on revenue, and urban district governments primarily earn revenue from business taxes, including value-added taxes (VAT) as well as operation and enterprise income taxes. The competition differentiates the fiscal capabilities among local governments, which subsequently leads to intra-city public service disparity.

Here we employ a multilevel model with repeated measures to estimate the effect of local government structure on public service disparity across 284 Chinese prefecture-level cities during the period 2000–2009. Our results suggest that government fragmentation increases fiscal disparity.

By examining the impact of local government structure on public service disparity across Chinese cities, this study contributes to the public choice theory developed in the USA context, by extending it to a relatively centralized administrative structure and a fiscal system in transition. Our findings indicate that public policies designed to alleviate public service disparity or income inequality should consider intra-city government structure, which has been neglected in the existing literature.

The Fiscal and Administrative System of Chinese Cities After 1994

The current fiscal system is based on the tax sharing scheme (TSS) introduced in 1994, which sought to recentralize tax revenue and improve regional revenue mobilization and equalization. The TSS stipulated that the central government would retain the entire tax revenue from sources such as tariffs, consumption taxes, as well as income from state-owned enterprises controlled by the central government. Meanwhile, local governments would retain the revenue earned from sources such as business tax, personal income tax, agricultural tax, and tax income from state-owned enterprises controlled by local government. Both central and local governments would share tax revenues earned from VAT, stock exchange transaction tax, and natural resources tax. While the TSS strengthened the fiscal capabilities of the central government, it sharply reduced the share of subnational revenues and precipitated long-standing difficulties for local governments (Bernstein and Lü 2003; Oi et al. 2012; World Bank 2002). Local governments have to heavily rely on corporate taxes as their major source of tax revenues, including VAT, operation tax, and corporate income tax. Income from the three corporate taxes contributes to more than 50% of revenue for the county/urban district governments.

With the TSS reform, the administrative system within Chinese cities has also undergone a restructuring process. The governance system comprises a municipal government and urban districts/counties with administrative and financial independence, and street offices. The municipal government and urban district/counties function as two separate levels of government. Over the last few decades, the urban districts/counties have attained complete fiscal independence and gained a vast array of administrative powers including planning, public works maintenance, approval of local foreign trade, and commercial administration. They also became major providers of public services including education, health, and public

safety. Street offices (and towns) function as "representative agencies" of urban districts at the residential community level. While the management of street offices is closely related to the daily lives of community residents and quality of life in general, these offices do not function as a level of government.

The municipal government and the urban district/county governments have both individual and collective sources of revenue; however, their level of public expenditure depends on their individual revenues (Hu 2009). The pressure to provide public services with shrinking tax revenue motivates each urban district/county to set up individual commercial centers and development zones to draw businesses into their jurisdictions (Wu 2002). They compete fiercely for investments to boost local economic growth, with particular focus on urban growth.

Local Government Fragmentation and Fiscal Disparity

Local government fragmentation is defined as the number of different local government units that preside in a single area. Government fragmentation is most prominent across the US metropolitan areas. Competition among fragmented local governments for scant beneficial resources, or to avoid a particular cost, forces local governments to provide better services at lower costs (Schneider 1989; Boyne 1992; Oakerson 1999; Jimenez and Hendrick 2010). At the same time, this fragmented government structure reinforces the unequal access to public services associated with residential segregation, which may affect the efficacy of policies designed to combat problems such as deteriorated city centers, job–home mismatch, costly urban sprawl, and multigenerational poverty (Korsu and Wenglenski 2010; Li et al. 2013; Massey and Denton 1993; Wilson 1987).

China's governance system is not as fragmented as that of the USA; county-level governments obtained substantial autonomy in finance and administration during the fiscal devolution process in the 1990s. The number of urban districts/counties within a city ranged from 1 to 40 with a mean of 10.65 for the period 1999–2006. They compete fiercely for limited chances of promotion through fiscal performance, or for scarce

mobile business investments to provide local public services (Lü and Landry 2014; Liu and Martinez-Vazquez 2014; Zhang 2011).

Although government fragmentation has been a subject of considerable debate for a long time, no consensus has been achieved about whether it is beneficial or detrimental. The most influential model among the theories on local government fragmentation and public service provision is the Tiebout model (1956). Those with different preferences with regards to services can weigh the benefits from local public services against the cost of their tax liability when choosing a residential community and political jurisdiction, and "vote with their feet" to reside in the jurisdictions where the service and tax packages match their preferences (Tiebout 1956). Competition among local governments within metropolitan areas thus restricts their budget growth and forces local bureaucracies to operate efficiently due to the threat of exit by residents and businesses to relocate to other areas with better services and lower taxes (Schneider 1989; Boyne 1992; Oakerson 1999; Jimenez and Hendrick 2010; Dowding and Mergoupis 2003). On the other hand, because individual preferences for public services are heterogeneous, and people are willing to pay more to live in a community that provides high-quality public services (Fack and Grenet 2010; Clark and Herrin 2000; Gibbons et al. 2013; García et al. 2010, Oates 1969), the public choice process leads to unequal distribution of public services associated with stratified residential communities.

Under the competition pressure for middle- and high-income households, the fragmented government becomes the institutional arrangement to reinforce this, by promoting and protecting unequal distribution of public resources (Bischoff 2008; Feiock and Clingermayer 1986; Lewis and Hamilton 2011; Lobao et al. 2007; Miller 2002; Rusk 1995). Governmental competition also forces local governments to spend their revenues on developmental services as a priority, and limits their incentives to provide redistributive services to the needy (Jimenez 2014; Peterson Paul 1981).

While Tiebout (Tiebout Charles 1956) elegantly elaborates the efficiency and equity consequences of inter-jurisdictional competition among fragmented governments, that model focuses mainly on individuals and households, rather than on business investment. Following the Tiebout tradition, the Oates-Schwab model (1991) states that jurisdictions compete for mobile capital stock by lowering tax and providing public inputs to firms, such as roads, police, and fire protection. In return for a larger

capital stock, residents receive higher wages. The major result of the Oates–Schwab model is that taxes on both households and businesses become benefit taxes. The cost paid by the firms for the public services exactly matches the benefit received from these services. Wolkoff (1992) refutes the assumption that local governments have full knowledge of business and shows that if there is no way to distinguish whether firms are mobile, the most advantageous strategy the government can adopt is to offer modest subsidies to all firms. Wolkoff (1992) also addresses the irrational economic development subsidies from local jurisdictions. Unfortunately, neither the Oates–Schwab nor Wolkoff models address the consequences of competition among fragmented governments for mobile capital.

Mora and Varsano (2001) traced back through the fiscal war that took place among Brazilian states in 1990s and found that when all states replicate fiscal incentives to attract investments, the fiscal benefit ultimately loses its power to induce relocation of production, because taxes have been reduced equally everywhere. Thus, each state's revenue decreases as well. The less developed states, which are financially weaker, fail to provide the services and public works necessary to attract new business; and the more developed states always win the battle. Consequently, fiscal disparity among states tends to increase.

Lü and Landry (2014) showed that competition among county-level governments affects their fiscal behavior within Chinese cities. However, they did not focus on the relation between inter-jurisdictional competition and fiscal disparities among county-level governments inside cities. Urban districts/counties have to rely on their individual revenue to provide public services, tax deductions, or subsidies to attract business investments. Local governments that earn higher revenue have more resources to attract businesses than those that earn less. This will then affect the latter's tax revenue from business in the future. Thus, competition among local governments for business tax resources amplifies fiscal disparity.

