For citation:

Shin, H.B. (forthcoming) Urban Spatial Restructuring, Event-led Development and Scalar Politics. Urban Studies (ISSN 0042-0980)

Urban Spatial Restructuring, Event-led Development and Scalar Politics

Dr. Hyun Bang Shin Department of Geography and Environment London School of Economics and Political Science Houghton Street, London WC2A 2AE tel. +44-20-7955-6383 fax. +44-20-7955-7412 e-mail. <u>H.B.SHIN@LSE.AC.UK</u>

Acknowledgement

The author acknowledges the financial support from the LSE Annual Fund/STICERD New Researcher Award (2009-2011) and the Social Science Korea Research Grant (SSK, NRF-2011-330-B00052), National Research Foundation of Korea. The author also acknowledges the local assistance from S. He at Sun Yat-sen University for helping with interviews conducted in 2009, and S. Koh at the London School of Economics for coordinating interviews carried out in 2011. The paper's earlier findings were presented at research seminars at the UCL Bartlett School of Planning and the Sun Yat-sen University, and also at the International Conference on Mega-events and the City at the Universidade Federal Fluminese in October 2010 as well as the 2nd International Conference on China's Urban Transition and City Planning at the University of Cardiff in May 2011. Particular thanks are due to Andy Thornley, Lin Ye and Jill Simone Gross for their insightful suggestions and encouragement and to the three anonymous referees for their highly constructive comments. The usual disclaimer applies.

Abstract

This paper uses Guangzhou's experience of hosting the 2010 Asian Games to illustrate Guangzhou's engagement with scalar politics. This includes concurrent processes of intraregional restructuring to position Guangzhou as a central city in south China and a 'negotiated scale-jump' to connect with the world under conditions negotiated in part with the overarching strong central state, testing the limit of Guangzhou's geopolitical expansion. Guangzhou's attempts were aided further by using the Asian Games as a vehicle for addressing condensed urban spatial restructuring to enhance its own production/accumulation capacities, and for facilitating urban redevelopment projects to achieve a 'global' appearance and exploit the city's real estate development potential. Guangzhou's experience of hosting the Games provides important lessons for expanding our understanding of how regional cities may pursue their development goals under the strong central state and how event-led development contributes to this.

Introduction

In November 2010, Guangzhou received an international spotlight as the host of the Summer Asian Games. This was the culminating moment of six-year preparation after winning the bid. Having taken place two years after the Beijing Olympic Games and only one month after the closing of the Shanghai World Expo, the Guangzhou Asian Games was China's finale of a series of mega-events. This paper is an attempt to examine how Guangzhou used the Asia Games strategically as a vehicle of fulfilling its development goals.

Mega-events are characterised for their huge consequences upon host cities, considerable exposure to (global) media coverage and discontinuity (Horne and Manzenreiter, 2006). Studies often produce three major motivations behind the promotion of mega-events. First, mega-events are promoted as a political project to legitimise the host nation's ruling regime, boost the national pride or attain a particular state vision (Black, 2007; Steenveld and Strelitz, 1998; Van der Westhuizen, 2004). Second, mega-events are seen as a means for political elites and businesses to form a growth coalition to pin down global capital and visitors in host cities (Gratton, 2005; Burbank *et al.*, 2001). Third, from a local-central relations perspective, mega-events are promoted by local elites to attract central state subsidies or grants in order to finance development projects (Cochrane *et al.*, 1996).

Guangzhou's experience seems to diverge from these. Compared with the Beijing Olympic Games or the Shanghai World Expo, the Asian Games remained as a relatively low-key event so that the fame of the preceding two *national* events would not diminish too soon. This also suggests that Guangzhou's experience might have more to tell beyond the promotion of national prestige. Furthermore, Guangzhou was not likely to use the Games as a means to attract central government subsidies to finance development projects: It had been enjoying China's third largest city status (after Shanghai and Beijing) in terms of the gross regional product. Guangzhou is the capital city of the Guangdong province that commanded the largest provincial economy in mainland China. Nor did Guangzhou feel short of international visitors or global investment. As the host city of Canton Fair that has been the principal window of overseas trade for the whole China since the 1950s, Guangzhou as well as other cities in the Pearl River Delta (hereafter PRD) region have been inundated with international visitors and capital investment, including those originating from or channelled through Hong Kong.

This paper uses Guangzhou's experiences of hosting the 2010 Asian Games to illustrate Guangzhou's engagement with scalar politics that includes both intra-regional restructuring and

a 'negotiated scale-jump' as a way of addressing its development vision. Instead of 'breaking away' from the central state, Guangzhou aimed at jumping scale to connect with the world under conditions negotiated in part with the state. In doing so, the promotion of Guangzhou as the international regional centre was what the municipality adopted as a discourse to justify the state intervention in the built environment through facilitating urban spatial restructuring and redevelopment. The discussions in this paper are based on the author's qualitative in-depth interviews with key informants (ten government officials at district and municipal levels, seven academics and six professional experts including three working for international firms operating in Guangzhou),¹ archival records and observation during field visits. These took place between September 2009 and May 2011.

Spatial restructuring, event-led development and local-central state relations

From the perspectives of globalisation and inter-urban competition, cities are driven into competition for increasingly footloose investment capital, transnational firms and visitors. Many Western cities in particular have faced post-industrial structural changes that accompanied the declining competitiveness of traditional secondary industries as well as the demise of the Keynesian welfare statism. Under these circumstances, local states are viewed as being under pressure to become more entrepreneurial to address the problems of limited financial resources. Business interests rise as key partners of local states, forming a growth coalition with diverse sectors to promote "value-free development" and make localities more amenable to investors' needs (Logan and Molotch, 1987). Various strategies emerge to support this process, including place promotion, image re-branding or signature architecture (Kavaratzis and Ashworth, 2005). The key to this process is to make sure mobile assets become 'sticky' to a locale through enacting developmental projects (Shin, 2007).

Some post-industrial cities choose the path of promoting 'consumption-oriented economic development' that emphasises consumption activities such as sports and entertainment (Judd and Fainstein, 1999). Place-dependent local growth advocates have increasingly drawn towards using mega-event hosting as a vehicle to meet their growth desire (Burbank *et al.*, 2001). Mega-event hosting not only contributes to urban transformation for the pursuit of visitors' pleasure

¹ In order to understand the ways in which the municipality made use of the Asian Games to fulfill its own vision, the interviews focused on this particular group of informants who were closely involved in working with or for the government. Professionals included experts in urban design and architecture firms.

but also acts as a catalyst to event-led development, aimed at providing event facilities and supporting infrastructure (Smith, 2012). Projects are put forward in the name of mega-events, "even if they have little relevance to a sporting event" (Burbank *et al.*, 2001:29). In this process, the role of the state is important, for it coordinates the circulation of surplus capital and its channelling into the built environment (Harvey, 1978). An event-led growth strategy may demonstrate the redefinition of the meaning of the state (Cochrane *et al.*, 1996).

