

The Suburb as a Space of Capital Accumulation: The Development of New Towns in Shanghai, China

Jie Shen

*School of Social Development and Public Policy, Fudan University, Shanghai, China;
shenj@fudan.edu.cn*

Fulong Wu

*Bartlett School of Planning, University College London, London, UK;
fulong.wu@ucl.ac.uk*

Abstract: Drawing attention to the governing role of capital accumulation and its interaction with the state, this study examines the dynamics of the new wave of suburbanization in China, which is characterized by the development of new towns. New towns essentially function as a spatial fix in China's contemporary accumulation regime. Rather than resulting from capital switching from the primary to the secondary circuits, new towns help to collect funds for the leverage of industrial capital and thus simultaneously sustain both circuits. Meanwhile, the development of new towns is also a process of territorial development, in which municipal governments expand the space of accumulation under strengthened fiscal and land controls and develop a metropolitan structure. Underlying the specific form and dynamics, however, is the worldwide trend of capital switching from declining manufacturing industries in developed countries to the new investment frontier in developing countries.

Keywords: suburbanization, suburban governance, capital accumulation, new towns, Chinese cities, Shanghai

Introduction

Chinese suburbanization, immediately after economic reform, was largely a result of land use change following the establishment of the land market, and was dominated by government-sponsored residential and industrial relocation (Zhou and Ma 2000). After 2000, a new wave of suburban development began to unfold, which was characterized by the development of new towns. Municipal governments managed to gain control over surrounding counties by administrative annexation (Zhang and Wu 2006). The outer suburban areas were developed by the expansion of mass transit systems (Cervero and Day 2008). Thus, along with the rising demand for new housing on the urban edge, the idea of living in the suburbs has become possible, appropriate, or even desirable (Shen and Wu 2013). In contrast to earlier expansion and exclusively industrial or residential uses, the new strategy has involved the development of multifunctional new towns and the creation of a polycentric metropolitan region (Wu and Zhang 2007). This new feature of suburbanization is referred to as a "polycentric structure" (Feng et al. 2009) or "post-suburbia" (Wu and Phelps 2011).

Many studies have emphasized the direct and strong role of the state in Chinese suburbanization (Wu and Phelps 2011; Zhou and Ma 2000), and much has been written about land reform. Urban sprawl has been characterized as “a land enclosure movement” (Deng and Huang 2004:219), and the emphasis has typically been on the “local government’s willingness to lease more land” (Zhang 2000: 131). These studies offer important insights into the dynamics of suburbanization in China. However, they conceal the more complicated way in which suburban development is being implemented. First, recent suburbanization is not a singular process driven by the state alone. In fact, the restructuring and decentralization of the state has resulted in the emergence of other actors and institutions. Some scholars note that market forces are increasingly apparent (Feng et al. 2008; Shen and Wu 2013). Capital accumulation, therefore, has become a major driving force for suburbanization. Second, it would also be too simplistic to divide the suburbanization processes into “government-led” and “market-oriented” stages (Feng et al. 2008). Such a dichotomy would ignore the interaction among different governing forces, particularly the powerful role of the state in enabling these forces to operate in the post-reform era. As He and Wu (2009:296) point out, China’s emerging neoliberal urbanization is largely “a mixture of market logic and state authority logic”. Moreover, it is also necessary to go beyond the market and to examine the determining role of the accumulation process, which is ever expanding beyond the limits of the market (Cox 2010).

In view of these criticisms, this paper draws attention to the power of capital accumulation in shaping suburban forms and processes. Specifically, as a particular type of Chinese suburb, to what extent does the development of new towns connect to wider processes of capital accumulation? Meanwhile, this is not to deny the role of the state in such developments. Based on a detailed case study of the new town project in Shanghai, we aim to investigate the complex mechanisms of suburban growth in China. It is revealed that new towns play a critical role as a “spatial fix” for capital on multiple geographical scales, while the state intervenes actively to secure its implementation via the sophisticated manipulation of market operations.

Largely based on the US experience, existing literature used to depict “suburb” as “a middle-class residential enclave”, and to define “suburbanization” as “the relocation of population from the centre to the suburbs” (e.g. Hirt 2007; Zhou and Ma 2000). Worldwide evidence, however, presents a far more complicated picture. Recent studies, therefore, incorporate all forms of peripheral growth, in different geographical and historical contexts, to understand the phenomenon through a comparative perspective (e.g. Ekers et al. 2012; Harris 2010). The form and dynamics of China’s suburban development is by no means the same as that of the classic post-war suburbanization in the West. We have adopted the extended concept in order to stress the diversity of suburbanization. New towns represent a particular form of suburb in China, which have profoundly transformed the landscape and image of the urban periphery. By examining new town projects in China, we seek to enrich current global suburban studies.

In the second section, the paper elaborates upon the idea of approaching suburbanization as different combinations of governance modalities, stressing the

central role of capital accumulation and its relation with state interventions in understanding suburban forms and processes in different contexts. Then, in the third section, it develops a general framework to understand the role of capital accumulation in suburban new town development. The fourth section explains the methods used to collect the empirical material in the study, while the fifth examines the changing dynamics and strategies of suburban development in Shanghai. This is followed by the sixth section, which illustrates the underlying growth mechanisms by taking a close look at Songjiang New Town. The final section concludes with the main findings and provides some broader implications.

The Suburb as a Space of Capital Accumulation

Recently, along with the rise of city-regions as strategic nodes in global systems of distribution, rapid peripheral urban growth on the global level has attracted much research interest (Hamel and Keil 2015; Phelps and Wu 2011). From a political and economic perspective, scholars work to explicate the processes of suburbanization in different historical moments and spaces. Crucially, current comparative analysis goes beyond comparison and contrasts in terms of appearance, and focuses on functions and development processes (Phelps et al. 2006). Ekers et al. (2012) further propose approaching suburbanization as an interaction among different suburban development actors. Two premises are particularly pertinent and useful here. One is concerned with the different modalities of suburban governance, focusing on the role of the state, capital accumulation, and authoritarian private governance. The other is the use of the term “modality” to reflect and stress the interplay of difference processes:

While capital plays a constitutive role in shaping suburban development and life, its governing function can be channelled through the state or non-democratic forms such as homeowners’ associations. Likewise, the foreclosure of suburban mortgages, which re-concentrates wealth in the hands of banks, is not possible without the power of the state and specifically the judiciary (Ekers et al. 2012:411).