Data and Variables

Dependent Variables

Fiscal disparities among local governments refer to the variation in fiscal conditions, which are usually measured as the relative ease or difficulty a local government faces in providing a standard package of public services

at a reasonable tax rate or tax burden on residents (Ladd 1994). Fiscal capabilities have been defined in different ways. Historically, the variation in fiscal conditions was often defined as the difference in revenue-raising capacity (RRC), which is most commonly measured using per capita property tax bases (Ferguson and Ladd 1985). Another definition is the need–capacity gap, which accounts for variation across communities in terms of their expenditure needs as well as RRC (Bradbury et al. 1984). This is a more comprehensive but more complicated measure to implement. Bahl et al. (1992) used average per capita expenditure and per capita level of taxes between cities and suburbs to measure and analyze metropolitan fiscal disparities. They found that non-education expenditure and per capita tax are higher in city centers than in suburbs. This is interpreted as a consequence of the slower growth in income in the city center and the pressure on the expenditure budget brought by the increasing concentration of needy families in these areas. Gini coefficient and generalized entropy (GE) indices based on per capita expenditure of county-level governments are adopted to measure fiscal disparities between county-level governments (Tsui 2005).

The statistical categories of public expenditure in China changed in 2006. In order to expand the time period for analysis, we choose the coefficient of variation (CV) of fiscal capacity of urban district/county governments to measure fiscal disparity. CV is measured as the ratio between the standard deviation and the mean. It also represents the relative standard deviation and is one of the most commonly used measures for inequality and heterogeneity (e.g., Hoffman and Guerra 2004). Following the definition of fiscal disparities, we define fiscal capacity as the ratio between public expenditure and public revenue. This variable indicates the variations of fiscal capacity across urban district/county governments. The formula is as given as:

$$\mathrm{FD} = \frac{\mathrm{std\,fc}}{\mathrm{mean\,fc}}$$

where fc denotes fiscal capacity, measured by public expenditure/public revenue; std fc and mean fc are the standard deviation and mean of fiscal capacity, respectively. Data is obtained from *National Prefecture and County Finance Statistics Compendium*.

Independent Variables

Local government fragmentation is measured as the number of county-level governments divided by the population within a prefectural city (Lü and Landry 2014; Jimenez 2014). A higher number of county-level governments within a city implies that more local governments are competing for any mobile business, and that the relocation costs are lower within the city. That is, a higher number of county-level governments indicates greater intensity of inter-jurisdictional competition.

Control Variables

The more public services the county-level governments need to provide, the higher the pressure on the local governments to compete for mobile business. Thus, the *percentage of public expenditure to total expenditure of the city* is included in the model. Control variables also include the following: *total population of a city*, which measures the city size; *percentage of non-agricultural population*, which is a measure of the urbanization status of a city; *population density, percentage of travel population* measuring the openness and attractiveness of a city; *GDP per capita of the city*; *employment in manufacturing industry*, *employment in service industry*, *unemployment rate*, *real Foreign Direct Investment (FDI)*, and *percentage of middle and primary school students*. Data are obtained from the *China City Statistical Yearbook*.

Multilevel Model with Repeated Measures

We employ a multilevel method to disentangle the relative longitudinal (over time) and cross-sectional (across cities) impacts of variables on public service efficiency and inequality. Research suggests that local government structure variables tend to affect public service provision in cross-sectional fashion, so that the bulk of the variation spreads across cities. Nevertheless, owing to the change in local government structure from 2000–2009 across Chinese cities, these variables might affect public service provision longitudinally, so that most of the variation is spread over time within cities (Alderson and Nielsen 2002). Other variables should also affect public service provision longitudinally. Thus, we analyze variations in public service provision (including efficiency and inequality) using

a multilevel repeated-measures model based on 282 cities observed at ten different times (2000–2009); time is nested within cities. The model permits any pattern of correlation over time.

The hierarchical model is composed of submodels at two levels, and most independent variables are measured at two levels with two indicators: the mean over time and the deviation from the mean. The level-1 equation predicts cities' public service efficiency/inequality over time. This equation includes deviations from the mean for city variables. The level-2 equation adds the means for the county-level independent variables.

The level-1 model is in the form

$$Y_{ti} = \beta_{0i} + \pi_{1i} t2001_{ti} + \cdots \pi_{10i} t2010_{ti} + \beta_{mi}\left(x_{mti} - \overline{x}_{mi}\right) + \in_{ti} \qquad (10.1)$$

Where Y_{ti} is the public service efficiency/inequality at time t in city i and is predicted by intercept β_{0i}, time-period effects $\pi_{1i} \sim \pi_{10i}$ (the year 2000 has been excluded), coefficients β_{1i} for city mean-centered time-varying independent variables $(x_{ti} - \overline{x}_{ti})$. Here x_{mti} is the city-level variable; x_m is measured at time t for city i, and $\overline{x}_{mi}$ represents the mean of city-level variable x_m for counties. The level-1 equation also includes an unstructured error term, *ti*, which permits any pattern of correlation over time. The covariance structure is block-diagonal to account for different variance structures across cities (Littell et al. 1998; Raudenbush and Bryk 2002).

The level-2 equation incorporates city means for the city-level time-varying economic and demographic variables entered in Eq. (10.1):

$$\beta_{0i} = \gamma_{00} + \beta_{0m}\,\overline{x}_{mi} + \mu_{0i} \qquad (10.2)$$

Where β_{0i} is the intercept from Eq. (10.1), γ_{00} is the average intercept across cities, and β_{0m} represents the between-city effects for the city-level variables. Including deviations from city means in Eq. (10.1) and means in Eq. (10.2) permits a decomposition of total effects into between-period (longitudinal) effects and between-city (cross-sectional) effects. This equation includes an additional error term to allow error correlation between cities.

Combining these two equations yields the following reduced-form Eq. (10.3):

$$Y_{ti} = \gamma_{00} + \pi_{1i} t2001_{ti} + \cdots \pi_{10i} t2010_{ti} + \beta_{mi}\left(x_{mti} - \bar{x}_{mi}\right) + \beta_{0m}\bar{x}_{mi} + \in_{ti} + \mu_{0i} \quad (10.3)$$

This equation illustrates that public service efficiency/inequality in time period t in city i is a function of a grand intercept, time-period effects, city mean-centered effects (i.e., deviations from the city mean over time), and average city effects. Two error terms permit correlation between cities and any type of correlation over time within cities.

Results

Table 10.1 presents the descriptive statistics of the major variables. The table shows that CV of fiscal capability increased from 30.05 to 47.5 during the period 2000–2009. The local government fragmentation measured by the number of urban districts and counties per 10,000 population of each city is relatively stable, maintaining about 2.50. Moreover, the percentage of public expenditure for urban districts/counties has risen from 66.25 to 72.22.

