From the ‘Workshop of the World’ to an emerging global city-region: Restructuring of the Pearl River Delta in the advanced services economy
Zhang, X.

Citation for published version (APA):
Zhang, X. (2015). From the ‘Workshop of the World’ to an emerging global city-region: Restructuring of the Pearl River Delta in the advanced services economy
Chapter 1

Introduction

Since the launch of the reform and opening-up programme in 1978, China has shown an unprecedented pace of economic development and urban transformation (Naughton, 2007). For over 20 years, it has maintained a remarkably high rate of economic growth, developing from a poor and backward country into the second largest economy in the world. Similar to its many East Asian predecessors, the economic take-off of China derived first and foremost from the rapid growth of its industrial sector (Zhang, 2006). Drawing on a huge and cheap workforce, China has built an export-oriented manufacturing sector within a short time mainly by relying on investments from firms in developed economies in search of low-cost labour. This has transformed the country from an essentially agrarian and early-industrial economy into a leading centre of manufacturing production (Jacques, 2012). By now, China is the largest ‘workshop’ in the world, accounting for 22 per cent of global manufacturing production and 11 per cent of goods exports (World Bank, 2012). Arguably, the industrialization of China in the past three decades is one of the most important events in the modern world economy.

However, economic development is, by definition, a dynamic process. After entering the new millennium, China’s export-oriented industrialization model has encountered growing challenges. Internally, the country suffers from the soaring labour and production costs, which put pressure on its labour- and resources-intensive manufacturing sectors (The Economist, 2012). Externally, the faltering demand in the developed world and the increasing competition from other low-wage countries, such as Vietnam and Cambodia, are diminishing the role of exports as a major driver of economic growth in the country. Against this background, a new wave of economic transition, boosted by assertive state policies, is emerging in China. This time, the leading sectors are advanced services. Although still lagging behind the average of its peers (ADB, 2012, p. 131), China’s service sector, especially advanced producer services, has showed a great potential of growth since the late 1990s (Yang and Yeh, 2013). There is evidence that some Chinese cities and regions- above all, those located along the coastal area- have
already begun to transform into the service-dominated, post-industrial economies (Lin, 2004a; Fang and Yan, 2004). Meanwhile, the Chinese policy makers have also recognized the importance of advanced services in the national and regional economy, and have committed to promote the development of these activities in their recent economic planning (Daniels, 2013). With the growing demand created by industrial upgrading and the supports from the central and local governments, advanced services are expected to expand in China in the next few decades (Yeh and Yang, 2013).

Contemporary urban theorists believe that urbanization and economic development are two closely intertwined processes (Castells, 1989; Harvey, 1989; Sassen, 1991; Amin, 1994; Soja, 2000; Scott, 2008, 2012). Cities, on the one hand, are dependent outcomes of capitalist development, reflecting the dynamics of the dominant production and accumulation regime. On the other hand, they also provide critical foundations for the social reproduction of capitalism (Scott, 2011, p. 289). This fundamental relationship implies that ‘every historical version of capitalism is associated with distinctive types of cities, and vice versa’ (Scott, 2008, p. vi). Research in the capitalist core countries has revealed that the crisis-generated economic restructuring and the rise of advanced services after the 1970s have triggered a profound spatial reorganization of these economies, manifested by a relative decline of the traditional centres of Fordist mass production and a simultaneous growth of new industrial areas that are identified as key locations of the so-called ‘post-Fordist’ or, more recently, ‘cognitive-cultural’ economic activities (Sassen, 1991; Amin, 1994; Soja, 2000; Scott, 2012). In addition, the transition towards the services economy has also deeply restructured the economic and spatial linkages between cities and city-regions, generating new patterns of urban systems and networks at different geographical scales (Taylor, 2004; Hall and Pain, 2006; Hoyler and Kloosterman et al., 2008; Derudder et al., 2010; Taylor et al., 2013). Compared to the extensive research in the developed world, the investigation into advanced services-led economic and urban transitions in China is still rather thin on the ground (cf. Fang and Yan, 2004; Lin, 2004a, 2005; Han and Qin, 2009; Yi and Yeh, 2011; Yang and Yeh, 2013; Yeh and Yang, 2013), in spite of the fact that advanced services are becoming increasingly crucial in driving economic and urban transformations in this country.
So, what are the development implications of the rise of the advanced services economy for Chinese regions and cities? This dissertation attempts to explore this question using one of the most archetypal manufacturing city-regions in the country- the Pearl River Delta (PRD). Through an in-depth case study of the PRD, the dissertation aims to understand how this typical manufacturing region is restructured by the emerging advanced service activities under the conditions of contemporary globalization, and how this process is shaped by the region’s special economic, political, institutional and cultural context that was formed during its unique history. Five articles, which are already published in or submitted to international peer-reviewed journals or books, constitute the main blocks of the dissertation. This chapter provides a brief introduction to: the background of the research (1.1), the issues and questions to be addressed (1.2), the study area (1.3), the research methods and data (1.4), and the structure of the dissertation (1.5).

