

CARDIFF UNIVERSITY
SCHOOL OF CITY AND REGIONAL
PLANNING

**Suburban Development in Shanghai:
A Case of Songjiang**

Jie Shen

Supervisor:

Professor Fulong Wu

Thesis for the Degree of Doctor of Philosophy

December 2011

ABSTRACT

Since 2000, a new round of suburbanisation characterised by mixed-use clustered development has begun to unfold in China. This research aims to explore the dynamics of recent suburban growth in China and also provide an empirical case for enriching suburban theory. It is held that suburbanisation in China in its current form is by no means a spontaneous process, but results from capitalism's creation of a new space to facilitate accumulation. Based on this view, the study examines the underlying forces of contemporary suburban growth with regard to three questions: what is the role of suburbanisation in China's contemporary capital accumulation regime? How are the suburbs developed under coalitions of different actors? And how is suburban development shaped by demand-side actors? The study is founded on an intensive case study of Shanghai and one of its suburban districts, Songjiang. Both qualitative and quantitative research methods are used. Firsthand data from interviews and a questionnaire survey and a wide variety of secondary data were collected, providing a rich fund of knowledge for the research.

While similar forms and functions to (post)-suburban settlements that have recently emerged in Western countries are found in Chinese suburbs, suburbanisation through new town development in China is a strategy of capital accumulation in response to a range of new conditions specific to China's local context. New towns deal with the recentralisation of both fiscal and land development powers on the one hand, and accommodate the increasing housing demands of a diverse labour force on the other. Moreover, a peculiar land-centred accumulation regime is established in which real estate development and industrial development mutually reinforce each other. The development of these suburban nodes is organised under state-led entrepreneurial governance in which

coalitions are led by the suburban district government and followed by various public and private sectors; however, this is manipulated by the municipal government. Demand-based driving forces are manifold, including four interwoven processes: industrial restructuring and economic growth, outwards-migration, urbanisation, and capitalisation. Three types of people, namely migrants, local natives and residents from central Shanghai, constitute the main groups of suburban residents. Their spatial sorting creates a heterogeneous suburban space.

PUBLICATIONS

English Articles

Shen Jie, Fulong Wu, Resetless urban landscapes in China: a case study of Shanghai's mega residential projects, *Journal of Urban Affairs* (Paper received, forth coming on August, 2012)

Shen Jie, Fulong Wu, The Development of Master-Planned Communities in Chinese Suburbs: a Case Study of Shanghai's Thames Town, *Urban Geography*, 2012, Vol.33, No.2: 183-203.

Chai Yanwei, Shen Jie, Long Tao. Downtown Retailing Development under Suburbanization—A Case Study of Beijing, *Chinese Geographical Science*, 2007, Vol.17, No.1:1-9.

Chinese articles

Chai Yanwei, and Jie Shen, 2006, Travel-activity based research frame of urban spatial structure, *Human geography*, Vol.21, No.5: 108-112 (In Chinese)

Shen Jie, and Yanwei Chai, 2006, Study on residents' utilization of downtown retailing center in Beijing in the context of suburbanization, *Human Geography*, Vol.21, No.5: 113-123 (In Chinese)

Chai Yanwei, Guilan Wen, and Jie Shen, 2008, A study on commercial structure of Shanghai based on residents' shopping behavior, *Geographical Research*, Vol.27, No.4: 897-906 (In Chinese)

Chai Yanwei, Zhilin Liu, and Jie Shen, 2008, Changes of the DANWEI system and its effects, *Arid Land Geography*, Vol.31, No.2: 155-163 (In Chinese)

Chai Yanwei, Jie Shen, and Guilan Weng, 2008, A study on activity space of shopping of Shanghai residents: temporal and spatial characteristics and relative influencing factors, *Economic Geography*, Vol. 28, No.2: 221-227 (In Chinese)

Chai Yanwei, Jie Shen, 2008, Activity-based approach to human spatial behaviour research, *Scientia Geographica Sinica*, Vol.28, No. 5: 594~600 (In Chinese)

Acknowledgements

I owe my deepest gratitude to my supervisor, Professor Fulong Wu. Without his supervision and encouragement from the preliminary to the concluding stages, my research would not have been possible. His insightful advice and recommendations, patience and time are very much appreciated. I would also like to thank him for his financial support for the questionnaire survey. I also extend my genuine thanks to Professor John Lovering, Professor Christ Webster, Dr. Gillian Bristow, and Dr. Yiming Wang, who provided very useful suggestions on my research. I have benefited greatly from discussions and conversations with them.

I give my heartfelt thanks to all the interviewees who generously shared with me their knowledge on suburban development or their suburban living experiences. My sincere gratitude also goes to all the people who helped me during my field work, including Professor Shiwen Sun at Tongji University, Yu Fan at Shanghai Municipal Urban Planning and Land Resources Management Bureau, Zhenliang Wang and Jun Chen at Songjiang Urban Planning and Land Resources Management Bureau, Chao Chen at Songjiang New Town Construction and Development Co. Ltd., as well as my friend Ms Changxia Li at AECOM Technology Corporation, Shanghai branch. I am most grateful to Dr. Limei Li and her students at the Eastern China Normal University, who gave me great support for the questionnaire survey.

I would also like to thank Dr. Yi Li, Dr. Stevie Upton, Anna Lermon, Yang Xiao, Sabine Schulz, Kin Wing Chan and many other colleagues in the school. I had a good time working with them. Finally, and most importantly, I am deeply indebted to my family, my parents and my husband, Xiang Luo, who have been so supportive and encouraging all along.

Contents

ABSTRACT	i
PUBLICATIONS	iii
Acknowledgements	iv
List of Tables	xi
List of Figures	xiii
Chapter One: Introduction	1
1.1 Research background	1
1.2 Research objectives.....	2
1.3 Organisation of the thesis	3
Chapter Two: Literature Review: Placing Chinese suburbs in a (post-)suburban world	6
2.1 Introduction	6
2.2 Re-theorising ‘the suburbs’ in a global society	7
2.2.1 Suburban American: the paradigmatic case	7
2.2.2 Beyond the model: suburban growth as a global phenomenon	9
2.2.3 Comparative framework.....	15
2.3 Studies on suburban growth in China	18
2.3.1 Evidence of suburban growth.....	18
2.3.2 Dynamics of suburban growth: market versus state.....	20
2.3.3 A critique on existing literature	21
2.4 Suburbs as space for capital accumulation	23

2.4.1 Spatial fix and capital switching	23
2.4.2 Suburbia and post-suburbia: solutions to capital crises.....	24
2.4.3 Chinese suburbs: a land-centred accumulation regime	27
2.5 The building of suburbs: growth machine and urban regime	28
2.5.1 Suburbs as a growth machine	28
2.5.2 Role of business interests	30
2.5.3 Role of the state	31
2.5.4 Chinese suburbs: a state-led mode	33
2.6 Living in the suburbs: suburbanism as a way of life?.....	35
2.6.1 Homogeneity: suburbanism as a way of life	35
2.6.2 Diversification of suburbs	36
2.6.3 Uneven development and social polarisation	38
2.6.4 Chinese suburbs: a heterogeneous world	40
2.7 Conclusion	42
Chapter Three: Research framework and methodology	44
3.1 Research framework.....	44
3.2 Research questions and hypotheses	47
3.3 Methodology	48
3.3.1 Secondary data sources	49
3.3.2 Semi-structured interviews	50
3.3.3 Questionnaire survey	51
3.4 Data analysis	55
3.4.1 Qualitative analysis	55
3.4.2 Quantitative analysis	55
3.5 Summary	56

Chapter Four: Suburbanisation and new town policy in Shanghai	57
4.1 Introduction	57
4.2 Changing conditions and a new approach to suburban development in China.....	59
4.2.1 Political economic and social cultural change.....	59
4.2.2 Production: space commodification and urban entrepreneurialism	62
4.2.3 Consumption: pro-ownership housing reform and social differentiation	64
4.2.4 A new approach to suburban development	67
4.3 The history of Shanghai’s suburban development.....	68
4.4 Changing rationale and strategy of suburban development.....	71
4.4.1 Rebuilding Shanghai as a ‘global metropolis’	71
4.4.2 Land and housing development as a new economic growth pole .	72
4.4.3 Growth management and ‘Three Concentrations’	73
4.5 Projects, policies and practices	76
4.5.1 Projects: from One-City-Nine-Towns to the ‘1966’ urban system	77
4.5.2 Policies: boosting supply and demand	86
4.5.3 Practices: a mode of suburban governance	90
4.6 A new metropolitan structure of Shanghai	95
4.7 State-led suburban development in China	100
4.8 Conclusion	106
 Chapter Five: Building Songjiang New Town under entrepreneurial governance	 110
5.1 Introduction	110
5.2 The rise of urban entrepreneurialism in Songjiang.....	114

5.2.1 Institutional context	114
5.2.2 Land development as the vehicle for growth	116
5.2.3 Changing entrepreneurial strategies of Songjiang.....	117
5.3 Building Songjiang New Town as an entrepreneurial city	118
5.3.1 Entrepreneurial discourse: from industrial satellite to comprehensive suburban new town	118
5.3.2 Entrepreneurial space: new town development.....	122
5.3.3 Entrepreneurial governance: mega-projects and a new mode of development	126
5.4 University Town: forming a coalition with universities.....	129
5.4.1 Bidding for the project	129
5.4.2 Development process	131
5.4.3 Local economic impact.....	133
5.4.4 Summary	135
5.5 No.9 Metro Line: harnessing resources from the municipality	136
5.5.1 Bidding for the project	136
5.5.2 Development process	137
5.5.3 Local economic impact	138
5.5.4 Summary	139
5.6 Thames Town: engaging the capital of private developers	140
5.6.1 Thames Town as a flagship project.....	140
5.6.2 Development process	143
5.6.3 Local economic impact	145
5.6.4 Summary	147
5.7 Growth machine in action.....	148
5.7.1 Property development.....	149

5.7.2 Industrial growth	150
5.7.3 Growth mechanism.....	151
5.8 Conclusion	156
Chapter Six: Moving to the suburbs: demand-side driving forces of suburban growth	159
6.1 Introduction	159
6.2 An overview of growth dynamics.....	161
6.2.1 Population growth, booming housing market and structural change	161
6.2.2 Industrial restructuring	163
6.2.3 Outwards-migration.....	165
6.2.4 Urbanisation	166
6.2.5 Capitalisation.....	166
6.3 Spatial differentiation	169
6.3.1 Housing types: villas versus apartments	169
6.3.2 Differentiation within the district: whiter-collar commuter suburb, migrant worker suburb and suburban new town	173
6.4 Heterogeneous Songjiang: empirical evidence.....	176
6.4.1 Data and method.....	177
6.4.2 Socioeconomic profiles	178
6.4.3 Residential mobility	180
6.4.4 A model of spatial sorting	184
6.4.5 Spatial differentiation I: villas versus apartments	190
6.4.6 Spatial differentiation II: whiter-collar suburb, migrant suburb and suburban new town.....	195
6.5 Conclusion	201

Chapter Seven: Conclusion	205
7.1 Introduction.....	205
7.2 Dynamics of suburban growth in China: empirical findings	207
7.2.1 Suburbs as a space for capital accumulation	207
7.2.2 The building of suburbs: state-led entrepreneurial governance ..	210
7.2.3 Living in the suburbs: a heterogeneous world.....	212
7.3 Chinese suburbs: a variation of post-suburbia.....	215
7.3.1 Physical form and population composition	216
7.3.2 Function.....	217
7.3.3 Dynamics.....	219
7.4 Broader implications.....	222
7.4.1 Emerging urbanism in China.....	222
7.4.2 Prospect of the Chinese state-led mode.....	223
Appendix 1 Interviewee list	225
Appendix 2 Survey Questionnaire.....	227
References	233

List of Tables

Table 2.1 Urban development processes and relationships among settlement types	18
Table 3.1 Listing of gated communities in Fangsong	53
Table 4.1 Comparison of the main structural changes leading to current suburban growth in Western developed cities and Chinese cities	60
Table 4.2 Visions for suburban new towns in Shanghai	81
Table 4.3 Typology of suburban development according to the role of state.....	105
Table 4.4 Characters of different types of suburban developments.....	105
Table 5.1 Changing Development Position of Songjiang	120
Table 5.2 Average housing price of Shanghai's districts from 2002 to 2008.....	147
Table 5.3 Economic growth and industrial structure of Songjiang (2001-2010)	150
Table 5.4 Economic structure of Shanghai and Songjiang (2008).....	151
Table 6.1 Real Estate Market Boom in Songjiang, 2001-2010.....	162
Table 6.2 Villa development in Shanghai and Songjiang (2001-2009).....	170
Table 6.3 Comparison between three main urban areas in Songjiang	174
Table 6.4 Comparison of socioeconomic profiles among the three groups.....	179
Table 6.5 Mean age by groups	180
Table 6.6 Push factors for residential mobility for three groups.....	181
Table 6.7 Pull factors for residential mobility for three groups.....	182
Table 6.8 Distribution of sample by reason to move to Songjiang, neighbourhood type and district.....	185

Table 6.9 Spatial sorting of the three groups in Songjiang	185
Table 6.10 Spatial sorting of the three groups in Songjiang (logistic regression results)	187
Table 6.11 Likelihood of living in villas	191
Table 6.12 District differentiations (logistic regression results)	198

List of Figures

Figure 3.1 Map of Shanghai and Songjiang.....	46
Figure 4.1 Locations of One City and Nine Towns	78
Figure 4.2 1966 urban system in Shanghai	80
Figure 4.3 Ideal directions of population flows in the 1966 urban system	89
Figure 4.4 Processes of urban development under the municipal-district administrative system.....	92
Figure 4.5 Area division by the administration body of planning and construction management	93
Figure 4.6 Population growth rate 2000-2010 by district	96
Figure 4.7 Population structure in Shanghai:.....	98
Figure 4.8 Spatial economic structure of Shanghai	99
Figure 4.9 State-led suburban new town development in China	101
Figure 5.1 Economic performance of suburban districts in Shanghai in 2001 ...	112
Figure 5.2 Population of suburban districts in Shanghai in 2001	112
Figure 5.3 Layout of Songjiang New Town.....	123
Figure 5.4 Typical English building style in Songjiang New Town.....	125
Figure 5.5 Typical traditional building style in Songjiang old city	125
Figure 5.6 Traditional timber-framed houses and an English caf éon the High Street in Thames Town.....	141
Figure 5.7 Western style wedding services and the Gothic-style church in Thames Town	142
Figure 5.8 Revenue structure of Songjiang District Government 2001-2010	152

Figure 5.9 Economic structure of Songjiang 2001-2010	153
Figure 5.10 Changing ratios of investment in real estate, infrastructure, and industry to GDP in Songjiang 2000-2010.....	154
Figure 5.11 Changing total investment in real estate, infrastructure and the manufacturing industry in Songjiang, 2000-2010.....	155
Figure 6.1 Low-density villa and high-density apartment developments in Songjiang.	171

CHAPTER ONE

INTRODUCTION

1.1 Research background

Chinese suburbs are experiencing great transformation. In the pre-reform era, the urban periphery was dominated by vast rural areas punctured by industrial satellites and small scale towns. Because free residential mobility was restricted, there was little interaction between the city and its surrounding areas. Since 1978 when market-oriented reform was launched, urban areas have begun to expand outwards. The urban edge became a highly vibrant zone in which different elements such as industrial development zones, large-scale residential areas, migrant urban villages and undeveloped agricultural areas coexisted (Cartier, 2001; Deng and Huang, 2004). Academic studies ascribed post-reform massive suburban development to a range of institutional changes such as administrative decentralisation and the establishment of the land and housing market (Zhou and Ma, 2000; Zhang, 2000; Logan and Zhou, 2008). Since 2000, however, comprehensive suburban new towns have emerged as a new spatial pattern of suburbanisation (Wu and Phelps, 2008). Moreover, the new round of suburban development is characterised by a variety of landscape elements that are new to China, such as industrial parks, villa-style gated communities and suburban shopping malls. Metropolitan areas are evolving into a polycentric spatial structure (Feng and Wang, 2009; Yue et al., 2010).

Recent studies have noted the phenomenon and attempted to provide explanations; some emphasise political economic factors. Feng et al. (2008) claim that market forces began to have a great impact on Chinese suburban development. Wu and Phelps (2011b) argue that suburban nodes were created by the territorialisation of the entrepreneurial municipal government; others, particularly those focusing on suburban gated communities, emphasise socio-cultural factors. It is demonstrated that housing consumption plays a constructive role in the process of contemporary social transformation (Fleischer, 2010). The emergence of gated communities indicates the new rich in China have a growing aspiration for a good life (Pow and Kong, 2007; Zhang, 2010). Wu (2010) shows how recent suburban residential development is packaged and branded as a new way of life to lure homebuyers, which plays an important role in facilitating Chinese suburbanisation.

However, systematic study of the current suburban development in China is still lacking. There are important questions to be answered: why has suburbanisation evolved into its present form? How has it materialised within the Chinese context? Who are the suburban residents and why they have settled in the suburbs? And how can the similarities between those new elements and their Western counterparts be explained? By drawing up a case study of Shanghai and one of its outer suburban districts, Songjiang, this research attempts to examine the new dynamics of suburbanisation in China.

1.2 Research objectives

There are two objectives of this thesis. The first is to provide a full understanding of contemporary suburban growth in China. Existing studies on Chinese suburbanisation are largely restricted to the spatial pattern of population redistribution and urban expansion. The essential process and the role of suburban development in China's current urbanisation, however, are unclear. On the production side, although there is little doubt that the state plays a leading role in

building the suburbs, the rationale, policies, the way it is engaging other actors and the relationships among different actors in the process are unknown. With regard to consumption, commodity houses have become the dominant type of housing provision, and residents are able to personally decide where and how to live. Yet, the active role of suburban residents in shaping suburban space has been much less examined. The demand-based factors that have driven the rapid growth in the suburbs are still obscure. Therefore, the study will empirically examine the new forms and functions of the suburbs and reveal their underlying driving forces.

The other aim of the thesis is to place Chinese suburbs in the global (post-) suburban world. Current suburban theory is mainly built on American-European countries. However, it is widely recognised that suburbanisation is a worldwide phenomenon (Clapson and Hutchison, 2010; Phelps and Wu, 2011). Moreover, diversity rather than conformity is found in many emerging economies. There emerges an urgent need to develop a common conceptual framework to theorise urban peripheries across the world. In particular, as Harris (2010: 17) states, it is important to bridge the global north and south, and theories based on advanced countries must be contextualised. China offers an important case for this purpose. In the past three decades, it has experienced unparalleled economic growth and urbanisation, but under institutional arrangements and social transformation that differ from that of eastern European post-socialist countries or rising eastern and south-eastern Asian economies. Suburbs are now at the leading edge of growth. By investigating the development of Chinese suburbs, this research aims to shed some light on global suburban studies.

1.3 Organisation of the thesis

The thesis is structured in seven chapters. The first three chapters introduce the research background, literature review and research framework, research questions and methodologies. Chapter 4-6 are the main body of the study. Chapter 4 examines the suburban development project of Shanghai municipality. Chapter

5 and Chapter 6 address an intensive study on Songjiang. While the former focuses on how Songjiang has developed under entrepreneurial governance, the latter addresses the views and actions of its residents. Finally, Chapter 7 summarises the main findings of the research and reflects on its broader theoretical and practical implications.

Following this chapter of introduction, *Chapter 2* provides the literature review and the theoretical context for the research. It first examines diverse patterns of suburban development across the world and calls for a step beyond the classic US model to conceptualise suburbs within a specific local context. The chapter then focuses on existing studies on China's suburbs. It is identified that a new phase of suburban development has emerged; however, the phenomenon is far from being understood in both theoretical and empirical terms. Finally, based on theories and findings elsewhere, a framework used to investigate the dynamics of Chinese suburbs is developed. Central to this analytical framework is the need to provide a base for comparative study on the one hand, but also emphasise interpretations based on locally-embedded factors on the other hand.

Chapter 3 then raises sets of research questions and their hypotheses according to the research framework. Meanwhile, methods of data collection and analysis are detailed. The research is based on plenty of fresh secondary data and original firsthand data, which are then analysed by a mixed method combining both qualitative and quantitative analysis. Such multiple sources and analysis methods lay down the empirical foundation of the research and provide substantial insightful perspectives with which to answer the research questions.

Chapter 4 aims to interpret Shanghai's new round of suburban development from the perspective of capital accumulation. It is argued that new town development as a new pattern of suburbanisation is intentionally promoted by the municipality in search for a new spatial fix. By reviewing and analysing new town policies, the changing rationale, strategies, policies and practices are examined, demonstrating the active role of the state in facilitating capital accumulation

through suburban development. In the end, based on macro statistical data, the contemporary spatial structure of metropolitan Shanghai is identified to examine the overall effects of the new town project.

Chapter 5 turns to focus on Songjiang and examines how Songjiang New Town has been built under state-led entrepreneurial governance; it first analyses the institutional context and rationale behind the local district government's decision to adopt the new town project as its key entrepreneurial strategy. Through closer investigation of the development of three mega-projects, how such a strategy was practiced by a new mode of development is revealed. Finally, the growth mechanism, i.e. how the new town functions as a growth machine, is explained by looking into changes to economic structure and capital investment over the past ten years. A land-centred accumulation regime that follows a different growth machine model is recognised.

Chapter 6 attempts to identify demand-based factors acting on the development of Songjiang. Firstly, an overview of demand-based growth dynamics is provided and the main types of residents are recognised. This is followed by an empirical study based on data from the survey examining the heterogeneity of suburban residents and spatial patterns. A range of statistical analysis methods are applied to identify how different groups of people are significantly different from each other in terms of their socioeconomic attributes, housing preferences and settlement locations. Furthermore, qualitative analysis based on interviews is also used to help explain the quantitative results.

Chapter 7 finally concludes the research. The research questions are answered by summarising the main empirical findings first. This is further framed by the concept of 'post-suburbia' and comparison of Chinese suburbs with similar patterns in other countries is provided. In brief, Chinese suburbs follow the same logic of capital as elsewhere, but result from specific local conditions. The broader implications of suburban development for Chinese new urbanism and the case of the Chinese state-led model for sustainability are provided at the end.

CHAPTER TWO

LITERATURE REVIEW: PLACING CHINESE SUBURBS IN A (POST-)SUBURBAN WORLD

2.1 Introduction

A vast body of literature has greatly contributed to identifying the forms and processes of peripheral urban development. Suburban growth is becoming a global process, and the notion of suburbs evolves over time and varies in different national contexts. This process urges a re-think of current suburban theories that are mainly derived from European-American experiences. With their rapid growth and unique patterns, Chinese suburbs provide an important case for approaching global models of suburban growth. Central to the investigation is the clarification of any universal or specific forces driving suburban development in China.

This chapter reviews the theoretical context for the empirical study of Chinese suburbs. A sketch of suburban patterns worldwide is provided first and then the need to go beyond viewing the US model as the hegemonic criteria to conceptualise suburbs within the specific local context is highlighted. The chapter then goes on to discuss existing literature on Chinese suburbs and notes the need for a full understanding of the forms and driving forces of contemporary suburban developments in China. Finally, drawing on relevant theories and empirical findings elsewhere, an analytic framework used to examine Chinese suburbs in this study is developed.

2.2 Re-theorising ‘the suburbs’ in a global society

2.2.1 Suburban American: the paradigmatic case

Broadly speaking, ‘*suburb*’ refers to the peripheral area of a city. In tracing suburban origins, Harris and Larkham (1999: 3) explain the derivation of the term from *sub urbe*, i.e. close to (*sub*) the town or pre-urban nucleus (*urbs*). Although the meaning of the term suburb varies at different times and in different countries, in the United States several myths which depict the suburb as ‘the middle-class residential enclave’ exist (ibid: 6). In physical terms, suburbs are often characterised by low-density but uniform residential developments. In social terms, the suburbs accommodate the better-off families who live a distinctive way of life. Therefore, suburban living represents a bourgeois utopia (Fishman, 1987).

This ‘traditional’ view of suburbs has made recent suburban changes an entirely new and shocking phenomenon. Along with rapid employment decentralisation, many terms, including ‘edge cities’ (Garreau, 1991), ‘technoburbs’ (Fishman, 1987), ‘edgeless cities’ (Lang, 2003) and ‘post-suburbia’ (Teaford, 1997) have been invented to capture the mixed-use centres at the edge. Nevertheless, the co-presence of the middle class and working class does not indicate social inclusion. Middle-class residential developments have evolved into gated and master-planned communities (Blakely and Snyder, 1997; Low, 2004; Knox, 2008), which often form a sharp contrast with nearby squatter settlements (Davis, 2006). Social polarisation and segregation are indeed reinforced in contemporary suburban forms (Low, 2004; 2008).

Wu and Phelps (2008) summarise several features of post-suburban developments. Firstly, the new form sees a decline in inner suburbs, but a booming growth in exurban areas. Secondly, new developments take a disjointed form depicted as a ‘patchwork structure’. Thirdly, as the distinction between the urban and the suburban is increasingly blurred, it becomes difficult to identify the boundaries of the modern metropolis. Fourthly, post-suburbia continues to be

invested with political and ideological content and its production involves a more complicated coalition among public and private sectors. Fifthly, post-suburban settlements achieve a greater balance between work and residence. Lastly, the mixture of land uses is a common feature of post-suburbia.

Soja (2000) recognises the outward sprawl in post-suburban forms as an urban restructuring process and a distinct phase of urbanisation; the hallmark of the process is a growing convergence between urban and suburban densities and functions. The once relatively homogenous suburbia is seeing increasing economic and social diversity, which has been identified as urban character. Consequently, cities are turned inside out. The term ‘exopolis’ is used to describe the new urban morphology featuring both ‘outside’ (peripheral) and ‘ex’ (no longer) characteristics. For Soja (2011), it is a shift from a monocentric metropolitan mode to a new phase of regional urbanisation.