Table 10.2 presents the results from the multilevel modeling of the effect of local government structure on the CV of fiscal capacity. Model 1 tests major independent variables; Model 2 adds population variables; and Model 3 includes all control variables, including population and economic variables. Local government competition shows both longitudinal and cross-sectional effects. Cities with increased government competition are associated with higher public expenditure per capita (longitudinal effect). If a city increases one unit of government fragmentation, the fiscal disparity within it will be associated with 3.98 units of increase. Cities with one unit higher government fragmentation are associated with 3.65 units of increase of fiscal disparity (cross-sectional effect).

Counties have higher administrative autonomy compared with urban districts. Competition among counties might have different consequences from that among urban districts. Table 10.3 presents the results of analysis based on urban districts and counties, respectively. The first and second columns show the results for urban districts and the third and fourth columns show those for counties. Analyses based on urban districts produce the same results with Table 10.2. Regarding counties, cities with a higher number of counties are associated with greater fiscal disparity.

Table 10.1 Means of major variables

Variables	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*
Coefficient of variance of fiscal capability	30.05	33.87	34.21	32.33	38.73	44.54	44.63	46.18	46.55	47.50
Standard deviations	*17.47*	*19.34*	*21.41*	*16.97*	*19.71*	*23.60*	*22.21*	*23.45*	*23.57*	*24.56*
Number of local gov. per 10,000 pop	2.54	2.53	2.54	2.57	2.52	2.53	2.58	2.55	2.54	2.54
Standard deviations	*1.28*	*1.41*	*1.42*	*1.41*	*1.34*	*1.34*	*1.61*	*1.57*	*1.51*	*1.58*
Ratio of local/total urban gov. spending	66.25	65.96	66.31	67.40	69.53	70.78	70.59	71.68	72.27	72.22
Standard deviations	*16.22*	*15.50*	*15.79*	*14.37*	*14.55*	*18.72*	*13.84*	*13.36*	*14.08*	*14.26*

Table 10.2 Results of multilevel modeling with repeated measure (coefficient of variance of fiscal capability)

Variables	*Model 1*		*Model 2*		*Model 3*	
	Estimates	*t Value*	*Estimate*	*t Value*	*Estimate*	*t Value*
Intercept	20.99	3.82***	21.30	2.47*	12.20	0.44
2001	3.24	3.21**	2.86	2.72**	2.81	2.60**
2002	4.13	3.60***	3.88	3.19**	4.01	3.16**
2003	2.89	3.07**	2.48	2.46*	2.35	2.04*
2004	7.22	7.40***	6.86	6.47***	6.85	5.27***
2005	13.24	12.57***	12.78	11.09***	11.86	7.52***
2006	13.73	12.66***	13.34	11.11***	12.38	6.81***
2007	15.40	13.22***	14.98	11.49***	13.61	6.67***
2008	16.18	14.33***	15.23	11.72***	13.27	5.80***
2009	17.69	14.40***	16.16	11.76***	11.12	1.62
Longitudinal effect						
Number of local gov. per capita	4.32	5.56***	3.63	4.54***	3.98	4.76***
Ratio of local/total urban gov. spending	−0.03	−0.70	−0.01	−0.30	−0.19	−3.63***
Total population (10,000)			0.02	1.54	0.02	1.23
percent of non-agri. pop			−0.08	−1.12	−0.03	−0.48
Population density			0.00	−0.27	0.00	0.13
Percent of travel pop.			0.00	−1.90	0.00	−1.66
GDP per capita (log)					0.85	0.43
Percent of employment in manufacturing					0.05	1.20
Percent of employment in service					−0.09	−2.33*
FDI real (log)					0.68	2.05*
Percent of students					−0.71	−4.02***
Unemployment rate					−0.55	−0.83

Cross-sectional effect						
Number of local gov. per capita	3.79	6.20***	2.24	2.62**	3.65	3.84***
Ratio of local/total urban gov. spending	−0.03	−0.37	−0.02	−0.26	−0.11	−1.13
Total population (10,000)			0.01	1.73	0.01	1.40
Percent of non-agri. pop			0.14	1.66	0.19	1.64
Population density			−0.01	−2.33*	−0.01	−2.79**
Percent of travel pop.			0.00	−0.91	0.00	−0.64
Total GDP (log)					−3.30	−1.17
Percent of employment in manufacturing					0.02	0.13
Percent of employment in service					0.17	1.07
FDI real (log)					1.47	1.56
Percent of students					1.40	4.03***
Unemployment rate					0.55	0.17
East			−1.65	−0.82	−1.76	−0.85
West			6.59	2.84**	6.14	2.45*

Note: *<=0.05; **<=0.01; ***<=0.001

Table 10.3 Results of Multilevel modeling with repeated measure, separate urban districts and counties

Variables	*Urban Districts*		*Urban Districts*		*Counties*		*Counties*	
	Estimates	*t Value*	*Estimate*	*t Value*	*Estimates*	*t Value*	*Estimate*	*t Value*
Intercept	17.70	4.93***	45.79	1.37	−6.32	−1.11	−29.94	−1.02
2001	1.65	1.32	1.98	1.49	2.00	2.26*	1.29	1.30
2002	2.55	2.03*	2.76	2.00*	3.18	2.97**	2.52	2.08*
2003	2.98	2.43**	3.69	2.50*	1.36	1.60	−0.07	−0.07
2004	6.42	4.99***	7.25	4.24***	5.00	5.64***	3.56	2.93**
2005	10.78	7.87***	11.10	5.29***	9.39	9.31***	6.48	4.39***
2006	8.57	6.26***	9.06	3.74***	9.86	9.92***	6.84	4.10***
2007	9.30	6.64***	9.83	3.68***	10.36	10.43***	6.88	3.79***
2008	9.64	6.49***	9.57	3.10**	10.26	10.62***	5.50	2.69**
2009	13.07	8.13***	18.06	1.81	10.64	10.38***	−5.32	−0.86
Longitudinal effect								
Number of local gov. per capita	5.49	3.25**	7.84	3.78***	−1.64	−2.12*	−1.76	−2.11*
Ratio of districts/urban gov. spending	−0.01	−0.26	0.05	1.01	−0.02	−0.55	−0.19	−3.73***
Total population (10,000)			0.03	2.13*			−0.02	−1.70
Percent of non-agri. Pop			−0.20	−2.51*			−0.10	−1.40
Population density			0.00	−0.06			0.00	−0.22
Percent of travel pop.			0.00	−2.39*			0.00	−2.02*
GDP per capita (log)			−2.36	−0.79			4.11	2.29*
Percent of employment in manufacturing			0.05	0.81			0.03	0.63
Percent of employment in service			0.01	0.13			−0.08	−2.30*
FDI real (log)			−0.60	−1.24			0.92	3.04**
Percent of students			−0.85	−2.76*			−0.55	−3.50***
Unemployment rate			1.73	2.11*			0.68	1.09

Cross-sectional effect								
Number of local gov. per capita	1.71	2.28*	3.64	2.31*	4.52	6.90***	4.61	4.63***
Ratio of districts/urban gov. spending	0.02	0.26	−0.09	−0.89	0.27	3.89***	0.20	1.92
Total population (10,000)			0.01	1.07			0.01	1.57
Percent of non-agri. Pop			−0.02	−0.18			−0.04	−0.32
Population density			0.00	−0.08			−0.01	−1.42
Percent of travel pop.			0.00	0.88			0.00	−0.68
Total GDP (log)			0.09	0.02			0.47	0.16
Percent of employment in manufacturing			−0.33	−1.78			0.04	0.25
Percent of employment in service			−0.18	−0.90			0.12	0.74
FDI real (log)			−0.09	−0.07			0.15	0.15
Percent of students			−0.42	−1.07			1.12	3.11**
Unemployment rate			-1.63	-0.43			3.02	0.93
East			0.74	0.28			−1.49	-0.70
West			4.36	1.14			4.27	1.63

Note: *<=0.05; **<=0.01; ***<=0.001

Cities with increased numbers of counties are associated with lower levels of fiscal disparity over time (longitudinal effect). Compared with urban districts, counties have higher administrative autonomy. Further investigation is needed to examine the reason for the negative longitudinal effect of governmental competition on fiscal disparity among counties within a city.