1.1 Structural transformation and the rise of (advanced) services

One of the most important changes in the world economy over the past several decades is the rise of services (Bryson and Daniels, 1998). Since the early 1980s, most advanced capitalist economies have experienced ‘a major reorientation in the pattern, form, and sources of … economic growth’ (James, 2009, p. 106). It has involved, on the one hand, ‘a process of de-industrialization in which manufacturing’s share of employment and output has been declining’ and, on the other, ‘a compensating growth in employment and output in services’, especially in advanced producer services (Bryson, 2009, p. 368). Underpinning this structural transformation is a set of profound changes in the capitalist system (cf. Kloosterman, 2010, p. 132): the innovations in information and communication technologies (ICTs) (Castells, 1989; Graham and Marvin, 2001), the increasing specialization and flexibilization in production along with the rise of the post-Fordist regime (Piore and Sabel, 1984; Amin, 1994), the widespread policy practices of de-regulation and privatization (Harvey, 2005), and the intensification of connections and competitions between regions across the globe (Dicken, 2011). Driven by these factors, many firms in the developed economies have transferred their low-end manufacturing activities to countries and regions that have a much lower labour cost (primarily in East Asia), while retaining the knowledge-intensive, higher value-added sectors, such as management, finance, marketing, research and
development, in their home countries (Dicken, 2011). As a consequence, the service sector has become the primary source of economic and employment growth in the developed world. It is estimated that more than 70 per cent of economic output and employment in most developed countries nowadays is generated by services (ADB, 2012, pp.41-42). In economies like the US and Western Europe, professional business services- the advanced and fastest growing sector in the services economy- account for around 20 per cent of all employment (James, 2009, p. 107).

Compared with its counterpart in the developed world, the service sector makes a less significant contribution to economies in developing countries. In developing Asia, services now account for about 34 per cent of the region’s employment and 48 per cent of its economic output. Both figures are still behind those in the advanced economies (ADB, 2012, pp. 41-42). Also different from developed countries, most Asian countries’ service sectors are dominated by traditional types of service activities (such as wholesale and retail, hotels and restaurants, personal services, and public administration, etc.), which tend to have a much lower productivity compared to the OECD level (ibid., p. 35). The relatively backward development of services in developing Asia is largely due to the fact that most of these economies are still at an early or medium stage of industrialization. In addition, the widespread national growth strategies which favor export-oriented manufacturing industries have also stunted the growth of services in many countries (Daniels, et al., 2005).

However, the contribution of services in developing economies ‘is on the rise and looks poised to expand further’ (ADB, 2012, p. 38). During the past two decades, the share of the service sector in employment and economic output has risen by 10-20 percentage points in most Asian countries. Even countries where services make a smaller contribution to the economy as whole, such as China, show a considerable growth (ibid., p. 41). Between 1990 and 2012, the share of services in China’s gross economic production (GDP) and employment increased from 31.5 and 18.5 per cent to 44.6 and 36.1 per cent respectively (NBS, 2013). This rate of growth was even faster than the expansion of industries. Producer services surged rapidly since the late 1990s. ‘By 2008, a total of 1.16 million producer service establishments were operating in China, creating 34.4 million jobs’ (Yang and Yeh,
Producer services’ contribution to the national economy in terms of the number of establishments and employment reached 16.4 and 12.7 per cent respectively (ibid.).