The emphasis on local scales and the attention to cities in the broader framework of globalisation and inter-urban competition raises a question about local-central state relations. Such relations are compounded by 'glocalisation' processes that entail substantial changes to the scale of economic networks and regulatory arrangements. These changes involve the national scale shifting upwards to supra-national/global scales and simultaneously downwards to local/regional scales (Swyngedouw, 2004). Cities pursuing global investment and visitors may consequently experience inter-scalar tensions, often engaging in scalar politics to get things done. In particular, when facing conflicts and contestation over pursuing a particular regulatory project to enable local accumulation, place-dependent alliances at local scales may attempt to 'jump scale', bypassing the central state and connecting directly with transnational actors (Park, 2005). Following Neil Brenner who interprets globalisation as "a multi-scalar *restructuring* of capitalist territorial organization" (Brenner, 1999:68; original emphasis), the scale-jump is viewed as a deterritorialisation strategy that aims "to circumvent or dismantle historically entrenched forms of territorial organization and their associated scalar morphologies" (ibid.:62). While the scale-jump might be a denationalisation strategy, the importance of the nation-state scale does not diminish (Brenner, 1999). Scalar politics may also be employed by the socially disadvantaged in order "to resist oppression and exploitation at a higher scale", as shown vividly by Neil Smith in his discussion of the Homeless Vehicle scheme in New York in the late 1980s (Smith, 1992:60). Mega-events promoted by territorial alliances would also display how the scalar politics have played out at local, national and global scales.

Shifting our attention to mainland China, it is questionable if mega-event hosting follows the post-industrial logic of consumption-oriented economic development. China's mega-events have served multiple purposes such as pacifying social unrests, ensuring socio-political stability and facilitating capital accumulation and spatial restructuring (Brady, 2009; Broudehoux, 2007; Shin, 2012). China's mega-events are also closely related with the recent regional development strategies, which have focused on producing mega-city regions, each of them centred on key sites of capital accumulation and political influence in respective regions (Wu and Zhang, 2007). These include the Yangtze River Delta region centred on Shanghai and Hangzhou-

Suzhou belt, the PRD region centred on Guangzhou and Shenzhen-Hong Kong link, and finally, the Beijing-Tianjin region. Not coincidentally, the three international mega-events in recent years were shared among the three city-regions. The competition between China's city-regions is expected to become much fiercer, and place-based local entrepreneurialism more vigorous in the world-class city promotion (*ibid.*; Wu, 2007).

While local states emerge as strong players in China's urbanisation and global integration, how do they negotiate their growing territorial power with the central state. It may be possible to discuss the rise of local states that attempt to break away from the central state interference, as local states enhance their competitiveness and accumulation capacities, promoting place-based interests (Xu and Yeh, 2005; Zhu, 2004). Critics have also noted the increasing entrepreneurial behaviour of local states in promoting local development, leading to the rise of state entrepreneurialism (Duckett, 1996) or local state corporatism (Oi, 1995). Local states may endeavour to make directive investment decisions in order to concentrate finite resources on key areas identified in strategic development plans and to realise local leaders' particular development visions (Wu and Zhang, 2007). Various spatial strategies have emerged to facilitate urban accumulation centred on using land resources (Lin, 2007). Hsing (2010) for instance discusses how urban governments have concentrated their resources on establishing 'new towns', with real estate development in their pursuit of urban accumulation (Shin, 2009).

Nevertheless, critics are also keen to emphasise the political importance of the central state in shaping local development agendas (Chen, 2009; Xu and Yeh, 2009). Central state support is crucial in promoting local reform experimentation. The rise of local states has benefited from various central state decisions to decentralise state power such as progressive fiscal and land reform, enabling local states to gain a greater control of locally raised revenues (Wu, 2009). Examining the rise of new community building initiatives in urban China, Heberer and Göbel further suggest that the central state efforts to enhance the local self-governance may be interpreted as "to enhance state control over society" by "instrumentalizing participation" (2011:4). A similar conclusion can be drawn with regard to the relationship between enhanced local state relations may indicate a dualist process of strong central statism and local state autonomy in times of state restructuring, decentralisation and global exposure of localities.

Then, how can we reconcile the strong central state with the rise of local states? Guangzhou's hosting the 2010 Asian Games might have been vital in order to keep or enhance their national

and regional position in China's economic and political geography. Having faced increasing inter-regional competitions as well as scalar tensions involving the central state, it is argued herein that Guangzhou has actively used the Asian Games as a vehicle for the local state's 'negotiated' scale-jump in order to advance locally-driven development agenda under conditions negotiated in part with the overarching strong central state.

Scalar Politics: Guangzhou, the PRD and the World

Guangzhou's long-term development vision has gone through major changes over the years. Guangzhou initially envisaged an "economic centre in southern China in the early 1990s" (Xu and Yeh, 2003:367), but over time, it added an international dimension. In 1995, Guangzhou proposed to "overtake the 'four little dragons' in Asia" by 2010, and become "an international metropolitan city, and the financial, trade and tourist centre in Asia-Pacific region" (Guangzhou Yearbook Editorial Committee, 1995 cited in Xu and Yeh, 2003:365-366). By late 1998, it envisioned a 'regional central city in the world' (*ibid*.:368). As Guangzhou had been making frequent references to Year 2010 (the final year of implementing the 11th Five-Year Plan) for streamlining its development projects, the 2010 Asian Games hosting came as a golden opportunity to realise its long-term vision to become a 'world-class city'.

Guangzhou is also the provincial capital of the Guangdong province, the largest provincial economy in China for many decades. This makes Guangzhou the political centre of the PRD region that has come to serve the global market as the 'factory of the world'. Various projects including the construction of a brand new central business district (hereafter CBD) were conceived by the municipal officials as a means to prepare Guangzhou for the 21st century, promoting the city in the "world urban hierarchy as a regional international financial and service center" (Zhu *et al.*, 2011:226). As local academics suggest, the Asian Games hosting could be interpreted as a means to achieve this strategy and gain recognition:

"The Guangzhou government used the Asian Games just to promote the city's level, because they wanted to develop Guangzhou as an important Asian city, like Seoul, Tokyo, Taipei and Singapore. Up to these cities' level" (Dr Deng, Guangzhou Academy of Social Science (hereafter GZASS), 19 May 2011)²

 $^{^2}$ All interviewee names are anonymised in this paper for confidentiality.