Capital accumulation is the less noted but nevertheless important of several governing forces. In the West, from Harvey (1985) and Walker (1981), and more recently, Cox (2010) and Phelps (2010), the thesis of suburbanization as a spatial-temporal fix of capitalist economies has been well developed. Fundamentally, suburbanization is driven by the need to drag on the fluidity of capital and the potential devalorization of capital in particular places (Cox 2010; Harvey 1985). In this sense, suburban development represents a process of territorial expansion through which local growth can be sustained. As city-regions have become the key scale on which capital accumulation is organized, emerging suburban nodes with an increase in specialization are becoming even more important as a way for the central city to orchestrate development throughout the metropolitan area and to promote local competitiveness (Lefèvre 1998).

Operationally, the development industry plays a central role in facilitating suburbanization and sustaining capital accumulation. Initial work by Henri Lefebvre (2003) notes that the production of the built environment absorbs surplus capital

and thereby helps to defer, temporarily, a capitalist crisis. Harvey (1985) further argues that post-war US mass suburbanization resulted from capital switching from the primary circuit of manufacturing production to the secondary circuit centred on the built environment. Recently, as financial capital with a speculative purpose has come to drive investment in the built environment, real estate is increasingly theorized as an independent sector (Beauregard 1994; Gotham 2006). It is the financialization of homeownership that has driven the recent round of global suburbanization (Gotham 2009).

Yet it would not be possible to understand the governing role of capital accumulation without considering state action (Ekers et al. 2012). While the relocation of industries to the suburbs stems from capital's pursuit of competitive advantages, this is also associated with various preferential policies provided by the entrepreneurial state. For example, the state governments in the US and Canada directly subsidized post-war suburbanization by massively funding highways and providing generous tax benefits to homeowners (Harris 2004; Hayden 2003). The recent rise of financial capital in suburban processes, as noted by Immergluck (2009), is also facilitated by the retreat of the state in mortgage markets.

In the Chinese context, the role of capital accumulation in shaping suburban development is relatively poorly understood. At best, rapid (sub)urbanization is regarded as a movement of counterbalance to the recent crisis in Western countries (Harvey 2012). Moreover, the involvement of the state is usually more prominent (Zhou and Ma 2000). Haila (2007) therefore questions whether market mechanisms could explain China's urban development after economic reform. However, new practices of land development further lead to the prevalence of land commodification (Xu et al. 2009). Under such circumstances, the previously socialist state has been reconfigured and so has become a market builder and player itself (Wu et al. 2007). Various market-oriented institutional changes have stimulated the suburban housing market. For example, on the production side, fiscal and other powers have been decentralized to suburban district governments, and the establishment of a land-leasing system has permitted the entry of private capital. On the demand side, the abandonment of welfare allocation of housing, as well as the relaxation of the Hukou restriction, has liberated the freedom of people to choose where to work and live. Local governments have also intentionally promoted homeownership by the introduction of various home financing instruments. Moreover, income from land leasing is now the main source of local revenue. In order to boost the suburban housing market, the state has become directly involved in suburban flagship and infrastructure projects. As a consequence, market mechanisms have become dominant since the late 1990s:

Residential suburbanization is driven by rising car ownership and preference for suburban villas and quality housing; industrial relocation is facilitated by the development of suburban industries; and retail suburbanization began to appear in the form of large shopping malls and retail parks (Feng et al. 2008:84).

Lin and Yi (2011) further identify the role of capital accumulation in driving China's urban expansion, i.e. (sub)urbanization is not simply a result of economic growth

but a tool for mobilizing capital. Going beyond aggregate analysis, this detailed case study on the development of new towns further opens up the “black box” of suburbanization, revealing the role of capital accumulation and how it is channelled by the state.

The Development of New Towns in China: An Analytical Framework

Immediately after the establishment of the land and housing markets in the 1980s, Chinese cities began to experience massive industrial relocation and population redistribution (Zhou and Ma 2000). Suburban development was characterized by scattered industrial zones (Deng and Huang 2004). From the late 1990s, a new round of extensive suburban development began to unfold; this has differed from the previous stages in at least two aspects. First, suburbs have been planned to grow into new settlements and to play an important role in the regional economy (Wu and Phelps 2011). Second, in spatial terms, the new round of suburbanization in outer suburbs and exurban rural areas has taken the form of well planned and mixed-use new towns (Wang et al. 2010). Residential and commercial developments, along with a range of high-quality living facilities and services, have become widespread.

A framework is established to analyse how the development of new towns is shaped by the broader process of capital accumulation (see Table 1). As a particular form of Chinese suburbanization, new towns work as a “spatial fix” for capital,

Table 1: An analytical framework for understanding the development of new towns in China

Scales of territorial organization	Capital accumulation	State actions
(Sub) urban	The mutual reinforcement of primary and secondary capital circuits	To promote mixed land use To establish a double-track land system To rebuild the image of suburbs as a liveable place
Metropolitan	The territorialization of capital internalizing new developments within a larger space	To annex outer suburban counties To facilitate metropolitan spatial restructuring To rescale metropolitan governance, either through motivating suburban governments or inserting municipal institutions into suburban space
Global	The switching of capital from declining industrial economies in the West to the new frontiers in China	To deregulate foreign investment To provide low-cost land and infrastructure

which is always premised upon historically specific configurations of overlapping geographical scales and results from circuits of capital on multiple geographical scales (Brenner 1998; Harvey 1982). On each scale, state interventions play a crucial role in channelling capital investment towards suburban new towns.

Firstly, on the local scale, the unique characteristics of capital accumulation in Chinese new towns lie in the growth mechanisms. The model known as “using land to breed land development” (Yeh 2005:34) drove the earlier development of economic and technological development zones (ETDZs) in the 1990s. Now, new towns are usually developed in the form of mixed-use projects to allow upscale commercial and residential development. The project indicates a possible population growth and thus a potential market. The local government then uses the new town project to leverage bank loans and sells the land through competitive bidding. Meanwhile, using the capital obtained from the land market, the local government invests in infrastructure development and provides serviced land in new towns to attract manufacturing industries. Property development generates quick capital returns and local land revenue, while industrial development ensures long-term local tax incomes (Tao et al. 2010). In this way, in contrast to post-war suburbanization in the West, the primary and secondary capital circuits reinforce each other in the Chinese suburbs. Thus, the development of new towns has created a more complicated pattern of capital flows.