In order to test the robustness of the results, we dropped from the analysis four large cities administrated by the central government: Beijing, Shanghai, Guangzhou, and Chongqing. We then changed the dependent variable to represent the standard deviation of fiscal capacity, and found that the results remained the same. Next, we ran a panel data fixed-effect analysis and confirmed that the results are consistent with those presented in Table 10.2.

Control Variables

The percentage of employment in the service sector shows a longitudinal effect; a 1% increase is associated with a 0.09 unit decrease in fiscal disparity. Moreover, a 1% increase in FDI is associated with a 0.68-unit increase in fiscal disparity. When unemployment rate increases by 1%, fiscal disparity decreases by 0.71 units.

A 1-unit increase in population density is associated with 0.01 unit decrease in fiscal disparity. The percentage of students shows both longitudinal and cross-sectional effects; nevertheless, these two effects differ. While cities with increased percentages of students are associated with lower fiscal disparity, those with higher percentages of students are associated with greater fiscal disparity.

Summary and Discussion

Twenty years have passed since fiscal decentralization was introduced in China. Urban districts/counties gained substantial administrative and fiscal powers in the process and became the engine for economic growth and the major providers of local public services. Several studies have confirmed that fiscal decentralization promoted China's economic growth. However, numerous other studies have documented that the decentralization process increased regional income inequality. Scholars have not paid much attention to the effect of empowered urban districts/counties on intracity fiscal disparity, which determines public service distribution within a

city. The distribution of public service accessibility is associated, to a great extent, with urban stratification, which determines households' career opportunities and quality of life.

Our results suggest that local government fragmentation is positively associated with fiscal disparity both longitudinally and cross-sectionally, while the percentage of public expenditure for urban districts/counties to the total public expenditure of the city is not associated with fiscal disparity. Cities with a larger number of urban districts/counties are associated with greater fiscal disparity, and cities with increased numbers of urban districts/counties are also associated with broader variations in fiscal capabilities among them.

Compared with US metropolitan areas, Chinese cities do not have many local jurisdictions. Households constrained by the Hukou system do not have complete mobility, and they do not need to pay property tax for access to public services. Local governments in Chinese cities provide public services based on business tax revenue. More local governments gained administrative and financial autonomy inside cities, resulting in increased fiscal inequalities among them. Given the fiscal and administrative background of Chinese cities, the inter-jurisdictional competition for business investments among the local governments has amplified intra-city fiscal disparity. This study has not elaborated the institutional mechanism. Further research needs to be conducted to investigate business competition among local jurisdictions and its effects.

Urbanization is flourishing in China and has become the engine for economic growth. Our study shows that local administrative structure affects the variations in fiscal capability among local jurisdictions, which ultimately shapes the urban landscape through public service distribution. For instance, due to increasing internal immigration and the pressure to increase revenue for infrastructure construction and public service provision, municipal governments are motivated to expand the city's geographical boundary to gain more land revenue. This process is often accompanied by incorporating adjacent counties to the city administrative boundary and converting such counties into the urban district. City prosperity grows through urban annexation. Our study implies that the process might broaden fiscal disparity among local jurisdictions, which intensifies the variation in public service accessibility within the city. In another case, some municipalities merge with existing urban districts to take advantage of the economies of scale in public service provision. For example, Shanghai merged Luwan District into

Huangpu District in 2011. Our findings indicate that merging jurisdictions can promote the efficiency as well as equity of public services. In sum, the changing intra-city administrative structure deserves scholars' attention apropos equal public service distribution during the massive urbanization process. Public service equality is vital for Chinese cities to morph into sustainable and livable spaces.

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CHAPTER 11

The Modes of Government Response to Internet Political Participation in Cities

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The internet has frequently been promoted as a profound technology that will increase political participation. The network society organizes exist a big public sphere more than any other historical form of organization (Castells 1996, 2004, 2008). Scholars argue that the policy-transfer process usually occurs through a communications and information framework (Page and Shapiro 1983; Wolman and Page 2002). As an effective supplement to traditional civic participation, internet political participation is playing an increasingly significant role in local government's governance innovations in advanced modern countries (Gu 2010). Rapidly developing internet technology as a force for the political participation of citizens provides a totally new political environment. At the same time, it also raises an obvious question for the Chinese urban government: In this new environment, how should the government respond to public opinion in the process of policymaking? How could the effectiveness of government responsiveness and governance be improved? The answers for these urgent questions will have a deep significance from the theoretical and practical point of view. The literature pertaining to internet political participation and government policymaking is extensive at both theoretical and empirical levels. Unfortunately, this large and rapidly growing body of research has not achieved "the cumulative characteristic which is desired"

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(Emerson 1962). The interpretations given so far have remained focused on the view of power, while our integrated knowledge of power does not significantly surpass the conceptions laid out by Max Weber (1947). This means that there is still a place for explaining government responses to internet political participation in policymaking.

A key characteristic of democracy is the continuing responsiveness of the government to the preferences of its citizens (Dahl 1956; Arrow 1963; Sen 1970). This characteristic focuses on whether government policy does or does not respond to public opinion. Scholars have also known that authoritarian regimes can exhibit responsiveness to citizens some of the time (Distelhorst and Hou 2014). The question is the same regarding internet political participation. Empirical studies have revealed that, unlike mainstream television and newspapers in China, weblogs contain information that is both critical of and divergent from party-state propaganda (Esarey and Xiao 2008). Statistics show that since 2003 more than 80% of the hottest issues (top 20 trending topics) in China online focus on public policy (Chinese Academy of Social Sciences, quoted by Zhang 2010, 70). When these issues occurred, most netizens (internet subscribers) disagreed with the government about a given policy, and requested the government to modify its unfair policy. The literature shows that social criticism dominates Chinese internet issues; much of the online participation takes place on interactive weblogs, with 64% of Chinese netizens using blogs, 32% using BBS forums, and 14% using micro-blogs (CNNIC 2011, 31). But with political content often involved, online discussion reaches a more serious level and can catch the public's attention. This sometimes creates anger at the government and political actors in the real world, effectively empowering ordinary netizens to shape and change government policies. This was the case with the infamous arrest and death in custody of migrant student Sun Zhigang in 2003 (Zheng 2007b, 147–51; Yang 2009, 34–35). For these reasons, it's clear that government response to internet political participation is very serious in China.

The Effect Mechanisms of Internet Political Participation Upon Government Process

The following sections deal with the literature on internet political participation and government response, respectively: Why is the government response to internet political participation important, specifically in China? What are the basic problems the country has to face in this context?