Many studies have aimed to revise and organise well-established accounts of suburb development and its evolution. The myth that suburbs were becoming a prosperous residential place for the middle-class has been probed by vast historical research which shows that suburbs have never been as homogenous as they are framed by the media and academic publications. It is widely demonstrated that the decentralisation of manufacturing employment and working-class settlements has been an important trend since the middle of the nineteenth century (Harris and Lewis, 1998; Lewis, 2004; Harris, 2004; Kruse & Sugrue, 2006). Even when only addressing residential development, Hayden (2003) has identified seven patterns of suburbia with different development practices and architecture preferences. This evidence lends credence to the view that recent suburban transformation should not be treated as a new phenomenon. It is argued that trends such as edge city have their roots in much earlier urban patterns (Hise, 1997; Walker and Lewis, 2001). The concept of edge city is created to resolve people’s ambivalence toward cities, but actually failed (Beauregard, 1995).

2.2.2 Beyond the model: suburban growth as a global phenomenon

One distinctive character of the Continental model of urban development is that the urban core, rather than the outlying areas, is built as the bourgeois utopia (Fishman, 1987). This was particularly exemplified by Louis Napoleon's and Haussmann's rebuilding of Paris. Meanwhile, working class suburbs, known as *banlieues*, were intentionally created by the government. Today, these peripheral neighbourhoods are still places where poor immigrants, particularly those from North Africa, concentrate (Wacquant, 2008). Like France, many other nations introduced a similar top-down, centralised model of suburbanisation by building public houses for the working class.

Nonetheless, European cities are often viewed as variations of the US form. This is because the meaning of suburbs shares many essential themes with the US, including the suburban living ideal, homogenous landscapes, private domesticity, etc. (Harris and Larkham, 1999). For example, Ebenezer Edward's garden city and the ideal semi-rural lifestyle had a great influence on Britain's post-war new towns programme (Clapson, 2000). Moreover, the suburban living ideal based on homeownership prevailed among the working class and soon led to an increasing trend of voluntary suburbanisation. Recently, studies on edge cities in Europe have emerged; although the form of these developments differs from that in the US, they conform to the definition of edge cities in terms of the function and development process (Nuissl and Rink, 2005; Bontje and Burdach, 2005; Phelps et al., 2006). More often than not, it is held that the main differences between the North American and European cities lie in the rate and timing of suburbanisation (Mazierska and Rascaroli, 2003).

Suburban experiences of cities in the Global South do not follow the uniform pattern found in the Global North. Cities are experiencing the process of urbanisation as rapid urban expansion unfolds a different suburban landscape with

high population densities and mixed urban and rural activities. In search of job opportunities in the cities, urban to rural and stepwise migrants concentrate at the urban fringe which often leads to massive squatter settlements. This phenomenon is apparent in cities of Latin America (Caldeira, 1996; Losada et al, 1998), modern Africa (Simon et al, 2008) and South and South-east Asia (McGee, 1991; Kundu et al, 2002). McGee (1991) has invented the term *desakota* to refer to such densely peripheral developments from the Indonesian language, in which *desa* means village and *kota* means town.

However, the traditional image of urban peripheries is in transition. Recent high-profile projects take development forms similar to those prevailing in Western suburbs such as high-end residential enclaves, industrial parks and shopping malls. Harris (2010:22-23) properly captured the change by reviewing a wide range of recent research concentrating on the fringe of cities that used to be dominated by squatter settlements. In his view, the general trends are to juxtapose people and mix things up, i.e. informal developments with poor infrastructure for the poor on the one hand and well-planned developments with high-quality urban services and amenities for the more affluent on the other hand.

Suburban experiences in Central and Eastern European countries are a different story. In the socialist era, there were seldom large-scale suburban developments in socialist cities. Their compact size was often regarded as an important distinction from Western capitalist cities. As Berry (1976:12; also quoted in Nuissl and Rink, 2005) points out ‘...liberal capitalism, with its acceptance of big cities and growth as the inevitable accompaniment of success, is seeing its cities disintegrate under pluralized individualistic choices, ...Marxist societies, committed to the emergence of a new settlement pattern for mankind, are preserving cities and centrality in a traditional sense’. This is largely associated with the inherent character of the socialist system of production; that is, the priority status of industrialisation on the one hand, and the long-term neglect of non-productive sectors on the other hand (Gentile and Sjöberg, 2006).

Although socialist cities faced serious housing shortages, the provision of housing and other living facilities and services was very limited, and was often subordinate to industrialisation and military consolidation. In order to ease the excess housing demand led by the influx of rural-to-urban migration, and to make the best use of existing facilities, many socialist cities adopted policies that aimed at limiting extensive urban growth. With regard to outward-migration, the Western type of suburbanisation driven by people's residential preferences was ruled out. This is not only because urban residents usually had little chance to change residences, but also because, to a large extent, central cities with job opportunities were still the optimal residential location for them (Tammaru, 2001).

Nevertheless, it is well documented that peripheral development actually occurred in the socialist era, but in different forms. According to existing literature, three types of socialist suburbs are identified. The first began in the 1960s, millions of '*khrushchevki*' for workers were built by the state on the immediate edge of large cities (Barter, 1980). These were standardised middle-rise buildings with an austere style and small apartment units which were often built into self-contained neighbourhood units (known as *mikroraion*). Secondly, the socialist state and industrial enterprises also invested in building *satellite new towns*, which were largely industrial-based and were relatively independent from the central cities (Bernhardt, 2005). Thirdly, summer cottages such as *Dachas* in Russia, *Villas* in Bulgarian, etc. were built for the social elite as their second or weekend homes (Lovell, 2003). There is evidence that summer homes gradually became a popular housing type after World War II. For example, in Russia, about twenty percent of the total number of urban families owned one *dacha* close to the city by the end of the 1980s (Kostinsky, 2001: 462). In Estonia, urban residents were increasingly allowed to construct single-family houses in the suburbs themselves (Tammaru, 2001). Although summer cottages resulted from people's housing demands and their desire to escape from the urban life, they

were by no means the dominant form of socialist suburbs. Suburban growth in socialist cities was fundamentally driven by the expansion of industrial production.

After the collapse of state socialism in 1989, these previously socialist countries began to experience rapid transformation. Some of the structural changes directly led to the restructuring of urban space: massive de-industrialisation, a shift from central planning to market mechanism (e.g. the reestablishment of private property rights and housing markets), relaxation of state control and power decentralisation to local levels (e.g. retreat from planning and poor regulation), an influx of foreign investment, and an increasingly important role of individuals' residential choices (Szelényi, 1996; Stanilov, 2007). Overall, the introduction of a market economy based on neoliberal theory dominates the urban transition in post-socialist cities (Sailer-Fliege, 1999). Nevertheless, this does not imply a simple convergence on the Western model of urbanisation. As many have argued, market-based urban processes here 'blend with the communist legacies and systemically unique processes attributable to the region's past experience of socialism and central planning and the transition therefrom' (Borón and Gentile, 2007: 95).

This statement on the mixture of multiple forces is well embodied in the emerging suburban forms and their underlying dynamics. Among other examples, massive suburban development was regarded as the most remarkable phenomenon across post-socialist cities. Due to the lack of a well-established planning framework immediately after the collapse of the old orders, cities witnessed a wave of intensive private investment in new commercial and residential developments on the urban periphery, particularly at major transport nodes (Nuissl and Rink, 2005; Rudolph and Brade, 2005). In the meantime, empirical evidence has demonstrated that socialist suburbs became the main site accommodating population growth. Particularly, along with the economic recovery since 2000, employment opportunities in many capital cities have

attracted large numbers of migrants from rural or lower-order provincial towns. Moreover, outward-migration driven by affluent households' pursuit of quality life was also increasingly prominent (Tamaru, 2005; Hirt, 2007; Medvedkov and Medvedkov, 2007).

Consequently, post-socialist suburbia presents different types of urban forms. Hirt and Stanilov (2009) identified four typical suburban elements: 1) squatter settlements informally built by poor residents in rural areas and small towns; 2) upscale individual housing built as single-family houses in former recreational zones; 3) master-planned suburban communities produced by private development companies for upper-to middle-class families; 4) non-residential suburbanisation such as large-scale retail and office developments. Based on this evidence, suburbanisation in post-socialist cities began to show trends more similar to Western residential suburbia and post-suburban multifunctional nodes, rather than those found in Eastern Asia. Suburban developments are increasingly characterised by relatively low density, based on private car use, and driven by better-off families' residential preferences.

Nevertheless, suburbanisation in post-socialist cities is underpinned by different political economic dynamics from the US-style growth machine or suburban governance in Western Europe. According to the existing literature, there are at least three characteristics of the political economy of suburban development in post-socialist cities. Firstly, the transformation in Central and Eastern European countries took place in a 'big bang' and institutional reforms occurred all at once rather than being progressive. The sudden collapse of the old central planning system led to an outburst of uncontrolled development in the peripheries of major post-socialist cities. In the process, few organised place-making strategies and pro-growth (or anti-growth) coalitions were involved. As depicted by Golubchikov and Phelps (2011:438), suburban growth in post-socialist cities was largely driven by "a spontaneous variety of opportunistic

profit-making initiatives that are characterised by short-termism and yet are essentially disconnected from the ‘local’ city”.

Secondly, actors involved in development processes were less pluralistic compared with those in the US (Kulcsar and Domokos, 2005). Local elites, which were mainly composed of previous technocratic elites and successful small business entrepreneurs, were the primary promoters of local economic growth. In the meantime, because local governments and state-owned enterprises often went into bankruptcy and had no funds to construct infrastructure, external actors such as foreign investors and the national state played an important role in undertaking a variety of commercial projects. Nevertheless, some actors significant in the Western context were much less important, such as banks, real estate companies and construction companies. Moreover, anti-growth grass-root groups and organisations were usually absent.

Thirdly, post-socialist suburban development is influenced by some important socialist legacies. One of these legacies is the fact that the local growth agenda was largely led by political rather than strictly economic interests, and suburban development often involves specific political-bureaucratic processes (Kulcsar and Domokos, 2005; Bor n and Gentile, 2007; Golubchikov and Phelps, 2011). This was determined by peculiar fiscal and administrative systems with many inherited principles. Most post-socialist countries kept a centralised fiscal system, under which municipal governments not only had few resources under their own control, but also gained little from local economic growth. Local governments thus had to continue depending on political patronage by political leadership at a higher tier of government. Additionally, the administrative power structure was still based on a ‘presidential-authoritarian model’ (Rudolph and Brade, 2005: 136), and many local political positions were directly appointed by the central state. As a result, governors tended to use urban development to assert their own political power.

2.2.3 Comparative framework

Worldwide evidence presents a picture far more complicated than the current conceptualisation of suburbs indicates. Among those seeking to understand particular suburban forms and types across the world, one common thread is to treat the US experience as the norm. Many cases have been compared with, or interpreted as, instances of the diffusion of the American norm. For those developing countries, it is argued that the emergence of American suburban forms results from globalisation-driven technology transfer and economic growth. Dick and Rimmer (1998) identify elements such as edge cities, gated communities, and shopping malls in large-scale mixed-used new town developments in Southeast Asian cities, and therefore suggest a process of convergence between North American and South-east Asia. In order to explore the nature of suburbs in post-socialist countries, middle-class suburbia in Western countries is used as a typical style to examine whether peri-urban development there is an actual process of suburbanisation and whether post-socialist cities are evolving toward advanced capitalism (Hirt, 2007).

Beauregard (2006) opines that behind the emergence of American suburban elements across the world was the triumph of the country's global project. In the US, while urban areas were often associated with persistent problems of unemployment, poverty and racial discrimination, the suburbs and the consumer-based lifestyle they represent were consciously exported to fight communism and establish its post-war global dominance. Ideologically, it is noted 'the suburbs signalled a mixture of individualism and conformity, a democracy where people were equal and yet free to pursue their dreams.' (Beauregard, 2006: 171). Today, America claims to represent the world's highest standards of prosperity and lifestyle; thus, many countries model their architectural development on the way that the American people have built their suburbs.

A second theoretical thread of global suburban growth emphasises local particularities rather than taking the US model as the hegemonic criteria. Indeed,

the literature on suburban forms beyond the Global North has been limited. Meanwhile, lacking references to or comparisons with other places, research on American suburbs is itself parochial. Therefore, recent research shifts have been made towards a re-sketching of suburbs as both a global process and a consequence of forces specific to place. This is evident in a special issue of *Research in Urban Sociology* dealing with social experiences of suburban growth worldwide (Clapson and Hutchison, 2010), an edited book on postsuburban development with an international perspective (Phelps and Wu, 2011), and an ongoing research project on suburban governance¹.

In terms of comparative frameworks, a traditional view often suggests using density, newness and peripheral location as the defining qualities of suburbs (Harris, 2010). However, problems could arise. Firstly, the social effects of certain physical environments remain to be explored. Moreover, distinctions between the city and suburbs have blurred and it has become difficult to assign recent suburban forms such as edge cities or technoburbs with clear boundaries. Therefore, Phelps et al. (2006) argue that restricting the term solely to form or appearance may obscure valid points of comparison. 'Not only do post-suburban forms vary according to broad geographical region...but they clearly evolve to vary over time in any one geographical setting' (*ibid*: 201).

Instead, it is necessary to deploy a composite definition beyond the realms of appearance. Firstly, comparison and contrasts in terms of functions and development processes in different settings offer important aspects for comparative analysis. Phelps et al. (2006) exemplify that, although European edge urban areas have functional similarities with US edge cities with regard to being significant employment centres, in terms of the development process administrative bodies play a more significant role in European nations. Moreover, the dynamics behind such developments not only involve economic issues, but

¹ The project *Global Suburbanisms: Governance, Land and Infrastructure in the 21st Century* is directed by Roger Keil, based in Canada and supported by the Canadian Social Sciences and Humanities Research Council. See http://www.yorku.ca/city/?page_id=222.

also social and political forces. Secondly, the suburban experiences of those who have settled in the suburbs are another significant aspect (Harris, 2010). The traditional contentment of suburbia and postsuburbia has been associated with ambivalence about cities, the pursuit of personal freedom and social upward mobility. However, the conventional image and meaning of this view is challenged by the diversity of worldwide suburbs. The motives and actions of suburban residents, and the social meanings suburbs hold for them, could vary enormously even in the same geographical context. For example, moves to the suburbs do not necessarily imply suburban growth as a result of free individual preference; many residents may not have chosen to be displaced to the periphery. In this sense, a comparison with the views of insiders could have important implications for understanding the process of suburban growth.

There are two essential aspects of this line of enquiry which conceptualise suburbs worldwide. Firstly, it is important to delineate a specific process and consequence of the suburbs to establish a generic theme for urban theory, i.e. to discover the common features of different suburbs. Furthermore, it is necessary to distinguish suburban developments in different places, i.e. how particular forms of suburbs are shaped by local economic and social forces. Phelps and Wu (2011) suggest using the term 'post-suburbia' to explore contemporary suburban settlements and their development process. Here, the prefix of 'post-' is not a temporal term, but rather emphasises the variety of forms and processes, as distinct from the previous understanding of the phenomenon built on suburban homogeneity. The post-suburban world 'registers itself in multiple ways, reflecting aspects of change in these different places' (Wu and Phelps, 2011a: 255). In particular, current experiences of suburbanisation present highly variable growth trajectories (Table 2.1). While some emerging suburbs are developing urban characters, some cities and stereotypical suburbs may have declined.

Table 2.1
Urban development processes and relationships among settlement types

Modern city
i. City → Suburb
Late modern city region
ii. City → Suburb → Post-suburb
City region of second modernity
iii. Post-Suburb → City
iv. Growing suburb → Post-suburb → City
v. Stable affluent suburb → Stable affluent suburb
vi. Declining suburb → Sub-suburb
vii. City → Suburb

Source: Phelps and Wu, 2011

2.3 Studies on suburban growth in China

2.3.1 Evidence of suburban growth

Suburban growth over the past three decades signals a clean break with socialist urbanisation. Drawing on census data or land-use data, many studies measured intra-urban population change and urban expansion in large cities over time. Usually, the land mass of a city is divided into three zones: city core, inner suburbs and outer suburbs. Quantitative evidence indicates the inner suburban area becomes the main region attracting population growth; with Beijing, Shanghai, Shenyang and Dalian in mind, it is claimed that Chinese cities have begun to experience suburbanisation (Zhou and Ma, 2000). Using the third and fourth national population censuses conducted in 1982 and 1990, Wang and Zhou (1999) model the change of population density in Beijing during the period. The study shows that while central districts in Beijing have experienced significant loss of population, suburban districts have gained substantial population growth. Feng et al. (2008) confirm that this trend was further reinforced in the 1990s. Not only did residential suburbanisation continue, but industrial and retail suburbanisation also accelerated. Similar patterns have been identified in

Shanghai, Hangzhou and many other cities (Li and Tang, 2005; Feng and Zhou, 2005).

Alongside population growth, urban expansion has rapidly encroached on farmland. Based on China's nation-wide land survey, annual urban statistics and Landsat images, Lin (2007) addresses the pattern of land conversion from the agriculture to the non-agricultural sector across the country. It is found that the urban sprawl of major cities, rather than the development of rural areas, becomes the most important driving force for the conversion of farmland into non-agricultural use. Land development came to be at the heart of economic growth. Based on more accurate and consistent information about the change in land use, other researchers studying major cities have also demonstrated that Chinese cities have experienced rapid outward expansion and have arrived at similar conclusions (Deng et al., 2009; Ma and Xu, 2010).

Recent studies seek to test if there is a trend of re-concentration on the metropolitan scale after earlier decentralisation. By modelling the change of population density since the 1980s, Feng et al. (2009) show the evolution of the population density pattern in Beijing from a monocentric model in 1982, a dual-centred model in 1990, towards a seven-centred model in 2000. They imply that a polycentric spatial structure has emerged in Chinese cities. Corresponding change in land use pattern has been also detected. Yue et al. (2010) explore the polycentric urban development in Hangzhou and conclude that dispersed urban patches have been increasingly agglomerated into larger areas, especially along road corridors. By studying the emergence of two economic growth poles on the edge of Beijing and Shanghai, Wu and Phelps (2008) attempt to explore to what extent China's rapid suburban growth could be characterised as a 'post-suburban' development. While it is premature to apply the concept to China, some individual suburban settlements do indeed display some post-suburban characteristics.

2.3.2 Dynamics of suburban growth: market versus state

Existing research indicates that the outward urban expansion is fundamentally associated with institutional changes, particularly the introduction of a market mechanism in urban development. Land and housing reforms are the two pillars for space commodification, which unleash both supply and demand in suburbanisation. Ding (2004) finds that the spatial pattern of land price and development density follows the logic of the land market. As the cost of land in the suburbs is much lower than in the urban core, many new and substantial projects, both industrial and residential developments, are located on the peripheries and lead to massive conversion of rural land into non-agricultural use. Feng et al. (2008) argue that market-oriented suburban developments have become increasingly apparent since the 1990s. While suburbanisation in China is still heavily influenced by public policies, similar suburban elements driven by market forces have emerged. ‘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’ (*ibid*:84).

Addressing the other side of the process, scholars argue the strong role of the state distinguishes the Chinese case. For example, Zhou and Ma (2000) argue that, although suburban growth is a reform-era phenomenon and directly results from economic restructuring, the state continued to play a direct role in large-scale suburban developments immediately after reform. Suburbanisation was initiated by the state through the establishment of the land market and the sponsorship of industrial relocation and new housing development. Alongside the establishment of the land and housing markets during the 1990s, the role of the state shifted from directly planning and investing in relocation projects to facilitating land and real estate development indirectly. Zhang (2000) argues that, in order to generate revenue through land leasing, local governments have great incentives to

undertake land development. The ambiguous and incomplete land property rights and land use system led to ‘zone fever’ and ‘real estate fever’, creating a chaotic pattern of development and causing serious loss of arable land (Cartier, 2001; Deng and Huang, 2004; Zhu and Hu, 2009). Wu and Phelps (2011b) continue to emphasise the role of state entrepreneurialism in driving recent metropolitan development. A case study of the historical development of an outer suburban new town of Beijing reflects how a growth node was created by the municipal government’s entrepreneurial strategies.

2.3.3 A critique on existing literature

The evidence to date indicates that suburbs in China are becoming a new economic growth pole. As discussed, rapid economic growth and urbanisation has led to the coexistence of different types of suburbs in China. However, there has yet to be a systematic investigation of the forms and driving forces of suburban growth. Firstly, the majority of the existing research is restricted to population redistribution and urban expansion. Yet the term ‘suburb’ is conceptualised as a generic type of place with defining qualities different from the city proper. It is often associated with certain ideological meanings, unique living experiences and distinctive sets of political tensions, which could vary from place to place. Therefore, population gains and losses are not adequate to capture the process of suburban growth. There is a need to define what ‘suburban’ means in the Chinese context and examine the phenomenon more closely.

Secondly, current studies commonly group the major driving forces of suburban development into two types: market-oriented and government-dominated forces. Those who address the increasingly important role of market forces tend to treat suburban growth as a spontaneous process (Ding, 2004; Deng et al., 2009; Ma and Xu, 2010). Others argue that ‘economic restructuring has not significantly eroded the political power of the state, which can be expected to continue to play a powerful role in effecting China’s urban and

suburban developments in the foreseeable future' (Zhou and Ma, 2000). Chinese urbanisation is still greatly affected by the nation's system of production and policies adopted by the state. However, such a dichotomous perspective overlooks the powerful role of the state in enabling these forces to operate. China's emerging neoliberal urbanisation is largely 'a mixture of market logic and state authority logic' (He and Wu, 2009: 296). Contemporary suburban development is associated with the manipulation of market operations for the interests of state-led accumulation. In this context, it is necessary to examine how the state and the market work with each other to facilitate suburban growth.

Last but not least, studies exploring the views and actions of suburban residents are few in number. Yet, the issue is of particular importance when placed alongside recent new town development which aims to develop comprehensive suburban settlements. It is true that great efforts have been made by the state and developers to promote suburban housing consumption. However, the social construction of the suburbs is not merely orchestrated by the producers, but also by those who settle there. As China's suburban growth is by no means dominated by the pursuit of the suburban lifestyle of the more affluent, suburbs appear to accommodate different types of residents. Establishing the exact driving forces which affect demand is vital to the development of a full conceptualisation of Chinese suburbs.

In this context, this study aims to investigate Chinese suburbs. The research is based on structural analysis from a political economic perspective on the one hand, whilst highlighting the role of human agents and their social activities in shaping the built environment on the other hand. It is held that China's suburban growth follows the logic of capital accumulation as occurs elsewhere. However, the production and consumption of suburban space is mediated by a range of social actors and institutions with interests in such places; for example, the local state and developers, as well as suburban residents. In the following section, these

three main themes are developed as a research framework to examine the dynamics of suburban growth in China.

2.4 Suburbs as space for capital accumulation

2.4.1 Spatial fix and capital switching

From a political economy perspective, the accumulation process is central to the understanding of suburban growth. Under the system of capitalism, places as a commodity have value in terms of both usage and exchange. Capital drives peripheral developments through both aspects. As a container for the reproduction of capital, suburb growth works as part of a ‘spatial fix’. For Harvey (1985), capital accumulation involves an inherent contradiction between fixity and mobility. There is a need for long-term investment in fixed structures. However, along with capital overaccumulation and intensification of competition, the profit rate may decline and local property capital may be devalued. This leads to capital’s constant tendency to undergo crises. Under the circumstances, the ‘spatial fix’ has become an effective way to temporarily solve these system glitches. There are two forms of fix (Schoenberger, 2004; Jessop, 2006); the first is intensive investment in local physical installations in order to sustain and enhance the system’s ability to create wealth. As a result, coalitions among capitals, state agencies and labour factions are thus formed to resist the threats of devaluation and shrinking profits and places are engaged in ongoing creative destruction to defend local interests. The second is through geographical expansion of production and consumption, i.e. to incorporate more territory and transform the relationships between production and ways of life on an expanding scale.

The exchange-value aspect of space contributes to suburban growth when capital flows into what Harvey (1985) terms the ‘secondary circuit of capital’. The circulation of capital is realised through three circuits: a primary circuit of

material production and consumption, a secondary circuit centred on the built environment, and a tertiary circuit involving social and technological investment. It is argued that when the pressure of overaccumulation in the sphere of production is rising, capital flows from the primary circuit into the secondary circuit. Yet recent research conceptualises the secondary circuit as autonomous from the production system and the real estate industry as an investment channel in its own right (Beauregard, 1994; Charney, 2001; Gothman, 2006). In particular, investment in the built environment can be driven by speculative purpose and a search for investment opportunities outside the sphere of production. In this case, the role of space becomes not merely a physical container for capital accumulation, but a capitalisable element itself; that is, a factor used to generate wealth.

2.4.2 Suburbia and post-suburbia: solutions to capital crises

Post-war suburbanisation in the US has long been deemed a part of a spatial fix and is a result of capital switching into the secondary circuit of real estate. It was a necessary spatial reorganisation responding to the capital crisis at the time, i.e. a ‘solution’ to the problem of the 1930s economic malaise (Walkers, 1981). Mass suburbanisation ‘has served as a vast outlet for capital in all its forms; as direct investment in factories, infrastructure and housing production; as consumer buying; as credit creation’ (*ibid*: 409). Urban expansion was driven by the logic of capital rationalisation to form optimal land use patterns and the need to establish a whole new mode of consumption and reproduction. More importantly, however, characterised by the mass production of homogenous single-family houses, land and property development played a significant role in the process. The second circuit successfully expanded outlets for the over-accumulated capital from the sphere of production while stimulating demand for industrial products (Harvey, 1985; Walkers, 1981).

However, accumulation necessarily creates contradictions. Along with the eclipse of Fordist capitalism since the 1970s, mass suburbanisation as a solution soon reached another crisis point and became ‘an entrenched barrier to social and economic change’ (Harvey 1985: 122). It has been well documented that developers and governments strive to overcome this barrier by creating various new suburban forms. The role of the suburbs in the facilitation of capital accumulation has been reinforced rather than weakened. Firstly, as capital shifted towards the service sectors, the old manufacturing economy in the suburbs, notably the inner suburbs, rapidly declined. Suburbs are increasingly attracting office-based industries and witnessing the influx of corporate offices and residents. Although industrial decentralisation is not novel, it is the recent massive rise of economic activity on the suburban fringe across the world that indicates a break from previous Fordist suburbanisation (Fishman, 1987; Garreau, 1991; Lang, 2003).