Secondly, the development of new towns reflects the process of the territorialization of capital on the metropolitan scale (Hsing 2010). As capital looks for competitive advantages facilitating the cheaper and faster turnover time of capital, the periphery becomes the rational locus for growth. The strategy is to develop a metropolitan spatial structure and turn capital’s inconstant geography to local advantage (Cox 2010). In China, this is realized through annexing outer suburban counties and building new towns. In the mid-1990s, in response to local disobedience, the central government strengthened its regulatory powers (Xu and Yeh 2009). This was marked by the launch of a tax-sharing system in 1994 and the introduction of the revised Land Administration Law in 1998 (Lin and Yi 2011; Xu and Yeh 2009). From 2004, the central government further reinforced its control over land development by the allocation of “land development quotas” to provincial and municipal governments. Under such circumstances, municipalities faced difficulties in mobilizing capital and had to find a way to compete with others for inward investment. As a response, outer counties were annexed and transformed through “strategic development plans” under the vision of a polycentric spatial structure (Wu and Zhang 2007), and suburban new towns were proposed as new growth poles of the metropolitan area. Municipalities were thereby able to internalize new growth within their territorially defined jurisdictions. The development of suburban new towns has to be understood in this context.

Finally, the recent wave of suburbanization cannot be adequately explained without reference to global dynamics. On the local scale, the development of new towns cannot be interpreted as the result of capital switching from primary to secondary circuits. Nonetheless, in response to crisis tendencies, capital accumulation always succeeds through the switching from one region to another across the world (Harvey 1985:19). The receipt of massive foreign industrial capital

suggests that Chinese suburbanization is a consequence of capital switching from declining industrial economies in the West to the new Chinese investment zones, financing both the construction of industrial facilities and housing areas in new towns. In this sense, the state's new town project acts as a sophisticated land use arrangement securing the interests of capital.

Research Methods

Shanghai is used as a case study in this research. Shanghai launched its new town project as early as 2000, and the experience has since been replicated by other Chinese cities. One major site of the project, Songjiang New Town, is used, empirically, to examine capital accumulation in suburban new towns. It is the fastest growing and largest new town of Shanghai. Importantly, as the experimental site for Shanghai's new town project from the outset, it pioneered a new mode of outer suburban development and became the role model for others. Certainly, the new towns have different rates of progress, depending on their locations, the pace of construction, etc. Because of the inherent contradictions, as shown from this study, the development of new towns does not guarantee profits. Using Songjiang as a case study, we intend to illustrate the rationale, development strategies and growth mechanisms of the new towns.

Analysis was conducted on both municipal and suburban district levels. Along with the decentralization of urban governance, capital accumulation is now largely embedded in territories at the municipal level, and suburbanization is usually promoted by the municipalities to facilitate economic growth within their territorial jurisdictions. Meanwhile, it is the suburban district governments that organize and operate the development of new towns. With extended power and responsibility over local affairs, they actually have significant incentives to promote local growth through the project. The district level is thus the lowest territorial scale where the development of new towns works.

The study is based on 16 field visits between 2009 and 2014 as well as 46 interviews with key people directly involved in the new town project, including municipal and district government officials, design and planning consultants, academics, managerial staff from government development companies, private property developers, real estate agents, and new town residents. Secondary empirical material includes key documents, such as a variety of planning and policy documents, consultancy reports regarding suburban development and new town projects, official statistical yearbooks, official data on land transactions, and population census data.

The Development of New Towns in Shanghai

The Adoption of New Towns in Shanghai Urban Planning

In the late 1950s and 1970s, Shanghai tried to build industrial satellite towns (Editorial Board of Shanghai Urban Planning History 1999). Both the central state and Shanghai municipality were directly involved in the projects. Following top-down policy mandates, a number of factories were relocated to, or were

constructed in the new towns. However, due to a lack of living facilities, most workers still lived in the centre. In the late 1990s, the government again proposed an idea for suburban new towns. The Shanghai Urban Master Plan (1999–2020) was prepared to transform the metropolitan area of Shanghai into a “multi-axis, multilayer, and multinuclear structure” (SMG 2001a). Nine new towns were planned, one in each of the nine outer districts (see Figure 1). An experimental project known as One-City-Nine-Towns was launched during the period 2001–2005. Then, in 2006, a new plan, known as the 1966 Urban System Plan, was announced to further suburban development and create a polycentric metropolitan area with “one central city, nine new towns, sixty new townships and six hundred central rural villages” (SUPMB 2005). The new towns were to be developed in phases, reflecting the municipal government’s long-term development strategy.

The vision of nine new towns is very different from the earlier plans for economic development zones. New towns are not seen as inferior locations but rather as a strategic investment frontier for a polycentric metropolitan region. Meanwhile, the government attached particular importance to infrastructure construction and aesthetic landscapes (interview, Professor in Urban Planning, Tongji University, January 2009). Essentially, this strategy aimed to attract capital investment in real estate on the periphery by providing infrastructure incentives. Yet the state can no longer simply locate projects through administrative orders but has to influence

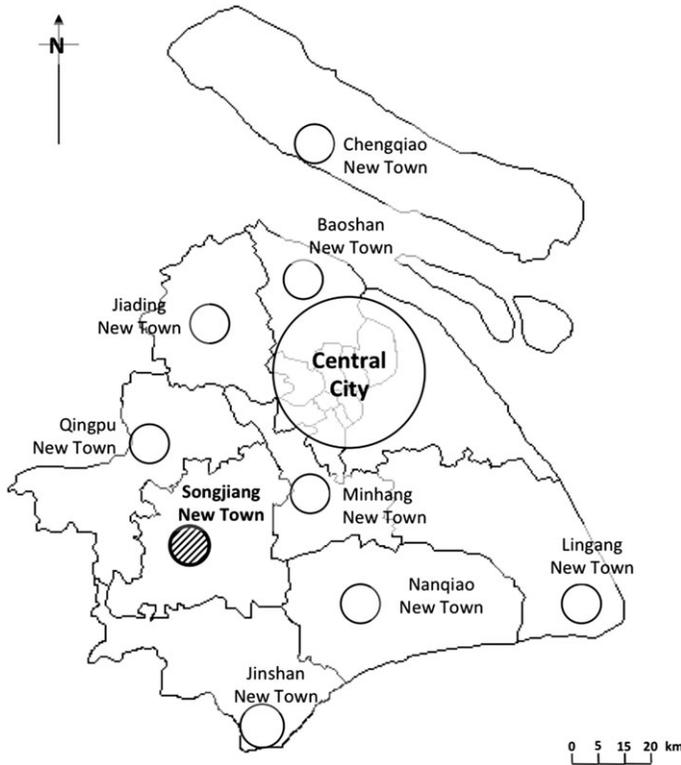


Figure 1: Locations of the planned suburban new towns in Shanghai

suburban development through the market. In the experimental project of One-City-Nine-Towns, the images of the new towns were promoted through replicating distinctive townscapes in Britain, Italy, the Netherlands, Germany, Spain, Scandinavia, and North America. In the later 1966 Urban System Plan, nine new towns were scaled up to take on comprehensive urban functions. Nearly all the new town plans placed an emphasis on “liveability” and the quality of life.