"Sporting events are yet a kind of, from the developing country's perspective, a tool to participate in the global competition. Just a kind of means, because we require recognition under the globalisation, hence it [the government] thinks that we have to do this kind of thing" (Professor Lu, Sun Yat-sen University, 17 September 2009)

However, Guangzhou's global positioning comes with its careful negotiation with scalar politics, which involves (i) the consideration of domestic tensions in central-local state relations; and (ii) the process of city-region rescaling in Guangdong. The rest of this section deals with each of these elements. First, the promotion of the Asian Games signals a more complex central-local relationship in the regional development process. While China's cities come to possess greater power to raise local revenues through decentralisation and carry out strategic plans for local growth, the central state continues to play an important role and attempts to retain its power through various measures of state reconstruction (Xu and Yeh, 2009). Expert interviewees often point out that Guangzhou remains the third most important city in mainland China after Beijing and Shanghai. For instance, "Guangzhou is happy to be in the third position, with Shanghai being the economic centre and Beijing the political/cultural centre" (Dr Fang, Sun Yat-sen University, 16 May 2011). This hierarchical notion was also reflected in the hierarchy of mega-events hosted by the three cities in terms of their relative importance to the country. While the three events were awarded very close to each other timewise, it seems that the central government was keen to make sure the glory of the Beijing Olympic Games and the Shanghai World Expo were ensured, and to keep the Asian Games a lower key. According to an interviewee:

"Before the Beijing Olympic Games, the central government asked the Guangzhou government to do this Asian Games preparation in a very subtle way, not [to make] that high profile. But after the [Olympic] Games, the central government still had to celebrate the success of the Olympic Games, so for that part, no one paid attention to the Asian Games. Then, the [Shanghai] exhibition event is also international rather than Asian only. So that is why it is not a good time for the Asian Games to be held" (Ms Heng, Planner, 15 September 2009)

Second, the rescaling of the PRD places Guangzhou in competition with other cities in the region to become the regional 'dragon head'. The hosting of the Asian Games symbolises Guangzhou's supremacy in this competition. While interviewees often referred to the fact that Beijing was able to mobilise not only their own but the national resources to make the Olympic Games successful, it was equally pointed out that Guangzhou was on its own without much financial support from the provincial government either. When the municipal government produced a comprehensive plan for the provision of Games venues and related facilities, the

provincial contribution to the total planned expenditure was only about 4.7 percent, while the municipality was to contribute 39.3 percent and the rest from what the government termed as 'social investment' (*shehui touzi* in Chinese), that is, investment mostly coming from the stateand the private-sector companies and put into real estate and infrastructure projects such as the Asian Games village and the Phase II development of Guangzhou's international airport (GZASS, 2006). Municipal officials also pursued economic ties with neighbouring countries and special administrative regions. As the Head of the Guangzhou Foreign Trade and Economic Cooperation Bureau explicitly stated, "Guangzhou will make good use of the sports gala to maximally promote trade and economic cooperation" (China Daily, 2010). To some extent, Guangzhou's less dependence on the central state subsidy reflects the city's confidence:

"China's three big metropolises, now we say mega-city regions: one is in Beijing, another in Shanghai and the other in Guangzhou. All are considerably well-developed areas in China. And these areas like to be made world-known, world-famous. They have got a competition. At first, Beijing successfully won the [bid to host] the Olympic Games, and then Shanghai this World Expo... And then, the Guangzhou government said, 'we would like to follow up', to also have something, important event to show to the world our development level, also our ability to control and organise this kind of event" (Professor Xi, GZASS, 16 September 2009)

Guangzhou also faces intra-regional competition with cities like Shenzhen and Hong Kong. The central government produced a regional policy to promote the national development around five national central cities in the mainland, that is Beijing, Shanghai, Tianjin, Chongqing and Guangzhou. This acknowledged the importance of Guangzhou, the only non-provincial-level city to be included in this designation. Guangzhou's supremacy in the region was also frequently pointed out by local experts:

"Compared to other cities in the PRD region, Guangzhou is the most developed, knowing how to govern, control and deal with all the development problems, so it can be the centre of the PRD region" (Dr Que, Guangzhou Commercial College, 17 May 2011).

Regarding the competition between Guangzhou and Hong Kong, the State Council approval of the Outline Plan for the Reform and Development of the Pearl River Delta (hereafter 2008 Outline Plan) in December 2008 seemed to have resolved Guangzhou's concern. The 2008 Outline Plan placed the Guangdong province (and hence Guangzhou) in the driving seat when it came to its competition with Hong Kong (Cheung, 2012). The 2008 Outline Plan also put Shenzhen as a platform for various economic innovation while confirming Guangzhou as the political and cultural centre. This effort by Guangzhou to lead the development of the PRD reflected the Guangdong provincial government's strategic aim to "build the cluster cities connecting Hong Kong, Shenzhen and Guangzhou, and develop the PRD metropolitan area as the cluster of world-class cities" during the 12th five-year development plan (2011-2015) (Dr Deng, 19 May 2011).

Guangzhou's development vision and the city's attempt to realise it through the Asian Games preparation has resulted in some economic success. As shown in Table 1, while the country as a whole was experiencing an average growth rates of 9.76 and 11.21 percent during the 10th and 11th five-year economic period respectively, Guangzhou outperformed these, registering nearly 14 percent annually during the ten-year period. Accordingly, Guangzhou displayed high productivity with its per capita GDP of 87,458 yuan in 2010: this was twice as high as that of the Guangdong province, and about 15 percent higher than those of Beijing and Shanghai. In fact, Guangzhou's high growth rates during the last ten years enabled it to overtake Shanghai's productivity. Guangzhou became almost on par with Beijing or Shanghai in terms of urban residents' disposable income, and also considerably reduced the income gap in comparison with Shenzhen.

(Table 1 here)

Condensed urban spatial restructuring

Guangzhou's long-term development vision was aided further by the Asian Games serving as a vehicle for addressing urban spatial restructuring to enhance its own production/accumulation capacities. The contribution of the Asian Games to Guangzhou's urban space primarily lies in facilitating and speeding up the completion of key projects in line with the city's comprehensive strategic plans. Between 2005 and 2010, key development projects were fast-tracked, receiving resources and preferential treatments when they met two conditions: (a) projects addressing the needs of the Games hosting itself (e.g. facilities and transport infrastructure) and (b) strategic projects in line with the city's long-term development vision. The Asian Games enabled Guangzhou to spend only "five years to achieve ten-year amount of construction", allowing the growth of "GDP from so many construction projects" (Interview with Dr Deng, GZASS, 19 May 2011). In particular, the Asian Games enabled the Guangzhou municipality to consolidate its long-term ambition to transform the city from a city of single core (centred on old city districts) to a multi-centric city (Lu and McCarthy, 2008).