Secondly, the aura of middle-class suburbia, particularly in the US, had truly been eclipsed by the 1970s. The image became negative, recalling the rampant spread of tract houses, as well as troublesome commuting and traffic; it was also criticised as ‘Sitcom Suburbs’ for its monotony and loss of urbanity (Hayden, 2003). As a result, the retrofitting and regeneration of the old suburbs has become apparent (Dunham-Jones and Williamson, 2009). New suburban residences are characterised by high-density mixed-use planning, neo-traditional design and enclosed forms, and are often privately governed based on a range of covenants, conditions and restrictions (Blakely and Snyder, 1997). On the one hand, the new forms are a response to the demands of symbolic consumption among the ‘new bourgeoisie’ and ‘new petit bourgeoisie’; suburbia is packaged in themed settings and diverse lifestyles to re-enchant housing consumption (Knox, 2008). On the other hand, the forms are tied to the rise of neoliberalism and represent the private provision of public services (McKenzie, 1994; 2005).

The rise of financial capital is recognised as the third pillar driving recent suburban growth. Since the 1980s, governments in many countries, notably the US and UK, have begun to approve the further expanded use of credit on the one hand and promote homeownership on the other hand to ensure economic growth. A range of novel tools to finance homeownership real estate development, including securitisation and subprime lending, were invented. Real estate has indeed become an independent economic sector in which the market-driven exchange value is increasingly more important than the use value (Gothman, 2009). Meanwhile, a much greater percentage of the population has suddenly become able to be a homeowner or real estate investor via a mortgage (Wyly, 2006). Heavily reliant on mortgage lending and consumer credit, the suburban life of the residents is to a great extent defined by new forms of financial self-discipline (Langley, 2009).

Lastly, in spatial terms, a multimodal and fragmented pattern has emerged to replace the traditional monocentric form. The conventional pyramidal hierarchy of urban centres is restructured into a network of nodes, representing a new economic regime of accumulation. As a result, city-regions are often selected as a scale for state policies and practices (Brenner, 2000). On the scale, suburbs or edge areas are not only integral parts of major city governments' entrepreneurial efforts to enlarge their spaces of engagement in response to intensified inter-regional competition (Cox, 1998), but are also the 'projection spaces' of the post-fordist economy in their own right (Phelps, 2010). It is well illustrated that the formation of the urban region of Frankfurt-Rhein-Main in Germany as a world city has not happened in the core of Frankfurt, but in the urban periphery. The peripheralisation of growth calls for a new regional mode of regulation (Keil and Ronneberger, 1994).

2.4.3 Chinese suburbs: a land-centred accumulation regime

Chinese suburbs are becoming the frontier of the country's capital accumulation. The development of suburbs is not just a consequence of economic growth, but also a driving force to expand the sphere of capital accumulation. There is a clear relationship between the expansion of urban built-up areas and local economic growth rates (Deng et al., 2010), as well as the amount of land sales and increases in local tax revenue (Tao et al., 2010). China's particularity lies in the fact that the institution of urban development is based on public ownership of land and its incomplete marketised land system. Land is actually the most important resource in the hands of local governments to stimulate growth. Therefore, since the 1990s, local governments have begun to heavily rely on intensive urban development to capture capital investment. This is a different path from that of the earlier reform in the 1980s, which was anchored by vibrant private entrepreneurship in rural China (Huang, 2008). An alternative accumulation regime has been built upon massive urban (re)construction and outward urban expansion.

Therefore, it is indisputable that land development is at the centre of China's capital accumulation and that suburban growth plays a significant role in the process. However, this leads to a question regarding how capital accumulation is realised via a particular form of suburban development. Earlier research reveals that local governments rely heavily on land-related income to finance infrastructure construction, particularly when a large amount of capital is not available from budgetary sources (Yeh and Wu, 1996; Wang et al., 2011). In turn, the improved transport system and infrastructure help to raise land values to attract more investment. The model is known as 'using land to breed land development' (Yeh, 2005).

However, it is worth noting that recent suburban development has shown a more mixed pattern of land usage which displays a greater balance between work and residence, serving as a regional growth node. Therefore, the claim that 'the

main driving force of urban sprawl in China is local government's willingness to lease more land' (Zhang, 2000:131) or the characterisation of China's urban sprawl as merely 'a land enclosure movement' (Deng and Huang, 2004:219) is too narrow. The usage of land has become more sophisticated. Firstly, municipalities have managed to expand their power to the outer suburbs and gain control over the resources of surrounding counties through extensive administrative annexation (Zhang and Wu, 2006). Therefore, in essence, suburban growth is associated with the central cities' efforts to expand their space of accumulation; suburbs provide the possibility of reorganising accumulation on a larger metropolitan scale. Secondly, on the local scale, capital accumulation is materialised based on the tactical mixture of land use. Local governments raise money by leasing land to private property developers for residential and commercial development through competitive bidding. Meanwhile, using the land leasing fees obtained from the open land market, they invest in infrastructure development and continue to use well-equipped low-priced land to attract manufacturing industries. While property development generates a quick return for primary land development and increases local revenue, industrial production ensures long-term economic growth and a strong local tax base (Tao et al., 2010). In this way, accumulations in the primary and second circuits reinforce each other and a land-centred growth machine is in operation.

2.5 The building of suburbs: growth machine and urban regime

2.5.1 Suburbs as a growth machine

The spatial print of capitalism is realised through human activities. Space is not a mere reflection of capital accumulation and class reproduction, but is socially produced by the real behaviours of social agents and their institutions.

Yet, the process by no means follows a free market mechanism, as if the city builders simply responded to consumers' demand, while entrepreneurs and residents voted with their feet according to their needs and preferences. The city as a growth machine (Logan and Molotch, 1987) and urban regimes (Stone, 1989) are two of the most influential theories interpreting how urban development is jointly facilitated by a range of social actors. Highlighting the nature of places as a special sort of commodity, Logan and Molotch explore the conflict between use and exchange values in the city and how the conflict is organised and managed. It is suggested that, in the pursuit of high rent levels, various local entrepreneurs always tend to work together to promote growth and intensify urban land use. The city hence becomes 'a growth machine'. Urban regime analysis seeks to further capture formal and informal modes of collaboration between business and government to make and carry out local governing decisions. As elected officials have to engage with non-government organisations to ensure access to resources beyond their reach, local politics turns into a contest between different interest groups.

Suburban growth should therefore not be viewed as 'spontaneous' urban development. It is certainly a response to consumer demand. Yet, it also results from the manipulation or exaggeration of that demand by suppliers. Throughout the long history of suburban development in the US, 'the physical realisation of this (suburban) dream has been in the hands of developers trying to turn a profit through suburban growth' (Hayden, 2003: 9). What underlies suburban development is the builders' intentionality. In addition, as Phelps (2006: 29) notes, 'various agents such as the state in its various guises, residents, land owners, real estate companies and financial institutions, property developers and construction companies, each play a role in the creation of different types of post-suburban settlement'. In other words, suburban development involves complex political contradictions and coalitions between different social actors. It is the politics of

the development process that always distinguishes one locality from another (Jonas and Wilson, 1999).

2.5.2 Role of business interests

Central to the suburban growth machine is the role of business interests in driving suburban growth. At the heart of the machine are those who are directly involved in generating rents from land and properties such as farmers and landowners, real estate developers, brokers and financial institutions. Instead of 'passively' waiting for the city to fill in the land beyond the urban fringe, they actively expand it by drumming up demand or luring speculative capital (Walker, 1981). In addition to these groups are other private employers like manufacturing and service companies, although they might be less dependent on local growth. Having the power to command economic resources, in many cases they exert great influence in local decision making to serve their own infrastructure needs (Logan and Molotch, 1987).

Zukin (1991: 135-177) provides a case study of Westchester County on the northern side of New York City where post-suburban development was jointly facilitated by both cooperative leaders and local land-based elites. Responding to a reorganisation of functions, corporate leaders searched for appropriate suburban locations for their business. Local land-based elites successfully captured their interests by consciously creating a homogeneous landscape. The presence of corporate headquarters in turn fed the market for upper-middle-class real estate development. Over time, corporations were locally linked and began to exert their own influence on local planning and other issues. 'As both a market for corporations and a place for landed and political elites, Westchester County legitimized the new suburban marketplace' (ibid: 175).

2.5.3 Role of the state

The state acts in different ways to facilitate suburban developments. In some cases, suburbs are approached by the state as inferior locations. This might lead to individually initiated, but chaotic developments. Even so, the state sometimes plays an active role in suburban development when the periphery is selected as a place for low-quality social housing development for the working class. This is particularly the case in Europe where the governments strongly commit to affordable housing projects (e.g. France, see Wacquant, 2008). In developing countries, suburbs are used as a marginal location by the state to accommodate disadvantaged groups displaced from the central city; for example, in South Seoul (Shin, 2008).

Nevertheless, more often than not, suburbs are selected by the state as new growth poles. In this case, the state often actively promotes suburban growth to cater for the needs of private capital. It is well documented that the state governments in the US and Canada directly subsidised post-war suburbanisation by massively funding highways, providing generous tax benefits to homeowners, and allowing the accelerated depreciation of commercial real estate (Hayden, 2003; Harris, 2004). On the local level, the state acts as a conduit for capital by means of zoning laws, urban plans and other financial rewards. Even suburban developments on the eastern seaboard of the US, which are commonly assumed to be the most apparent product of market forces, involved planning actions and federal programmes (Gottdiener, 1977; Hise, 1997).

Alongside recent shifts in urban politics from social welfare policies to local development and economic growth, city governments now operate in a similar way to private entrepreneurs to attract investment and jobs (Harvey, 1989). Urban entrepreneurialism has become apparent everywhere. In Europe, where urban development commonly shows a higher level of involvement of the public sector, recent state invention and shifts in regional planning schemes are giving rise to the recruitment of business interests for local growth and bringing about the

emergence of new suburban economic poles (Bontje and Burdack, 2005; Nicholls, 2006; Nuissl and Rink, 2005). In Asia, the states have rediscovered the functions of the periphery. Local governments are enthusiastic about initiating high-profile infrastructure projects to build suburban industrial parks and new towns (Kennedy, 2007; Firman, 2004; Lee and Shin, 2010).

In addition to dealing with public-private partnerships, it is necessary to note any creation of special suburbs could result from state intervention at different scales. Cox (2010) has discussed two aspects that generate politics of scale; on the one hand, the contradiction between capital fixity and mobility has led to the emergence of local coalitions. On the other hand, however, locally-dependent actors do have broader interests in the growth of the metropolitan area. Due to the lengthening of commuting times and the journey to the local shops and the increase in locational substitutability, metropolitan areas must increasingly function as integrated labour and housing markets. Therefore, suburban politics commonly involves the inter-scalar relationship between the central cities and their edges, taking the form of urban secession or regional consolidation (Keil, 2000).

In many places, entrepreneurial strategies derived from local dependence are dominant, particularly in the US context. Political incorporation of suburban towns is an important way to promote suburban growth (Logan and Molotch, 1987; Teaford, 1997). Suburban authorities prefer to break themselves off from the municipality. With governmental autonomy, local elite residents, business groups and industrialists are able to create a set of policies to serve local business needs. Nevertheless, the pursuit of local autonomy does not mean an absolute break from the central city. Phelps et al. (2006: 38) refer to such relationships as some sort of 'complex and selective interdependencies': suburban areas might remain largely dependent on the central city and have an effect on other suburban areas. Importantly, one significant strategy of suburban entrepreneurialism is to

engage with powers at wider scales, i.e. to access non-local public resources to facilitate local growth (Althubaity and Jonas, 1998: 149).

New developments at the edge of major cities could also be driven by the central cities' efforts to attract international investment with enlarged spaces of engagement and regional coherence. In Western and Southern Europe, where local actors enjoy less autonomy on local issues, central state-led or municipal-led projects underpinned by a city-region consciousness for interregional competition are more common. 'Central cities...are now aware that they need the peripheries in order to develop, or quite simply to keep their place, in the ranks of world cities' (Lefevre, 1998:22). This leads Bontje and Burdack (2005) to argue that 'the European suburban economic poles are not meant to be alternatives to the traditional town centres but rather thought of as complementary structures to support a polycentric development'.

2.5.4 Chinese suburbs: a state-led mode

The above review assumes that the production of suburbs involves both market forces and administrative process. Their dominance varies significantly in different historical and geographical contexts. Phelps et al. (2006: 18-19) proposes a distinction between 'the relative geographical fixity of administrative or state practices, structure and agents on the one hand and the relative geographical mobility of functional (non-state, economic, social and informal political process and associated agents) on the other hand' to chart the different dynamism of suburbs. Ekers et al. (2010: 10-11) identifies three styles of suburban development, i.e. self-built, state-led and private-led peri-urban growth, and suggests that distinguishing the three modalities of suburban governance provides a better comparative basis of suburban growth in different places.

In the case of China, the monopolistic role of the state in urban development has been broken down since the launch of land and housing reforms. Land development is now a game involving a range of players with diversified interests

(Wu, 1999). Many studies attempt to borrow the concepts of the ‘growth machine’ (Logan and Molotch, 1987) and ‘urban regimes’ (Stone, 1989) originated in the US to investigate how such interaction between different actors is shaping the urban development process (Zhu, 1999; Zhang, 2002). Moreover, outside the state system, the informal development of village houses by village collectives or rural peasants further complicates the picture (Tian, 2008; Wang et al., 2009). All in all, with the establishment of the land and housing markets, various new actors beyond the state, from private real estate developers to individual middle-class families, have tied their interests to suburban development and local growth. Suburban development is evolving towards a pro-growth governance regime.

Nevertheless, it is notable that, due to China’s peculiar state-ownership of land, the state still plays a leading role in suburban development. While business groups play a major role in Western cities, the growth machine in China is dominated by the state’s entrepreneurship. For Wu and Phelps (2008: 479), what makes the emerging peripheral settlements in China distinct from the North American edge cities is the exact form of politics; ‘in China this is dominated by the local, regional and national governments and their adjuncts rather than “local bourgeois alliances” or “the growth machine”.’ Moreover, multiple levels of government are involved. In order to generate incentives for local governments, decision-making power is decentralised to the district governments. The performance of suburban district officials is evaluated through their promotion of local growth. As a result, suburban entrepreneurial governance is gradually characterised by a horizontal relationship between the central city and the suburban districts.

In practice, the state is not just a regulator, but also an indispensable market player itself (Wu et al., 2007). A recent round of suburban development is essentially a process in which the state managed to manipulate market operations for the purpose of capital accumulation. On the one hand, through administrative means, the state removes all possible obstacles to suburban development. On the

other hand, through heavy investment in infrastructure and other public facilities, the state helps to secure favourable conditions for capital investment. All these practises and the promotion of suburban development further transform people's attitudes and change the overall investment climate.

2.6 Living in the suburbs: suburbanism as a way of life?

2.6.1 Homogeneity: suburbanism as a way of life

It is assumed that the unique spatial patterns and socioeconomic composition of the suburbs have engendered specific norms of suburban living. Classical explanations emphasise that suburbanism is both an ecological phenomenon and a socio-psychological state (Fava, 1956). Suburbs feature single family houses, low population density, access to open space and are predominantly occupied by young, middle class married couples. Moreover, suburbs are regarded as being built upon individual residential preferences and choices. Suburban residents are self-sorted to the suburbs and show an orientation toward neighbouring and other rural values and practices. Subsequently, Gans (1968) argues that Wirth's (1930) definition of urbanism as a way of life is insufficient to capture the social dynamics of the suburbs. He considers relationships between neighbours to be 'quasi-primary', which are 'more intimate than a secondary contact, but more guarded than a primary one' (*ibid*: 634). For him, although physical and locational differences between the city and suburb have little to do with ways of life, he opines that the suburbs and the outer city exhibit a way of life that differs from that of the inner city. Beyond social relationships, the suburban way of life is also linked with distinctive attitudes towards minorities (Frey, 1979), family life (Bell, 1958), modes of consumption (Dunleavy, 1979) and political ideology (Cox, 1968).

Whether or not all the suburbanites are indeed living in the manner described by the common accounts, the connotations of suburban lifestyle have been well

established in the US. Generally, they are centred on consumption and defined by ‘the low density of development, the reliance on the automobile, the stark separation of land uses, the social similarity of residents, the magnetic attraction of the malls, and the scarcity of employment centres’ (Beauregard, 2006: 131). Therefore, suburban experiences are in sharp contrast with the urban lifestyle that was characterised as being dense, diverse and mass-transit dependent (Jacobs, 1961). It is often held that the homogeneity of the suburbs is in opposition to the heterogeneity of the urban core (Gans, 1968). Yet, such a new way of life rooted in the suburbs set the tone of American living in the early postwar decades to the extent that even urban residents began to adopt similar activities and became ‘suburban’ (Beauregard, 2006: 143).

2.6.2 Diversification of suburbs

The recent transformation of suburban communities has challenged the conventional ideals of suburban life. Empirical studies have revealed that, since the 1970s and 1980s, suburbs in the US have become racially and socially diverse (Hall and Lee, 2009). Non-white immigrants, particularly those from Latin America and Asia, are increasingly important groups of suburbanites, which have given rise to the ‘melting pot suburbs’ (Frey, 2001; Fasenfest et al., 2006). Suburban residents are also becoming diverse in terms of income, education and occupational status, as working class occupants have moved out into the emerging employment centres (Baldassare, 1986). The presence of moderate- and lower-income residents has accelerated the stratification of suburban places (Logan and Schneider, 1981; Orfield, 2002). In addition, suburbs have witnessed the arrival of non-family households, including the elderly and single people (Frey, 2003; Frey and Berube, 2003). This has prompted the claim that ‘the new metropolitan reality is of heterogeneous suburbs’ (Halon et al., 2006: 2140).

Diversity does not lead to social integration at the local and neighbourhood level, however. As Baldassare (1992: 1992) points out, ‘suburban communities

are specialised, catering to the unique needs of different sub-groups of the suburban population'. Using multivariate analysis, Mikelbank (2004) categorises 3,567 incorporated suburbs across the country into ten types. The result not only shows that merely half of the suburbs could be characterised by traditional traits, but also that the suburban clusters are different in terms of wealth, employment and race. Halon et al. (2006) identify poor, black, immigrant and manufacturing suburbs which are strikingly different from the traditional suburbia.

Broadly, three threads of explanation are presented for the increasingly diverse suburban pattern. Classical ecological theory explains the growth and evolution of communities as the location choice of individual residential preference (Burgess, 1967). From this perspective, high-status households always seek to relocate to newer neighbourhoods to improve their status. Therefore, the arrival of low-income workers and immigrants could be driven by a 'spatial-assimilation' process. Research suggests that ethnic minorities tend to move out from the central area to the suburbs for better surroundings (Massey, 1985; Alba et al., 1999; Lacy, 2004). Alternatively, socioeconomic change could also be traced to the decline of suburbs as older communities, while many first-tier suburbs, particularly manufacturing areas, have begun to experience the same deterioration, aging of population, white flight and the influx of lower-income groups as the inner cities (Hudnut, 2003; Manden, 2003; Halon and Vicino, 2007).

Community characteristics have become more complicated with the suburbanisation of employment since the late 1950s. Earlier research focused more on socioeconomic differentiation among suburbs due to different types of employment, i.e. trade and manufacturing (Logan and Golden, 1986). New suburban developments which are dominated by service sector growth show a more mixed pattern in individual suburbs, as the service sector is more bifurcated by high-end jobs and low-end services, and requires location proximity of the two (Downey and Smith, 2011). More often than not, however, residents with

different jobs and statuses are sorted into different suburban places. It is often difficult for service workers or lower-income office workers to find affordable housing in the employment suburbs with high property values. Such stratification of suburbs driven by the division of labour is further reinforced when suburban institutions manipulate local resources to compete with others for economic growth (Logan and Molotch, 1987; Zukin, 1991).

Beyond the US, many other countries have also witnessed suburban growth or transition into a heterogenous space in which wealthy and poorer neighbourhoods coexist near to each other; yet, the driving forces can be quite different. Suburbs in many European countries which used to accommodate the working class have recently witnessed the emergence of middle class suburbs. On the edge of Paris, American middle-class suburbs have been imported with the creation of new peripheral economic poles (Bontje and Burdack, 2005). The periphery of post-socialist cities was once dominated by standardised housing complexes for employees of state enterprises. After the collapse of socialist regimes, residential decentralisation of the upper- and middle-class regions became apparent (Hirt and Stanilov, 2009). With regard to the cities experiencing rapid urbanisation in developing countries, residential patterns are even more complicated (Harris, 2010). Suburban growth is driven by both informal piecemeal and formal large-scale developments. Suburbanites could be previously rural peasants, residents forcibly displaced from the central areas, migrants from other places seeking economic opportunities in the city or wealthy families pursuing a better way of life in the suburbs.

2.6.3 Uneven development and social polarisation

Uneven development and residential segregation in the suburbs constitute another significant theme of the current suburban way of life. The utopian living ideal continues to be manipulated to re-enchant upscale suburban housing consumption, but is invested with new contents and new landscapes (Knox, 2008).

The underlying ideology is no longer egalitarian liberalism or democracy. Suburban housing is also not principally built for middle-middle and lower-middle class markets. The affluent professional classes, referred to as ‘advanced services middle classes’ generated by the new economy (Lash and Urry, 1992), have emerged to drive the transformation of the suburbs. Consumption becomes an important means through which this group strives to indicate their distinctive lifestyle and exclusive social status. Subsequently, about the attraction of contemporary suburbia is its appeal to people’s obsession with security and exclusion to their self-identity as consumers. Suburban builders have quickly shifted away from standardised subdivisions. Suburbia increasingly features private master-planned communities, spectacular retail malls and gigantic churches. These new landscapes, which are labelled as ‘vulgaria’, are packaged with aesthetic designs, simulated settings and privately-owned amenities, and are well fortified by walls and fences and other security devices. For Knox (2008: 12), *Vulgaria* also acts a new morality that emphasises ‘an ideology of competitive consumption, moral minimalism, and disengagement from notions of social justice and civil society’.

Meanwhile, the other side of suburban life presents a dismal picture. In the US, the suburbs, which once contrasted with the poverty and decline of central cities, have increasingly become areas where the poor concentrate. It is found that from 1990 to 2000, property rates and the number of high-poverty neighbourhoods (greater than 30% poverty) in the suburbs increased at a rate even greater than that of central cities (Berud and Frey, 2002; Kingsley and Pettit, 2003). The socioeconomic decline is particularly apparent in the inner-ring or first-tier suburbs (Jargowsky, 2003; Halon and Vicino, 2007; Manden, 2003). Inner suburbs now face serious economic and social problems that might be worse than those experienced by the inner cities. In the Global South, the urban poor and rural migrants were expelled from the central cities by expensive housing prices. Squatter settlements continue to increase in the suburbs of major cities (Davis,

2006). Allard (2004) points out that the poor suburbs have far less access to social service resources due to a lack of adequate provision and convenient ease of use. In many cases, local services were not oriented to the specific needs of poor populations (Murphy, 2007). Moreover, while most regeneration projects focus on central cities, those declining suburbs have often been neglected by public policies (Orefield, 2002). The marginal role of low-income groups, namely those who were previously peasants, migrants or displaced urban residents, in the urban economy could be further reinforced by the constrained life on the urban periphery.

In sum, as the suburbs become the leading edge of contemporary urban developments, they have largely taken the place of central areas as zones of transition (Downey and Smith, 2011). Suburbanism as a way of life could hardly be characterised as homogeneous. On the contrary, it is the diverse economic and social landscapes that distinguish the suburbs from the well-established urban areas. Nonetheless, traditional suburban life continues to be practiced by the affluent in terms of physical and cultural exclusion. As a result, as Brown (1992; quoted in Harris, 2010: 28) argues with regard to Latin America, cities 'have not one but at least two outskirts. One is affluent and integrated into the city with good transportation; the other is isolated, poor, alienated, and more populous'.

2.6.4 Chinese suburbs: a heterogeneous world

Earlier suburban development in China in the 1990s was predominantly driven by state-led industrialisation and urbanisation. Nevertheless, due to an asymmetrical land system, the suburbs experienced both formal and informal developments (Deng and Huang, 2004). On the one hand, state-owned urban land was allowed to enter the market. The state could easily expropriate farmland at a very low price and turned the land into industrial zones for profit afterwards. On the other hand, market transaction of the collectively-owned farmland was strictly forbidden. Having no right to transfer the land for their own sake, peasants tended

to build or expand their houses to accommodate the demands of migrants. Therefore, from the outset, the Chinese suburbs have exhibited a heterogeneous character.

Recently, the scenario has been further complicated. Led by new town projects, the suburbs are seeing massive real estate development. Developers endeavour to create an alternative living experience for home buyers by producing diverse properties, ranging from exclusive low-density villas to modern high-rise apartments. In China, the suburbs have never been an attractive residential location (Zhou and Logan, 2008; Wang and Li, 2004). Nevertheless, along with the building boom in the suburbs, large numbers of new households have been drawn to the periphery.

Therefore, suburban residents are quite diverse in nature. Fleischer (2010: 137) identifies a highly heterogeneous suburban area in Beijing. Young and affluent homeowners, rural migrants, and local natives ‘inhabit, experience, and thus produce the suburban space of Wangjing’ together. The research also reveals that housing and other consumption not only constitutes one’s suburban living experience, but also becomes a social practice to distinguish oneself from others. In this sense, residents choosing to live in different types of neighbourhoods ‘do not just follow blindly the lure of the market, but actively engage in the production of space’ (*ibid*: 146). Specifically, rich families have moved into high-end single-family houses in gated communities. Houses are more than shelter; they provide a package for a good life: aesthetic design, a safe and sanctified environment, as well as class identity and social status (Pow, 2009; Wu, 2010). At the same time, better-off families self-selected into different neighbourhoods and locations based on their economic capacity and housing needs. As centripetal force remains strong, for many of these groups residential choices are actually tradeoffs between housing prices and distance to the centre. With limited access to the housing market, rural migrants tend to concentrate in places where abundant low-price private rental houses are available (Wang et al.,

2010). In short, different types of developments are created and juxtaposed in the suburbs and the resultant suburban space is a heterogeneous world.