Reasons for Adopting New Town Strategies

Since the late 1990s, the strategy of creating ETDZs has faced challenges from China’s entry into the World Trade Organization (WTO), intensified inter-urban competition, and state rescaling (strengthened central control). The strategy of building new towns includes at least three considerations: to rebuild Shanghai into a global city as a response to regional competition, to adopt land development as a driver for economic growth, and to promote compact development as a response to strengthened land control.

To Rebuild Shanghai into a Global City

From the mid-1990s, Shanghai faced increasing competition from surrounding cities in Jiangsu and Zhejiang provinces, which were able to provide cheaper land and labour. As a result, Shanghai began to lag behind the other two provinces in manufacturing. This reflects what Cox (2010:218) refers to as “the threat of devaluation” and the potential for capital outflow into other places. Therefore, to strengthen its status, Shanghai proposed developing a global metropolis (interview, Head of Shanghai Institute of Urban Planning and Design, January 2010).

To become a global city, Shanghai aimed to effect a transition from an industry-oriented economy to a service-oriented economy. One important strategy was to reorganize economic activities at the metropolitan level. Thus, it was necessary to promote service sectors in the central area to catch up with other global cities, and the suburbs were given the mission of maintaining the strength of the manufacturing industries. As the slogan says, “The central city shows urban prosperity while the suburb maintains economic strength” (SMG 2001b:1). Moreover, following New York, Tokyo, Paris, and London, Shanghai needed to transform its metropolitan spatial structure, form a polycentric structure, and develop suburban nodes (SUPMB 2007; Ye 2003). In essence, the aim of this round of suburban development was to rebuild Shanghai as a global city on a larger metropolitan scale.

Through successful spatial restructuring and the expansion of space of capital accumulation into the suburbs, the aim of industrial restructuring was well achieved. The contribution of the tertiary sector to Shanghai’s overall economic growth quickly outpaced that of the secondary sector, and the central city experienced fast deindustrialization. In 2014, the tertiary sector contributed about 86% to the total GDP in the central areas. Meanwhile, suburban districts saw the development of manufacturing industries, accounting for about 50% or more of

their total GDP (SSB 2015). Notably, within the new towns, industrial land still took around 20–40% of their total area (SUPDRI 2014).

To Adopt Land Development as a Driver for Economic Growth

The tax system in the 1990s reduced local incomes but left expenditure responsibilities with local governments. However, most land-related and real-estate-related taxes and any off-budget land income were given to local governments and became a major source of local finance. This tax system reinforced the incentive to promote land and housing development. Accordingly, Shanghai decided to boost urban development in its suburbs. It was decided that the suburbs should not only become industrial areas, but should also form new urban areas.

The decision for the suburbs to undertake housing development was made largely due to the lack of land in the central districts: “In the 1990s, we achieved great success in urban renewal. There was not much land left in the central area, and the cost was high. So the government decided to shift [attention] towards the undeveloped periphery” (interview, government official, Shanghai Municipal Planning and Land Resources Management Bureau, February 2009). The success of suburban development depended on the quality of the living environment, the availability of services and facilities, and fast transport links to the central city. These were critical conditions for property development at the edge of the city. The development of new towns was regarded as a strategy to implement these development conditions and boost the entire suburban housing market. This strategy, indeed, provided an important means of revenue generation in the following years.

To Promote Compact Development as a Response to Strengthened Land Control

In the 1990s, Shanghai experienced urban sprawl. The government understood that without development control, the scattered pattern could damage the environment; according to a government research report (Ye 2003:27):

Such spontaneous urban expansion depends entirely on the market. The model requires the least investment in infrastructure. Nevertheless, it would lead to inefficient land use and overpressure on the facilities of central cities ... Without effective measures in place to prevent urban sprawl, Shanghai would be a mega city characterized by pollution and massive overcrowding.

However, the promotion of compact development is actually because of strengthened central control over land; since the late 1990s, the central government has strengthened its regulation over land development. After the revision of the Land Administration Law in 1998, the central state began to set annual quotas for the total amount of land conversion, which could not be exceeded. Under this policy, the local government could not arbitrarily convert agricultural land for land development and had to search for a new development approach.

In 2000, a new policy of “land quotas” was adopted, which allowed construction land quotas to be interchangeable between rural and urban areas. Accordingly, within the jurisdiction of a municipality, if a certain amount of construction land in the countryside was reclaimed for agricultural use, an equal amount could be added to the total quota for construction land in the urban area (MLR 2000; State Council 2004). This policy was originally designed to strengthen the preservation of agricultural land, but it has driven local governments to claim farmers’ housing plots and unused land in rural areas for agricultural use, as the creation of new agricultural land allows the government to use the equivalent amount for land development in urban areas.

In 2004, the municipal government of Shanghai issued a new guideline for suburban development, known as the “three concentrations”, namely, concentrating industries in planned industrial parks, populations in new towns, and land development in major areas (SMG 2004). The 1966 Urban System Plan aimed to realize this strategy: to promote the development of new towns as a way to strengthen these “concentrations” (interview, Deputy Chief of Master Plan Management Department, Shanghai Municipal Planning and Land Resources Management Bureau, May 2010). The policy converted rural construction land in remote areas with less growth potential back to agricultural use. In this way, the municipal government created extra “land quotas” to be used to secure a land supply in major settlements. The new towns were then designed to concentrate urban development and economic activities. Consequently, although the central state adopted strict land policies, the provision of newly increased construction land in Shanghai remained at a high level, particularly during 2002–2006 when the three first-round new towns were under construction (CMLR 2009).