The Guangzhou municipality produced an important strategic planning document in 2000 known as 2000 Concept Plan. In fact, Guangzhou is noted as China's first city to have put forward a strategic development plan in the form of a 'concept plan' that reflected local elites' visions (Wu and Zhang, 2007). The 2000 Concept Plan clarified the city's spatial development strategies by proposing the concept of "advancement in the east, linkage in the west, optimisation in the north, expansion in the south" (Lu and McCarthy, 2008:459). After Guangzhou's successful bid for the Asian Games in July 2004, it produced the Outline of Urban Planning and Construction for Guangzhou's 2010 Asian Games (hereafter 2004 Outline Plan), which had been "the principal guiding document" for Guangzhou's urban development "during the six-year period from 2004 as well as the post-Asian Games period" (Mr Wang, Urban Planner, 4 September 2010). The 2004 Outline Plan identified 'two cores and four cities' as strategic sites of urban intervention for spatial restructuring, most of which overlapped with key areas identified in the previous 2000 Concept Plan. These sites included Tianhe New Town Urban Core and Guangzhou New Town Core as two major urban cores, and Olympic Games New Town, University Town, Baiyun New Town and Huadi New Town as four cities. Guangzhou's ambitious promotion of these new growth centres demonstrated the city's shifting emphasis on spatial approaches to urban development from a 'development district (*kaifaqu*)' strategy to a 'new town construction' (xincheng jianshe) strategy, a path that is being replicated by many other Chinese cities in recent years (Hsing, 2010). The latter strategy was employed particularly in rural areas at the urban fringe, which were brought under the control of urban governments for the acquisition of land-premium through the sales of 'granted land use-rights' to developers (*ibid*.).

The development of the Tianhe New Town Urban Core (hereafter Tianhe UC) is pivotal in Guangzhou's urban development and is further scrutinised here. Originally, the city's 14th masterplan, approved by the State Council in 1984, envisaged a compact development plan with three urban cores consisting of (i) the old city districts, (ii) Tianhe as a business district, and (iii) Huangpu as an industrial concentration (Xu and Yeh, 2003:365). Part of the business functions originally located in the old city districts (especially around the Garden Hotel area in Yuexiu District) therefore began to shift towards Tianhe District. This transition was facilitated by Guangzhou's hosting of the 6th National Games in 1987, which led to the construction of sports complex in Tianhe District and signalled the expansion of Guangzhou's urban core functions to the east (Lu and McCarthy, 2008:451-452). The Tianhe UC, as laid out in the 2004 Outline Plan, was an ambitious intervention to create a new North-South axis, which extended from the Guangzhou East Rail Station in Tianhe District to Lijiao village at the southern tip of Haizhu District. The key areas encompassed the Tianhe Sports Complex and the Pearl River New Town

as Guangzhou's new CBD for the 21st century as well as the substantial expansion of the Chinese Export Commodities Fair (CECF) Pazhou Complex where regular trade fairs are held.

In particular, the development of the Pearl River New Town (*Zhujiang Xincheng* in Chinese; hereafter PRNT) has received a strong emphasis as it lies in the centre of the Tianhe UC. As the Party Secretary of Guangzhou stated, the PRNT was to become the Guangzhou version of 'Lujiazui', the locus of Shanghai's new CBD in Pudong (Yangcheng Evening News, 2009). Resources were concentrated to complete the long-delayed construction of the PRNT, which was originally perceived in its first masterplan produced in 1993. What were empty lots with skeleton streets until the mid-2000s went through full-scale transformation to be made presentable by the time of the Asian Games opening (see Figure 1). The PRNT consisted of a 1.5-kilometre-long boulevard, Guangzhou's version of "Champs Élysées" (Interview with Professor Xi, GZASS, 16 September 2009), along with iconic buildings such as the Zaha Hadid-designed Opera House and the Wilkinson Eyre-designed Guangzhou International Financial Centre. Guangzhou TV Tower, another flagship project to build China's tallest structure, was located right across the Pearl River along the North-South axis. The use of international architecture firms and iconic buildings has gained popularity in Chinese cities as a quick solution to raise city profiles (Ren, 2011) and Guangzhou was no exception. The whole process was facilitated to ensure key projects were complete in time for the Games opening. An international architect explains:

"At that time, the party secretary and the city authority were very keen to make the building complete as quickly as possible before the Asian Games, so the method they used was that the government organised the design competition, then also organised efforts to find the master design, and then appointed state-owned enterprise as a developer to actually deliver it...It was a very highly political event" (Interview with an international architect, 29 September 2009).

(Figure 1 here)

The use of the Asian Games also seemed to have enabled the Guangzhou municipality to secure an extra quota of construction land for more development projects. Critics often point out that China's urbanisation has been a process of land-based accumulation, in which land becomes an important asset for government finance and its development an integral component of economic development (Hsing, 2010; Wu *et al.*, 2007). In recent years, converting agricultural land to urban use had been controlled through the central state's assertion of the land quota system, determined by five-to-ten year land use planning with annual targets (Xu and Yeh, 2009). The draft outline of Guangzhou's land use planning for the 12th Five-Year (2011-2015) Plan states that Guangzhou had seen a rapid increase in demand for construction lands in order to address domestic need and prepare the Asian Games (GMLRHAB, 2011). Despite the annual allocation of 17.03 square kilometres of new construction lands by the provincial government during the 11th Five-Year Plan period, Guangzhou experienced a shortage of 6.42 square kilometres on average each year: In 2010 alone, Guangzhou had 12.83-square-kilometre project sites, which could not apply for the land use permission because the municipality used up its quota for the year (*ibid*.:7-8). Under these constraints, the Games preparation allowed the municipality to gain more construction land outside the official land use quota allocation. As Ms Wu from the Guangzhou Municipal Bureau of Planning explains, "projects marked for the Asian Games would enable the acquisition of an extra quota, which was mostly used for expressways and transportation facilities...These facilities work for the Asian Games, and also work for Guangzhou, and the extra quota is used to build the expressway...while the original quota allocated to the expressway construction could be sold" (Ms Wu, 15 September 2009). Major projects for the Asian Games also received "green light" when processing applications for land use permission so that "they were given a priority" (*ibid*.).