2.7 Conclusion

While traditional suburban living ideals may continue exerting their influences on developments on the urban periphery, realities found in different places call for a revision of conventional wisdom about suburbs. Rather than revolving around the paradigmatic case of America, new approaches take suburban diversity as the norm, emphasising commonalities and differences among particular types and development processes. In this sense, the research agenda may be redirected towards a ‘post-suburban’ phenomenon where suburbs present highly different characters and growth trajectories. In China, alongside a series of institutional changes, suburban landscapes have greatly changed. Importantly, it has been noted that recent suburban developments have morphed into new towns with comprehensive urban functions, which are quite different from previous industrial satellites. New dynamics for growth are created; however, a comprehensive understanding of these developments remains lacking.

In order to provide a complete overview of these developments whilst studying Chinese suburbs in the broader ‘post-suburban’ research agenda, a theoretical framework is established. At the heart of the analytic perspective is the goal of linking current suburban growth with the accumulation of capital on the one hand, whilst examining how the particular accumulation regime is achieved by actors involved in the processes on the other hand. Accordingly, three themes are outlined to investigate the underlying dynamics of suburban development. Firstly, and fundamentally, suburban growth in China is a spatial fix of capital accumulation. This is a common generalisation, as in many other places. However, it is argued that the central role of the suburbs in the process should be interpreted in relation to China’s peculiar land development system. Secondly, from the perspective of space production, the suburbs function as a growth machine which

is co-engineered by a range of land-interests. In particular, the role of the state and its entrepreneurial strategies should be highlighted in China's context. The third theme, which has been less discussed so far, proposes that Chinese suburbs have grown into a space of consumption. This is by no means a convergence with Western residential suburbia, however. Multiple driving forces are shaping the process here, which has given rise to a heterogenous composition of suburban residents, as well as different types of suburban developments. In sum, given all these specificities, investigation of the origins, forms and functions of suburbs in China will provide useful insights for the understanding of suburban growth as a worldwide phenomenon.

CHAPTER THREE

RESEARCH FRAMEWORK AND METHODOLOGY

3.1 Research framework

Based on the literature review of existing suburban theory, a research framework is developed to examine the dynamics of suburban growth in China. Fundamentally, following Harvey (1985), Walker (1981), and Lefebvre (1991) the research adopts a political economy approach to understand the production of new suburban space. It is held that the emergence of new suburban nodes in China is by no means spontaneous. They are a particular kind of spatial organisation which is socially constructed to ‘assure the reproduction of capital (accumulation) and capitalist social relations (holding class struggle in check)’ (Walker, 1981: 386). Whatever specific forms or means through which China has achieved its growth, the universal logic of capital works here. As Wang and Zhou (1999: 279) emphasise when explaining the similarities between urban structure in Chinese and Western cities ‘economic forces are universal, so even socialist countries cannot escape’. Accordingly, it is necessary to examine the structural factors and accumulation regime that gave rise to the new pattern of suburban growth in China.

In the meantime, however, the study attempts to avoid extreme functionalism, but stresses the important role of human agents and their activities, that is, ‘people

dreaming, planning, and organizing themselves to make money from property are the agents through which accumulation does its work at the level of the urban place' (Logan and Molotch, 1987:12). Bearing this in mind, Chinese suburbs are socially shaped by local actors and institutions. Actors are generally divided into two groups: those mainly on the production side and those on the consumption side. On the production side, the study aims to capture how suburban development is organised under coalitions of different actors, i.e. their motives, operations and relationships in the process. There have been many studies concerning the emergence of the 'urban growth machine' and 'pro-growth coalitions' since market-oriented reform (Zhu, 1999; Zhang, 2002; He and Wu, 2005). However, studies on how these concepts work in current suburbanisation are still lacking. On the consumption side, the study examines the activities of residents. In a Western context, people's changing residential preferences are an important factor contributing to mass suburbanisation (Fishman, 1987). Some studies have noted that, in order to lure newly rich Chinese, suburban gated residences began to be packaged and promoted as a new and better lifestyle (Pow and Kong, 2007; Zhang, 2010; Wu, 2010). Nevertheless, this type of estate is by no means the dominant form of the Chinese suburbs. The exact provenance of demand-based factors needs to be empirically investigated.

Therefore, in order to understand the current pattern of suburban growth in China, this study will focus on political-economic and sociocultural changes on the macro level, and the activities and relationships of the builders and residents at the micro level. The three themes are also discussed with comparison with suburban experiences in other countries. It is argued that the rising suburbs are a response to China's specific conditions, and have materialised through the actions of various actors at the local level.

Shanghai and one of its outer suburban districts, Songjiang, have been chosen as the locations in which to carry out the research for its representativeness. Shanghai is not only one of the largest cities in China, but plays an irreplaceable

role in the country's efforts to connect its economy with the global economy. The rationale behind choosing Shanghai is that the entrepreneurship of Shanghai municipal government is prominent and at the leading edge of Chinese economic reform. It launched a range of institutional changes to promote suburban new town development as early as 2000 and has achieved substantial progress so far. Its experiences have been replicated by many other cities across the country. Songjiang lies at the far south-western edge of the metropolitan area, about 40 kilometres from the city centre (Figure 3.1). It was developed as the experimental site for Shanghai's new town project from the outset and, over the last ten years, it has been the fastest-growing district among all the districts in Shanghai. The municipal government is now going to build another three suburban new towns by following a similar mode of development over the next few years. Therefore, Songjiang is a fairly representative case to illustrate the process of contemporary suburbanisation in Shanghai and China.

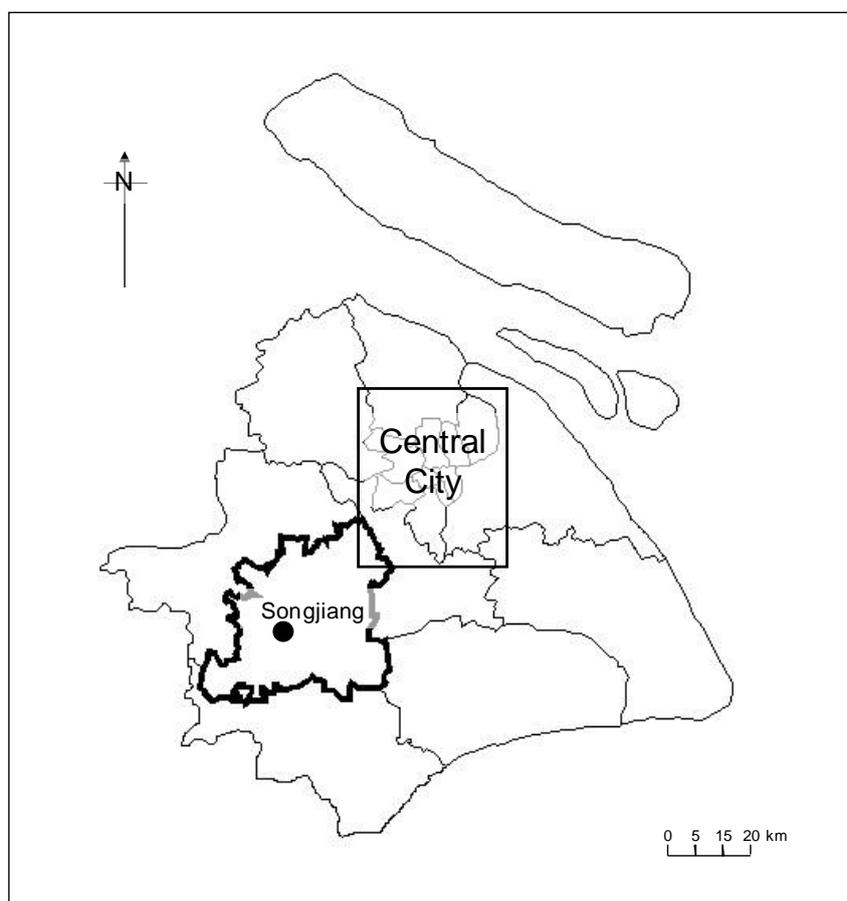


Figure 3.1 Map of Shanghai and Songjiang

3.2 Research questions and hypotheses

At the heart of this research is the quest to reveal the underlying dynamics of recent rapid suburban growth in China. The key research question is: *why have Chinese suburbs evolved into their current form and how they have grown so quickly?* Following the research framework mentioned above, three sets of questions to be answered and corresponding hypotheses are put forward as follows:

1. What is the role of suburbanisation in China's contemporary capital accumulation regime? What are the conditions giving rise to the current suburban pattern? How do they work to facilitate accumulation? And what is the role of the state in the process?

Hypothesis: taking a new form of new town development, suburbanisation in China functions as an important means to facilitate capital accumulation under a range of new conditions. The state not only consciously adopts this strategy, but also actively facilitates the process by all means.

2. What are the characters of suburban governance in China? How are pro-growth coalitions formed? And how do they work to facilitate suburban growth?

Hypothesis: suburban politics in China are characterised by state-led entrepreneurial governance, whereby the entrepreneurial state introduces a new mode of development in order to engage a variety of actors to create innovative suburban space for the purpose of economic growth.

3. What are the growth dynamics on the demand side driving suburban growth? Who are the suburban residents? What factors have driven them to move to the suburbs? And what are the characteristics of suburban spatial differentiations?

Hypothesis: the demand-based forces driving the population growth of Chinese suburbs are myriad; they include: an influx of migrants seeking employment opportunities, outwards-migration of the urban new rich in search of better living conditions, the urbanisation of local farmers and investment capital spent on properties. As a result, the composition of the suburban population is heterogeneous in nature, which in turn gives rise to a heterogeneous suburban space.

3.3 Methodology

This study is based on a three-step research strategy. Desk research is first carried out to obtain information about Shanghai and Songjiang's suburban development and to prepare preliminary hypotheses. This is followed by a pilot fieldwork trip to Shanghai from December, 2009 to January, 2010. More secondary data covering general information regarding the whole city and Songjiang were collected from local governments, consulting companies and public libraries. Meanwhile, interviews with key government officials and planners who directly participated in Shanghai's suburban development project and the Songjiang New Town project were conducted. Based on the pilot study, hypotheses were refined and specific research methods were developed. Interviews and surveys were used to collect first hand data. Semi-structured interviews were conducted to collect qualitative material. Target interviewees were all kinds of actors involved in suburban development, including government officials, planners, design and planning consultants, property developers, real estate agents and residential committee staff, as well as home buyers. Because interviews with several homebuyers can hardly establish a full view of suburban residents, and official population statistics are also unavailable, a questionnaire based survey was used to collect information from residents in Songjiang. Both extensive interviews and the survey were conducted during the second fieldtrip that took place from May, 2010 to September, 2010. In brief, documents, data

from interviews and the questionnaire survey are the three main kinds of empirical resources used by this study. Based on these data, both qualitative and quantitative analysis is applied to derive the final conclusion.

3.3.1 Secondary data sources

Secondary data used in this study includes materials with information on both the whole city of Shanghai and the Songjiang district. The main types of sources are listed as below.

Shanghai Statistical Yearbooks from 2001 - 2011 (Shanghai Statistical Bureau, 2001-2011), *Shanghai Suburb Statistical Yearbook 2002* (Shanghai Statistical Bureau and Shanghai Agricultural and Forestry Bureau, 2002) and *Songjiang Statistical Yearbooks from 2001-2011* (Shanghai Songjiang Statistical Bureau, 2001-2011) provide longitudinal data for the whole city, districts under its administration and also detailed information regarding the Songjiang district, which includes various annual statistics for economic performance, industrial structure, fiscal revenue and expenditure and urban construction. As a supplement, the *Almanacs* of Shanghai and some suburban districts (Editorial Board of Shanghai General History, 1999; Editorial Board of Shanghai Songjiang Almanac, 1991; Editorial Board of Shanghai Jinshan Almanac, 1990) are useful information on the history of these places.

The fifth (2000) and sixth (2010) census data are the chief source of information on the demography at the metropolitan, district, and sub-district (street office) or township levels. However, these data are not sufficient for sociospatial studies. Firstly, the government only publishes aggregate statistics of the population. Moreover, the lowest spatial unit of these data is the sub-district, which makes it difficult to identify diversity within the sub-district.

Other official publications including *Shanghai Urban Planning history* (Editorial Board of History of Urban Planning in Shanghai, 1999), *Shanghai Spatial Development Strategic Research* (Ye et al., 2003), *Urban Planning*

Administration Practices in Shanghai (Shanghai Urban Planning Management Bureau, 2007), *History of Urban Planning in Songjiang* (Editorial Board of History of Urban Planning in Songjiang, 2009) and *A Classical Planning of New Town in China* (Wang et al., 2003) contain abundant information about changes to urban planning and development administration practices of Shanghai municipality and Songjiang district. Maps and cartographic materials are also included.

Policy documents, planning and design documents, internal reports as well as promotional materials from Shanghai Urban Planning Management Bureau, Shanghai Urban Planning and Design Institute and other consulting companies are widely used to provide detailed information about institutional arrangements, short-term and long-term development strategies and specific project schemes and their development processes.

Online media reports and relevant academic research provide plenty of information and the latest news on Shanghai and Songjiang. They not only include many useful facts and insights to aid understanding the process of suburban development in Shanghai, but are also a very useful way to acquire updated data, which is necessary after fieldwork has been conducted.

3.3.2 Semi-structured interviews

In order to examine how different actors are involved in shaping Chinese suburbs, semi-structured interviews were held to collect firsthand data on the subject. On the supply side, interviewees were those directly involved in the planning and development process such as government officials, planners, developers, and those familiar with relevant local issues such as experienced local realtors. On the demand side, interviewees were those involved in community management such as staff in local street offices and residents' committees, and different kinds of residents in Songjiang based on their origins (local native, migrants from other places, and residents from the central city), their type housing

(villa or apartments), and the different sub-districts in which they live. Based on the established local contact, a ‘snowball’ kind of approach was adopted to gain access to target interviewees.

Semi-structured questions were tailored to different interviewees. Interviews with the actors on the supply side focus on development strategies, the rationale underlying the strategies, the formation of partnerships, development processes, outcomes of projects, housing markets in Songjiang new town, opinions of these space producers on suburban development, etc. On the demand side, the main information collected addresses the main types of homebuyers in different districts and neighbourhoods, the reasons for settling in Songjiang, residential preferences and choices, satisfaction with suburban living, etc. These questions were used as a guide, and during interviews, adjustments were made according to their relevance to particular interviewees.

In total, 42 face-to-face interviews were conducted during the two fieldtrips. Each interview lasted approximately one hour. The number of interviews split by the type of interviewee is as follows: six government officials, seven developers, five planners and planning and design consultants, four real estate agents and consultants, two university administrators, nine staff of street offices and residents’ committees and fourteen residents (for details, see Appendix 1).

3.3.3 Questionnaire survey

The questionnaire survey aimed to explore the demographic and socioeconomic characteristics of suburban residents, factors driving them to move to the suburbs, their satisfaction with suburban living, etc. The questionnaire is composed of three parts: 1) household demographic and socioeconomic attributes; 2) current housing conditions, residential mobility and an assessment of the respondents’ neighbourhoods and sub-district; 3) information about respondents’ daily lives, such as modes of transport, commuting time, spending habits and neighbourhood interactions (for details, see Appendix 2).

Instead of covering all sub-districts/townships in Songjiang, the study focuses on the three main urban districts: Fangsong (in which the new town project is located), Sijing and Jiuting, where property development was most concentrated. Besides, because this study mainly focuses on the dynamics of formal new town development, self-led informal development, known as urban villages, is not included. Based on on-site observation and interviews with community management staff, although the three districts have similar types of suburban neighbourhoods, the dominant type is different. Therefore, the survey aims to test if the three sub-districts represent different types of suburbs.

The survey initially set the sample size at 100 for each sub-district, which is a small-sample case study. However, in order to obtain a representative sample, the survey followed the principle of random sampling and adopted a *multistage clustered sampling* method. Firstly, *stratified sampling* was applied. All neighbourhoods in each district were sorted into different typical types, i.e. luxury villas and gated communities for the rich, neighbourhoods of displaced residents from the central city, neighbourhoods of white-collar middle class, neighbourhoods of migrants from other regions, neighbourhoods of Songjiang local residents. This is based on information provided by a local community management office. Stratified sampling according to neighbourhood type effectively reduced sampling errors by ensuring the elements were drawn from homogeneous strata, and hence ensured the strength of the representativeness of the sample (Babbie, 2007).

The second stage used the method of *probability proportionate to size (PPS) sampling* to select one neighbourhood from each type of neighbourhood. Take the villa-style gated communities in Fangsong district as an example to illustrate how neighbourhoods were selected. According to data provided by a local community management office, there are total of 11 neighbourhoods of this type in the district. A sampling frame was listed (Table 3.1). Besides the ID No. of each neighbourhood, its total number of households was used to compute the

cumulative total running through the list. The final cumulative total was 4,394. Systematic random sampling was used to select a number between 1 and 4,394; the number was 2582, which fell within the range of numbers assigned to Gated Community No.6 (2293-2761). This neighbourhood was then chosen.

Table 3.1 Listing of gated communities in Fangsong

Gated community	Number of households	Cumulative Total
No.1	1073	1073
No.2	184	1257
No.3	80	1337
No.4	264	1601
No.5	692	2293
No.6	468	2761
No.7	538	3299
No.8	44	3343
No.9	365	3708
No.10	410	4118
No.11	276	4394

The third stage involved simple random sampling being used in each neighbourhood to select households. Questionnaires were distributed at a fixed interval. If the selected households refused to take part or were not available, then the next household was visited. The three-stage sampling guarantees that the probability of each household being selected is equal. The final sample can statistically represent the total population of each sub-district.

However, because the proportion of households in villa-style gated communities to the total households of the sub-districts is much smaller compared to those in apartment neighbourhoods, only 9% in Fangsong, 5% in Sijing, and 7% in Jiuting, the total number of households in villas selected would be too small to be analysed. Therefore, 30 households were surveyed in each selected gated community. Besides, in order to ensure that the number of valid questionnaires from each neighbourhood would be no less than planned, another one or two extra

households were visited. These two practices made the sample disproportionate. Consequently, when all data were combined to represent the whole sub-district, the sample elements were weighted to ensure the principle of *probability proportionate to size (PPS)*¹. To a certain extent, such technical processing somehow violated the reliability of the research. However, since data analysis mainly focuses on modelling relationships between variables, a larger sample size could actually help to promote the effect sizes of the statistic models. Sampling errors are tolerant and have no direct influence on the final results.

After neighbourhoods were selected, questionnaire distribution was arranged with the residents' committees that took charge of the selected neighbourhoods. The committees helped issue formal notices to make it easier for the interviewers to gain the trust of the households. In order to ensure most families were at home, the survey was undertaken on weekend mornings from the 10th July to 1st August, 2010. Undergraduate students from Eastern China Normal University helped with the distribution. Questionnaires were given to household heads or their spouses, and most were completed and taken back by the student interviewers on the spot. However, home visits by the interviewers were denied by the two gated communities selected in Fangsong and Sijing. Instead, the residents' committee staff helped to allocate and collect the questionnaires. With the help of residents' committees, the rate of success is fair; about 85% of households visited agreed to take part in the survey. In total, 393 valid questionnaires were collected.

¹ For more details on the method of disproportionate sampling and weighting in clustered random sampling, see Babbie, 2007.

3.4 Data analysis

3.4.1 Qualitative analysis

Based on types of qualitative data sources, methods used for qualitative analysis mainly comprise two categories. The first is *document analysis*. Policy documents were widely used to interpret the rationale of the suburban development, the values that are promoted, how these policies were mediated by different actors and how they affect different actors. This was supplemented by in-depth study of other sources of secondary data, such as promotional materials, media reports, etc. The second is conversation analysis. Notes of interviews were used as the major materials for analysis. All interviews were categorised and coded by the interviewees' characters. In the rest of this thesis, interviews will be referred to according to their codes: G for government officials, D for developers, P for planners and design consultants, E for estate agents, C for community management staff, U for university administrators, R_F, R_S and R_J for residents of Fangsong, Sijing and Jiuting respectively. Interviews with those who were directly involved in the new town development were linked and compared to trace the development process. Interviews with residents were used to establish common factors with regard to residential preferences and housing choices, as well as dominant attitudes.

3.4.2 Quantitative analysis

Quantitative analysis was conducted on both macro statistical data and micro survey data. Macro statistical data such as that taken from statistical year books and census records were used to indicate the changing spatial structure of Shanghai. A database containing economic performance indexes, demographics, housing construction, etc. for each of the sub-districts of Shanghai was established. Spatial-analysis software Arc GIS was used to visualise spatial differences across

the entire metropolitan area. Every question and relevant option in the micro survey data were coded and recorded into SPSS 16.0. Various statistical methods were used to analyse the dataset, including ANOVA analysis, Pearson's Chi-square test and multinomial logistic regression analysis. More details are provided in Chapter six.

3.5 Summary

This chapter explains the research framework of this study. Examination of the dynamics of China's current suburban growth involves three aspects: 1) how suburbs function as space for capital accumulation; 2) how suburbs are socially produced; 3) how suburbs are shaped by their residents. It is argued that this framework will not only help acquire a full understanding of the phenomenon taking place in China, but also provide a platform for comparative analysis.

The research then builds its empirical findings on a wide variety of secondary and firsthand data sources. Secondary data include comprehensive information on Shanghai's suburban development project and the newest statistical data on current changes to Shanghai and its suburbs. Firsthand data were collected by means of semi-structured interviews and the questionnaire survey, both of which are particularly valuable considering official micro-level data is rarely available in China. Qualitative and quantitative methods were applied to these data to generate insights with regard to the research questions. The results are presented in the following chapters.

CHAPTER FOUR

SUBURBANISATION AND NEW TOWN POLICY IN SHANGHAI

4.1 Introduction

While suburbanisation and suburban developments have been well-documented in Western countries, the phenomenon is relatively new in urban China. In the socialist era, Chinese cities were relatively compact. There was a significant rural and urban divide; both rural to urban and outward residential mobility were quite low (Zhou and Logan, 2008). Instead, the state adopted a strategy to facilitate industrial development and used suburbs as a space for production. From the 1950s onwards, in order to find places in which to invest and prevent overconcentration in large cities such as Beijing and Shanghai, self-contained industrial satellite towns were developed. However, because of overspecialisation and the emphasis on productive infrastructure which resulted in a poor living environment, these areas were not attractive to residents. A large proportion of workers still commuted from the central city.

Since economic reform, Chinese cities have witnessed massive industrial relocation and population redistribution due to the establishment of a land market and consequent land use changes (Zhou and Ma, 2000; Feng and Zhou, 2005; Feng et al., 2008; Feng et al., 2009; Lin and Yi, 2011). Government-sponsored residential projects were developed in suburbs to improve living conditions and accommodate households relocated from redeveloped central areas (Wu, 2004). Suburban growth has also been driven by industrial relocation and a 'land

enclosure movement' in the form of industrial development zones (Deng and Huang, 2004). Suburban development in this period was less planned, and usually mixed with residential projects, scattered industrial development zones and migrant villages on the urban fringe (Deng and Huang, 2004). The spatial pattern was rampant outward expansion of fragmented single-function uses.

After the late 1990s, a new round of extensive suburban development began to unfold, which has differed from previous stages in at least three aspects. First, suburban development is promoted as the new field of development and has started to play a strategically important role in the process of urbanisation. In other words, suburbs are no longer merely an inferior location, mainly supporting the development of the central area. They are planned to grow into self-sustained settlements and to serve as drivers for growth in the regional and even global economy in their own right. Second, in spatial terms, suburban growth takes the form of clustered development in order to control the featureless expansion of the central built-up area on the one hand, and to develop a range of small to medium size urban settlements outside the central city on the other hand. The ultimate goal is to form a multi-centric metropolitan region. Finally, residential and commercial developments, along with a range of quality living facilities and services, have become widespread. Moreover, suburban settlements are often well-planned and have developed into mixed-use suburban new towns. This signals an important difference from the previous dominant form of development zones, which functioned mainly as production space.

This chapter examines these new trends of suburban development. It is argued that the new form and function of suburbs are associated with local governments' search for a new spatial fix in response to a range of new conditions for sustaining economic growth. The chapter is organised as follows. Firstly, recent changes in the supply and demand spheres in space production are analysed, and the new approach to suburban development led by these trends is briefly summarised. Secondly, the case of Shanghai's suburban development project is

studied in detail. After a brief review of the history of Shanghai's suburban development, the municipal government's rationale for a new suburban development strategy is examined. The following section details the design and operations of suburban new town policy. Finally, an examination of the contemporary spatial structure of metropolitan Shanghai is provided to show the overall effects of these policies and to provide an overview of present suburbs in Shanghai.

4.2 Changing conditions and a new approach to suburban development in China

4.2.1 Political economic and social cultural change

Economic reform has created a range of new conditions for suburban development (Table 4.1). In the political economic sphere, the state adopted market-oriented reform in 1979. As state-led industrialisation seemed to have reached its limits, the reform aimed to promote economic growth by introducing market operations in almost all aspects of the economy (Wu, 2010). This signals a shift from state socialism to capitalism. The reform led to a series of institutional changes which not only included the break-up of the state monopoly on resource allocation, but also rapid devolution of power to the localities. Commodification and privatisation represent the two key processes leading to economic restructuring; similarly important is its active engagement with global commodity production.