Building Songjiang as a New Town

Songjiang is an outer suburban county town about 40 km away from the central city (see Figure 1). It was designed as one of Shanghai’s industrial satellites in the 1950s. After economic reform, Songjiang saw rapid growth based on the industrial sector. In 1994, Songjiang Industrial Zone to the east of the old city was approved as one of the municipal level industrial zones, which was entitled to provide a series of preferential tax policies for enterprise. Industry then maintained rapid and steady growth. The pace of urbanization in Songjiang, however, slowed in the 1980s and 1990s. While the three inner suburban districts, namely, Pudong, Baoshan and Minhang, had been experiencing rapid urban expansion and real estate growth, more than 60% of Songjiang’s population was still involved in agriculture in 2001. The contribution of real estate to its total GDP was about 3.8%, ranking last but one among all the suburban districts.

Against this background, the massive urban development in Songjiang since the launch of the new town project has been astonishing. In 2001, it was selected by the municipal government to be the key site for suburban development. The master plan by the district government envisaged Songjiang as “a comprehensive suburban new town of Shanghai, and in the end a comprehensive new city in the

Yangtze Delta” (Editorial Board of Songjiang Urban Planning History 2009:61). According to the master plan, Songjiang should have residential and commercial developments with existing industrial zones. The layout was designed as a mixed-use urban settlement, which had a business centre in the middle, surrounded by the Songjiang industrial zone in the east, the University Town in the north, an English residential quarter in the west, and the old downtown in the south. The plan shows that this would be a new town rather than an industrial zone.

As an outer suburban district, Songjiang was not a popular residential area. Although the land price was much cheaper than in the central districts, developers were sceptical about commercial and housing projects there (interview, Deputy Director, Songjiang Planning and Land Resources Management Bureau, July 2010). Therefore, great importance was attached to place-making (interview, Chief of Construction Department, Songjiang New Town Development Corporation, May 2010). The district government grasped the gist of successful urban management, i.e. to rebuild an image that would be distinct from its industrial past. Up to \$6 million was spent on planning and urban design to reconfigure Songjiang’s fresh identity as “a liveable city with a beautiful living environment” and as “a historic, cultural, and ecological garden city” (Editorial Board of Songjiang Urban Planning History 2009:61; Wang 2002). Figure 2 shows the ordinary landscape of Songjiang New Town, featuring high-rise apartments and a nice living environment. Four important high-profile developments, including a central green park to improve the landscape; a university town to import 100,000 students and staff as new residents; and a flagship real estate project, Thames Town, featuring an authentic English townscape to promote public recognition; as well as the



Figure 2: Ordinary landscape of Songjiang New Town (source: photograph by author)

No. 9 metro line to link up with central Shanghai, were then designed to achieve this goal.

In practice, the new town, covering an area of 23 km², was divided into four parts. Each included one flagship project. Four state-owned development companies were set up to develop each of the areas: Fangsong Construction and Investment Co., Ltd (FCIC), responsible for the Central Green Park and its surrounding land; University Town Construction and Development Co., Ltd (UTCDC), responsible for the university town project and its surrounding land; Chengtong Rail Transit Investment and Construction Corporation (CRTICC), responsible for the No. 9 metro line and the land surrounding the stations; and Songjiang New Town Construction and Development Co., Ltd (SNTDC), responsible for Thames Town and its surrounding land. Land was allocated by the government as initial capital, but the development companies were responsible for their own profits or losses. The companies then undertook land requisition, infrastructure construction, and mega-projects development. Notably, they actually could gain little profit from the flagship projects (interview, Chief of Construction Department, Songjiang New Town Development Corporation, May 2010; interview, Deputy Director, Songjiang Chengtong Rail Transport Investment and Development Co., Ltd, June 2010). Yet, as the land value rose along with the increased reputation of the flagships, they earned returns by selling the surrounding land to other private developers. As one local official pointed out, “The building of Songjiang New Town just rests on successful *chengshi jingying* (literally, urban entrepreneurialism) ... the key to success is to adopt overall strategies, which means building growth poles for the whole region” (Wang 2002:52). The state-led flagship projects are such growth poles.

Through successful land management, Songjiang New Town was built in a very short period. From August 2001, when construction started, to the end of 2005, 23 km² were turned into urban areas. At the same time, the total number of residents in Songjiang New Town increased more than twofold in 10 years, from 271,400 in 2001 to 684,300 in 2010. Stimulated by the new town project, Songjiang District has also seen a population growth rate of 146.80%, exceeding all other districts and counties in Shanghai (SSB 2001, 2011).

Capital Accumulation in Songjiang New Town

The establishment of Songjiang New Town marked a significant stage in which the suburbs began to act as a place for capital accumulation. By investing in prestigious projects, the district government managed to raise the image and land value of the town. The average land price was about 18,000 Yuan per mu (15 mu = 1 ha) in 1999. However, after the announcement of the new town project in 2000, Songjiang became well known. In 2010, when a land area of 94,476 m² was leased out by public auction, the bid price reached 1.25 billion Yuan. This meant the price of one mu of land was nearly 9 million Yuan, and the cost of building houses would be more than 16,000 Yuan per m² (Zhou 2010). Furthermore, the development of the new town promoted infrastructure development and property investment. From 2001 to 2008, the annual growth rates of the construction and real estate

sectors were 23.1% and 28.3% respectively. The total number of companies in the real estate industry registered in Songjiang, including development companies, property management companies, and property agencies, increased from 70 in 2001 to 993 in 2008 (SSSB 2009).

The rise of the real estate industry helped raise land values and contributed to the increase in local revenue. Figure 3 shows the structure of local budgetary incomes. The district government shared only a small portion of the total budgetary income, but after the tax had been turned over to the municipal government, real estate-related tax and land revenue contributed a large proportion to local public finances; in 2010, real estate-related income contributed as much as 58.6% to the local budgetary revenue. However, the real estate industry made only a small contribution of 4.5% to the total GDP (SSSB 2011).

In parallel with building Songjiang New Town, the district government continued to attract industrial investment and to build its economic growth based on manufacturing. With the revenue collected from building Songjiang New Town, the district government was able to invest in infrastructure and so provided various preferential policies to attract industrial capital. In 2000 and 2003, with approval from the State Council, the district set up two Export Processing Zones, to the east and west of the new town, covering 1.98 km² and 2.9 km² of land, respectively. Meanwhile, Songjiang Industrial Zone was further extended. In 2003, about 30 km² of land was developed to accommodate various industries.