Economic indicators demonstrate how Guangzhou gained from the concentration of resources in its investment in the built environment. In terms of year-on-year growth rates of total fixed asset investments between 2005 and 2010, Guangzhou showed generally a better performance than other cities such as Beijing, Shanghai and Shenzhen (see Table 1). While the global financial crisis also hit China and especially the PRD region's export industry, Guangzhou's economic growth was not much deterred between 2008 and 2010. The Guangzhou Asian Games facilitated the concentration of locally-driven investment activities in times of the Games preparation.

Selective surgical intervention for redevelopment and beautification

Promoting Guangzhou as a world-class city accompanies a large scale of urban make-over. The 2010 Asian Games also served as a vehicle to lay the foundation for urban redevelopment to exploit the city's real estate development potential. Throughout the 1990s and early 2000s, city-wide redevelopment of dilapidated urban space had been challenging, especially due to the high density of population and building, and high costs of relocating and re-housing local Guangzhou residents. The preparation for the Asian Games provided justification to speed up the progress of urban redevelopment by implementing urban beautification in old city districts in particular

and making strategic interventions in selective redevelopment project sites. In other words, while the intense restructuring of urban spatial configuration in Guangzhou involved the city's *outward expansion* to build new urban centres in suburban areas, it has also sought *inward densification*, looking for sites of accumulation through redevelopment.

Government investments were poured into improving Guangzhou's appearance and renovating building facades, and make the city more 'presentable' to visitors and to the media. In the words of the then Party Secretary of Guangzhou, "the imminent task is to take the Asian Games as a moment to ensure the substantial change to the city's environmental appearance by 2010" (Yangcheng Evening News, 2009). Environmental improvement projects were to be carried out in "1512 neighbourhoods whose total areas reach 237.95 square kilometres, subjecting 3.57 million people" (ibid.). Beautification initiatives, locally known as "chuanyi daimao" (meaning dressing), were to involve about 73,510 buildings located along the city's 735-kilometre-long main arteries as well as those areas adjacent to sport venues (*ibid.*; Xinxi Shibao, 2009). Beautification projects were more pronounced in the old city districts, which were to present cultural experiences to tourists and athletes at the time of the Games opening (Interview with Professor Lu, Sun Yat-sen University, 17 September 2009). Furthermore, the city-wide redevelopment of dilapidated neighbourhoods received a great emphasis by the district and municipal governments, promoted under the name of the Games preparation, as "leaders called for the improvement of urban appearance" (Interview with Mr Teng, Planning Officer at the Haizhu District Government, 21 September 2009). The municipality frequently made a reference to the 2010 Asian Games as the deadline for implementing urban redevelopment projects.

The preparation for the Asian Games and beautification gave impetus to the city-wide promotion of a new urban policy ('Three Olds' redevelopment) to accelerate Guangzhou's urban redevelopment. After the provincial government's emphasis in 2009 (Ye, 2011), this policy was put into practice upon the announcement of the key government document on 31 December 2009 (Guangzhou Municipal Government, 2009). The Three Olds areas referred to old towns, old industrial plants and old villages. Sources indicate that the size of urban areas that were subject to the Three Olds policy reached 318 square kilometres spanning across 10 districts (Nanfang Daily, 2010). The majority of these target areas (53 percent) were villages-in-the-city (hereafter VICs), which were former rural villages with a high concentration of migrant tenants accommodated in informal dwellings, built by village landlords for rental income. About 38 percent were old industrial plants, while the remaining nine percent were old town areas (*ibid*.). A special municipal taskforce organ called the Guangzhou Urban Redevelopment

Office (*Sanjiuban* in Chinese meaning Three Olds Office) was established in February 2010 to oversee the municipal progress and approve redevelopment plans for project sites.

The Asian Games hosting provided the early impetus, being frequently cited as a means to enable the initial kick-off of redevelopment projects. In other words, the Asian Games had been the founding stone for the strategic government interventions in Guangzhou's inception of the Three Olds redevelopment policy. As a planner indicates:

"Maybe Guangzhou thinks they want to take this chance to renovate all the old buildings. Like Guangzhou's 2000-year history, the villages are quite old and the government wants to have a reason to do something. Then the Asian Games should be a very good reason. Even the country would support the Guangzhou government to do all these things, and turn on the green light to do a lot of things" (Interview with Ms Heng, 15 September 2009)

Streamlining these interventions, district governments repeatedly short-listed redevelopment project sites, making a clear reference to the opening of the Asian Games to facilitate work progress. As a planning official from an inner-city district government succinctly points out, the speed of urban redevelopment "could not have been so fast", were it not for the Asian Games (Mr Pu, 22 September 2009). For instance, the district government of Tianhe, where the PRNT was located, produced a list of key construction projects in the summer of 2009, which aimed at completing the overall transformation of its VICs (Nanfang Daily, 2009). The plan included the completion of Liede village redevelopment by June 2010, of the wholesale demolition of Xian village located adjacent to the PRNT and of Xiaoxintang village located near the Guangzhou Olympic Sports Complex (*ibid.*). The demolition of Xian and Xiaoxintang villages were particularly emphasised by the Tianhe district mayor who stated that "no matter how many problems are faced, Xiancun and Xintang village are going to be demolished before the Asian Games", also emphasising the importance of persuading the local residents (*ibid.*).

The three VICs above (Liede, Xian and Xiaoxintang) were also part of the nine VICs that the municipal government gave top priority to wholesale clearance before the opening of the Asian Games (New Express Daily, 2010). The other six included: Linhe village in Tianhe; Pazhou village in Haizhu; Yangji village in Yuexiu; Sanyuanli, Tangxia and Xiaogang village in Baiyun (see Figure 2).³ A glance at the location of these nine VICs would make it clear why they were selected. For instance, the demolition of Linhe, Xian, Liede and Pazhou were deemed important as they were all part of the new Tianhe UC: Pazhou was located east of the new Chinese Export

³ Sources suggest that these villages used to accommodate a large number of migrant tenants: for instance, Tangxia and Xiaogang villages were known to have housed about 50,000 migrants each.

Commodities Fair (CECF) Pazhou Complex, while the other three were all adjacent to the PRNT under construction. Baiyun's three VICs were all situated close to the Baiyun New Town, one of the four centres as explained earlier.