We define internet political participation as the political participation of citizens on the internet. This is a kind of behavior and process intended to influence policymaking within the political system, using the internet to express citizens' political will and participation in political activities.[1] Political participation by citizens using the internet is characterized by instantaneity, interaction, convenience, independence, randomness, and explosiveness, as well as other new influential features which greatly differ from traditional political participation. Graeme Browning (2000) called this phenomenon "electronic democracy." Through the internet, citizens have more opportunities to understand what the government is doing, and how to express their views and take part in the policymaking process in different ways in a timely manner (Huang and Cheng 2001).

The literature in English shows the great impact of cyberspace on Chinese society. Some authors posit that the Chinese internet is a means for "gradual, slow revolution" (MacKinnon 2008, 45), "political liberalization" (Zheng 2007b, 167), or a "communication revolution" (Yang 2009, 213). Others argue that it is "a platform for bottom-up information and public debate" (Zhou 2009, 1006) and "a new channel for individual expression" (Shen et al. 2009, 470), which either "democratizes communication of information in Chinese society" (Tai 2006, 289), "promotes political openness, transparency, and accountability" (Zheng 2007b, 186), or "challenges the mainstream culture" through its "playful (mis)use of the available resources" (Yu 2007, 429). How the government responds to such participation and how to improve the responsiveness and the effectiveness of governance has become a critical issue.

There are three mechanisms of internet that affect political participation upon government policymaking: power, information, and communication. The communication mechanism is a kind of logic particular to China of rapidly developing internet political participation, and it will have a major impact on all government processes. In other words, these mechanisms are the factors that determine and influence the government's response, and the factors that are relevant for China.

First, we have the power mechanism. Power in cyberspace is key to understanding the impact of internet political participation upon government process. American scholar Mark Slouka suggested that "the digital revolution, in its deep core, is associated with power" (Slouka 1995, 71). Famous American futurist Alvin Toffler (1983) also argued that, in the information society, "all information move forward together

with power, and then are closely related with politics. As we gradually enter the information politics era, this relationship will become increasingly deep." British scholar Tim Jordan (1999) and Lent and Jordan (1999) engaged in a series of studies on the powers of the internet, and suggested that it spreads mainly on three levels: the power of technology, the power of media, and the power of imagination—the three powers being interconnected. The use of social networking and the like have "the most dramatic effects in states where a public sphere already constrains the actions of the government, and social networking has become coordinating tools for nearly all of the world's political movements" (Shirky 2011). It makes power become the core factor in political participation. Internet commentators, and micro-blogs in particular, are "equally buoyant about the power of China's blogosphere to democratize public discourse" (Zhou 2009, 1016, quoted in Leibold 2011). This has opened up new spaces for creating a sort of "digital civil society," which "can challenge cultural stereotypes, correct misinformation, and resist symbolic violence" (Yang 2009, 216, quoted in Leibold 2011).

Perhaps the greatest power of the internet, along with its search engines such as Baidu and Google in particular, is not the ability to locate information but rather to filter it. The increasingly personalized nature of internet speech and information presents a number of inherent problems (Sunstein 2006, 2007, 2009): First, it increases the ability of diverse yet segmented discourse communities to talk and listen to one another rather than engage in genuine dialogue. Second, this process of balkanization also polarizes online opinion, leading to more extreme opinions, which can foster hatred and even real-world violence. Third, enclave deliberation often produces cyber-cascades, allowing rumors, conspiracy theories, and false information to spread like wildfire on the internet. Fourth, cyber-niches undermine "general-interest intermediaries," like newspapers and the nightly news, making shared deliberation and consensus-building more difficult.

In the field of political management, especially in public administration, the European Union and individual countries began trying to adapt to the challenge of network technology through licensing, decentralization, and other forms. In a study of the restructuring of governance in local governments in Western Europe, American scholar Chris Ansell (2000) suggested using networked policy instead of hierarchical organization.

Second, we come to the information mechanism. Information is an essential factor of internet political participation's impact on government process. Structurally, a social networking site (SNS) is situated in the

broader context of the internet, and of course is the quintessential personal network tool. Karl Deutsch even said that the essence of politics is information and not necessarily power. In these three kinds of internet power mentioned before by Tim Jordan (1999), technological power and media power induce ownership and power dominance by monopolizing control of information. Having limited resources and an asymmetry of information is very favorable to the government for it to make decisions unilaterally. But through the internet, individuals can communicate directly with government officials, for instance making requests and recommendations to government officials, or participating in elections or government policymaking through a computer. At the same time, the popularity of the internet places a government's actions constantly under the scrutiny of the public. Therefore, the more transparency there is in the government's internal affairs, the more subject to constraints they become.

Since the rise of the internet in the early 1990s, especially the SNS at the beginning of the twenty-first century, the networked population has grown very quickly and the sinophone internet is now the world's largest cyber-community. As the data show, at the end of 2012 the number of Chinese netizens reached 564 million, while internet penetration rate rose to 42.1%. Most notably, over the same period SNS has become a fact of participation for the public, as most entertainment applications have declined, while the number of micro-blog users increased by 23.5%, from 251 million at the end of 2011 reaching a record of 309 million after one year, becoming the fastest growing internet application (CNNIC 2013).

In addition, with the development of internet technology, there have been many new channels of internet participation influencing government policymaking, mainly: internet cyber-communities, micro-blogs, light blogs, other blogs, web forums (BBS), professional websites, and so on, all of which have the potential to spread a large amount of information quickly. Major countries in the world, such as the UK, USA, France, Canada, and the members of the European Union, are using SNS like Facebook, Twitter,[2] YouTube, and others as information channels. One viral video (something that is rapidly shared, copied, or replicated (Kony 2012)), according to Wikipedia, was the most successful video in terms of its spread, gaining about 32,000,000 clicks just one week after it was originally aired (Rebecca Collins). Some international organizations, such as the United Nations and the World Bank also launched official micro-blogs on Sina Weibo (micro-blog). Such a huge amount of internet subscribers, informational flows, and information-spread creates the

base for internet political participation, which has an important impact on government policymaking process.

Third, there is the communication mechanism. Not unlike previous communication technologies, the internet has been predicted to dramatically change the nature of government process. The rising and rapid development of internet political participation in China has its own logic, and it is in essence different from the West. In sharp contrast, "research and debate on the political impact of the internet in the West has been more robust and wide-ranging in its focus, and far more cautious in its conclusions" (Leibold 2011). In western countries, the rise of internet political participation is closely linked with participatory democratic theory and practice. In addition to internet political participation, there are many institutionalized channels for citizens' participation. As John Thomas (1995, 29) said, "the advantages of citizen participation include: to ensure that public services better suited to their requirements, to promote the formation of a more open and more responsive public bureaucracy, and to establish a more active and contend cognitive and emotional to the government and citizens themselves." Matthew Hindman (2008, quoted in Leibold 2011) demonstrates "how blogging remains a narrow, elite pursuit, which does little to increase the representative basis of American politics." University of Chicago Professor Zhao Dingxin (2011) claimed that it is a new "internet forced reform, micro-blog changing China," but he also pointed out that "unlike China, the internet is not the main platform for political information delivery in the United States currently."