A widely accepted experience of economic development is that as the economy advances, employment and production will first shift from agriculture to manufacturing, and then to services (Fisher, 1935; Clark, 1940; Elfring, 1988). With the growth potential of manufacturing industries gradually approaching its ‘ceiling’, we could expect that the future structural transformation in countries like China will mainly be a shift from agriculture and manufacturing to services. In addition, ‘the development of new technology and associated production systems offered the possibility of relocating some service functions from high to low-cost production locations’ (Bryson, 2007, p.32). Some business services (e.g. software development, call centres, data processing) ‘are thus following manufacturing in the development of a [new] “global shift” ’ (ibid.). As the recent case of Indian and the Philippines shows, this new trend of global outsourcing and offshoring of services, which is sometimes referred to as the ‘second global shift’, the ‘new wave of outsourcing’, the ‘new international division of “service” labour’, or the ‘next wave of globalization’ (Bardhan and Kroll, 2003; Bryson, 2007; Dossani and Kenny, 2007; Kleibert, forthcoming), is also enhancing the potential of services to contribute to sustained economic growth in developing countries (Ghani and Kharas, 2010).

Due to their specific natures (e.g. knowledge- and information-rich and communication-intensive) and locational demands (e.g. access to skilled labor, advanced ICT systems, clients and other service providers, etc.), advanced services tend to demonstrate a spatial distribution that is significantly different from those of most manufacturing activities as they are much stronger oriented towards high urban milieus (Daniels, 1985; Coffey, 2000). This makes them a major force to restructure the patterns of urbanization and the interdependence between cities that used to be shaped dominantly by the progress of industrialization. As such, the transition towards a post-industrial economy not just involves ‘fundamental shifts in the urban economic base and industrial structure’, but also, and importantly, implies a ‘reconfiguration of regional structure, the metropolitan space-economy, and urban form’ and a ‘repositioning of cities and city-regions within external
networks and systems’ (Hutton, 2003, p. 3). The transformations of cities and city-regions in the advanced services economy have thus become a hotspot of research in contemporary urban studies. The next section will briefly introduce several key issues (debates) regarding this topic and raise the questions that this dissertation wants to address.

1.2 Advanced services and regional development: issues and questions

This dissertation mainly contributes to three key issues (debates) that revolve around the development implications of the advanced services economy in the urban and regional context:
1) the impacts of advanced services on the spatial transformations of city-regions;
2) the global and local dynamics that contribute to urban transitions in the new economy; and
3) the policy and planning challenges presented by such transitions.

The spatial transformations of city-regions in the advanced services economy

The first major issue concerning the development implications of advanced services is their impact on the redefining of urban development processes. In the past decade or so, urban scholars have identified two essential spatial changes that accompany the rise of the advanced services economy (cf. Kloosterman and Lambregts, 2007). On the one hand, the mutually reinforcing tendencies of globalization and post-industrial transformation ‘have contributed to the growth of centralized service nodes for the management and regulation of the new space economy’ across the globe (Sassen, 1991, p. 325). The geographical dispersion of production, including its internationalization, has fed the growth and importance of central coordination functions and a series of dedicated supporting producer service activities (ibid.). These expanding economic sectors, often operating under conditions of increasing uncertainty, instability and complexity, are subject to strong agglomeration economies (above all, the ‘urbanization economies’ of Jacobs, 1970) (Kloosterman and Lambregts, 2007, p. 63). Therefore, they tend to concentrate in a limited number of large cities which are endowed with top-notch infrastructure, human capital, global connections and local urban milieu (Sassen, 1991; Scott, 2012). These cities, often entitled as ‘world cities’ or ‘global cities’,
constitute the strategic sites for the operation of the capitalist system and the ‘gateways’ for linking major regions and states into the world economy (Friedmann, 1986; Castells, 1989; Sassen, 2001; Taylor, 2004). They demonstrate a new geography of centrality in the global economic system.