As a result, the proportion of the manufacturing sector in GDP actually increased after 2001, which stimulated Songjiang's overall economic growth and brought employment and an increasing population. During 2001–2014, the growth in manufacturing industries alone contributed 53.4% of the district's GDP growth. In 2014, while Shanghai enhanced its tertiary industry proportion of GDP to 64.8%, manufacturing industries contributed 54.1% of the total GDP of Songjiang (SSB 2015; SSSB 2015). The extensive establishment of labour-intensive industries,

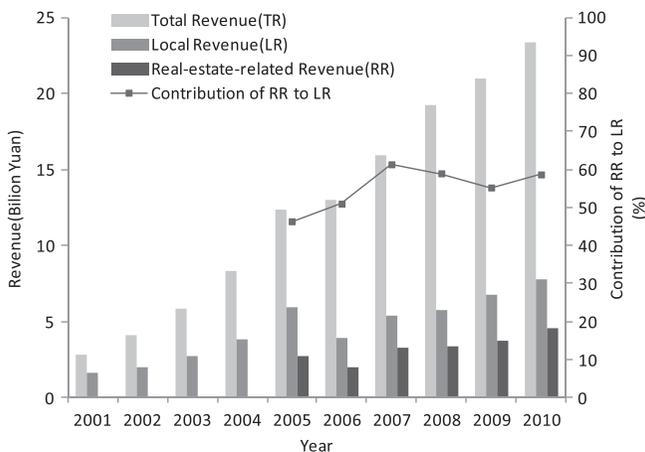


Figure 3: Revenue structure of Songjiang District Government 2001–2010 (note: data on real estate tax are not available from 2001 to 2004; source: compiled from SSSB [2011, 2015])

including the electrical and electronics, machine building, and new materials industries, along with the biomedical industry and the chemical industry, also provided about 85% of total employment in the district and brought about an influx of migrant workers (SSSB 2011).

The district government managed to bring the two capital circuits together: new town development and industrial growth reinforced each other. Subsequently, both GDP and local revenue increased, with annual growth rates of 25.3% and 19.9%, respectively. This mechanism, that is, using the development of a new town to generate capital and then investing in infrastructure to boost economic growth, can be further demonstrated by examining capital switching over the decade. Here, the ratios of fixed-asset investment in infrastructure, real estate, and manufacturing are compared with all economic activities, reflecting the temporal patterns of capital investment distributed among different sectors. The result shows that there were two distinct development periods before 2008 (see Figure 4). From 2000 to 2005, when the new town project was under construction, there emerged an upward trend of infrastructure investment, which reached a peak in 2003. This reflects the way the district government invested heavily in infrastructure in the early years to initiate new town development. The period also saw the rapid growth of investment in both manufacturing industries and real estate relative to other types of investment. From 2005 to 2008, after the new town project was completed, fixed-capital investments gradually decreased. Importantly, the early intensive development of infrastructure greatly promoted the advantages of Songjiang. Because land prices were pushed up, the district government was able to collect sufficient revenue by leasing a small quantity of land (interview, Deputy Director, Songjiang Chengtong Rail Transport Investment and Development Co., Ltd, June 2010). The average level of investment in both sectors greatly increased compared to previous levels.

Therefore, the pattern of capital investment in Songjiang was different from typical capital switching during the suburbanization process in the West

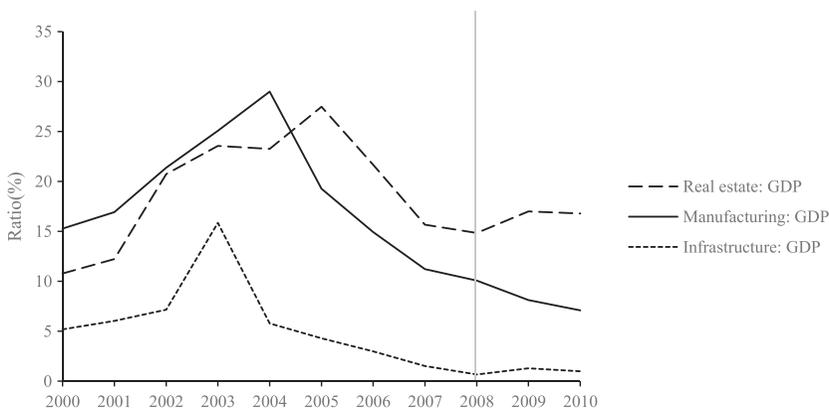


Figure 4: Changing ratios of fixed-asset investment in infrastructure, real estate and the manufacturing sectors in Songjiang, 2000–2010 (source: compiled from SSSB [2015])

(Harvey 1985; Lefebvre 2003), because examining investment in real estate and industry in Songjiang shows no evidence that the building boom resulted from the decline of the manufacturing industries. On the contrary, investment in the two sectors exhibited a similar cyclical behaviour, at least prior to 2008. Both experienced rapid expansion in the first few years and then began to show a cyclical downturn after 2005. It is also interesting that, on average, in contrast to Shanghai before the mid-2000s, fixed-asset investment in manufacturing was even greater than that in real estate. Under the new town strategy, the suburbs still served more as regional industrial nodes.

Clearly, it is important to place the accumulation regime in its immediate historical context. We thus focus on the years leading up to 2008, when new towns were intensively constructed. In fact, led by a stimulus package of 4 trillion Yuan from the central government in 2008, the recent building boom has indicated that speculative profits in real estate have begun to draw capital away from industrial production. However, this does not undermine the fact that, at the initial stage of suburbanization, the massive development of new towns is not a result of capital switching.

Conclusion and Discussion

Since 2000, major Chinese cities have adopted a new spatial form of suburban development, that is, the new town characterized by mixed-use clustered development (Hsing 2010). This paper examines the underlying dynamics of this new trend of suburbanization. Approaching suburbanization as a complex process involving multiple driving forces and governance modalities (Ekers et al. 2012), the study draws attention to the role of capital accumulation underlying the state's new town strategies. The case of Shanghai supports the notion that new towns function as a "spatial fix" for capital, or as a "solution" to sustain accumulation (Walker 1981). This must be understood having regard to both global dynamics and the particular characteristics of China. Meanwhile, this does not mean a total withdrawal of state intervention in suburban governance. On the contrary, the power of capital is closely bound to that of the state. The development of new towns offers an interesting case to study how the two forces work through one another in the context of Chinese suburbanization.