Internet political participation in China is part of the "blog revolution" that is sweeping the country, by "shaking up the power balance between the people and the government of the world's most populous nation" (Xiao 2004). At present in China, there is a conflict between the few channels for citizen involvement and the enthusiasm of modern citizens for political participation. When the channels to express one's views within the system are not available, no effective public participation is possible. Therefore, this new mode of public participation outside the system is developing rapidly. It plays an increasingly important role in the public political participation and social life and has become the most active part of the public domain in China (Sun 2010). In this case, it is not similar to western countries where the social network sites are homophilous, and "create cavernous echo chambers as people reiterate what their friends posted" (Boyd 2008). Instead, in China, the internet makes average people more informed, while SNS postings make them politically activated by strangers—usually the elites online.

Let us take the example of the recent protests in Wukan, a so called "landmark event of grassroots democracy" (Li 2011). The controversy happened in February 2011. But as all channels to express one's view within the system were not available, confrontation even continued until September 21 of that year. Wukan villagers had been to the Lufeng Municipal Government to hand over a petition to complain about officials who had sold land to real estate developers without properly compensating the villagers. The villagers announced via the internet that they would be marching to give the local government a petition on November 21, and invited Chinese and foreign correspondents to report. Then it attracted worldwide attention in mid-November, and the high-level government of Guangdong Province stepped in, thus solving the matter peacefully (Hu 2011).

However, once this "non-procedural democracy," about which netizens have high expectations, combines with impatient behavior, it could bring problems, such as the "tyranny of the majority," distortion of government policymaking by the expression of public opinion, or group polarization caused by internet political participation developing in a disorderly manner, and so forth. These factors could result in mistakes in government policymaking, or sensible but not legal decisions and other negative effects (Fu 2010). In addition, internet bullying (cyberbullying is bullying that takes place using electronic technology) is different from in-person bullying because it gives the bully the ability to remain anonymous. Just like the case of the real estate mentioned above, internet public opinion may mislead government policymaking. Take, for example, of the case of Deng Yujiao: strong internet public opinion forced the judiciary to make a judgment, which appeased public anger but was not compatible with the law. Disorder in internet political participation is growing; it shows the lack of systematic relations between the state and citizens, groups, and the failure of standardization (Fu 2010). The Chinese internet is "highly vulnerable to manipulation and deceit" and "ripe with willful ignorance, misinformation, and misguided faith in numbers and volume as proof of truth" (Zhu and Robinson 2010). "China's unique form of online vigilantism, the so-called human-flesh search engines, is a case in point. Directed at the right source, they can result in petty, ill-informed and harassing witch-hunts based on innuendos, half-truths and bizarre conspiracy theories, especially they might be ways of invasion of privacy" (Leibold 2011).

Campaigners can reach enormous "networked publics" (Boyd 2008) and SNS can potentially democratize "the space of appearance" (Arendt 1998; see also Silverstone 2007). "There are many strong reasons why

campaigners have focused their attentions on social media and why there has been a general enthusiasm regarding social media as an opportunity for humanitarian campaigns and for cultivating cosmopolitan sensibilities" (Madianou 2011, 250).

Therefore, in the context of internet political participation, government process becomes more complex. As a result of these crises, the form that the government response might take is an important issue. Based on different concepts, government response to citizens' internet political participation would produce different modes, and different response patterns may lead to different results.

The Analysis Framework: Participation-Responsiveness Model

The modes of government response to internet political participation for policymaking refers to the ways in which, in the face of internet political participation, the government reacts or answers someone's issue or proposal to set an agenda, modify existing public policy, or form a new public policy. This kind of government response means that the government answers to the public's requirement of public policy change and takes action to solve the issue (Starling 2002). Responsiveness is distinct from both accountability and representation, and refers to the extent of citizens' ability to influence policy, or, conversely, the adherence of policymakers to the preferences of citizens (Malesky and Schuler 2012). Government response, simply, is the government's reaction or answer to someone's issue or a proposal raised by the public. It includes two parts: governmental reaction and governmental answer.

Initially, this chapter discussed power, information, and communication that affects government policymaking. Public policy is the output of a political system's policymaking, where "a political system can be designated as those interactions through which values are authoritatively allocated for a society" (Easton 1953, 1971, 129). Internet political participation has a significant influence on government policymaking: the communication mechanism is a very important and special factor in China. These factors that determine or influence the government response will then affect the agenda-setting of public policy, and vice versa. Therefore, these discussions are used to develop this chapter's major framework (see Table 3). There were present: the dimensions by which the modes of government response to internet political participation for policymaking are to be classified; the

level of networked public participation; the level of government response; and the interaction level between the networked public and the government.

There are many studies on government policymaking modes by scholars, featuring especially more research with regard to agenda-setting modes. For example, Thomas J. Lando's study shows that meaningful citizen participation happens mainly at the agenda-setting stage (1998). The most classic is generally considered to be May's agenda-setting modes derived from Cobb and Ross (1976) and other scholars. According to the sponsors of the agenda and the level of public support, May (1991) distinguished the agenda-setting modes between the external autogenous mode, the mobilization mode, the internal self mode, and the consolidation mode (Table 11.1).

Chinese scholar Wang Shaoguang (2006) distinguished six kinds of public policy agenda-setting mode, according to the identities of the policy agenda and the level of public participation (Table 11.2).

Otherwise, combining May's agenda-setting modes, Zheng Qi (2007a) suggests the internal and external cooperation mode, and so on.

Yet, in a study that looks into the internet participation context, I found that users may have an influence in choosing not only which issue should be included in the government's agenda for discussion and action at the

Table 11.1 May's agenda-setting modes (1991, 188)

		Sponsors of the agenda	
		Government	*Society*
The level of public support	Low	Mobilization model	Inside initiative model
	High	Consolidation mode	Outside initiative model

Table 11.2 Wang Shaoguang's Chinese agenda-setting modes (2006)

		Sponsors of the agenda		
		Decision-makers	*Think-tank*	*Society*
The level of public participation	Low	Closed mode	Internal reference mode	Letter mode
	High	Mobilization mode	Leveraging mode	External pressure mode

stage when the government selects various issues by order of importance (Kingdon 1984, 3–4) but also in the government's policymaking stage, monitoring stage, and evaluation stage after it has made a decision. How the government responds at each of these different phases is a key issue.

At the same time, although the agenda is divided into three categories—media agenda, public agenda, and policy agenda (Kingdon 1995)—these agendas may be interrelated, and in the context of network participation, they are often intertwined. Indeed, internet subscribers requiring the government to put an issue into policymaking agenda is part of the public agenda, whereas when these internet subscribers are using online media in order to form internet public opinions, this is the media agenda; at the same time, when these internet subscribers participate in the government's decision-making process, it is the policy agenda. Thus, it is difficult to completely separate the three processes. Therefore, the mode of the government policy response discussed in this chapter is inclusive of the two processes of agenda-setting and policy formation, and combines with the interaction of the public agenda, media agenda, and policy agenda. And this is still different from the agenda-setting mode. In fact, what is discussed here is the way to police policymaking. But unfortunately, there have been almost no specialized studies into the mode of government response to internet political participation for policymaking. Zhang Shuhua's (2010) research into the relationship between government decisions and internet public opinion can provide us with useful references (Zhang 2010, 141).