On the other hand, with the advancements in transport and communication technologies, many of the specialized advanced service activities do not necessarily concentrate in the traditional metropolitan cores. Instead, they may (re-)distribute to a series of secondary centres or lower-order cities within the same urban system, so they can ‘enjoy lower wages and rent and a better living environment’ while at the same time ‘retaining their economic and social contacts in large cities’ (Yang and Yeh, 2013, p. 161; also see Senn, 1993; Gong, 2001). This fosters the formation of multiple service clusters (Hall and Pain, 2006) or ‘new industrial districts’ (Storper, 1997) over the scale of a wide city-region. These specialized advanced service centres are dependent on the ‘more narrow “localization economies” that mainly pertain to one specific industry’ (Kloosterman and Lambregts, 2007, p. 63; also see Malmberg and Maskell, 2002). Meanwhile, they also benefit substantially from the intensive ‘space of flows’ (Castells, 1996) that exist between each other, enabled by high-quality transportation networks and digital communication systems. As such, ‘new poles of urban growth’ are created outside the older established centres, ‘stretching and pinning down the urban fabric to a recentred regional constellation of cities’ (Scott, 2001, p. 19).

These simultaneous processes of concentration, deconcentration and reconcentration have promoted the emergence of a new type of urban form: the polycentric global city-region (Scott, 2001) or mega-city region (Hall and Pain, 2006). According to Hall and Pain (2006, p. 1), this is an urban form that contains ‘a series of anything between 10 and 50 cities and towns, physically separate but functionally networked, clustered around one or more larger central cities, and drawing enormous economic strength from a new functional division of labour’. Instead of dominated by one central city, the typical global city-region tends to encompass a number of centres, many with a strong presence of different specialized clusters of advanced services (Kloosterman and Musterd, 2001; Hoyler and Kloosterman et al., 2008). Through ‘borrowing size’ from each other and by enjoying various types of ‘agglomeration economies’ and ‘network externalities’,
the multiple centres constituting a global city-region may derive considerable economic strength from this special urban configuration and maintain potential competitive advantages over their monocentric counterparts (Lambregts, 2009, p. 12; also see Kloosterman and Musterd, 2001; Phelps and Ozawa, 2003; Meijers, 2007). In the meantime, due to the information- and knowledge-intensive natures of their economies, these regions are also highly networked externally on a global scale (Hall and Pain, 2006). Many scholars support the idea that the global/mega city-region represents an advanced stage of urbanization development, or, in other words, the ‘emerging urban form at the start of the 21st century’ (Hall and Pain, 2006; Scott, 2012; Harrison and Hoyler, 2015).

While the emergence of large-scale city-regions is widely recognized as a global phenomenon (Hall, 1997; Douglass, 2000; Hall and Pain, 2006; Wu and Phelps, 2008; Florid et al., 2008; Scott, 2012), research on them seems to have followed different agendas in the established (developed) and the new (developing) economies. As discussed above, most Western scholars have treated the formation of global city-regions as a spatial outcome of the post-industrial economic transitions in the developed economies. Accordingly, the priority of their analyses falls on the economic connections and inter-urban relations generated by advanced services within and beyond these global city-regions (Hall and Pain, 2006; Hoyler and Kloosterman et al., 2008). In comparison, studies on city-regions in developing countries still largely focus on the impacts of manufacturing activities on their transformations (cf. Xu and Li, 1990; McGee and Robinson, 1995; Sit and Yang, 1997). For instance, Pain and Hall (2008, p. 1068) argue that in contrast to the development dynamics of European global mega-city regions, the formation of mega-city regions in China is tightly related to the ‘astonishing performance of their manufacturing economies’. Yeh et al. (2014, p. 6) also point out that ‘[u]nlike mega-city regions from developed countries, mega-city regions in China are embedded in a context with a different industrial structure and urban system arrangement; the manufacturing sector still contributes a large share to the regional economy, and the large number of small and medium cities is an outcome of rural industrialisation and urbanisation’. This divergence in research perspectives has resulted in a gap between the knowledge on current urban and regional transformations in the developed and the developing economies, in spite of the fact that the latter is also rapidly catching up in advanced service sectors (Hutton, 2003).
‘[I]t remains to be seen in what ways the insights gained from... European mega-city regions [can] compare with evidence from emerging megaregional urban forms and experiences outside of Europe’ (Hoyler and Kloosterman et al., 2008, p. 1061).