Table 4.1
Comparison of the main structural changes leading to current suburban growth in Western developed cities and Chinese cities

Structural Forces	Western cities	Chinese cities
Political economic change	<ul style="list-style-type: none"> ● Shift toward the post-fordist accumulation regime ● Deindustrialisation and a new economy based on non-material products industries* ● Neoliberalisation based on free-market doctrines ● Entrepreneurial urban governance ● Globalisation 	<ul style="list-style-type: none"> ● Shift toward the post-socialist accumulation regime ● Intensive accumulation through an export oriented strategy and commodification of urban development ● Marketisation characterised by a mixture of market logic and strong state intervention ● Entrepreneurial urban governance ● Globalisation
Sociocultural change	<ul style="list-style-type: none"> ● Cultural and attitudinal shift from modernism to post-modernism ● Emphasis on styles and aesthetics to break away from past purity, unity and order ● The rise of new bourgeoisie and new petite bourgeoisie involved in the new economy ● Consumption as a means of signifying cultural taste in search of social distinction 	<ul style="list-style-type: none"> ● Cultural and attitudinal shift from socialist ideology toward materialism and individualism ● Emphasis on styles and aesthetics to break away from past plain and poor approach ● The rise of new rich who have benefited from the reform and accumulated significant private wealth ● Consumption as a means of signifying material wealth and a good life in search of social distinction

* 'The new economy' describes the new sectors which have developed from an industrial/manufacturing-based economy and often includes technology-intensive manufacturing, services, cultural-product industries and design and fashion-oriented forms of production

Many scholars suggest that the market-driven approach indicates China's embrace of neo-liberalism. Harvey (2005) views China as an important variation of the global neoliberal shift. For instance, through the processes of decentralisation, land and housing reform, urban development is now an integral part of local governments' entrepreneurialism. A new mode of neoliberal

urbanisation has emerged 'characterised by the renaissance of urbanism and a rapid process of urban-centred wealth accumulation' (He and Wu, 2009:284). However, China's exceptional distinction lies in the fact that, in the process, the role of the state has not been weakened but actually grown in strength. Wu (2010:624) argues that the reform is indeed 'a state-engineered process' in which market-oriented development was forcefully supported, but also controlled by the state to facilitate state-led accumulation and legitimise its power. Therefore, some researchers (e.g. Harvey, 2005; He and Wu, 2009) depict the political economy in China to be a particular form which combines the logic of both market and state authority.

The other dimension of change is an ideological and cultural shift in the sociocultural sphere. With an overall increase of social wealth and an improvement in living conditions, post-reform society has witnessed the proliferation of consumerism and material culture over the last three decades. Urban residents have experienced a 'consumer revolution' based on an overall improvement of living standards (Davis, 2000). The puritan communism of Maoist China always inculcated 'a correct proletarian lifestyle of hard work and plain living (*jianku pusu*)'. Material consumption was denied to the masses because it was 'bourgeois in origin and surplus to authentic human needs'. Yet, these ideas became obsolete in the face of the rampant spread of mass consumption. A new ideology of consumerism has 'firmly entrenched itself in the void left by the bankruptcy of official Marxism-Leninism-Maoism in the new era of ideological disenchantment' (Zhao, 1997: 46). Moreover, the practice of consumption has become the primary means to actualise the individual's value and establishes social status and dignity (Zhu, 2004).

4.2.2 Production: space commodification and urban entrepreneurialism

Land and housing reforms have provided the most important preconditions for space commodification. Before economic reform, land and housing were not treated as a commodity. Land was administratively allocated by the state, while housing was distributed as a welfare benefit by state-owned enterprises. The central planning system, however, led to low efficiency and was financially detrimental for urban development. Since the 1980s, the land market has gradually been established with the institutionalisation of a land leasing system, which made it possible to transfer the land use rights of state-owned land to private developers. Meanwhile, housing reform was launched to break the state's monopoly on housing provision. Particularly after the total abandonment of public housing allocation in 1998, housing as a commodity has become the primary means of new residential supply. Overall, great economic incentives to undertake urban development have been generated.

Administrative and fiscal decentralisation is another significant change which has boosted large-scale urban development. Local governments have not only gained greater discretion to deal with local tax and revenue, but also the right to manage land leasing and urban development themselves. Consequently, local governments' willingness to lease more land to generate more revenue became the main driving force of urban sprawl (Zhang, 2000). In this case, local governments are not just regulators, but are also an indispensable market player themselves (Wu et al., 2007). In the beginning, suburban developments were largely driven by land enclosure and speculation as it is relatively difficult and time-consuming to acquire land in the inner city (Cartier, 2001; Deng and Huang, 2004). Rampant urban expansion caused serious loss of agricultural land (Ho and Lin, 2004).

However, some changes have recently occurred. On the one hand, intercity competition has amplified, as earlier decentralisation of power engendered great

initiatives for economic growth at the local level. City governments became entrepreneurial actors and nowadays compete with each other to attract footloose investment capital (Wu, 2002; Xu and Yeh, 2005). This creates long-term demand for land resources and the continuing need to invest in infrastructure and other large-scale projects. On the other hand, however, in order to control local discretion and retain its regulatory power, the central state began to launch a series of recentralisation policies (Xu and Yeh, 2009). Firstly, the tax-sharing system identifies different sources of central and local taxes, which has the effect of greatly reducing local taxes while leaving the burden of a large proportion of social expenditure to the local government. Secondly, since 2003, in order to constrain the quantity of land leased, the central government has begun to allocate land development quotas to local governments. It has thus become more difficult to release massive amounts of rural land for urban uses.

Under such circumstances, with less resources and administrative power, local governments now face greater challenges to sustain growth. Land sale income is still under the direct control of local governments and has become the most important growth factor. Suburban development as an entrepreneurial strategy thus becomes more imperative; but more sophisticated tactics are needed to develop suburbs as a method of capital accumulation. Firstly, a mix of land uses has emerged in recent suburban development; both residential and commercial projects are encouraged. Land for such developments is leased out to the highest bidders in open auction, which raises a large amount of capital. Meanwhile, local governments continue to offer low-price land for industrial investment, with the aim of raising local tax returns (Tao et al., 2010). Secondly, unable to convert as much rural land as they wish, local governments widely use place promotion and marketing to present the suburbs as a nice place to live and work in order to encourage demand, which could help to raise land prices and thus maximise land revenue. Suburbs are now built as a place to live and work, and the previously undesirable status of suburban living is purposely promoted as a better way of life.

4.2.3 Consumption: pro-ownership housing reform and social differentiation

Radical housing reform was adopted in China in 1998. Welfare allocation of housing was abolished and commodity housing became the primary means of new housing supply. This was largely to offset the difficulties faced by China's export sector during the Asian Financial Crisis. Housing and other infrastructure was then used to boost domestic demand, ensuring economic growth and social stability. With the establishment of the housing market, homes became commodities to be consumed; they could be made more attractive, advertised and marketed to make profits. Individual households replaced work-units as the major buyers in the housing market and were granted the freedom of housing choice. Although institutional variables such as jobs and types of employer still have an effect, demographic attributes such as life cycle and socioeconomic status such as income have become important factors in housing consumption (Huang, 2003).

Importantly, homeownership, which was once despised and regarded as the sign of an unfavourable 'bourgeoisie' class, is now consciously promoted as a symbol of well-being by both the government and the developers (Huang, 2004). In order to stimulate housing demand, new home financing instruments were introduced (Li, 2010). All commercial banks were encouraged to request low down-payments and offer low-interest and long term personal housing loans. A nationwide mandatory Housing Provident Fund (HPF) was established to ensure funding for affordable housing construction. Individual home buyers are now able to borrow from the HPF at a lower interest rate than that offered by the market. As the recent dramatic rise of house prices has made it almost impossible to pay off the purchase cost in one lump sum, mortgage loans have become an important means to realise ordinary people's dream of homeownership.

Yet access to one's dream home is unequal across society. Housing has become one of the new defining factors of social inequality (Bian and Liu, 2005;

Logan et al., 1999). With the rise of consumerism and material culture, the emerging urban rich (Goodman, 2008) and new middle classes (L. Zhang, 2010) are no longer satisfied with the previous uniform and low-quality apartments and ascetic lifestyle². With greater purchasing power, the new rich have become the biggest buyers in the newly-established housing market. Housing and relevant domestic consumption constitute the central focus of spending and are a significant means to achieve better lives (Davis, 2005).

For this group of people, housing does not merely represent a place to live, but a means to establish their social distinction; in simple terms, ‘to choose a house means to choose a lifestyle’ (Fleischer, 2007:287). Referring to the concept of ‘spatialization of class’, Zhang (2010) elaborates how the establishment of the new middle class has become possible through the production and consumption of new residential spaces. Diverse aesthetic residences and landscapes offer ‘a tangible location for a new class to materialize itself through spatial exclusion, cultural differentiation, and lifestyle practices’ (Zhang, 2010: 3). Moreover, given the continuous price escalation of residential property, buying a house in effect preserves and adds value to homeowners’ assets. Motivated by such considerations, housing consumption has expanded to include speculation, which gives the public a greater role in shaping the real estate market.

With spacious rooms, aesthetic landscapes and a recreational environment, suburban living signals a breakaway from the socialist past and is an attractive option. Evidence suggests that exclusive residential land use, green space and high-quality amenities are favourable factors and buyers are willing to pay higher housing prices for them (Jim and Chen, 2007; Zheng et al., 2009). As a result, real estate developers go to great lengths to build diverse themed settings and a nice

² Generally, in the Chinese context, this group consists of people who have benefited from economic reform and have accumulated significant private wealth. But it is also an emergent and unstable group without pre-established cultural norms and symbolic capital. They are eager to establish their social distinction by means of consumption. Therefore, although it would be hard to define the group in terms of traditional criteria such as occupation, they are linked by a similar orientation in their search for the good life and embrace of consumerism.

environment for their products, mimicking Western suburbia; gated communities have become a common strategy to capture the growing aspirations of the newly rich (Wu, 2010; Pow and Kong, 2007).

Another new class created by economic reform and closely related to suburban housing demand is formed by newly-arrived rural migrants. The 2010 census data shows that migrants make up a sizable proportion of urban residents in large cities, with 35% in Beijing and 39% in Shanghai. They come to large cities in search of better job opportunities; however, the temporary rural-urban migrants without local hukou, who constitute the majority of the group, often have the least prestigious occupations and earn the least income and receive the fewest benefits (Fan, 2001; 2002). Even worse, household registration continues to be a significant factor denying their access to better urban living (Huang and Jiang, 2009; Logan et al., 2009). The group is thus severely disadvantaged in the housing market. They are less likely to gain access to subsidised housing than the native urban residents, while the money they earn could never catch up with inflating housing prices. The rental of private housing represents their most common residential choice (Wu, 2002).

Consequently, migrants tend to concentrate in peripheral areas of the city where low-price rental housing is readily available (Feng and Zhou, 2005; Wu, 2008). In particular, houses built by rural peasants in peri-urban villages are the most common choice (Wang et al., 2010). Recently, in response to migrants' increasing demand for housing, many examples of newly-developed commodity and vacant resettlement housing have also entered the rental sector. An apartment with two-to-three bedrooms may be divided and leased to several migrant families separately. This new type of rental is called *qunzu* (literally, co-renting) and has become prevalent in many major cities. In many cases, housing conditions for migrants are bad (Wu, 2002). Facilities inside the houses are poor, while room sharing and overcrowding are very common. Yet, most migrants report that their feelings are neutral about this or that they are satisfied. When choosing where to

live, migrants are unlikely to make their living environment their main consideration. Instead, convenient proximity to their work or business, as well as cheaper rent, is much more important.

4.2.4 A new approach to suburban development

Given all the structural changes analysed above, it is clear that local governments began to find it tough to sustain growth. With regard to production, they experienced a reduction in resources to mobilise capital investment after the recentralisation of fiscal and land development power. On the other hand, a rise in consumption meant they needed to accommodate the increasing housing demands of different groups. Consequently, a new round of suburban development has emerged in China since the late 1990s, which is distinctive not only due to its scale, but also for its nature. One after another, municipal governments began to adjust their administrative boundaries by annexing surrounding counties (Wu and Zhang, 2007). Mass urban transport systems were developed to provide rapid access to the exurbs (Cervero and Day, 2008) and the outer suburban areas were opened up for development. Moreover, the new strategy focuses on developing suburban growth nodes with comprehensive urban functions. Aiming at upgrading labour-intensive and low-cost manufacturing industries to become high-tech and producer services, many mature economic development zones have attempted to shift their manufacturing sector to a more balanced economic structure between the secondary and tertiary sectors (Wong and Tang, 2005). Suburban new town projects with high-quality amenities and services are ubiquitous among large and medium cities. Featuring multifunction land uses, these new towns represent a more mixed land use pattern and greater balance between work and residence, containing not only industrial zones and high-tech parks, but also residential subdivisions, shopping malls and university towns (Wu and Phelps, 2008). In addition to manufacturing industry, residential development has become an important driving force in these well-planned new towns (Wang et al., 2010). With

various packaging and marketing approaches, the image of the suburban district has shifted from industrial satellites to liveable cities (Wu, 2010; Wu and Phelps, 2011b). As a consequence, cities are witnessing the emergence of a polycentric metropolitan structure (Feng et al., 2009) in which different urban areas and new towns are integrated to form clusters in a densely urbanised region.

In sum, faced with a range of new conditions for economic growth, suburbs are no longer treated as secondary places. The strategy of suburban development in Chinese cities now goes beyond industrial and population relocation from the central city to the suburbs. Instead, suburban new towns and other kinds of settlements are built as solutions to a range of issues brought about by the previous mode of extensive growth. Having economies of scales as their key advantage, the new towns and the like will serve as regional growth poles to absorb capital and labour power. Meanwhile, urban concentration in the suburbs will also help to intensify land use and encourage better distribution of public facilities, as well as cause the remission of growth pressure in the central city. Central to the new mode, however, remains the entrepreneurial strategies for growth. In the remainder of this chapter, recent suburban development in Shanghai is examined to further reveal the rationale behind the new strategy, as well as detail its measures and evaluate its influences.

4.3 The history of Shanghai's suburban development

The earliest attempt to develop the periphery of Shanghai dates back to the 1940s. After the anti-Japanese war, in order to respond to rapid urban growth and revive the largest international finance centre in the pre-war Far East at the time, the Nationalist government formulated a master-plan to develop several new towns on the edge of the city encompassing 1.6 to 1.8 million people each. However, the principal of 'organic decentralisation' and the plan itself were discarded soon after the new government took over the city. Instead, Soviet planning experts, who were invited to give advice on how to develop the city,

suggested that new developments should not go beyond the existing urban core, but should be located at the immediate periphery³. Consequently, ten specialised industrial areas were built on the fringe of the city proper, followed by nine housing projects in the form of ‘workers’ villages’. Such a suburban development strategy favoured the monocentric model and was aimed at economising in the supply of public utilities.

Ten years later, in 1956, when Shanghai was positioned as the largest industrial base in China, the municipality proposed the development of several satellite towns to accommodate massive industrial development. This was partially associated with the shift in the general national urban policy from the Soviet model of industrial centralisation toward an emphasis on decentralising the population and industries to small and medium-size cities. Ten adjacent rural counties of Jiangsu and Zhejiang provinces were placed under the city’s administration. After that, the municipality was given formal administrative power over its hinterland. A general plan to construct five industrial satellites in 15 years was launched⁴. Nevertheless, to a large extent, this first generation of satellite towns turned out to be a failure. The programme made little progress in the following three decades. Although a number of factories were allocated to the new towns, most workers still lived in the centre (Kirkby, 1987).

Shanghai’s second generation satellite towns were initiated when Baoshan county and Jinshan county were selected by the state to develop two large-scale industrial projects in the 1970s. The master plan of Shanghai compiled later in 1982 designated Jinshan and Baoshan as two key satellites to be intensively constructed. The two towns and their surrounding areas were figuratively depicted as the city’s two wings. By the end of the 1980s, to a certain degree, both had developed into self-sufficient suburban communities. Along with the construction

³ See *On Shanghai’s Urban Reconstruction and Development* by ВЕНЕННКОВ, 1949, quoted in the Editorial Board of History of Urban Planning in Shanghai, 1999.

⁴ See *General Map of Preliminary Planning of Urban Construction 1959*, quoted in Editorial Board of History of Urban Planning in Shanghai, 1999.

of two industrial bases, namely Baosteel Complex in Baoshan and Shanghai Petrochemical Complex in Jinshan, housing and other residential facilities were gradually developed for workers. More than half of the workers had settled down in the towns (Shanghai Jinshan Almanac Editorial Board, 1990). They did not merely move from the central districts; a large number were from other provinces and were local peasants who lost their land to urban construction.

During the 1990s, however, the concept of a multinodal urban system was greatly eclipsed by the focus on Pudong. The Pudong New Area project signalled a radical shift in urban development. Various institutional reforms were launched to facilitate urban construction and infrastructure improvements. Within a decade, the area adjacent to the east of the Huangpu River, previously composed of broad acres of farmland and some small industrial enterprises, was not only built into an outstanding urban district, but was also the vehicle for the development of an outward-oriented new economy. Indeed, the success of the project marked the state's recognition of the pivotal role of urbanisation in promoting economic growth and it opened up a promising path for future development (Olds, 1997).

Over all, as the largest metropolis in China, Shanghai has an administrative area of 6,340 km², containing nine central districts and ten suburban districts and counties. Nevertheless, the city remained dense and compact until 2000. Most suburban development was dominated by industry and the image of suburbs was remote and desolate. Until 2000, the central districts, which make up only 4.5% (289 km²) of the total area, still contained 42.2% (6.93 million) of the total population (16.40 million)⁵. While the average population density for the whole of Shanghai rose to 2,588 people per square kilometre, it declined with distance from the centre. The four core districts (Huangpu, Jingan, Luwan and Hongkou) were the most congested, with more than 35,000 people per square kilometre, while all outer suburban districts had a population density of less than 2,000/km².

⁵ The data is drawn from the Fifth (2000) Population Censuses, see http://www.stats.gov.cn/tjgb/rkpcgb/dfrkpcgb/t20020331_15423.htm, accessed on 20th August, 2011

4.4 Changing rationale and strategy of suburban development

After several rounds of suburban development projects, the idea of nodalisation was revived again when the Shanghai Master Plan (1999-2020) was relaunched in 1999. The aim, as clearly stated, is to rebuild Shanghai metropolitan area into a spatial structure characterised as ‘multi-axis, multilayer, multinuclear’. ‘Multi-axis’ means to focus new development along three major transport arteries, the Shanghai-to-Nanjing axis, the Shanghai-to-Hangzhou axis, and the Riverside-to-Seaside axis. ‘Multilayer’ means to build a five-level urban system, namely: one central city, new towns, central townships, central villages and villages. ‘Multinuclear’ refers to the central city and several new towns in the suburbs. This spatial structure implies a reassertion of the strategic role of the suburban towns and hinterlands of Shanghai that was proposed in the early 1950s, but with a different rationale. The new round of suburban development has been driven by the goal to rebuild Shanghai into a global city, to use housing development as a driver for economic growth, and to concentrate expansion in suburban new towns to manage enlargement and prevent sprawl.

4.4.1 Rebuilding Shanghai as a ‘global metropolis’

When the reboot of Shanghai’s economy was initiated by the central state in the early 1990s, its strategic role was recognised as a link between the country and the world economy. The city was envisioned to be a global metropolis. Therefore, the development strategy greatly emphasised the open door policy to attract Foreign Direct Investment. In addition to various market-oriented institutional changes, new production spaces such as Pudong New Area, Minhang ETDZ (Economic and Technological Development Zone), Hongqiao ETDZ and Caohejing High-tech Park were developed to accommodate capital flows.

Meanwhile, by restoring historical zones and building symbolic landscapes, the municipal government has also gone to great effort to project a prosperous, cosmopolitan image.

After great success in urban construction and ten years' rapid growth, the municipal government then aimed to enhance the city's competitiveness by reorganising economic activities on the metropolitan level. Crucially, an effective city–region network was regarded as very important for the transition to become a world city. Strategic plans, reports and even academic papers referred to New York, Tokyo, Paris and London as models; the development of a polycentric structure was a necessary condition and self-contained satellite cities were an advanced and effective mode (Shanghai Municipal Planning Bureau, 2001; Ye et al., 2003). With regard to Shanghai, one important consideration when following this model was to further promote service sectors in the central area to catch up with other global cities, while maintaining its traditional strength in manufacturing in the suburbs. In addition, suburban development could also ease increasing population pressure and environmental degradation in the central districts, while in turn promoting the city's image and helping to attract international business. As the slogan says, 'the central city shows urban prosperity while the suburb embodies economic strength.' In essence, this round of suburban development was to rebuild Shanghai on the larger metropolitan scale and to develop a well-integrated global city region.

4.4.2 Land and housing development as a new economic growth pole

The revival of Shanghai since 1990 has largely been founded on the improvement of the built environment and large-scale infrastructure projects. For instance, during the construction of Pudong New Area, vast amounts of investment were injected into urban development and a range of infrastructure

constructions. Investment in the built environment has become a crucial economic growth pole. The improvement of the infrastructure and land leasing has brought about land revenues; impressive developments help to promote the city's new image and attract global capital. Importantly, the property industry itself has become a pivotal sector in the urban economy. In other words, the role of urban development has been rediscovered.

Therefore, when China's export sector encountered difficulties during the Asian Financial Crisis at the end of the 1990s, the state decided to use housing and infrastructure to boost domestic demand. Urban development has indeed become a vehicle for capital accumulation. In the Tenth Five-Year Plan launched in 2000, it was claimed that Shanghai's development strategy was not merely to focus on manufacturing, but also to expand urban development into the outer suburbs. One government official pointed out that the decision to undertake suburban development was largely made because there was no more land available in the central districts 'during the last decade, we have achieved great success in urban renewal. There is not much land left in the central area and the cost is high. So the government decided to shift towards the undeveloped periphery'.⁶ Therefore, three points were strongly emphasised as key factors for the success of suburban development: a high-quality living environment, full service facilities and rapid transport links to the central city. All are aimed at promoting land prices and further expanding property development to the edge of the conurbation.

4.4.3 Growth management and 'Three Concentrations'

By the time it was decided to extend urban development further, Shanghai had already experienced massive population growth. Spatially, the city rapidly sprawled into inner suburbs. The ring just around the central city was the fastest

⁶ This quote is based on an interview with a government official in the Shanghai Planning Bureau, conducted on 10 February 2009.

growing region, showing a concentric urban growth pattern. It was a matter of great concern that this uncontrolled trend is not conducive to sustainable social and economic development in the long term and would eventually cause severe damage to the quality of the urban environment.

Such spontaneous kind of mode depends entirely on the market. It requires lowest development cost and infrastructure investment. Nevertheless, it would not only lead to inefficient land use but cause overpressure on central city's facilities. The city is now absorbing its surrounding areas such as Baoshan and Minhang. If we do not stop it now and adopt effective measures, Shanghai would be developed into an overcrowding, no-green-shelters, unhealthy pie-shaped urban giant. (Ye et al., 2003: 27).

The suburbs themselves had already undergone a degree of transformation owing to economic reform. Driven by the urban government's pursuit of land revenue which was realised by leasing more land, the suburbs saw a disproportionate conversion of farmland to urban use. Additionally, along with the rapid development of township enterprises, non-agricultural industries replaced the traditional farming economy and became dominant sectors in the suburban rural areas of Shanghai. However, under rigid administrative institutions, each township created industrial parks and urban constructions in its own way, resulting in dispersed small-scale developments. The municipal government considered this pattern of urbanisation to be unsustainable as it disregarded economies of scale and, in general terms, fostered unhealthy competition.

However, there was a more important hidden reason for controlling scattered developments. Since the late 1990s, the central state has reinforced its regulation over land development. The government thus could not arbitrarily convert agricultural land anymore. The central state set an annual quota for the total amount of land allocated to urban construction that must not be exceeded. In other words, the municipal government had much less land available to facilitate economic growth. It thus had to search for a new growth mode based on the

intensification of land use rather than extensive land development. Meanwhile, in 2004, the central state initiated a new policy on quota allocation⁷. According to the policy, which fell within the jurisdiction of the local governments, if a certain amount of land used for construction 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. This policy was originally designed to reinforce the preservation of agricultural land and increase the efficiency of rural land use. However, the local governments figured out that they could acquire a greater amount of land for urban construction by reclaiming farmers' housing plots and unused land in the rural areas. The new policy was then tactically used to facilitate urban development.

Against this context, the Shanghai government initiated a new guideline for suburban development known as 'Three Concentrations' – concentration of industry towards planned industrial parks, population towards cities and towns, and land development towards scale management. Following this principle, the metropolitan area would be reorganised into a multilayer urban system consisting of settlements of different sizes. In this way, economic activities and urban development could become relatively concentrated in certain sites and thus take advantage of agglomeration economies. At the same time, land in remote rural villages with less growth potential would be reclaimed for agricultural use to secure land supply in urban settlements. Therefore, although the policy was justified in the name of environmental protection and in order to narrow the gap between the urban and rural areas and improve the living standards of suburban farmers, its fundamental aim was still to facilitate urban development and economic growth.

In sum, for all the considerations above, the development of suburban new towns with an employment-residential balance emerged as an optimal strategy for further growth. While the municipal government aimed to achieve global city

⁷ *On Deepening Reform and Strengthening Land Administration*, the State Council, 2004

status by promoting a service economy, the suburban new towns would accommodate its traditional industrial sectors and help sustain its rapid economic growth rate. At the same time, property development in the new towns would contribute to the local revenue and tax base. Finally, building its economy on the back of an agglomeration economy, new towns would facilitate an intensive growth mode. This would help to ease congestion problems in the central city. Nevertheless, it was a tricky strategy for growth in the face of tightened land development policies.

4.5 Projects, policies and practices

New town development in Shanghai was formally launched in 2001; thus far, the development could be generally divided into two periods. During the Tenth Five-year Plan (2001-2005), under the name of ‘One-City-Nine-Towns’, relevant policies were first framed and the development mode was tested in ten selected suburban towns. The operation system was extended to the whole metropolitan area throughout the Eleventh Five-year Plan (2006-2010). The project was called the ‘1966’ urban system and was aimed at spatially reorganising development by constructing a range of urban settlements of different sizes, namely one central city, nine new towns, sixty new townships and six hundred central villages. Throughout the two projects, the state developed a number of devices to boost the growth of suburban economy. At the core of these policies was the intention to create favourable conditions for capital investment. Four types of institutions dealing with different aspects of new town development are identified to have contributed to the whole process.