This chapter argues that we can identify four modes of government response to internet political participation for policymaking, according to two dimensions: the level of the networked public's participation and the level of government's response, and the interaction level of the two public policymaking bodies—that is, the networked public and the government. According to the magnitude of the government response, these modes are arranged as follows (Table 11.2).

This table's two dimensions are justified by more analysis. On the one hand, the communication mechanism is an important factor that influences government policymaking. And the government response is that the government in response to the public's requirement to make a change to public policy through communication (Starling 2002). So those factors that influence the communication mechanism would affect government response. The communication mechanism includes the networked public's participation and the government's response. "As the communication

landscape gets more participatory, the networked population is gaining greater access and enhanced ability to undertake collective action" (Shirky 2011). Therefore, the level of the networked public's participation is a very important index by which to measure the government response. It is the same case for the level of the government's response.

On the other hand, as mentioned above, those factors which determine agenda-setting for public policy will affect the government response. There are two factors that determine agenda-setting: the sponsors of the policy agenda and the level of public participation. As also mentioned above, the level of public participation is an important factor that influences government policymaking.

It should be kept in mind that the interaction level between the networked public and the government reflects the level of government response. The interactive nature of the internet is seen by some as a technological innovation that might boost participation in politics and civic affairs (Ferber et al. 2005).

Therefore, the level of the networked public's participation and the level of the governments' response, and the interactions level between the networked public and the government are important factors that impact the government response. In other words, these two dimensions are useful to develop the framework.

Four Modes of Government Response to Internet Political Participation

Ostrich Mode: Netizens Participate, the Government Does Not Respond

In this mode, although internet public users have been involved in and discussed the issue on the internet, the government ignores public opinion and does not respond, adopting instead an ostrich's head-in-the-sand policy. This mode is characterized by a high level of participation of internet subscribers but a very low level of government responsiveness, and by a lack of interaction between the two bodies. With traditional management thinking, most events have corresponded to this mode in China. An example of this is the case of banned BBS (a kind of online forum) by the Bureau of Binhai County, Jiangsu Province. In May 2010, the Department of Education of Binhai County blocked access to the website Binhai.cn

from any computer in the county's primary and secondary schools. When questioned by journalists, the Secretary of Education Zuo Anqi explained that bbs.binha.cn (a part of binhai.cn) was blocked but not binha.cn, because this website was unrelated to teaching and education. Anqi said that bbs.binha.cn was the "garbage dump" of a small number of people venting their resentment; therefore, it had been decided to prohibit teachers and students from visiting the site or to post on it from the school computers. The local government continued to maintain their original approach, ignoring the objections of internet subscribers (Guo 2010). For the government, using this mode is not appropriate to resolve the issues at stake. The results of this mode will tend to be worse; it easily leads to an ostrich policy through government inaction. The risk is that such an approach in fact worsens the conflict.

Cuckoo Mode: Public Opinion Pre-Expressed, Passive Government Response

In this mode, after unexpected events have occurred, the scale of the event is amplified through the internet; the views expressed by netizens focus on public policy and official responsibilities. Under the pressure of internet public users, the senior government leadership then answers passively and facilitates new policymaking, which benefits netizens directly affected. All policymaking processes in this mode can generally be simplified as following this chain of events: events happen, stakeholders make a claim to maintain their rights—events are reported on social media platforms—it attracts netizens' intensive attention, and the focus of online public opinion—the event receives media coverage—a general public opinion is attached to the event, going as far as reaching the government—thereby causing high-level government attention to the issue. This is how such an event can influence the policymaking agenda, with the problem being solved by adjusting policies and programs. The government is pressured by public opinion online to make or change policy. However, the mode is characterized by a high level of participation of netizens but a low level of government response; there is little interaction between the government and netizens. The latter are filled with anger and act as "Fuya Tears of Blood" (a Chinese proverb: it describes a cuckoo constantly crying blood in pain and sadness). This mode is full of conflict and blood and tears.

Occurrences such as PX (para-xylene) events (in Dalian city, Kunming city, Chengdu city, Ningbo city, Maoming city, and Zhangzhou city), the Sun

Zhigang case in Shenzhen city, the Wenzhou train collision in Wenzhou city, "Shanxi Black Brick Kiln" events in different cities in Shanxi Province, the Yao Jiaxin event in Kunming city, and so forth are all typical cases of Cuckoo mode: public opinion is pre-expressed, there is a passive government response. One typical case of this model is the protests of Wukan mentioned above. The "outbreak" of this event occurred under the premise of the poor access to the formal expression of public opinion, and then in favor of seeking assistance through the internet. Internet political participation played a powerful role in promoting and influencing the event, eventually developing it into a public event and then into policy issues. Initially, although the incident entered the public view, it did not become a public issue. It was not upgraded to a public event until the villagers announced through the internet that they would demonstrate on November 21. Discussions led to intense media coverage that focused the opinions of internet users, and pointed to public policy and the authorities. In particular, on December 20, the villagers announced that they would parade out of the village to Lufeng City the next day, and that they would not hesitate to shed blood. This made the working group headed by Zhu Mingguo Guangdong, deputy secretary of the Guanddong Provincial Committee stationed in Lufeng, handle the event on the same day. Finally, internet public opinion caused senior leadership to attend to the issue, and promoted agreement between the highest policy advice and public opinion, quickly resolving the event by affecting the "senior will" (Shen 2011).

This mode is full of conflicts between network participation and public policymaking, between citizens' rights and the government's powers. It seems to coincide with the views and ideas of conflict theory. But even conflict theory also recognizes conflict as a "safety valve" of social systems, with a function of integration (Coser 1956). Following this theory, government initiative and the public participate directly in policymaking. This mode could provide the basis and manner for conflict to have a positive function and for the possibility of a negotiated settlement.

Queen Bee Mode: Government-Led, the Public Partly Participates

The so-called "queen bee mode" is defined by the government acting as the queen bee, and urging worker bees to build the honeycomb together. This mode plays a large part in the policymaking process by leading internet citizens to participate. It is characterized by a lower level of participation of internet public users but a higher degree of interaction between internet subscribers and the government.

In this mode, after a public event or issue happens, the public discusses policy issues through the internet. Then the government incorporates the proposals of public representatives into the government policymaking agenda. It seems that the conflict between network participation and public policymaking, the conflict between citizens' rights and government's powers, converts into delivering consultation and integration.

The latest policymaking process of the Xiamen PX (para-xylene) incident in Xiamen City can be taken as an example. Some media stated that this was "a landmark event" and was a "specimen" of democratic policymaking in China (Zhang 2010). The "anti-trafficking through micro-blog" case also appears to function in this mode. In this case, the event received a positive response, in the sense that the government was responsive to the event. Drawing on recent survey data of internet subscribers, we can clearly see that at first the number of micro-blog posts rose sharply while the amount of news coverage on traditional media did not increase correspondingly. On February 8, 2011, the Ministry of Public Security got involved, so public opinion witnessed a trend of instantaneous shift. Then citizens became more rational in their discussions, instead of blindly taking actions on the street; some the National People's Congress (NPC) deputies and the Chinese People's Political Consultative Conference (CPPCC) members submitted a motion to the NPC conference and the CPPCC conference. Consequently, the responsible government departments set up "anti-trafficking through micro-blog" measures, which were first created by civil society, as a professional and legitimate tool. It not only ensures privacy but also facilitates a solution to the problem. Some critics stated that "anti-trafficking through micro-blog" is conducive to the growth of netizens, that it will help to improve the government's reputation, and it is an excellent improvement in public relations. This promoted the legalization and effectiveness of anti-trafficking action, but also indirectly confirmed the value of netizens' online activities (People Web Opinion Observed 2011).