Therefore, the first objective of this dissertation is to fill this gap by providing a detailed exploration of the new patterns of urban systems and networks generated by advanced services in the PRD. The corresponding research question is:

*RQ1: How do advanced services restructure the PRD’s urban system and reshape its inter-city connections in the regional, national and global urban networks?*

Following the strategy adopted by most previous studies, the dissertation will address this question by examining the location patterns of the key actors in the advanced services economy- the multi-office advanced producer services (APS) firms (Sassen, 1991, Taylor, 2004)- within and beyond the PRD (see section 1.4). Comparisons will be made, firstly, between the PRD’s new regional spaces and networks created by APS firms and its former urbanization pattern that was dominated by (low-end) manufacturing activities; and, secondly, between the spatial transformations of the PRD in the advanced services economy and the experience of Western global city-regions. Through such an analysis, the dissertation will help to elucidate ‘the extent to which the formation of mega-city regions represents a gradual reworking of inherited urban structures or a genuinely new and qualitatively different spatial logic’ (Hoyler and Kloosterman et al., 2008, p. 1062).

**The global and local dynamics of urban transitions in the new economy**

The second issue that has been widely debated in current urban studies concerns the underlying dynamics of urban and regional transitions in the new economy, or, more in particular, the question of which factors have contributed to the emergence and development of world/global cities and city-regions in the past several decades. There are basically two different perspectives:

The first, dominant perspective emphasizes the overarching role of large-scale
political-economic changes in the transitions being played out in cities and regions in the new world system. Scholars following this research tradition have adopted a largely structuralist point of view, which attempts to link many, if not most, aspects of contemporary socioeconomic transformations of major cities and city-regions in the world to the wider dynamics of globalization, capitalist restructuring (above all, the rise of the advanced services economy), and the formation of the new international division of labor (NIDL) which emerged from the late 1970s onwards (Friedmann, 1986; Sassen, 1991; Taylor, 2004; Scott, 2001, 2012). According to this argument, cities and regions are ‘the expression and outcome of ongoing worldwide economic, political and sociospatial transformations’ (Brenner and Keil, 2006, p. 7). How cities are integrated into the new capitalist system, and which functions they are playing in the world economy, will be decisive for the fundamental transformations of their local industrial structures, labour market conditions, socio-spatial morphologies, and urban landscapes, etc. Therefore, the explanation of current urban development patterns should be achieved first and foremost by examining cities’ dominant accumulation regimes and their articulations within the new global economy.

The second, alternative perspective highlights the significance of contingent local contexts in the process of urban and regional development in an even highly globalized world. Scholars holding this view argue that although the structural changes in the capitalist system are ‘more or less ubiquitous’, which do generate many similarities in cities and regions across the world, they are, however, ‘played out in different national institutional and urban contexts’, resulting in potentially diverging economic production and accumulation regimes and, accordingly, different social-spatial consequences and political implications (Kloosterman, 2010, p. 134). As such, a more comprehensive understanding of contemporary urban transformations should take into full consideration of cities’ (and regions’) specific, divergent local conditions, including, typically, their distinct development paths and histories (Abu-Lughod, 1999; Grant and Nijman, 2002; Kloosterman and Lambregts, 2007; Wolfe, 2010), the active roles played by their local actors, social forces and institutions (Hill and Kim, 2000; Wu, 2000; Hamel et al., 2003; Olds and Yeung, 2004; Wang, 2004; Dupont, 2011; Timberlake et al., 2014), as well as cities’ unique cultural heritages and local identities (King, 1991; Yeoh, 2005; Kong, 2007), etc. ‘[I]t is essential to acknowledge the significance of [these]… localized
Although these two perspectives are not entirely incompatible, they have, however, led to quite divergent research agendas and, in some cases, even critical debates in current urban studies (cf. Keil and Olds, 2001; Brenner and Keil, 2006; Roy and Ong, 2011; Thornley and Newman, 2011; McFarlane and Robinson, 2012; Harrison and Hoyler, 2015). There is a growing need for the constructive dialogue between the more general models of urban growth (which, up till now, are largely generated from Western experiences) and the more plural, complex trajectories of urban development in both theoretical and practical terms (Peck, 2015). This dissertation would like to further contribute to this discussion by examining both the global and local dynamics of the PRD’s transitions in the new economy. Therefore, the second part of the research focuses on the question of:

**RQ2: What are the impacts of the PRD’s specific local contexts on its urban transitions in the new economy under the conditions of contemporary globalization?**

More precisely, it will explore how the PRD’s special geo-historical background, institutional arrangements and government interventions provide a counterweight to the political and economic changes at broader scales, and shape the patterns and trajectories of its cities’ transitions in the current era. This question will mainly be addressed based on more in-depth, qualitative data and methods. As such, it will also provide an explanation and expansion to the outcomes of the first research question.