(Figure 2 here)

The prioritised selection of these nine villages was clearly conforming to the city's Asian Games preparation. However, such earmarking of wholesale clearance suggests that while the municipal government was interested in beautifying the city, the Games also acted as an effective justification to initiate the municipality's long-anticipated redevelopment of dilapidated and obsolete urban spaces. The initiation of clearance before the Games was to lay the foundation for the post-Games reconstruction and hence the acceleration of Three Olds projects. Figure 2 shows the redevelopment status of those nine priority VICs at the time of the Asian Games opening. While the demolition work in Baiyun's three VICs did not progress as fast as the government would have hoped for, the other six villages in Tianhe, Yuexiu and Haizhu districts saw the commencement or completion of demolition by November 2010. The redevelopment of Liede village was completed just in time for the commencement of the Asian Games, presumably due to its proximity to both the PRNT and the Haixinsha Island where the opening ceremony of the Asian Games was held.

The spatial restructuring is not conflict-free. In particular, preparations for mega-events often involve displacement of local residents. In the case of Guangzhou's nine VICs whose redevelopment was prioritised for completion by the opening of the Asian Games (see Figure 2), 16,000 original village households and a much higher number of migrant tenants were to be affected by the demolition. Mega-events are often pursued by top-down decision-making, and this may worsen conflicts over space (Hayes and Horne, 2011). Previous studies on the Beijing Olympic Games also suggest that the costs were borne by socio-economically marginalised groups (Shin, 2012; Shin and Li, forthcoming). Ironically, these costs were often borne without huge protests due to the prevailing ideological imposition by the state that attributed a great degree of national significance to the successful hosting of the Games (*ibid.*). Within Guangzhou, the extensive spatial restructuring has incurred various protests by local residents to defend their right to housing and land (see Shin, 2013 for example), directed often at the 'predatory' local states than the 'benign' central state (So, 2007). However, protests against the Asian Games itself seemed to have been rare.

Conclusion

The 2010 Guangzhou Asian Games was the concluding moment of China's endeavour to stage the country in the world. While the Beijing Olympic Games and the Shanghai World Expo were more closely associated with the nationalist sentiment (endorsing the achievement of China's economic and political rise in the world), the Asian Games remained comparatively a low-key event. As the provincial capital of the Guangdong province, Guangzhou's preparation for the Asian Games was used in such a way as to sustain its own standing in the country while attempting to realise its development vision to become a world-class city as well as the international regional centre. The city's engagement with the scalar politics is a realisation of multi-scalar activities that involve both intra-provincial competition and 'negotiated scalejump'.

The city's experience of hosting the Games provides some important lessons for our understanding of how regional cities may pursue their development goals under the strong central state, and how event-led development contributes to this. First, Guangzhou's experience signals the rise of a regional city that attempts to 'jump scale' to connect with the world and reposition itself as the international regional centre. However, this 'scale-jump' is not what often tends to result from more conflictual local-central relations in which the place-dependent alliances at local scales might face confrontational central state (Park, 2005). Guangzhou's 'scale-jump' strategy is locally driven within a uniquely different context of the strong state. For Guangzhou, its 'scale-jump' was negotiated in that it (together with the Guangdong province) had to engage in constant negotiations with the central state to test the limit of their geopolitical expansion. This was testified in Guangzhou's positioning as the third largest city without explicit attempts to surpass Beijing or Shanghai, while making sure that they stay above Tianjin or Shenzhen and become an influential regional centre, both domestically and internationally. The Asian Games was used strategically as a way of making possible this double-edged development strategy.

To this extent, Guangzhou's experience testifies to the continuing importance of the scale of nation-state in China urban studies. Unlike the contemporary understanding of 'scale-jump' as a deterritorial or denationalising strategy in times of globalisation (Brenner, 1999), Guangzhou's 'scale-jump' is a process of *re-nationalising* to ensure maximum political and economic gains are achieved in a reshaped central-local state relationship. In other words, in the midst of intense competition among local states in China in times of economic decentralisation and China's ascendency in the global market, China's local states attempt to jump scale upward (connecting

with transnational capital or supranational agencies) or downward (promoting intra-regional reconfiguration of territorial organisations). These attempts are realised only through the mediation of and negotiation with the central state. This process of a 'negotiated scale-jump' is crucial for China's Party State whose primary concern is to ensure national political stability (Shin, 2012) and who has been strengthening its control through various means including stronger management of local Party cadres (Edin, 2003).

Second, Guangzhou's developmental pursuit to become a domestic and international regional centre was supported firmly by the spatial manifestation of the city's strategic development plans. The Asian Games experience testifies to the transformative role of local governments in their entrepreneurial push for urban accumulation through spatial restructuring and urban redevelopment for land resource mobilisation and urban make-over. The preparation for the Games reflected the expansionary boosterism that typified the decades-long development of China's cities, built on heavy productive investment in fixed assets. For Guangzhou, this expansionary boosterism had been justified by the city's development vision to become the international regional centre and a world-class city. Guangzhou's hosting of the 2010 Asian Games provided the city with a window of opportunities to initiate and streamline its longanticipated development projects, defending fast-tracked fixed asset investments. These investments were using mostly the city's own resources, which contrasts strongly with what has been reported in Western, post-industrial cities that rely heavily on global investment or central state subsidies. Instead of mega-events acting as a prerequisite for future development, megaevent hosting itself was embedded in the stream of speculative investments in fixed assets to ensure urban development and capital accumulation.

References

Black, D. (2007) The symbolic politics of sport mega-events: 2010 in comparative perspective, *Politikon* 34(3):261-276

Brady, A-M. (2009) The Beijing Olympics as a campaign of mass distraction, *The China Quarterly*, 197:1-24

Brenner, N. (1999) Beyond the state-centrism? Space, territoriality, and geographical scale in globalization studies, *Theory and Society*, 28:39-78

Broudehoux, A-M. (2007) Spectacular Beijing: The conspicuous construction of an Olympic metropolis, *Journal of Urban Affairs*, 29(4):383-399

Burbank, M.J., Andranovich, G.D. and Heying, C.H. (2001) *Olympic dreams: The impact of mega-events on local politics*. London: Lynne Rienner Publishers

Chen, X. (Ed.) (2009) *Shanghai rising: State power and local transformations in a global megacity*, Minneapolis; London: University of Minnesota Press

Cheung, P.T.Y. (2012) The politics of regional cooperation in the Greater Pearl River Delta, *Asia Pacific Viewpoint*, 53(1):21-37

China Daily (2009) Guangdong special: Guangzhou promotes overseas investment, 22 October. URL: <u>http://www.chinadaily.com.cn/cndy/2010-10/22/content_11443101.htm</u> (last access: 28 July 2013)