The case of Songjiang New Town reveals a unique capital switching dynamics of China's suburbanization. Through the development of new towns, the local government found ways to harness the financialization of land and to facilitate capital accumulation in the secondary circuit. In contrast to earlier industrial zones, new towns mobilized land as a financial asset. Based on a promise of future returns, these projects inflated the prices of land and property and brought both revenues and borrowings to the de facto landowner, i.e. the local government. Capital obtained from the land and real estate market was then used to support infrastructure development and subsidize industrial development. In contrast to suburbanization in the West, which has been underpinned by capital switching from the primary circuit of manufacturing industries to the secondary circuit of property development (Harvey 1985; Walker 1981), both primary and secondary circuits of capital accumulation occurred in tandem.

The new town project in Shanghai also reflects the imperative of territorialization for capital. Specifically, it is a strategy used by the municipal government to overcome the barriers to capital accumulation for territorial competition, that is, the re-centralization of both fiscal and land development powers. By annexing suburban counties and expanding urban development into the suburbs, Shanghai municipal government managed not only to enlarge its control over resources and capital investment, but also to facilitate restructuring on the metropolitan scale. Notably, suburban growth and reterritorialization are achieved through an amalgamation of the metropolitan area and territorial politics similar to those employed in Canada or Western Europe rather than secession as in the US (Keil 2000; Lefèvre 1998).

Whatever concrete forms and dynamics underlie Chinese suburbanization, it cannot be separated from the recent global expansion of capital accumulation. The development of new towns is an integral part of China's contemporary accumulation regime under the new international divisions of labour. Since economic reform, China has received massive foreign investment and become the world's factory; at the same time, the country has experienced rapid urbanization. This study shows that these two processes are closely related and each reinforces the other: the development of suburbs helps to generate capital to subsidize industrialization, while industrial development in the suburbs boosts the prosperity of new towns. In this sense, it is the switch of capital from industrial sectors in developed countries that has mobilized both industrial and housing developments in Chinese suburbs.

Nevertheless, the dynamics of suburban new town development reveal an inherent contradiction in contemporary Chinese suburbanization between the promotion of property development and industrial development. Suburban property development aims to attract the new middle class from the central city, so the local government strives to invest in mega-projects to boost property development. In turn, the promotion of suburban new towns has led to property speculation. However, manufacturing industries in the suburbs require a stable, low-cost, labour force, but the new rural migrants cannot afford the rising property prices in the new towns, which are targeted at relatively wealthier urban residents who commute to the central city. This creates a mismatch between the labour force for suburban industrial development and the new residents in the suburbs. Thus, the development of new towns has created a barrier to further capital accumulation, and so the struggle over spatial production is far from settled.

Acknowledgements

We are grateful to the three anonymous referees for their helpful comments and suggestions. This research has been supported by UK ESRC research project "Governing the Future City: a Comparative Analysis of Governance Innovations in Large Scale Urban Developments in Shanghai, London, Johannesburg" (ES/N006070/1). We would also like to acknowledge funding support from the Social Sciences and Humanities Research Council of Canada through funding from the Major Collaborative Research Initiative "Global Suburbanism: Governance, Land, and Infrastructure in the 21st Century (2010–2017)", the National Natural Science Foundation of China project "Suburban New Towns in China: Dynamics, Modes

and Regulation" (41401140), and the Research Fund of the School of Social Development and Public Policy at Fudan University.

References

- Beauregard R (1994) Capital switching and the built environment: United States 1970–1989. *Environment and Planning A* 26(5):715–732
- Brenner N (1998) Between fixity and motion: Accumulation, territorial organization, and the historical geography of spatial scales. *Environment and Planning D* 16(4):459–481
- Cervero R and Day J (2008) Suburbanization and transit-oriented development in China. *Transport Policy* 15(5):315–323
- China Ministry of Land and Resources (CMLR) (2009) *China Land and Resources Almanac (from 2002 to 2009)*. Beijing: China Land Press
- Cox K (2010) The problem of metropolitan governance and the politics of scale. *Regional Studies* 44(2):215–227
- Deng F F and Huang Y (2004) Uneven land reform and urban sprawl in China: The case of Beijing. *Progress in Planning* 61: 211–236.
- Editorial Board of Shanghai Urban Planning History (1999) *History of Urban Planning in Shanghai*. Shanghai: Shanghai Academy of Social Sciences
- Editorial Board of Songjiang Urban Planning History (2009) *History of Urban Planning in Songjiang*. Shanghai: Shanghai Lexicographical
- Ekers M, Hamel P and Keil R (2012) Governing suburbia: Modalities and mechanisms of suburban governance. *Regional Studies* 46(3):405–422
- Feng J, Wang F and Zhou Y (2009) The spatial restructuring of population in metropolitan Beijing: Towards polycentricity in the post-reform era. *Urban Geography* 30(7):779–802
- Feng J, Zhou Y and Wu F (2008) New trends of suburbanization in Beijing since 1990: From government-led to market-oriented. *Regional Studies* 42(1):83–99
- Gotham K F (2006) The secondary circuit of capital reconsidered: Globalization and the US real estate sector. *American Journal of Sociology* 112(1):231–275
- Gotham K F (2009) Creating liquidity out of spatial fixity: The secondary circuit of capital and the subprime mortgage crisis. *International Journal of Urban and Regional Research* 33 (2):355–371
- Haila A (2007) The market as the new emperor. *International Journal of Urban and Regional Research* 31(1):3–20
- Hamel P and Keil R (eds) (2015) *Suburban Governance: A Global View*. Toronto: University of Toronto Press
- Harris R (2004) *Creeping Conformity: How Canada Became Suburban, 1900–1960*. Toronto: University of Toronto Press
- Harris R (2010) Meaningful types in a world of suburbs. In M Clapson and R Hutchison (eds) *Suburbanisation in Global Society* (pp 15–50). Bingley: Emerald
- Harvey D (1982) *The Limits to Capital*. Chicago: University of Chicago Press
- Harvey D (1985) *The Urbanisation of Capital*. Oxford: Blackwell
- Harvey D (2012) The urban roots of financial crises: Reclaiming the city for anti-capitalist struggle. In L Panitch, G Albo and V Chibber (eds) *Socialist Register 2012: The Crisis and the Left* (pp 1–35). Pontypool: Merlin
- Hayden D (2003) *Building Suburbia: Greenfields and Urban Growth, 1820–2000*. New York: Pantheon
- He S and Wu F (2009) China's emerging neoliberal urbanism: Perspectives from urban development. *Antipode* 41(2):282–304
- Hirt S (2007) Suburbanizing Sofia: Characteristics of post-Socialist peri-urban change. *Urban Geography* 28(8):755–780
- Hsing Y (2010) *The Great Urban Transformation: Politics of Land and Property in China*. New York: Oxford University Press
- Immergluck D (2009) Core of the crisis: Deregulation, the global savings glut, and financial innovation in the subprime debacle. *City and Community* 8(3):341–345