**Challenges to urban policy and planning with the rise of the advanced services economy**

The third major issue that has attracted extensive attention in both academic and policy circles in recent years concerns the policy challenges relating to the rise of the advanced services economy. Due to their ‘intangible’, ‘non-tradable’ and ‘unproductive’ features, for a long time services were regarded as a passive or dependent sector in economic development (Cohen and Zysman, 1987; Coffey, 2000) and, therefore, were overlooked in the policy domain (Yeh and Yang, 2013, p.
3). However, this ‘negative perception of service activities’ is increasingly challenged by the rapid growth of services, especially advanced producer services, in many (developed as well as developing) economies accompanying their deindustrialization processes (ibid.). A now widely held view is that modern services can play a important role in ‘improving production efficiency’, ‘promoting technical progress and innovation’, and absorbing the surplus labour from agricultural and manufacturing sectors, which makes them a potentially new engine of economic growth (ADB, 2009; Bryson and Daniels, 2007). More importantly, with the development of new technologies and the associated reorganization of production processes, services are following manufacturing to develop a new wave of global shift and offshoring (Bryson, 2007). This globalization of services is recognized as an opportunity for developing countries and regions to move beyond (even bypass) low-end manufacturing and achieve more advanced, sustainable economic development through fostering a competitive service sector (Ghani and Kharas 2010; ADB, 2012; Ghani and O’Connell, 2014).

As a result, services, and advanced producer services in particular, are gradually moving to the central stage of economic development policies in many developing countries. In China, considerable optimism has existed in recent years concerning the potential of (advanced) services to restructure and upgrade the country’s predominant, (low-end) manufacturing-based growth model (Daniels, 2013; Yeh and Yang, 2013). Many cities and regions’ local authorities have committed themselves to promote the development of advanced (or modern) services by assigning a priority to these sectors in their recent economic development strategies and urban planning. Great efforts have been devoted by them to attracting high-order service activities, which include, above all, the construction of modern business districts and the planning of various service dedicated zones.

However, some scholars point out a clear gap between ‘the rhetoric’ and ‘the knowledge’ in these service development ‘fevers’ (Daniels, 2013, p. 30). They argue that although the growth of advanced services could be beneficial for a national or regional economy in general, such benefits, however, may not be equally distributed in space. Some cities (usually large ones) tend to be better conditioned in developing advanced services than others (Yang and Yeh, 2013). As such, while making policies to stimulate the growth of service activities, ‘consider
caution must be exercised’ (Coffey and Polèse, 1989, p. 24). However, most Chinese cities and regions’ service development strategies and instruments are seems still largely copied from their former successful experience in attracting manufacturing activities, which demonstrate a poor understanding of the characteristics of advanced services, especially the factors governing the locations of these activities, as well as the local conditions of specific individual cities (Yang and Yeh, 2013; Wei and Li, 2009). These problematic policy interventions may have little effect while involving relatively high costs.

Therefore, the last part of this dissertation discusses the issues and challenges raised by the development of advanced services in the PRD from a policy perspective. This leads to the third sub question of the research:

*RQ3: To what extent advanced services can provide a viable substitution to manufacturing as the leading sector of economic growth, and what services development strategies could possibly fit different cities in the PRD context?*

This final discussion will present a critical evaluation of the current local policies targeting at (advanced) services in the PRD region. In addition to that, it will also propose some more realistic, alternative policy suggestions according to cities’ different development conditions for advanced services. A typology of business services economies will be constructed to provide the theoretical underpinning for the argument, while findings from previous studies and additional data constituting the empirical foundations.

1.3 Research area

To address the above issues and questions, this dissertation chooses one of China’s most archetypal transitional city-regions, the PRD, as the research area. As the first region that was opened to foreign investors, the PRD has taken a lead in China’s dramatic industrialization and urbanization in the past three decades (Xu and Li, 1990; Sit and Yang, 1997; Enright et al., 2005). The outstanding performance in manufacturing has earned it a reputation as the ‘workshop of the world’—‘the contemporary equivalent of 19th-century Manchester’ (*The Economist*, 2002). However, with China gradually losing its advantages in low-cost production, the
PRD has also become the region that faces the greatest pressure of industrial upgrading in the country. As recent evidence indicates, a new wave of economic transition, enabled by relatively advanced service activities, is already emerging in the region. This can be easily observed from the new urban landscapes in its major cities (Figure 1.1).