Cochrane, A., Peck, J. and Tickell, A. (1996) Manchester plays games: Exploring the local politics of globalisation, *Urban Studies*, 33(8):1319-1335

Duckett, J. (1996) The emergence of the entrepreneurial state in contemporary China, *The Pacific Review*, 9(2):180-198

Edin, M. (2003) State capacity and local agent control in China: CCP cadre management from a township perspective, *The China Quarterly*, 173:35-52

Gratton, C., Shibli, S. And Coleman, R. (2005) Sport and Economic Regeneration in Cities, *Urban Studies*, 42(5-6):985-999

Guangzhou Municipal Government (2009) Opinion on the accelerated promotion of "Three Olds" redevelopment (Guanyu jiakuai tuijin "Sanjiu" gaizao gongzuo-de yijian), Guangzhou administrative regulatory documents full-text search system, URL: http://sfzb.gzlo.gov.cn/sfzb/index.do GZASS (Guangzhou Academic of Social Sciences) (2006) Study on the Asian Games' impact on Guangzhou's economy and society and its promotion of urban planning and construction (Yayunhui dui Guangzhou jingji shehui he chengshi guihua jianshe daidong he yingxiang yanjiu), Guangzhou: GZASS

GMLRHAB (Guangzhou Municipal Land Resources and Housing Administrative Bureau) (2011) Guangzhou land use (draft) plan for the 12th Five-year period (Guangzhoushi tudi liyong 'shierwu' guihua), URL:

http://fagai.panyu.gov.cn/upfiles/up2011/20111129180501857.doc (last access: 22 June 2012)

Guangzhou Yearbook Editorial Committee (GZYEC) (1995) *Guangzhou Yearbook 1995*, Guangzhou: Guangzhou Yearbook Press

Harvey, D. (1978) The urban process under capitalism: A framework for analysis. *International Journal of Urban and Regional Research*, 2(1-4):101-131

Hayes, G. and Horne, J. (2011) Sustainable development, shock and awe? London 2012 and civil society. *Sociology*, 45(5):749-764

Heberer, T. and Göbel, C. (2011) The politics of community building in urban China. Abingdon: Routledge

Horne, J. and Manzenreiter, W. (eds.) (2006) *Sports mega-events: Social scientific analyses of a global phenomenon*, Oxford: Blackwell

Hsing, Y-t. (2010) *The great urban transformation: Politics of land and property in China*, Oxford: Oxford University Press

Judd, D.R. and Fainstein, S.S. (Eds.) (1999) *The tourist city*, New Haven, CT: Yale University Press

Kavaratzis, M. and Ashworth, G.J. (2005) City branding: An effective assertion of identity or a transitory marketing trick? *Tijdschrift voor economische en sociale geografie*, 96(5):506-514

Lin, G.C.S. (2007) Reproducing spaces of Chinese urbanisation: New city-based and land-centred urban transformation, *Urban Studies*, 44(9):1827-1855

Logan, J.R. and Molotch, H.L. (1987) *Urban fortunes: The political economy of places*, Berkeley, CA: University of California Press

Lu, L. and McCarthy, L. (2008) Spatial Restructuring in Urban China amid Globalization and Economic Reform: The Case of Guangzhou, *Built Environment*, 34(4):444-463

Nanfang Daily (2009) Guangzhou's Xian village redevelopment will involve "wholesale demolition", known to satisfy developers (Guangzhou Xiancun gaizao jiang "quanchai" chuan yi bei kaifashang xiangzhong), 12 August, URL:

http://news.southcn.com/gdnews/nanyuedadi/content/2009-08/12/content_5540452.htm (last access: 1 June 2012)

Nanfang Daily (2010) For the first time, Guangzhou municipal office of three olds regeneration responds to hot spots: the government never expects to make money (Guangzhou shisanjiuban shouci huiying redian: Zhengfu congmei zhiwang zhuanqian), 24 April, http://nf.nfdaily.cn/nfdsb/content/2010-04/24/content_11363483.htm (last access: 31 May 2012)

New Express Daily (Xin Kuai Bao) (2010) Guangzhou's Three Olds Office lists nine villagesin-the-city for demolition before the Asian Games, 25 February, URL: <u>http://news.xkb.com.cn/guangzhou/2010/0225/44839.html</u> (last access: 24 June 2012)

Oi, J.C. (1995) The role of the local state in China's transitional economy, *The China Quarterly*, 114:1132-1149

Park, B-G. (2005) Globalization and local political economy: The multi-scalar approach, *Global Economic Review*, 34(4):397-414

Ren, X. (2011) *Building globalization: Transnational architecture production in urban China*, Chicago: The University of Chicago Press

Shin, H.B. (2013) The right to the city and critical reflections on China's property rights activism, *Antipode*, 45(5):1167-1189

Shin, H.B. (2012) Unequal cities of spectacle and mega-events in China, *City*, 16(6):728-744

Shin, H.B. (2009) Residential redevelopment and entrepreneurial local state: The implications of Beijing's shifting emphasis on urban redevelopment policies, *Urban Studies*, 46(13):2815-2839

Shin, H.B. and Li, B. (2013) Whose Games? The costs of being "Olympic citizens" in Beijing, *Environment and Urbanization*, 25(2):549-566

Shin, J-S. (ed.) (2007) Global challenges and local responses, London: Routledge

Smith, A. (2012) Events and urban regeneration: The strategic use of events to revitalise cities, Abingdon; New York: Routledge

Smith, N. (1992) Contours of a spatialized politics: Homeless vehicles and the production of geographical scale, *Social Text*, 33:54-81

So, A.Y. (2007) Peasant conflict and the local predatory state in the Chinese countryside, *The Journal of Peasant Studies*, 34(3-4):560-581

Steenveld, L. and Strelitz, L. (1998) The 1995 Rugby World Cup and the politics of nationbuilding in South Africa, *Media, Culture and Society*, 20(4):609-629

Swyngedouw, E. (2004) Globalisation or 'glocalisation'? Networks, territories and rescaling, *Cambridge Review of International Affairs*, 17(1):25-48

Van der Westhuizen, J. (2004) Marketing Malaysia as a model modern Muslim state: The significance of the 16th Commonwealth Games, *Third World Quarterly*, 25(7):1277-1291

Wu, F. (2009) Globalization, the changing state, and local governance in Shanghai, in: X. Chen (Ed.) *Rising Shanghai: State power and local transformations in a global megacity*, pp.125-144, Minneapolis; London: University of Minnesota Press

Wu, F. and Zhang, J. (2007) Planning the competitive city-region, *Urban Affairs Review* 42(5):714-740

Wu, F., Xu, J. and Yeh, A.G-O. (2007) Urban development in post-reform China: State, market, and space, Abingdon: Routledge

Xinxi Shibao (2009) Walls around Liwan lake, Dongshan lake and Liuhua lake get demolished (Liwanhu dongshanhu Liuhuahu chaiqiang), 16 July, URL:

http://informationtimes.dayoo.com/html/2009-07/16/content_635343.htm (last access: 21 June 2012).