4.5.1 Projects: from One-City-Nine-Towns to the ‘1966’ urban system

The project known as ‘One-City-Nine-Towns’ was formally launched with the Shanghai Municipality No. 1 Decree: ‘Announcement on Promotion of Urbanisation in Experimental Towns’ in 2001. Ten towns were selected from each suburban district or county to be experimental sites for suburban development (Figure 4.1). According to the document, the ultimate goal of the project was to construct all ten towns into well-designed and fully-equipped urban settlements. What distinguished the project from previous satellite town development is the fact that the government attached particular importance to infrastructure construction and aesthetic urban landscapes. The primary task of the project was to draw up ‘high-profile’ master plans and urban designs. Moreover, the towns were built to replicate authentic Western townscapes in Britain, Italy, the Netherlands, Germany, Spain, Scandinavia, and North America respectively. The plan indicated that all the towns would not only be based on concepts generated from their corresponding Western countries, but would also contain a master-planned community with landscapes and building forms taken from those countries.

By 2005, although two of the towns abandoned the original plan⁸, the level of achievement was extraordinary. In total, eight towns finished the land development of an area comprising 4,105 hectares, which included 6,992,000m² of private housing and 3,242,400 m² of public facilities⁹. Driven by this project, urban development began to boom in the suburbs. By the end of 2004, there were more than 600 km² of urban areas, and the level of urbanisation in the suburbs had

⁸ The two towns were Lingang in Nanhui and Chenjiazhen in Chongming. Lingang was removed from the project because it was later reassigned as a separate new town project directly developed by the municipality. The development of Chenjiazhen was put aside as the location was near an international wildlife reserve and urban development was strictly controlled.

⁹ ‘Assessment report on the development of experimental towns’, internal report of the Advisory Board of Shanghai Municipal Government, December, 2005.

reached 57.8%¹⁰. The municipality claimed that the project of One-City-Nine-Towns greatly improved the level of urban planning and development in the suburbs and provided valuable experience for future suburban development. Importantly, the project set up the basic policy framework for the implementation of its grand metropolitan plan¹¹.

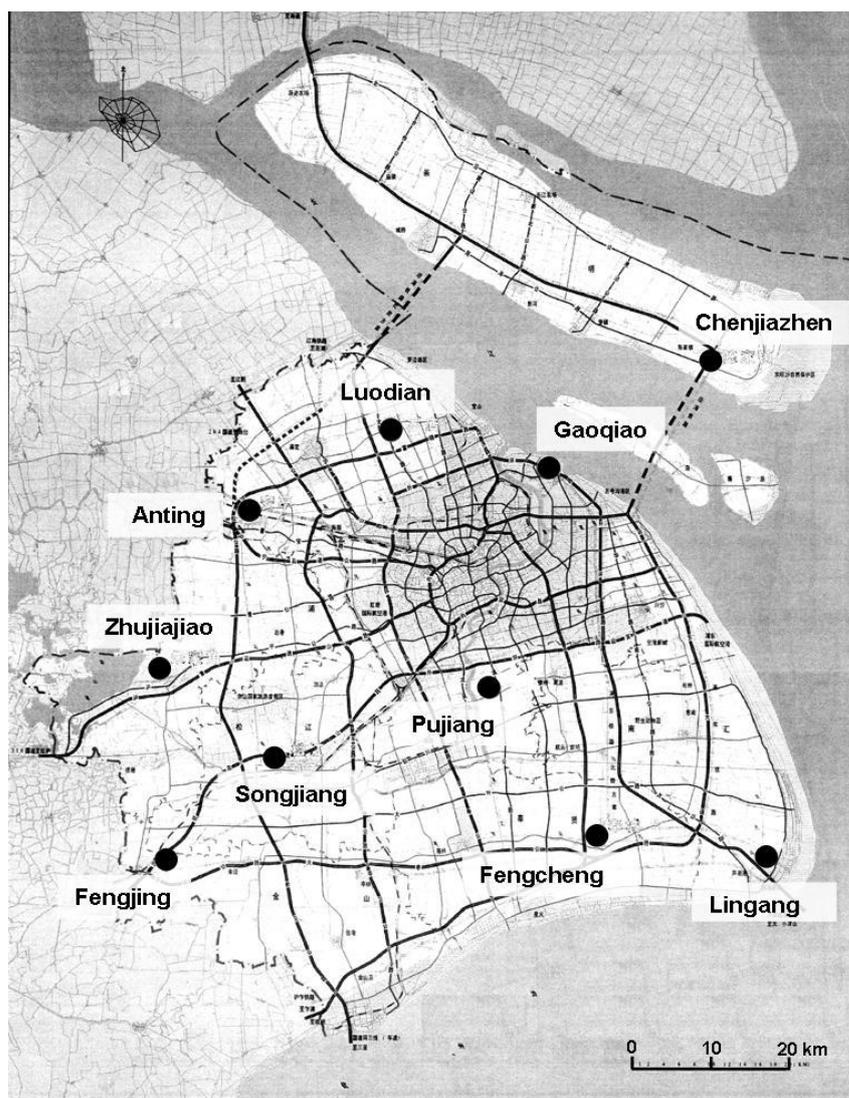


Figure 4.1 Locations of One City and Nine Towns

Source: compiled from 'Assessment report on the development of experimental towns', internal report of the Advisory Board of Shanghai Municipal Government, December, 2005.

¹⁰ *Follow-up study on suburban planning*, Shanghai Planning and Design Research Institute, 2008

¹¹ *Follow-up study on suburban planning*, Shanghai Planning and Design Research Institute, 2008

Based on the One-City-Nine-Towns project, the goal of the 1966 urban system was to further suburban development and reorganise urban and industrial development throughout the metropolitan area. According to the municipality's planning document¹², Shanghai was to be developed into a spatial structure in which a variety of urban clusters, graded in a multi-layer system both small and large, would be rationally distributed, but would be well connected with each other; they would resemble the stars planted in a galaxy (Figure 4.2). Nevertheless, the main task at the centre of such spatial restructuring was to develop new towns as economic growth poles to benefit the metropolitan area as a whole.

In total, nine new suburban towns were programmed to be built into middle-scale urban settlements, based on the pre-existing central towns of each suburban district/country, with the exception of Pudong. The new towns were planned to be the political, economic and cultural centres of their districts and the main places where employment and population growth would be concentrated. Ideally, they would be relatively independent from the central city, but contribute to the metropolitan economy with specialised economic structures (Table 4.2). Some were developed to contribute to the manufacturing industry, including Baoshan for iron and steel, Minhang for microelectronics, Jiading for the automotive industry, Jinshan for petrochemical business and Lingang for equipment. Others, however, were intended to focus on service sectors. For example, Songjiang, Qingpu, Nanqiao and Chengqiao were assigned to enhance the real estate, leisure and tourism industries.

¹² Shanghai Municipality No. 45 Decree (2004): 'Planning Framework on the implementation of "three concentrations" to accelerate suburban development in Shanghai'.

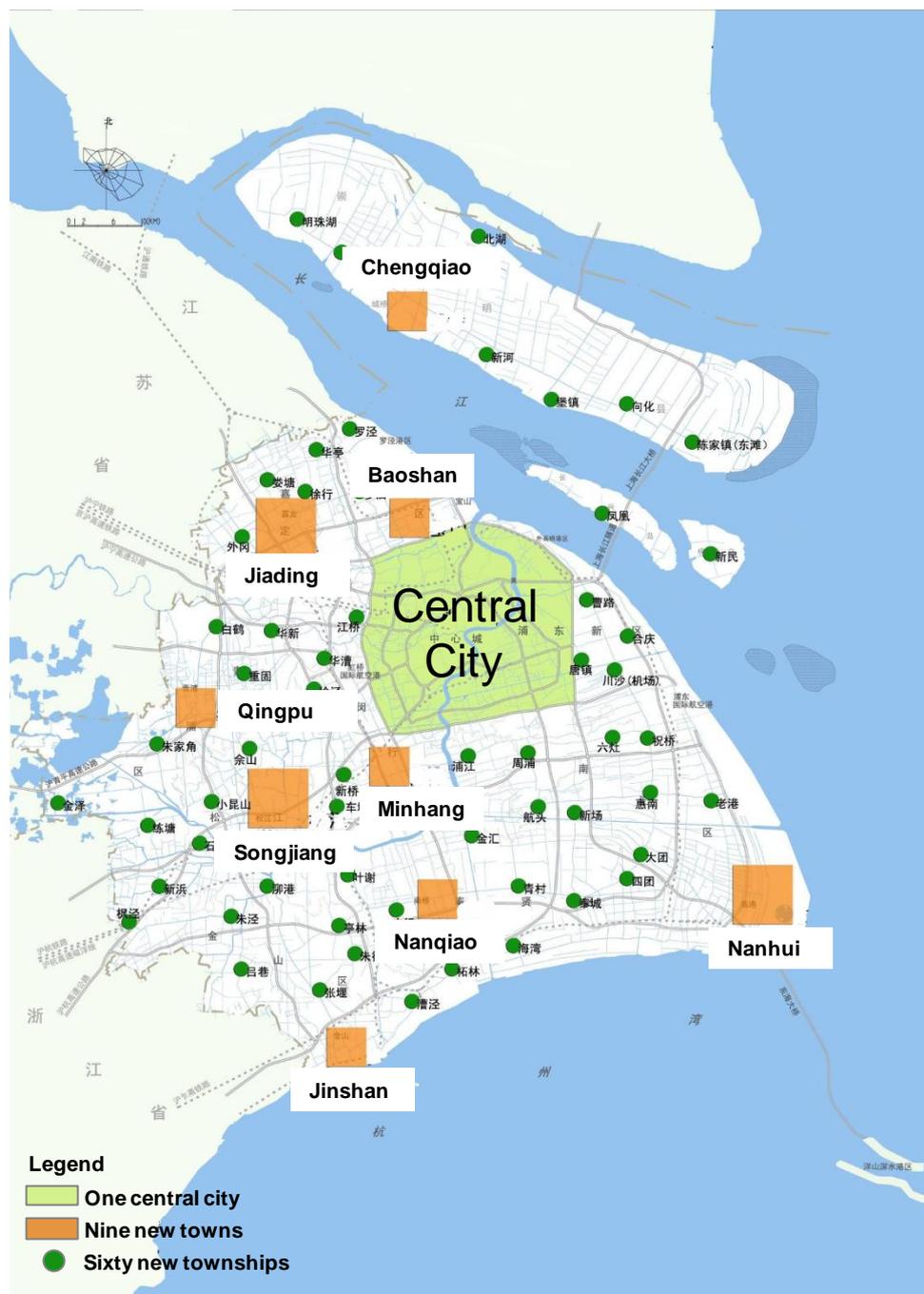


Figure 4.2 1966 urban system in Shanghai

Source: Compiled from *Follow-up study on suburban planning*, Shanghai Planning and Design Research Institute, 2008

Table 4.2 Visions for suburban new towns in Shanghai

New Towns	Visions	Total area and area of construction land (km ²)	Population target (by 2020)
Baoshan New Town	'Steel Baoshan' built upon an economy of steel manufacturing and logistics	81.35 (51.22)	650,000
Minhang New Town	'Aerospace Minhang' built upon an economy of aerospace manufacturing and technologic innovation	193.7 (165)	1,050,000
Qingpu New Town	'Green Qingpu' characterised by traditional water townscapes and based on tourism, leisure and convention and exhibition industries	53.8 (44.26); 119 (85)*	500,000 700,000*
Jiading New Town	'Auto Jiading' and 'a comprehensive node city in the Yangtze Delta', specifically for the car industry and company headquarters	224.4(133.5) 224.4 (146.5)*	828,000 1,150,000*
Jinshan New Town	'Silicon Valley of Petrochemical Industry' built on petrochemical and related industries	80.66 (30.4) 80.66 (41.0)*	380,000 410,000*

Table 4.2 (continued)

New Towns	Visions	Total area and area of construction land (km ²)	Population target (by 2020)
Songjiang New Town	'Liveable cultural city' and 'Socialist New Suburbs' with a suburban-oriented real estate market; 'Higher Education Base' ; 'A comprehensive node city in the Yangtze Delta and the hub of south-west Shanghai' , specifically targeting advanced manufacturing and company headquarters	106.5(78.4) 160 (120)*	810, 000 1,100,000*
Chengqiao New Town	'Water Garden City' mainly focusing on the green economy and tourism and leisure industry	28 (26.12)	200,000
Nanqiao New Town	'Eco City' built on sustainable planning and design; 'Low-carbon city' for the development of a low-carbon economy; 'Intelligent city' at the cutting edge of technological innovation; 'A comprehensive centre on the northern bank of Hangzhou bay'; the hub of south Shanghai'	84 (31.9) 84 (61)*	450,000 750,000*
Lingang New Town	'International shipping centre' based on Yangshan International Deep Water Port and the equipment manufacturing industry	296 (164.8)	830,000

* Updated targets in recently published revised master plans (2010-2020)

Source: Compiled from Shanghai Planning and Land Resources Bureau, 2008; and Master Plan (revised version, 2010-2020) of Qingpu New Town, Jiading New Town, Jinshan New Town, Songjiang New Town, Nanqiao New Town, <http://www.shgtj.gov.cn/>, accessed on 29 August, 2011

In terms of population, the new towns were conceived to be ‘anti-magnets’ to agglomerate the population and control continuous urban sprawl. This follows a principle of ‘decentralised concentration’¹³. Decentralisation was intended to ease the increasing population and environmental pressure on the central area, whereas concentration would create agglomeration economies and optimise the distribution of public facilities. The government hoped that these new towns would accommodate half of the total number of suburban residents, that is, about 5.40 million by 2020. Based on their roles in the overall spatial strategy, the recent-updated plan aims to populate Songjiang and Jiading, as the two largest settlements, with 1.0 million inhabitants by 2020, followed by Qingpu, Nanqiao and Lingang with 0.6-0.8 million, and Jinshan and Chengqiao with 0.2-0.4 million.

According to the plan, the new towns were to be developed in phases, reflecting the municipal government’s long-term development strategy. Based on their development conditions and the significance of building the competitiveness of Shanghai, some were designated to be developed into bigger cities first. Since Jiading and Songjiang border Jiangsu and Zhejiang provinces and their connections to the inner areas have recently been reinforced with the opening of two high speed railways, they were assigned as the ‘node cities’ of the Yangtze Delta, and the main sites to compete with other cities in the region. Qingpu, Nanqiao and Lingang were identified as the commercial and business centres of their surrounding areas. Jinshan and Chengqiao will be placed on reserve, without large-scale urban development in the immediate future. The municipal government chose to give its support to selected strategic sites among these new towns at different stages. During the Eleventh Five-year Plan (2006-2010), Songjiang, Jiading and Lingang received development focus along with substantial support from the municipal government. For the next five years,

¹³ *Suggestions on suburban planning and development in Shanghai*, Shanghai Municipal Government, 2004

Jiading, Qingpu and Nanqiao are the priority sites in the second round of new town development.

Above the new town layer is the central city, namely the area inside the outer ring of Shanghai. By the end of 2005, there were a total of 9.76 million residents in that area, and population density was about 15,500 per square kilometre. The aim of the plan was to control population growth in this area. The total population target was 9.50 million in 2010, and a further reduction to 9 million in 2020. Economic development in this area focuses on deindustrialisation and the development of service sectors such as financial services, international trade, the information industry, etc. At the same time, the government will continue to redevelop old high-density neighbourhoods to upgrade the urban environment.

Below the new town area, there are two layers of smaller settlements. The first is 60 new townships distributed across the suburban areas; there are four types of new townships: 1) townships that used to be district or country centres; 2) townships that are close to the central city or near major metropolitan infrastructures; 3) townships that are next to large industrial parks; 4) townships that are outstanding for their agricultural production and good ecological environment. With great potential to accommodate growth, they are intended to constitute the most basic unit for administrative management and the distribution of public facilities and social services. Generally, each new township was planned to accommodate 50,000 residents. Nevertheless, some with a stronger historical foundation and better development conditions are expected to maintain a population of about 100,000 to 150,000. The municipality also aimed to place its large-scale affordable housing projects there.

The second layer comprises 600 central villages at the bottom of the system. Central villages constitute the basic unit of rural communities. The strategy was to promote intensive land use by re-concentrating the farmers that are currently sporadically distributed in 50,000 natural villages into a smaller number of well-planned new villages. Apparently, this idea encompasses many trivial tasks

and might take more than 20 years to finish. However, as it would create more available land to sustain rapid economic growth, the building of central villages was considered to be vital to the whole project. The scale of these villages could vary significantly according to the characteristics of local agriculture and the cultivated area. Generally, in the inner suburbs, the total number of central villages was planned to be smaller and each was to accommodate around 1,000 households. In the outer suburbs, which comprise a larger proportion of the rural population, there would be more villages built; each was designed for merely 500-600 households.

In review, both projects, namely 'One-City-Nine-Towns' and the '1966' urban system were to facilitate suburban growth through new town development. However, they had different focuses and affected suburban development in different ways. The 'One-City-Nine-Towns' project promoted suburban growth by intensive urban construction. From the outset, high-quality plans and aesthetic landscapes, as well as investment in public facilities and transport infrastructure, were regarded as the main tasks. These were believed to be vital for attracting both capital and residents. By the development of the '1966' urban system, the spatial strategy has become clearer, that is, to develop specialised economic growth poles on the metropolitan scale. While the central city would be further upgraded to accommodate service sectors, suburban new towns were to be multifunctional urban settlements, yet based on industrial development. Meanwhile, the project intentionally covered vast rural areas, where smaller settlements were to be planned and developed. In essence, however, this strategy was still designed to support the development of new towns. As explained earlier, a new land development policy made it necessary to develop an intensive pattern of land use. This was achieved through concentrating land development in the new towns on the one hand, and relocating farmers in remote villages for a greater land development quota on the other hand. Therefore, the new townships and central villages were designed to accommodate those landless farmers. After the

two projects, new town development was successfully initiated. The following paragraphs turn to an analysis of the policies and practices through which the projects were carried out.

4.5.2 Policies: boosting supply and demand

In order to support new town development, the municipal government launched a series of policies and institutional changes concerning almost all relevant aspects including planning, land leasing, the development system, industrial concentration and population growth. Central to the strategy of these policies was the creation of conditions favouring capital accumulation. State intervention could be divided into four types, both supply and demand. On the supply side, the most important kind of policies addressed land assembly. On the one hand, the municipal government assigned a larger quota for construction land and relaxed land development control in the new towns that were selected as key sites. For example, according to the central state's policy, when agricultural land has been occupied by urban construction, the local government can reclaim agricultural land occupying the same area in other places. The key new towns, however, were allowed to reclaim only half of the total area they converted to urban use, while the remainder would be made up by the municipal government in other places. On the other hand, a range of institutions designed to convert collectively-owned land to state-owned land were launched, such as the state-collective co-development model, housing plot exchange policy (*zhaijidi zhi huan*) and land for social insurance policy (*tudi huan baozhang*) etc. By all these means, the government settled the problem of land shortage and ensured the provision of land in the new towns.

Secondly, the government directly invested in infrastructure construction and mega-projects. This is particular apparent in the pilot project of 'One-City-Nine-Towns'. The government not only undertook primary land development and prepared land to be ready-for-development for private

developers, but also used its power over planning and development control to ensure a quality living environment for all the new towns. The government set up various development corporations to perform these tasks, which were often in charge of primary land development and infrastructure construction, as well as attracting private investment afterwards. Importantly, in order to address financial issues, these corporations were allowed to raise funds through diverse channels, particularly market operations such as loans from banks or private investment companies. In effect, these projects helped lower the cost of development, promote the overall image of the towns, and thus lowered the risk of investment.

On the demand side, policies address both industrial development and real estate development. According to the government's document¹⁴, the strategy was claimed to be 'using industrialization to drive urbanization, meanwhile using urbanization to propel industrialization'. The development of new towns was first understood to be supported by industrial growth. The government endeavoured to attract industrial investment, but wished to concentrate these factories in the industrial parks of the new towns. Importantly, tax generated from the enterprises in these parks was fully refunded to local district governments. Consequently, great incentives were created for local governments to lure enterprises by offering various preferential policies such as under-priced land or tax exemptions. In addition, for large and important companies the governments might even offer real estate in the new towns to their senior managers (Interview D2). This presented an interesting case in which industrial development and housing development were mutually reinforced.

When it comes to real estate development, the government's efforts mainly concentrated on a prosperous housing market in the new towns, which was to be achieved by absorbing large amounts of the population to boost the housing market in the towns. When building the '1966' urban system, policies were

¹⁴ Shanghai Municipality No. 1 Decree: 'Announcement on Promotion of Urbanization in Experimental Towns', 2001

mainly targeted at three groups of people (Figure 4.3). Firstly, local farmers were encouraged to give up their land and relocate to the new towns. The municipality imposed a project of '*Cheng Xiang Yitihua*' (literally, urban-rural integration), which aimed to narrow or eliminate the development gap between the urban areas and countryside by improving farmers' living standards. In essence, the policy urged farmers to leave their rural lives and to work and live in towns and cities. One important practise was the policy known as housing plot exchange (*zhaijidi zhi huan*). Local township governments or the collectives negotiated with farmers to transfer their housing plots to the government in return for acceptable compensation and benefits. Generally, farmers could choose between two alternatives, in-kind compensation or cash. In the former case, farmers were compensated with another new apartment in the government-planned new townships or central villages. In the latter case, they could buy into commodity houses in the new towns, and acquire urban registration status and enjoy their welfare as urban residents at the same time. Therefore, in this sense, urbanising the farmers not only made room for construction, but also created a fresh group of possible residents for the new towns.

Secondly, central residents were encouraged to relocate to the suburbs. In order to attract them with a better living environment and comprehensive public facilities, nearly all the plans for the new towns placed an emphasis on liveability and the local quality of life. Meanwhile, the municipality adopted rigid development controls in the central areas to displace projects and populations. For example, one significant principle known as '*Shuang Zeng Shuang Jian*' (literally, two incenses and two reductions), to increase green space and public space while reducing plot ratios and high-rise buildings, was formally legislated in the *Shanghai Urban Planning Ordinance Amendment* in 2003. It aimed to decrease urban density to relieve environmental problems such as ground settlement and the increasing effects of the urban heat island, while promoting housing prices in the central areas to dispel new arrivals in an indirect way.

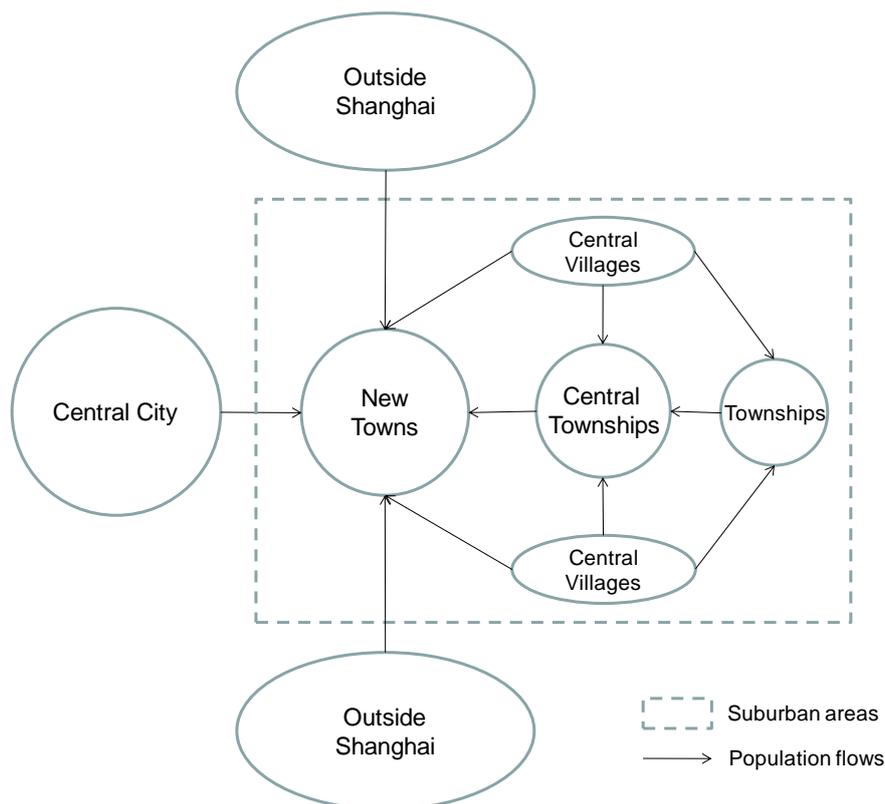


Figure 4.3 Ideal directions of population flows in the 1966 urban system

Source: compiled from *Follow-up study on suburban planning*, Shanghai Planning and Design Research Institute, 2008

Finally, new towns were also planned to accommodate the influx of migrants from other places to Shanghai. Ten years after the suburban new town development was launched, local planners now admit that, rather than pulling massive residents out of the central city, this strategy might be a more feasible solution to control the growth of the core, given that centripetal forces continue to be dominant in Shanghai. It is estimated that the number of migrants will soon exceed local residents in the near future. One interviewee describes the growth potential of the housing market in the new towns (Interview G1):

An apparent fact is that, due to very high housing prices, the fresh university graduates cannot afford commodity houses in the central city at all. We are building the most attractive communities with most convenient transportation, but much lower prices. People will make wise decisions. This is a liveable dream available for the masses.

Therefore, since 2010, policies have begun to identify the white-collar class that have newly arrived in Shanghai as their main targets. The development strategy will focus more on public transit development and large-scale affordable housing projects.