Mandarin Duck Mode: Government Initiative, High Interaction Between Government and Netizens

This is an ideal model, characterized by a high level of participation of internet subscribers, a high level of government response, and a high degree of interaction between the government and netizens. It is like a

pair of mandarin ducks, inseparable, mutually caring for each other. This mode has not yet appeared in China. It is citizen centered, facilitating a broad participation of citizens in the decision-making process. It is conducive to open assessment of government action, and enables monitoring and influence to affect policy. The process in the mandarin duck mode becomes institutionalized and normalized. It is characteristic of participatory democracy, such as e-democracy. In this mode, the government response is citizen centric, swiftly observed, and there is a proactive disclosure of information. Citizens broadly participate in the policymaking process to deal with issues. There are more open channels for public opinion to make assessments, monitor, and correct the government's actions. This requires using a variety of systems as a guarantee to continue to improve policymaking rules and procedures, and to use criteria to determine the scope, efficiency, forms, and other areas of policymaking in order to prevent arbitrary government decisions.

In this mode, a large number of cyber-communities develop and become advisory bodies which provide information and advice for the government. The level of government response to the local affairs is high. Citizens give a positive response to government policymaking. Governments initially gather public opinion and put forward policy issues, while the internet public can directly participate in the entire policymaking process. There is a wide range of policy discussion forums, and online policy questions and identification. At all stages of policymaking, governments accept and take into account the supervision and evaluation by the public, and quickly respond. Of course, governments still play the leading role in governmental policymaking.

The elements of the policymaking process can generally be simplified to: incidents occur, issues are proposed—this catches the internet public's attention and causes discussion around the issues—the proposal of representatives or officers creates access to government policymaking agenda—the government sectors ask public representatives to make special investigations, then form initial comments and proposals—these comments or proposals are published through the media, additional comments are requested, and surveys expanded—a wide range of public opinion is formed, the government adjusts its plan based on the feedback—a formal, large-scale online survey is launched—a plan is finalized, the problem is solved or a policy is adjusted—then the result is formally promulgated through the media.

Conclusion

Through the four kinds of mode of government response to internet political participation for policymaking and some of the typical case studies discussed above, it can be seen that, when issues arise, if the ostrich mode (internet public participates, the government does not respond) or cuckoo mode (public opinion pre-expressed passive government response) is applied, it will result in severe consequences and the credibility of the government will be compromised. The queen bee mode (government-led, the public participating directly) might develop from conflict to negotiation between internet participation and government policymaking. Thus, the government should avoid using ostrich mode and minimize use of cuckoo mode, while promoting the government-led queen bee mode to make network internet participation and government policymaking work together, for the prevention of incidents. If efficient government policymaking was pursued with policy stability and predictability, then the queen bee mode is a good option, but it still does not provide a better solution to the interaction between internet public users and the government in government policymaking. In this mode, the active participation of internet public is not enough. As *New Century* magazine pointed out (Gladwell 2002), when facing the awakening of civil rights stimulated by the market economy, governments at all levels must learn "to use dialogue, negotiation and consultative approach to resolve conflicts of interest," and create a mechanism for officials and the public to interact. The biggest challenge for the modes of government response to internet political participation for policymaking in China currently is that they are mostly non-institutionalized, and not normalized. The government's approaches fail to solve deep-seated problems and contradictions, resulting in the government becoming the fire brigade, struggling to cope with various crisis events and mass incidents.

Therefore, the ideal approach in the future might be the mandarin duck mode (government initiative, high interaction between government and netizens). Although there is obviously a certain tension and conflict between internet political participation and public policymaking, as well as between citizens' rights and government's powers, there is also the basis for mutual integration and balance. The shift from conflict to negotiation is an effective way to resolve the relationship between the two bodies. The government-led queen bee mode offers the basis and method for a conflict to have a positive function and a negotiated settlement. The mandarin

duck mode provides a theoretical basis for the future institutionalization and normalization of effective government policymaking. As Cleveland states, "more and more works in the participation of citizens be resolved or not. A growing number of policymaking is developed based on extensive consultation—Otherwise, the decision made lacks of support and implement" (Cleveland 1985). For policymaking, this means that the mechanism of democratic consultation, in which the power of internet public opinion is put onto a rational track, establishes a mechanism of power that can absorb reasonable components of public opinion. The political system is the reason and guarantee for internet political participation, and can protect substantive rights of citizens with internet political participation. Strengthening and improving the system of civic political participation through the internet has become the question, and the means are considerable for implementing political stability, while also promoting political democracy and civilization (Fu 2010).

In short, the mandarin duck mode provides a good basis for the institutionalization and normalization of effective government policymaking, and for orderly and legal internet political participation in the future. In the network participation environment, in order to improve government policymaking capability to respond, to resolve online political risk, and to guide legal and orderly network participation, the ideas and strategies can be considered from the following aspects.

First, improving information release systems and establishing a governmental source of authority. This is from the power and information mechanisms of internet political participation.

Second, establishing an open internet system of policy policymaking and building in response-oriented government, integrated into the holistic government (Perri 2002, 6). This is a departure from the public policymaking purposes.

Third, reforming the mechanism of government policymaking and enhancing the cost–benefit ratio of political participation. The proposal is to prevent the disorder of internet political participation.

Fourth, improving the legislation around internet political participation, and regulating its order. This is a starting point for the process of proper internet political participation.

Generally speaking, there are two arguments against the viewpoint that the internet will play an essential role in national politics: the first is the critique of ineffectiveness of the tools themselves, SNS and the like, as laid out by Malcolm Gladwell in the *New Yorker*; the second is that the tools

produce as much harm to democratization as positive effects, "because repressive governments are becoming better at using these tools to suppress dissent," as emphasized by Rebecca Mackinnon of the New American Foundation and Evgeny Morozov of Open Society Institute (Shirky 2011). Research into citizens' perceptions shows that the information provided by the media plays an important role in forming their judgments. This suggests that through the communicational dimension of accountability, the media contribute to ensuring democratic legitimacy, independent of the institutional characteristics of metropolitan governance structures (Christmann et al. 2015). According to pre-testing and previous research, certain government websites may respond privately or make both requests and responses viewable only to the individual submitting the request (King et al. 2014). Yet, "[a]cademic analysis of the internet in China has become bogged down in the ubiquitous yet increasing stale debate between digital-activism and cyber-censorship—the good versus evil struggle between the internet's liberating potential and the Chinese party-state's ongoing efforts at thought-control" (Leibold 2011). Therefore, further research should be undertaken to investigate how to deal with these problems.

Notes

1. This idea is derived from concept of political participation introduced by Manuel Castells in 1996.
2. Twitter is a micro-blogging service on the world wide web in which users post messages of up to 140 characters to their account page or "profile." Their messages can then be viewed by any other account holder. Users can choose to "follow" each other, in which case messages are streamed instantly to the accounts of their "followers." This produces a form of virtual network that can quickly expand to allow large numbers of users to communicate simultaneously and in near real time (Hands 2011, 191).

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