**Figure 1.1** The new city centres of Guangzhou (left) and Shenzhen (right)

![Figure 1.1](image)

*Source: Author*

The purpose of the dissertation is to explore how a predominantly manufacturing city-region is being restructured by emerging advanced service activities, and how this process is shaped by local specific geographical, institutional and historical contexts. In methodological terms, this research belongs to the category of the single case study (Gerring, 2004). According to Gerring and McDermott (2007, p. 688), case study is ‘a form of analysis where one or a few units are studies intensively with an aim to elucidate features of a broader class of- presumably similar but not identical- units’. Because of the great depth and relative looseness it provides, the case study approach is considered to ‘enjoy a nature advantage in research of an exploratory nature’ (Gerring, 2004, p. 349). Moreover, various kinds of data (e.g. statistics, documents, interviews, and observations) and techniques can be used collectively in a case study (Ying, 2003), which makes this approach especially suitable for the investigation of complex phenomena, such as urban and regional development.

There are two basic case selection methods in the case study research: random
selection and purposive selection. Typically, in studies with a small number of cases (like the current one), purposive case selection is a more viable approach (Seawright and Gerring, 2008). Seawright and Gerring (ibid.) has suggested seven strategies for purposive case selection—‘typical’, ‘extreme’, ‘influential’, ‘deviant’, ‘diverse’, ‘most similar’ and ‘most different’ cases. Among them, only the first four are relevant in the context of a single case study. This dissertation chooses the PRD as the study area because it has the features of both a typical and an influential case. As outlined above, the PRD is widely recognized a typical (low-end manufacturing-based, export-oriented) ‘workshop of the world’, which is currently experiencing a new trend of industrial upgrading and economic transition. This makes it an ideal case to examine the impacts of advanced services on the transformations of industrial city-regions in developing economies. On the other hand, as a much observed and studied area, the PRD could serve as an influential example to inspire extensive academic debates and to provide useful lessons for other regions that have (or ready to follow) similar economic development experiences. Admittedly, as a single case study, the dissertation is not aimed at lawlike generalization, but, instead, at enriching the understanding of the new patterns of advanced services-led urban development in places outside the capitalist core countries in both empirical and theoretical terms. Therefore, the main comparisons are made between different cities in the PRD, between the region’s current (advanced services-based) and former (manufacturing-based) patterns of urban development, and between the evidences of PRD and the experience from global city-regions in the developed world.

1.4 Data and methods

This dissertation has adopted a mixed methods research (Teddlie and Tashakkori, 2010). Multiple data and methods, including both quantitative and qualitative ones, are used to address different research questions.

Firstly, to investigate the restructuring of the PRD’s regional system and inter-urban networks in the advanced services economy, the dissertation has used the method of Interlocking Network Analysis. This method was initially developed by Taylor and the GaWC group to systematically analyze inter-city relations within the world city network (Taylor, 2001), then extended by the POLYNET project to
explore the functional connections between cities at the mega-regional scale (Hall and Pain, 2006). Its basic idea is through examining a large number of APS firms’ organizational structures (i.e. office networks) to infer the relative importance of each city and the strength of their inter-urban connections in the economic spaces created by advanced services. This dissertation has collected the location information of 219 APS firms from five producer service sectors, namely banking, insurance, accountancy, law and advertising, to construct the database. To reflect the unique regional context of the study area and the special purpose of this research, several methodological modifications are introduced to the original Interlocking Network Model (INM). The details of the data collection and analysis process are introduced in chapter 3.

Secondly, for a better explanation of the outcomes of the quantitative analysis and a more comprehensive understanding of the local dynamics of different cities’ economic transitions, 21 in-depth interviews with relevant actors were conducted in Guangzhou and Shenzhen between May and July, 2013. These interviewees include 15 senior staffs working in APS firms (which are selected mainly from the quantitative database), 3 managers from chambers of commerce and industrial associations, and 3 planners/experts from planning and research institutions. All interviews were undertaken in a semi-structured, face-to-face way with only two exceptions (one through telephone, and the other through e-mail). Each interview lasted for about one hour. This qualitative information provides a valuable complementation to the quantitative method.