4.5.3 Practices: a mode of suburban governance

For the purpose of extending its power to the outer suburbs, since the 1990s the city has begun to gradually merge with its peripheral counties and convert them into city districts; the earliest assimilations were Baoshan, Shanghai (county) and Jiading, followed by Jinshan, Songjiang, Fengxian, Qingpu and Nanhui. The municipality was then able to directly organise its development strategy in an enlarged space. Administratively, however, through power devolution, district governments were endowed with an increasingly significant role in local growth. In order to mobilise local enthusiasm and enhance local economic vitality, the municipality has gradually devolved its power and responsibility to district and county governments since the 1990s. In 1992, an administrative system known as ‘two-level governments, two-level managements’ was proposed, defining a new political labour division characterised by ‘unified leadership (by the municipality), decentralised administration (by the local governments), and sector-specific guidance (by the municipality)’. For the suburban districts, this was later refined as ‘three-level governments, three-level managements’, an administrative structure constituting the municipality, the district government and a number of town and township governments. When the new town project was launched, the district governments themselves were in charge of the development.

Therefore, suburban development in Shanghai involves a dialectical process of both consolidation and fragmentation (Figure 4.4). First and foremost, development results from the central city’s thirst for land and other production factors in response to regional and global competition. Within China’s peculiar system of ‘city administering county’ (literally, *shi guan xian*), it owns the

legislative capacity to administrate its surrounding areas. The municipality managed to restructure its jurisdiction and force an amalgamation of the metropolitan area. Nowadays, the municipality controls vital issues of the region, but expands its regulatory influence into the suburban space. In the sector of urban planning and land development, for example, the principle reads as ‘unified plans and regulations, decentralised administration and management’ (Shanghai Urban Planning Management Bureau, 2007). The municipality is not only in charge of formulating metropolitan plans and allocating annual construction land quotas, but also directly administrates the development of all key sites and strategic projects (Figure 4.5). To a large extent, its control lies in its power over the selection of strategic sites and relevant policy preferences and investment in infrastructure construction, which could greatly influence economic activity at the local level. As one planner in the municipal planning and design institute points out (interview G7):

The lessons we learnt from the past ten-year period of suburban development are that, without the support of the municipality, these outer suburban areas have very little chance to grow up into multifunctional new towns in their own right. Only after they were selected as strategic development sites would the municipal government guarantee their land development quota, locate large-scale residential projects and put essential infrastructure into place. It is the municipality that gives them such opportunities.

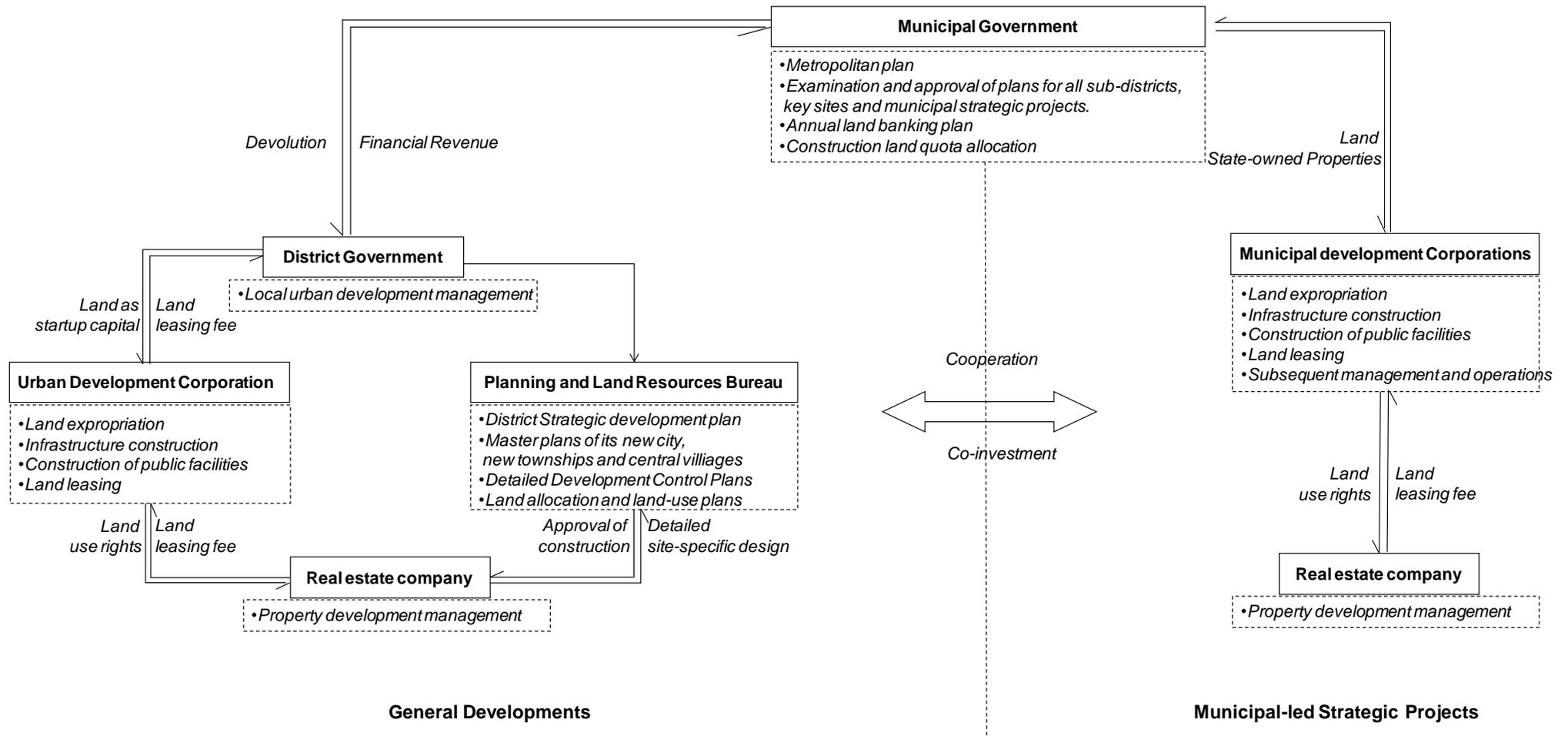


Figure 4.4 Processes of urban development under the municipal-district administrative system

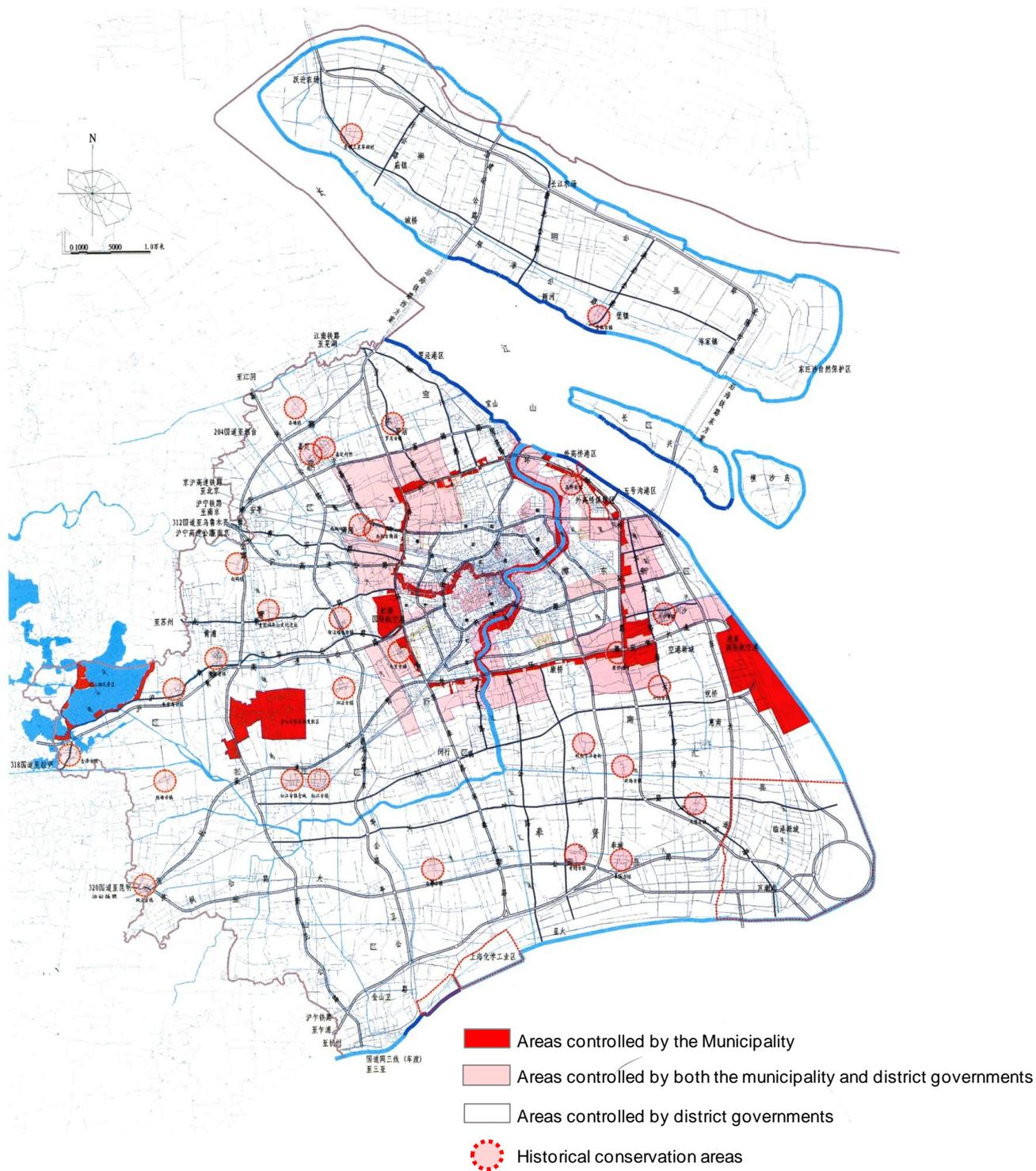


Figure 4.5 Area division by the administration body of planning and construction management

Source: Shanghai Urban Planning Management Bureau, 2007

However, the building of the '1966' urban system is by no means a task initiated by the municipality and implemented by local district governments. In practice, although the district governments are required to complete certain assignments, they were granted the right to orchestrate the development in their own ways (see figure 4.4). The district governments formulated the master plans for the new towns themselves. After acquiring planning approval from the municipality, they set up their own development corporations to take charge of land expropriation, infrastructure construction, land leasing, investment attraction and all other relevant work. Meanwhile, local governments were entitled to set up their own coffers to organise local development. They were allowed to maintain various extra-budget and off-budget revenues; particularly, all land leasing fees and tax generated from local industrial parks would be fully refunded to the localities. Therefore, district governments were not only given great autonomy over local issues, but also great incentives to pursue growth and thus play a leading role in the development process.

The new relationships between the municipality and suburban district governments are not without tension. Facing fierce inter-locality competition, district governments are more concerned about local economic interests than the goals of Shanghai as a whole. They compete with each other for projects initiated by the municipality, but only for those favouring local growth. For example, they are reluctant to contribute their land for resettlement housing development. Those without the municipality's support are also unwilling to lag behind and often go beyond the plans of the municipality. It is notable that, despite being envisaged as complementary centres, all the new towns endeavour to mobilise all possible resources for growth. All have set up their own industrial parks, competing for factories in similar industries. At the same time, all have framed their visions with the rhetoric of an excellent suburban living environment and a high quality of life. Consequently, competition with homogeneous industries is not uncommon. Under such circumstances, the municipality is generally in an uneasy position when

coordinating developments and enforcing its grand plans.

4.6 A new metropolitan structure of Shanghai

Although it may still be too early to state that the spatial restructuring of Shanghai has created a new multimodal model that is recognised in the US as ‘exopolis’ (Soja, 2000), the relationship between the core and the periphery has been redefined. Importantly, with the implementation of the new metropolitan plan, the suburbs are emerging as new subcentres for population growth (Figure 4.6). The total population share of the suburbs in the metropolitan area rose from 57% to 70% between 2000 and 2010. With the exception of Chongming and Jinshan, all experienced spectacular rates of growth varying from 50% to 150%. Notably, as one major site in the first round of new town development, Songjiang was the location with the fastest population growth.

The rapid population growth in the suburbs was partially attributed to the movement of residents from the central city. During 2000-2010, on average, the population of the central areas did not significantly increase. Moreover, five out of nine central districts experienced population loss (see Figure 4.6). Among others, three districts, namely Luwan, Huangpu and Jing’an, experienced a reduction in population of more than 20%. Additionally, the suburbs accommodated the influx of a large number of migrants. Figures 4.7(a) and 4.7(b) show how the proportion of migrants in each area relative to the average level varies across different districts. Concentrations of migrants are found in five suburban districts: Minhang, Fengxian, Jiading, Qingpu and Songjiang, the latter three of which have greater migrant populations than native citizens. The central areas continue to be dominated by native residents, who account for 75% of their total population.

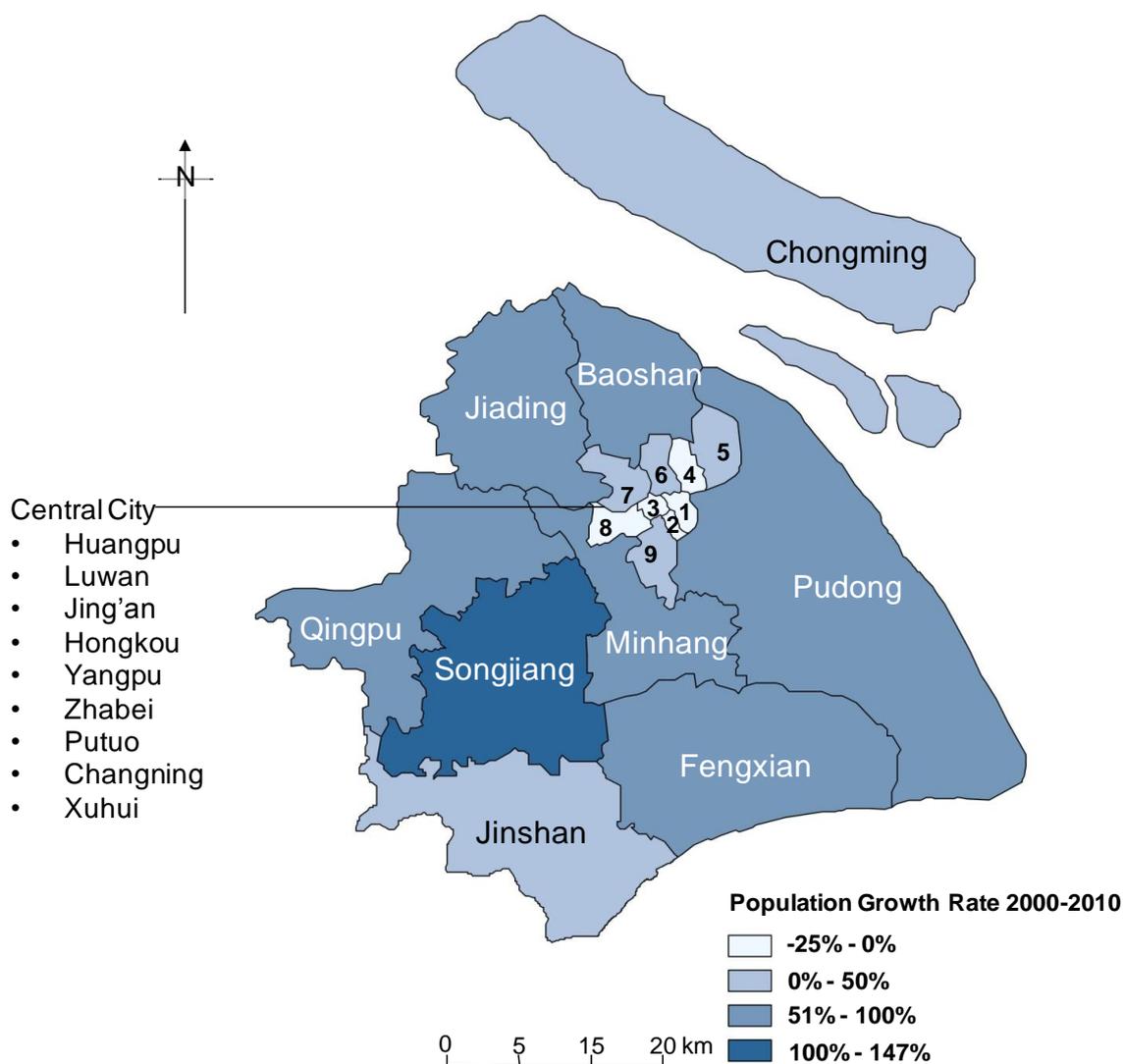


Figure 4.6 Population growth rate 2000-2010 by district

Sources: 2000 and 2010 Shanghai census data

This led to a difference in the composition of the population between the centre and the suburbs in terms of their socioeconomic categories. During 1990-2000, the central cities witnessed an increase in professional occupants and better-off families (He, 2009). Although the latest data on disposable incomes or occupations at the district level is not available, the distribution of education among residents shows a similar pattern in the following decade and implies the higher socioeconomic status of those living in the central districts (Figure 4.7c). For example, the central area has a higher concentration of people who have

undergone higher education, which amounts to about 32% of the total population. In contrast, the ratio of this group to the total population in many suburban districts is merely around 10%, while people with only primary education or less make up more than 60% of all the suburban districts.

Population redistribution was accompanied by economic restructuring in the metropolitan area. Unsurprisingly, the dominant role of the central city has not been weakened, but reinforced. The central areas have enjoyed the fastest economic growth over the past ten years; the annual growth rate of gross domestic product (GDP) has reached as high as 78% (Figure 4.8a). This was accompanied by a successful deindustrialisation process (Figure 4.8b). In 2009, tertiary sectors alone contributed 85% to the total growth of the central areas. Pudong New Area, even after annexing Nanhui district this year, has maintained its leading role in the region and achieved good performance in both manufacturing and tertiary industries. The other suburban districts, however, have grown strong due to the manufacturing sector, mostly through the electrical and electronics, chemicals, equipment manufacturing and automotive industries. In some districts such as Minhang, Songjiang, Jiading and Qingpu, manufacturing industry contributes more than 65% of the local economies.

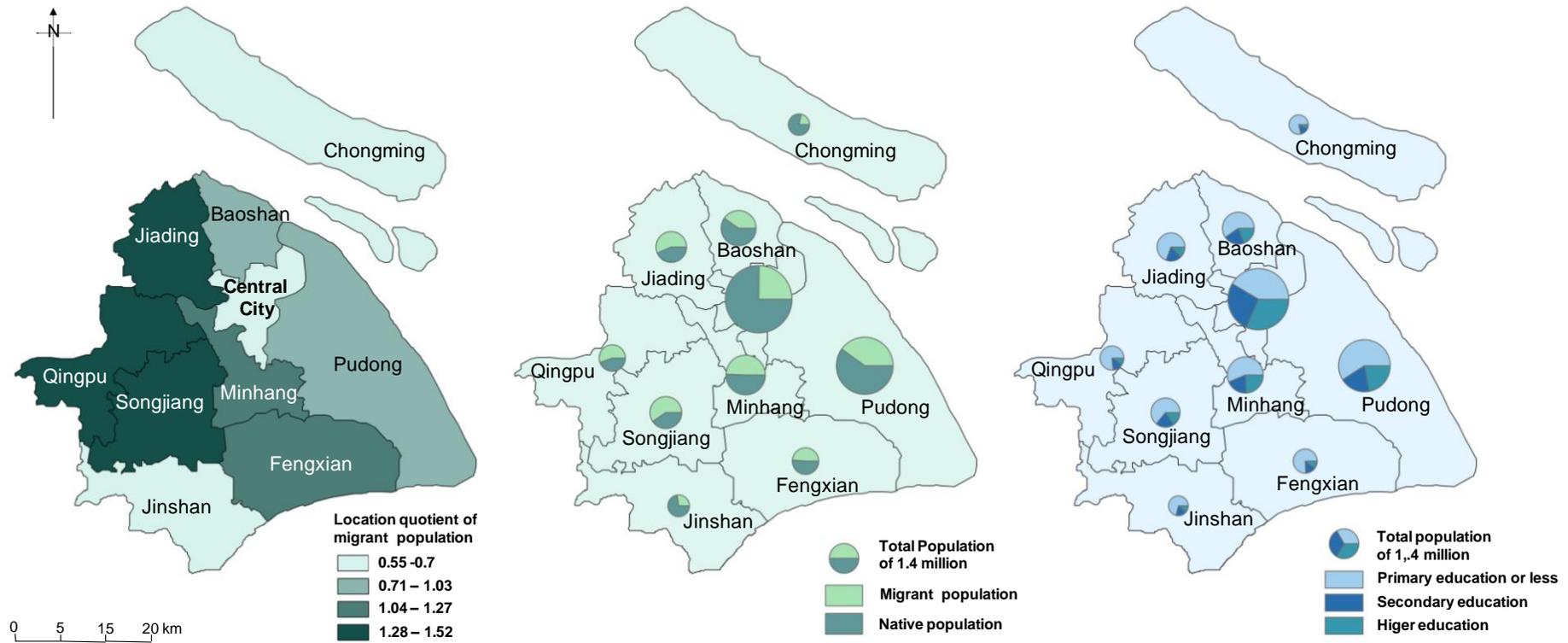


Figure 4.7 Population structure in Shanghai:
 a) concentration of migrants; b) proportion of migrants vs. natives; c) proportion of residents with different education levels
 Sources: 2000 and 2010 Shanghai census data

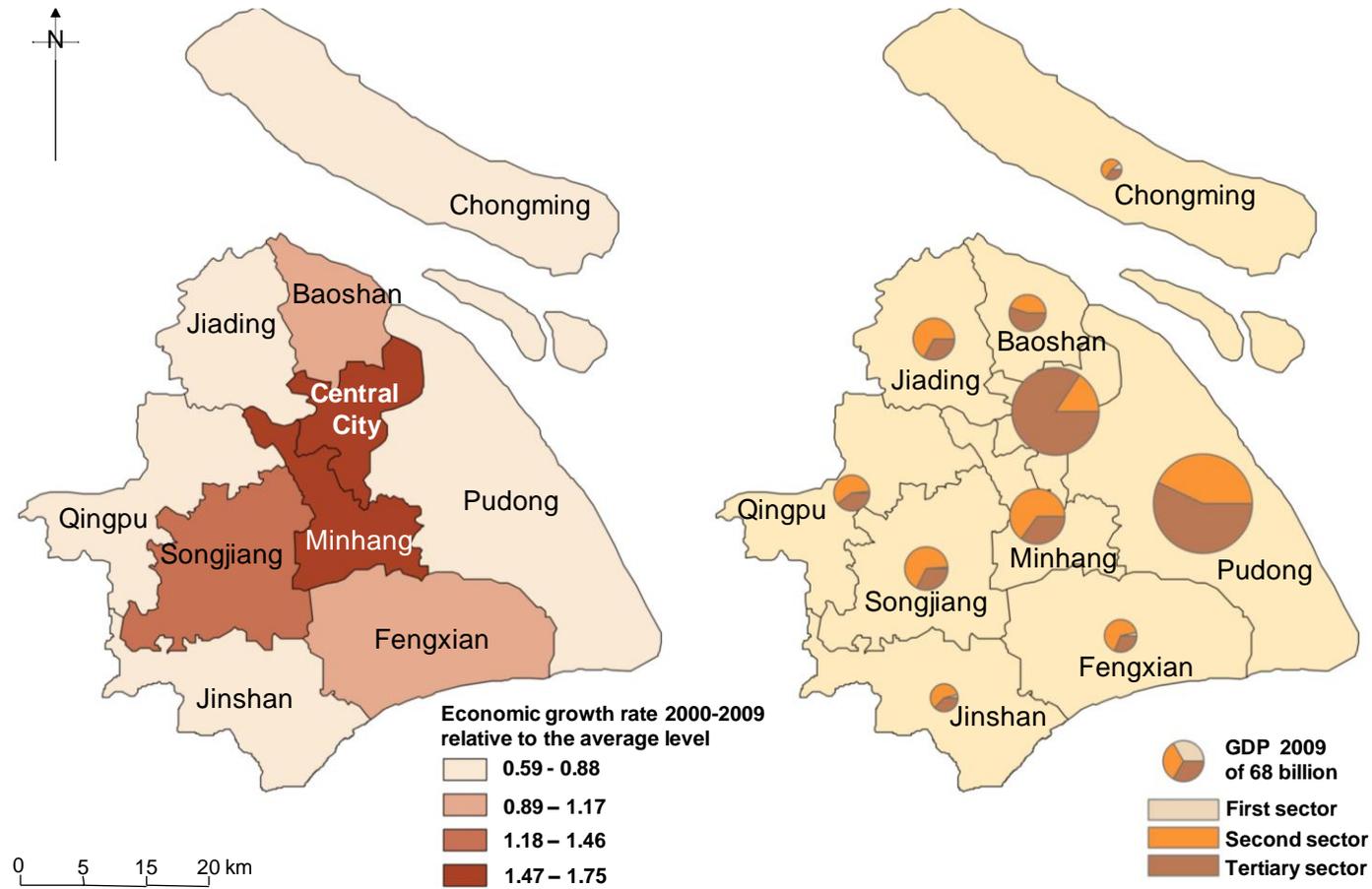


Figure 4.8 Spatial economic structure of Shanghai

a) Distribution of economic growth 2000-2009 in Shanghai b) Economic structure in different districts

Sources: Shanghai Statistical Bureau, 2001; 2010

In short, the new patterns of population distribution and economic growth present a spatial division of labour at the metropolitan scale. On the one hand, the central city has managed to shift its economy towards service sectors and produce a new middle class faction involved in the service-based economy. On the other hand, manufacturing has been decentralised, which in turn has led to the arrival of migrant workers in the suburbs. Given the fact that service industries have also emerged in many suburban new towns, such division of economic sectors is not absolute. Nevertheless, it is evident that while the central city retains its dominant position, the suburbs have grown into new economic centres. With specialised economies, the central city and the suburbs began to complement each other and form an entire mega-city for global competition. In this sense, the municipality's original plan of spatially reorganising its economy has been achieved.