Xu, J. and Yeh, A.G.O. (2009) Decoding urban land governance: State reconstruction in contemporary Chinese cities, *Urban Studies*, 46(3):559-581

Xu, J. and Yeh, A.G.O. (2005) City repositioning and competitiveness building in regional development: New development strategies in Guangzhou, China, *International Journal of Urban and Regional Development*, 29(2):283-308

Xu, J. And Yeh, A.G.O. (2003) City profile of Guangzhou, Cities, 20(5):361-374

Yangcheng Evening News (2009) National central city, not really reached (Guojia zhongxin chengshi, zanwei mingfuqishi), 1 July, URL: <u>http://www.ycwb.com/ePaper/ycwb/html/2009-07/01/content_533391.htm</u> (last access: 21 June 2012)

Ye, L. (2011) Urban regeneration in China: Policy, development, and issues, *Local Economy*, 26(5):337-347

Zhu, J. (2004) Local developmental state and order in China's urban development during transition, *International Journal of Urban and Regional Research*, 28(2):424-447

Zhu, H., Qian, J. And Gao, Y. (2011) Globalization and the production of city image in Guangzhou's metro station advertisements, *Cities*, 28(3):221-229

Figure 1:

Transformation of the Pearl River New Town, 2000 - 2010

(c) Google Earth Satellite Images (top three) and Author's Pictures (bottom three)





View towards Guangzhou TV Tower and <u>Haixinsha</u> Island (c) Author, May 2011

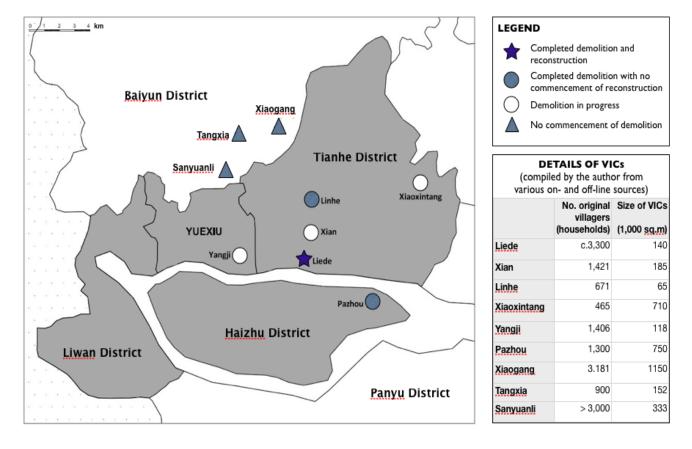


PRNT viewing towards north (before the Asian Games) (c) Author, September 2010



PRNT viewing towards north (after the Asian Games) (c) Author, May 2011

Figure 2:



Nine prioritised VICs and their redevelopment status by the Asian Games opening

Table 1: Comparative summary	statistics of economi	c development in	Guangzhou
- ····································			

Categories	Unit	Year ^(Source)	Guangzhou	Shenzhen	Guangdong	Beijing	Shanghai	National
Gross Domestic Product (current prices)	billion yuan	2010 ^{(1),(4),(6),(7)} 2000 ^{(1),(4),(6),(7)}	1074.83 249.27	958.15 218.75	4601.31 1074.13	1411.36 316.17	1 716.60 477.12	40326.00 9800.00
Average Real GDP Growth Rates		Period, 2001–2005 Period, 2006–2010	13.79% 13.51%	16.33% 13.26%	13.31% 12.42%	12.10% 11.40%	11.93% 11.19%	9.76% 11.21%
Per Capita GDP	yuan	2010 ^{(1),(4),(6),(7)} 2000 ^{(1),(4),(6),(7)}	87,458 25,626	94,296 32,800	44,736 12,736	75,943 24,217	76,074 30,047	29,992 7,858
Per Capita Annual Dispos	able Income,							
Urban Households	yuan yuan	2010 ^{(1),(4),(6),(7)} top 20% (A) bottom 20% (B) A/B, % 2000 ^{(1),(2),(5),(6),(7)} top 20% (A) bottom 20% (B) A/B, %	30,658 13,622	32,381 21,577	23,898 52,417 8,610 6.09 9,762 18,074 4,752 3.80	29,073 53,739 13,692 3.92 10,350 17,831 5,775 3.09	31,838 62,465 14,996 4.17 11,718 19,959 6,840 2.92	19,109 41,238 7,617 5,41 6,280 11,373 3,143 3,62
Permanent Population	-	2010 ^{(1),(4),(6),(7)} d migrant residents registered migrants	12.71 4.65 36.6%	10.37 7.77 74.9%	1 04.41 20.75 19.9%	1 9.62 7.05 35.9%	23.03 8.98 39.0%	1,340.91
	-	2000 ^{(1),(3),(4),(7)} d migrant residents registered migrants	9.95	7.01 5.76 82.2%	86.50 5.76 6.7%	1 3.57 2.56 18.9%	16.09 3.13 19.5%	1,267.43

Year-on-year growth rates of total fixed asset investments $^{(1),(4),(6)}$

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Guangzhou	5.29%	2.76%	16.10%	13.14%	15.33%	11.43%	10.17%	13.06%	26.57%	22.70%
Shenzhen	5.84%	11.60%	18.66%	14.86%	8.46%	8.89%	4.47%	8.87%	16.72%	13.78%
Beijing	14.40%	21.84%	24.90%	16.67%	12.67%	10.81%	13.28%	-0.82%	11.17%	20.46%
Shanghai	8.64%	12.67%	11.71%	22.55%	16.56%	16.10%	18.46%	8.13%	14.84%	-1.04%

Sources: (1) Guangdong Statistical Yearbook 2011; (2) Guangdong Statistical Yearbook 2001; (3) Shenzhen Statistical Yearbook 2006 (4) Beijing Statistical Yearbook 2011; (5) Beijing Statistical Yearbook 2001; (6) Shanghai Statistical Yearbook 2011 (7) China Statistical Yearbook 2011; (8) China Statistical Yearbook 2001