In addition to these two main data sources, an extensive set of second-hand data is also used in different sections of the dissertation. These include official statistics, historical documents, reports from media and specialized associations, planning policies and discourses, and academic publications, etc. Data from different sources are cross-examined to increase the validity of the research. Some visualization techniques, such as Geographic Information System, are adopted for the mapping of final outcomes.

1.5 Structure of the dissertation

The main block of this dissertation is organized into five chapters. Each chapter is
also a single article which is either published in or submitted to an international peer-reviewed journal or book. While most of the chapters are centred on a specific research question, their arrangement basically reflects the logic of the three issues outlined in section 2.

Chapter 2 gives an in-depth overview of the long-term evolution of the PRD in the context of changing globalization and China’s state policies. It looks at how the PRD has been continuously (re)shaped in terms of global linkages, national status and regional urban system by the national and global political economic changes during different historical periods. Through such a historical mega-regional analysis, the chapter not only provides some crucial background information of the PRD for those who may not be familiar with this area, but also develops an analytical framework, which links the transitions of city-regions to the macro-level political and economic changes in a historical and context-sensitive perspective, for understanding urban and regional transformations in a globalizing world. As such, it also lays a foundation for the investigation of the following chapters.

Chapter 3 addresses one of the three main research questions of the dissertation: the spatial transformations of the PRD in the advanced services economy. Drawing on the method of the INM, this chapter examines the internal and external urban networks of the PRD generated by APS firms. Its result shows that advanced services are leading to a profound spatial restructuring of the PRD in terms of both its internal urban system and its external connections with major national and global cities. The new patterns of the advanced services-led spatial development are rather different from the region’s early mode of industrialization and urbanization in the 1980s and 1990s, which pose a challenge to the conventional wisdom of the ‘workshop of the world’. This chapter also provides an evaluation of the applicability of the INM in the Chinese context.

Chapter 4 further develops the analysis of chapter 3 by presenting a more detailed comparison of the multiple inter-city networks created by different types of APS firms in the PRD. Specifically, the chapter divides the APS firms in the database into three categories (i.e., firms with headquarters in the PRD, in mainland China and overseas), and explores how firms in each category impact on the internal urban system and external relations of the PRD through their service networks. The
The major finding is that the formation of advanced services-based urban networks at different geographical scales is partly determined by the origins of firms. Moreover, with the help of the interview information, the chapter also reveals that the variegated service geographies created by different types of APS firms both within and outside China not only reflect firms’ different development histories, client orientations in specific markets and home regions’ economic conditions, but also are significantly shaped by China’s unique regulatory environment and complex state-market relations.

Chapter 5 focuses on the second main issue of the research: the global and local factors that contribute to urban and regional transformations in the new global economy. Drawing on interview information and statistical data, this chapter conducts an in-depth, comparative analysis of the development processes of two advanced services centres in the PRD—Guangzhou and Shenzhen—after the launch of China’s reform and opening up programme in 1979. It tries to understand, firstly, how Chinese local authorities respond to the political-economic changes at the global and national scales and steer their cities’ transformations against the background of current globalization; and, secondly, how this process is shaped by individual cities’ unique economic structures and local assets that formed along their long-term development trajectories. Theoretically, the chapter further develops the framework proposed in chapter 2, and contributes to the world/global city debate by introducing the concepts of path dependency and strategic management of cities.

Chapter 6 is the concluding chapter of the dissertation, which turns to the question of policy challenges relating to the rise of the advanced services economy. It shows that many PRD cities’ current policy interventions that focus on advanced services still rely heavily on their former experiences accumulated in the industrialization period, which tend to overlook the unique natures of advanced services. Therefore, the chapter argues that local policy makers should develop a better understanding of the characteristics of advanced service activities as well as the strengths and constraints of their individual cities, and formulate more targeted policies to promote the development of specific type(s) of advanced services that fits their local economic profiles. However, the implementation of such policies, as the chapter also points out, is not without challenges in the Chinese context.