- Keil R (2000) Governance restructuring in Los Angeles and Toronto: Amalgamation or secession? *International Journal of Urban and Regional Research* 24(4):758–781
- Lefebvre H (2003) *The Urban Revolution*. Minneapolis: University of Minnesota Press
- Lefèvre C (1998) Metropolitan government and governance in western countries: A critical review. *International Journal of Urban and Regional Research* 22(1):9–25
- Lin G C S and Yi F (2011) Urbanisation of capital or capitalisation on urban land? Land development and local public finance in urbanising China. *Urban Geography* 32(1):50–79
- Ministry of Land and Resources (MLR) (2000) *Announcement on Promoting the Development of Small Towns through Strengthened Land Development*. Beijing: Government Document
- Phelps N A (2010) Suburbs for nations? Some interdisciplinary connections on the suburban economy. *Cities* 17(2):68–76
- Phelps N A, Parsons N, Ballas D and Dowling A (2006) *Post-Suburban Europe: Planning and Politics at the Margins of Europe's Capital Cities*. Basingstoke: Palgrave Macmillan
- Phelps N A and Wu F (2011) *International Perspectives on Suburbanization: A Post-Suburban World?* Basingstoke: Palgrave Macmillan
- Shanghai Municipal Government (SMG) (2001a) *Shanghai Urban Master Plan (1999–2020)*. Shanghai: Government Document
- Shanghai Municipal Government (SMG) (2001b) *Announcement on Promotion of Urbanisation in Experimental Towns*. Shanghai: Government Document
- Shanghai Municipal Government (SMG) (2004) *Action Plan for Suburban Development through "Three Concentrations"*. Shanghai: Government Document
- Shanghai Songjiang Statistical Bureau (SSSB) (2009) "Statistical Bulletin on the Second Economic Census of Shanghai (2008)." <http://tjj.songjiang.gov.cn:8081/fxbg/tjgb/1102.html> (last accessed 12 September 2011)
- Shanghai Songjiang Statistical Bureau (SSSB) (2011) "Analysis of Songjiang's Industrial Economy in 2010." <http://www.stats-sh.gov.cn/fxbg/201105/215519.html> (last accessed 21 September 2011)
- Shanghai Songjiang Statistical Bureau (SSSB) (2015) *Songjiang Statistical Yearbooks (from 2001 to 2011)*. Shanghai: Shanghai Songjiang Statistical Bureau
- Shanghai Statistical Bureau (SSB) (2001) "Statistical Bulletin on the Fifth National Population Census of Shanghai." <http://www.stats-sh.gov.cn/sjfb/201103/96137.html> (last accessed 20 August 2011)
- Shanghai Statistical Bureau (SSB) (2011) "Statistical Bulletin on the Sixth National Population Census of Shanghai." <http://www.stats-sh.gov.cn/sjfb/201105/218819.html> (last accessed 20 August 2011)
- Shanghai Statistical Bureau (SSB) (2015) *Shanghai Statistical Yearbook 2015*. Beijing: China Statistics Press
- Shanghai Urban Planning and Design Research Institute (SUPDRI) (2014) *Evaluation on New Town Development in Shanghai*. Shanghai: Government Document
- Shanghai Urban Planning Management Bureau (SUPMB) (2005) *Recent Urban Development Plan for Shanghai (2006–2010)* Shanghai: Government Document
- Shanghai Urban Planning Management Bureau (SUPMB) (2007) *Urban Planning Administration Practices in Shanghai*. Beijing: China Architecture and Building Press
- Shen J and Wu F (2013) Moving to the suburbs: Demand-side driving forces of suburban growth in China. *Environment and Planning A* 45(8):1823–1844
- State Council (2004) *On Deepening Reform and Strengthening Land Administration*. Beijing: Government Document
- Tao R, Su F, Liu M and Cao G (2010) Land leasing and local public finance in China's regional development: Evidence from prefecture-level cities. *Urban Studies* 47(10):2217–2236
- Walker R (1981) A theory of suburbanization: Capitalism and the construction of urban space in the US. In M Dear and A Scott (eds) *Urbanisation and Urban Planning in Capitalist Societies* (pp 383–429). London: Methuen
- Wang L, Kundu R and Chen X (2010) Building for what and whom? New town development as planned suburbanization in China and India. In M Clapson and R Hutchison (eds) *Suburbanisation in Global Society* (pp 319–345). Bingley: Emerald

- Wang Z (2002) Institutional innovation in the rapid development process of Songjiang New Town in Shanghai. *Urban Planning Forum* 6:51–54
- Wu F and Phelps N A (2011) (Post)suburban development and state entrepreneurialism in Beijing's outer suburbs. *Environment and Planning A* 43(2):410–430
- Wu F, Xu J and Yeh A G O (2007) *Urban Development in Post-Reform China: State, Market, and Space*. London: Routledge
- Wu F and Zhang J (2007) Planning the competitive city-region: The emergence of strategic development plan in China. *Urban Affairs Review* 42(5):714–740
- 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, Yeh A G O and Wu F (2009) Land commodification: New land development and politics in China since the late 1990s. *International Journal of Urban and Regional Research* 33(4):890–913
- Ye G (2003) *Shanghai Spatial Development Strategic Research*. Shanghai: China Architecture and Building Press
- Yeh A G O (2005) Dual land market and internal spatial structure of Chinese cities. In L J C Ma and F Wu (eds) *Restructuring the Chinese Cities: Changing Society, Economy, and Space* (pp 52–69). Abingdon: Routledge
- Zhang J and Wu F (2006) China's changing economic governance: Administrative annexation and the reorganization of local governments in the Yangtze River Delta. *Regional Studies* 40(1):3–21
- Zhang T (2000) Land market forces and government's role in sprawl. *Cities* 17(2):123–135
- Zhou M (2010) Price of land plot hits new high in Songjiang. *Dongfang Daily* 2 September. <http://epaper.dfdaily.com/dfzb/html/2010-09/02/content414515.htm> (last accessed 14 August 2011)
- Zhou Y and Ma L J C (2000) Economic restructuring and suburbanization in China. *Urban Geography* 21(3):205–236