4.7 State-led suburban development in China

China's contemporary suburbanisation represents a case where the entrepreneurial state plays an important role in the process (Figure 4.9). To a large extent, suburban growth resulted from 'a state project'. In the face of new conditions, the municipal government schemed to develop suburban new towns to sustain local economic growth, and managed to ensure efficient implementation of its plan subsequently. The great capacity of the state to facilitate rapid progress meanwhile control the consequences lies in the mixed use of both market mechanism and state interventions.

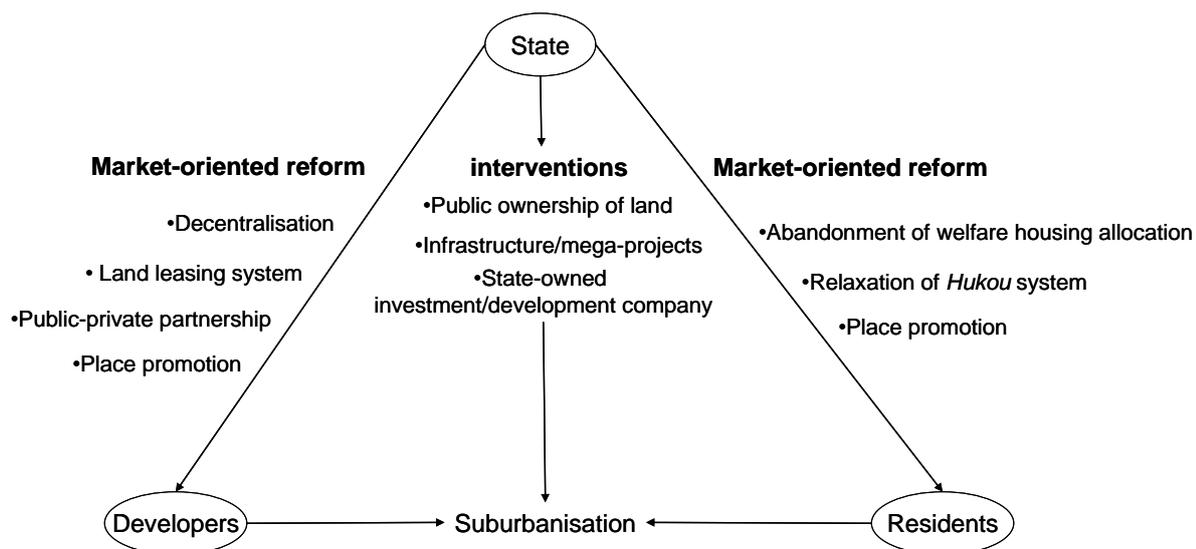


Figure 4.9 State-led suburban new town development in China

On the one hand, through privatisation and commodification of land and housing development, the monopoly power of the state was broken down. In the meantime, market operation was introduced in the production of built environment. Such transition mirrors the path of neoliberalisation noted by Harvey (2005: 2), that is, reform policies aimed to establish ‘an institutional framework characterized by strong private property rights, free markets, and free trade’. Specifically, the government launched a series of institutional changes to facilitate the establishment of a suburban housing market by working on both supply and demand sides. On the production side, fiscal and other powers were decentralised to district governments, leading to the rise of urban entrepreneurialism at the district level. The establishment of land-leasing system permitted the entry of private capital and facilitated the transfer of land use rights based on market mechanism. And, as a result, public-private partnership became a common form of urban governance in response to fierce inter-locality competition.

On the consumption side, the government attempted to stimulate the demand for housing on the periphery by absorbing different kinds of potential residents,

including local farmers, migrants and residents from the central city. The abandonment of welfare allocation of housing liberated urban residents' freedom to choose where to live. Commodity housing newly-built on the periphery became the primary type of new housing provision. *Hukou* system, which was once the key barrier to rural-urban interaction, was greatly relaxed. Residents' employment was no longer necessarily restricted to the locations of their *hukou*. Millions of migrants freely flooded into large cities which provided plenty of employment opportunities. The local government also attempted to urbanise local farmers by offering them urban *Hukou* and associated welfare benefits. Besides, taking an entrepreneurial stance, while the governments intentionally promoted homeownership and domestic consumption as a symbol of well-being, the image of suburbs was also recast as a nice place to embrace such consumer culture and enjoy a good life.

On the other hand, however, the state maintains strong control power over development processes. First and foremost, while land use rights are allowed to be transferred to private developers, the state retains the public ownership of urban land and adopts a top-down plan-making process. In this way, private developers must follow strictly the development plans made by the governments. Second, during the processes, the state set up state-owned development companies to undertake various tasks on its own behalf, such as land expropriation, resettlement, infrastructure construction etc. Although these companies are responsible for their profits and losses, they work directly for the governments and the heads of the companies were appointed by the governments as well. And the government-led projects were usually implemented as political tasks. In other words, governmental interventions, even through political-bureaucratic processes, greatly influenced the shape and pace of suburban development.

In sum, current suburbanisation in China is largely driven by local governments' pursuit of economic growth, facilitated through risk-taking activities, but implemented by cautious privatisation and deregulation, and

full-scale controlled through heavy state interventions. In this sense, the dynamics of China's suburban development is quite close to those driven by urban entrepreneurialism but with some distinct Chinese characteristics. Although the state still plays an important role in the process of suburban development, a step towards neoliberalism is steady, with regard to organisation of decision making (a developmental state), mechanisms for coordination (an emerging market economy), property rights (partially privatisation), incentives (both profit maximisation and social stability) (see also Zhu, 2009:555). This state can no longer simply locates projects through administrative orders but has to influence suburban development through the market. It is this transitional process that results in the prevalence of urban entrepreneurialism.

In the meantime, there are still some legacies of central planning which continue influencing China's contemporary suburbanisation. Firstly, the state is more entrepreneurial in nature than many other states. Because local governments are the *de facto* land owner, they function as not only market regulator, but also market player themselves. Development companies were precisely set up by the governments to operate in the market environment. Therefore, even though the state recycled money into services and infrastructure, the underlying rationale is to stimulate growth instead of welfare provision.

Secondly, urban entrepreneurialism in China is underpinned by not only economic but also political interests. One important feature of China's reform is that, while market transition has taken steady steps in economic sphere, political system has far less been liberalised. Local government officials are appointed by higher levels of administrative bureaucracy. While they pursue personal career advancement based on their achievement in office, economic growth and urban retrofitting are most important indicators.

Thirdly, compared with entrepreneurial governments in Western developed countries, the state in China still holds greater economic capacity and political power, which can be regarded as another important political legacy of central

planning system. With critical resources such as capital and land in its hands, the state possesses the 'commanding power' (Stone, 1989) when dealing with other actors involved in pro-growth coalitions, such as private developers or rural farmers. In addition, the role of the state in social control is still pervasive. In order to guarantee progress and accomplish their goals, local governments tend to use administrative tools to eliminate any obstacles and uncertainties.

Lastly, the municipal government plays a significant role in the development of suburban areas. This is particularly different from the case in the US where suburban entrepreneurialism is usually local-based and even leads to secession from the municipality (Logan and Molotch, 1987; Keil, 2000). In China, suburban counties used to be under the administration of central cities. Through converting these counties into urban districts, the municipal government managed to extend its power across the metropolitan region and acquire more resources to compete with other cities. In order to generate incentives for local government, however, fiscal and administrative powers are decentralised to suburban district governments and also lower-level township governments, which in turn give rise to fierce inter-locality competition and a fragmented pattern of suburbs.

Finally, a typology model based on the role of the state in suburbanisation is developed to identify the mode of Chinese suburban new town development among other types of suburbanisation across the world (Table 4.3). Two aspects of the local state differentiate the types of suburban development. First concerns whether the state's stance is entrepreneurial or managerial. Entrepreneurial state tends to promote suburbanisation as growth machine, while managerial state tends to control rapid urban expansion for environmental or social benefits. Second, the capacity or control power of the state directly determines the actual results of the implementation of its plan. The role of the state is thus divided into four types: strong entrepreneurial state, weak entrepreneurial state, strong managerial state, and weak managerial state. These four types of role often lead to four different types of suburban development respectively: state-led growth developments,

private-led growth developments, welfare developments, and informal developments. It is notable that the stance and capacity of the state here refer to relative terms, and may vary in different times, places and specific projects, and also can coexist in a same country.

Table 4.3 Typology of suburban development according to the role of state

Stance \ Capacity	(1) Weak	(2) Strong
(I) Managerialism	Type I-1 Informal developments	Type I-2 Welfare developments
(II) Entrepreneurialism	Type II-1 Private-led growth developments	Type II-2 State-led growth developments

Table 4.4 Characters of different types of suburban developments

	Type I-1	Type I-2	Type II-1	Type II-2
Types	Informal developments	Welfare developments	Private-led growth developments	State-led growth developments
Mode of dynamics	Placeless opportunistic initiatives	Private-public partnership Anti-growth regime	Private-led pro-growth regime	State entrepreneurialism
Speed of urban expansion	Slow	Slow	Rapid	Rapid
Physical forms	<ul style="list-style-type: none"> •Chaotic landscapes •Poor-equipped infrastructure •Low-quality environment 	<ul style="list-style-type: none"> •Orchestrated landscapes •Poor-equipped infrastructure •Low-quality environment 	<ul style="list-style-type: none"> •Orchestrated landscapes •Well-equipped infrastructure •High-quality environment 	<ul style="list-style-type: none"> •Orchestrated landscapes •Well-equipped infrastructure •High-quality environment
Population composition	Working class	Working class	Middle- to upper-class	Middle- to upper-class
Examples	<ul style="list-style-type: none"> •Scattered private-led developments in post-socialist cities •Slums in Latin American cities 	<ul style="list-style-type: none"> •New town development in UK and South Korea 	<ul style="list-style-type: none"> •Private master-planned communities •Edge cities (e.g. in US and South-east Asia) 	<ul style="list-style-type: none"> •New town development in China

Table 4.4 shows the characters of the four typical types of suburban developments. Type I-1, i.e. spontaneous Informal developments takes place where the role of the local state in suburbanisation is rather passive due to lack of resources. Urban periphery accommodates migrants in low-quality informal houses. Type I-2 refers to welfare projects led by the state, while sometimes public-private partnership is involved. In most cases of this type, the state usually has strong control over urban expansion. If there were any suburban developments, they usually take the form of social housing projects. Different from these two types, Type I-2 is supported by the state to facilitate economic growth. It fits those conforming to the classic growth machine model in America where local entrepreneurial state, due to lack of fiscal capacity, relies heavily on private sector to undertake suburban development. In the end, type I-1 represents the cases where the entrepreneurial state holds enough resource and power to facilitate suburban growth as it plans. Chinese new town development is well captured by this type, at the core of which is a political economy characterised by state entrepreneurialism. For both types, formal pro-growth coalitions formed in the development processes, though the coalitions are led by different actors. Aiming at attracting high-end businesses and middle- to upper- residents, the resultant suburbs are usually built with quality infrastructure and living environments.

4.8 Conclusion

Massive suburban development in China came about after market-oriented reform, along with the country's prosperity; but it is by no means merely a natural consequence of economic growth. In fact, China's peculiar institutions confer land development with a central role in its economy. With the establishment of the land market, land became an important resource in the hands of local governments to generate revenue and attract capital investment. Therefore, from the outset, suburban growth is largely associated with local governments' usage of land development to stimulate economic growth. Earlier local development strategies

relied heavily on extensive land development, characterised by a disordered sprawl and fragmented industrial zone developments. Since 2000, however, a range of new conditions have emerged and posed new challenges to sustained growth. On the production side, confronting increasingly fierce competition, local governments need more land and resources to preserve their economic advantages. Yet thanks to a recentralisation of land and fiscal authority by the central state, they are forced to find a more intensive growth mode. On the consumption side, rapid economic growth in the first two decades after reform has created unprecedented population growth and housing demand. There appears to be an urgent need to deal with the influx of population and resultant urban problems.

It is against such a backdrop that a new round of suburbanisation anchored by new-town development was launched. As illustrated by the case of Shanghai, this new approach was favourable for the government's entrepreneurial efforts for three reasons. Firstly, by engaging in intense interspatial competition, particularly with nearby boom cities in the Yangtze River Delta, Shanghai positioned itself as a global city and needed more space to reorganise its economic activity; that is, to develop service sectors in the city while reinforcing manufacturing industries in the suburbs. Secondly, faced by increasingly recentralised fiscal and land policy on the one hand, and unfavourable external environments during the financial crisis on the other hand, the government urgently needed money to fill the gap in local finance and continue investing in infrastructure to sustain growth. Through building new towns, land and property development could provide an important means of generating land income. It was expected that agglomeration and urban concentration would prop up land and housing prices in the suburbs. Finally, new town development was regarded as a rational approach to intensive growth. On the one hand, new towns were expected to ease the pressure of overconcentration in the central city and improve the efficiency of disordered peri-urban development, dealing with the negative effects of the previous growth mode. On the other hand, a stringent land policy made extensive development impossible

and forced the adoption of a more efficient usage of land. Further growth had to be more dependent on agglomeration economies. In all these aspects, new town projects not only expanded the space of accumulation for Shanghai, but also created a new spatial fix to overcome the emerging barriers to growth.

In practise, the municipal government designed a range of policies and institutions to facilitate new town development. However, unlike previous methods whereby the projects were directly located by the government through administrative orders, the new strategy made efforts to establish preconditions for a prosperous land and housing market in the suburbs. State intervention on both production and consumptions sides could be identified. On the production side, the government organised land assembly and provided infrastructure for new town development. On the demand side, policies aimed to facilitate both industrial growth and housing development at the same time. While industrial investment was attracted to the industrial parks of the new towns by various preferential policies, the government also attempted to influence the demand for housing consumption by absorbing different kinds of potential residents, including local farmers, migrants and residents from the central city.

New town development was also facilitated by a new mode of suburban governance. It resulted from power devolution by the municipal government to create local initiatives. The new relationship between the core and the periphery is not similar to the previous top-down approach under the traditional planning system. On the one hand, the municipality retained the power of decision on key issues for the whole region, as well as appointments and removals of district leaders. On the other hand, however, local district governments were granted great autonomy to deal with local growth themselves. Suburban governance is thus characterised by diverse tensions, involving not only leadership and obedience, but also partnership and negotiation between the central city and the suburbs.

Finally, over the past ten years, due to great effort expended by the government, some suburban places experienced rapid economic and population

growth in a different manner from that brought about by previous suburban development. Zhou and Ma (2000: 227) observed that, for China, ‘the suburbs are still very much subordinate to the central city, both administratively and functionally...the Chinese urban scene is still decidedly dominated by the city in all aspects of city-suburb relationship’. However, an examination of the current metropolitan structure of Shanghai shows that suburbs are becoming a spatial fix for capital accumulation for its own right. Economically, the outer suburbs were not only opened up to absorb industrial capital, but also property investments. Meanwhile, they were also seeing the arrival of both migrants and residents from the central city. Administratively, suburban district governments played an increasingly dominant role in suburban growth, although in a different way to Western countries such as the US, where suburbanisation was often accompanied by the decline of the central city; it is evident that both centripetal and centrifugal forces are contributing to metropolitan growth together. In the US, the shift from the core to suburban areas was largely associated with different changes such as deindustrialisation, the loss of manufacturing jobs and environmental degradation in the centre (Beauregard, 1993; Hill et al., 1995; Adams et al., 1996). In China, however, the central areas and the suburbs are now evolving as complementary nodes. While the central city promotes a service-sector economy, the suburbs maintain their specialism in the manufacturing industry. This arrangement should be seen as a unique pattern of metropolitan growth for China. In the next two chapters, the study will take a close look at Songjiang, the key site of the whole project over the past ten years, to further illustrate in greater detail how suburban growth and new town development is achieved by different actors involved in the process.

CHAPTER FIVE

BUILDING SONGJIANG NEW TOWN UNDER ENTREPRENEURIAL GOVERNANCE

5.1 Introduction

Songjiang is a historical country town which was established during the Tang Dynasty (618-907) and was promoted as a prefecture capital in 1277. It has become the administrative and economic centre of the region since then, and reached the peak of its prosperity along with a thriving textile industry in the Ming Dynasty (1368–1644). After Shanghai was opened to foreign trade and grew to become an important sea port in the 19th century, the old city of Songjiang gradually declined. In 1958, Shanghai launched a satellite town programme to accommodate industrial development. Songjiang County was incorporated into Shanghai and designed as one of its industrial satellites. According to the original plan¹, the target population for Songjiang town was 360,000; the plan, however, was not a success. In a centrally-planned command system, the government directly allocates industries to the satellites. A number of factories owned by the central state and the municipality were directed to Songjiang in 1960 and an industrial area was built up on the west of the old city. Yet, due to lack of funds for non-productive investments, urban construction made little progress in the following two decades.

¹ *Songjiang City Plan* was completed by Shanghai Urban Planning, Investigation and Design Institute in December 1958.

Due to a lack of living facilities, plus lower wage rates and benefits than those received by Shanghai residents, workers were unwilling to settle there. As a result, there was no significant population growth in the city, which rose from 50,672 in 1958 to just 52,492 by 1978 (Shanghai Songjiang Almanac Editorial Board, 1991). Songjiang County remained a predominantly rural county with about 82% of its total population involved in agriculture. The primary sector still accounted for nearly a half of the district's Gross Domestic Product (GDP) (Shanghai Songjiang Statistical Bureau, 2008).

Thanks to a range of market-oriented reforms, Songjiang's economy took off in the 1980s. In particular, it saw rapid growth in the industrial sectors. Even when compared with all the other suburban districts, industrial development in Songjiang was outstanding. In 1994, Songjiang Industrial Zone to the east of the old city was approved as one of the municipal level industrial zones. The total added value of industry in Songjiang maintained rapid and steady growth afterwards. By 2001, the amount reached 8.86 billion Yuan, contributing 59% to local GDP that year. Both the monetary value itself and its proportion in the economy were ranked third among all suburban counties (Figure 5.1). The pace of urbanisation in Songjiang, however, did not accelerate during the two decades after reform. While the three inner suburban districts i.e. 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 by 2001 (Figure 5.2). The urban development and real estate industry was still moderate.

Against this background, the rapid urban growth of Songjiang over the past ten years is astonishing. Contrary to the earlier stage which was dominated by industrial development, the main task was to promote the pace of urbanisation. The aim was to concentrate population in urban settlements by developing a three-tier urban system, i.e. one new town (Songjiang New Town), several central new townships, and a number of central villages. In the following years, urban development and population in Songjiang made unprecedented progress. Songjiang

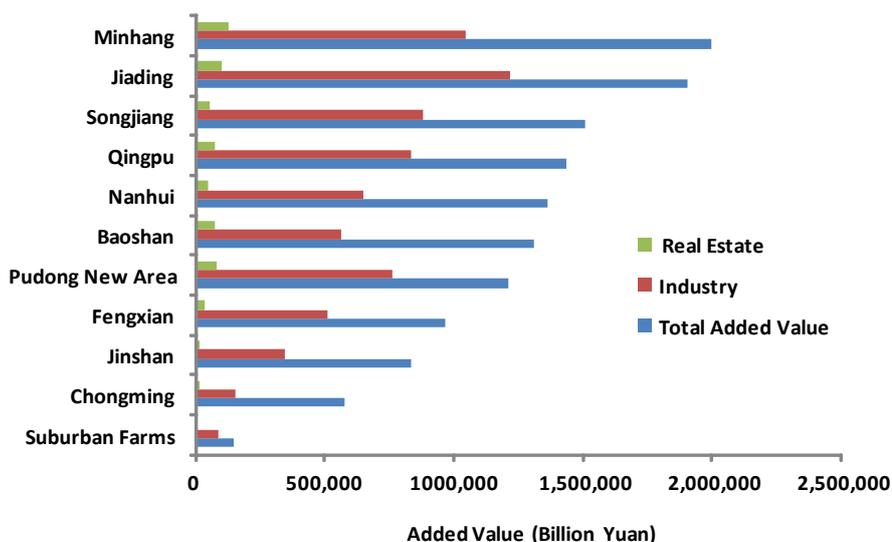


Figure 5.1 Economic performance of suburban districts in Shanghai in 2001
 Source: Shanghai Statistical Bureau and Shanghai Agricultural and Forestry Bureau, 2002

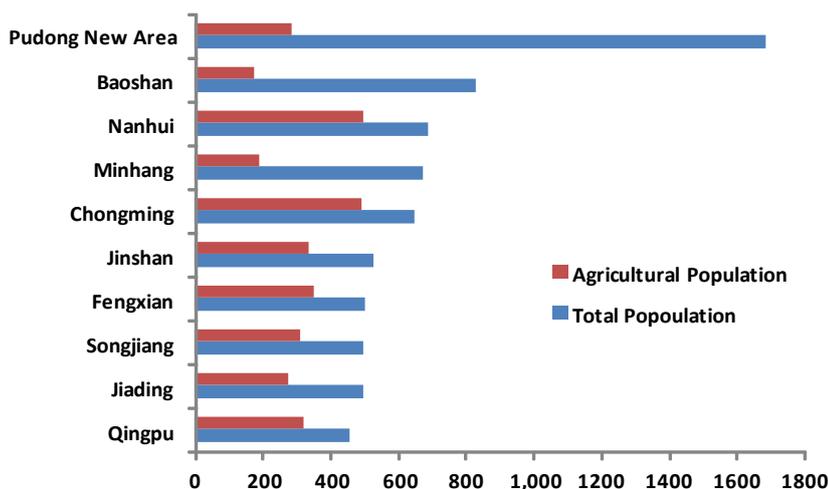


Figure 5.2 Population of suburban districts in Shanghai in 2001
 Source: Shanghai Statistical Bureau and Shanghai Agricultural and Forestry Bureau, 2002

New Town was built in a very short period. From August 2001 when construction started to the end of 2005, 23 km² was turned into urban areas, as planned. It now boasts a comprehensive mixed-use urban area composed of large-scale industrial parks, various residential estate, a university town and public squares, as well as commercial and retail complexes. At the same time, Songjiang witnessed the influx of a large number of people. Over the past ten years, Songjiang has been the

fastest-growing district among all 18 districts and counties in Shanghai with regard to population. By 2010, the total population of Songjiang had increased by 146.80%, to 1,582,398 residents².

Doubtlessly, the rise of Songjiang as a suburban settlement was difficult to achieve in the pre-reform era. Since the introduction of a market mechanism, land began to acquire an exchange value, the suburban frontier began to attract massive real estate development and thus attracted residents. Nevertheless, there are further significant factors beyond the establishment of a market. Suburbanisation in Western countries is often underpinned by coalitions between private business groups and public sectors and their pro-growth agendas (Logan and Molotch, 1987). In the US, growth-coalitions are characterised by the dominant role of private sectors as the local government relies heavily on business interests. Suburban development is now witnessing an increasingly widespread form of private governance in the forms of gated communities or edge cities (Garreau, 1991; Blakely and Snyder, 1997). In Europe, the state exerts the most influence in organising the urban growth machine (Harding, 1991). With the exception of some examples in the UK, business interests on the urban edge have little influence on local issues and are subject to the political consideration of local politicians. Besides, authorities at a higher level have a greater role in structuring suburban governance (Bontje and Burdack, 2005; Phelps et al., 2006).

In the case of Songjiang, it is the state's urban entrepreneurialism that played a crucial role in initiating and facilitating the growth machine. Led by the governments, pro-growth coalitions among a range of interests were formed to facilitate suburban growth. Therefore, this chapter seeks to examine the role of entrepreneurial governance in driving suburban growth. In the following sections, the intuitional context for the emergence of urban entrepreneurialism, the imperative to create innovative space for competition and the rationale for taking new town development as its new focus are firstly described. The new strategy is

² *Songjiang 2010 Census Data Bulletin*, Shanghai Songjiang Statistical Bureau, 6th May, 2011.

then detailed with regard to its discourse, urban form and the new method of space production. After identifying the new strategy, the development process of three mega-projects are presented in section 4 to section 6 to further investigate the entrepreneurial politics involved in the process. Finally, an analysis on economic performance and capital investment in Songjiang is carried out to reveal the underlying growth mechanism and discuss how the strategy managed to stimulate growth.

5.2 The rise of urban entrepreneurialism in Songjiang

5.2.1 Institutional context

The emergence of urban entrepreneurialism in Songjiang is related to the downscaling of governance from the municipal government to localities. After the mid 1980s, in response to decentralisation from the central state to local municipalities, Shanghai Municipal Government further decentralised both fiscal and administrative power to its district governments (see chapter four, section 4.5). Importantly, after surrendering a fixed amount to the municipal government every year, they could keep and use the surplus revenue according to their own needs. Such fiscal flexibility created great incentives for district governments to pursue economic growth and generate revenue.

The Tax Sharing System launched in 1994 further reinforced the engagement of district governments in promoting local growth. In terms of central–local fiscal relations, under the new fiscal system taxes were divided into three types: central taxes, local taxes, and taxes shared between the two. Some major taxes were fully assigned to the central government including Consumption Tax and Customs Duties. Value Added Tax (VAT) was shared between central and local, with central taking 75% of the total. Enterprise Income Tax was originally classified as local tax, but the central state began to share it in 2002, first by 50% and later by 60% in 2003. Therefore, in effect, the new system greatly decreased the tax shared by

municipal governments. In the meantime, however, expenditure responsibilities were not reduced, but increased (Tsui and Wang, 2004).

In such a situation, the Shanghai Municipal Government correspondingly adjusted its fiscal relations with district governments. The strategy, however, was to mobilise local initiatives by further decentralisation of responsibilities and powers. On the one hand, local public expenditure such as education, infrastructure construction and administration fees should be all have been paid by local governments except for large strategic projects. On the other hand, the municipality took the larger part of the taxes. For example, all taxes categorised as 'local taxes' were assigned to the municipality. Meanwhile, the municipality shared major taxes with district governments³; however, in order to provide local incentives, the ratio of the municipality to the locality was 40:60. In addition, a certain amount of tax could be refunded to the local governments as a reward according to the growth rate of their revenue each year, which means that the more revenue generated, the more could be refunded.

Consequently, the great pressure to collect revenues was passed the district governments. Firstly, they were required to take charge of more administrative responsibilities. Secondly, they had to continue promoting economic growth in order to acquire rewards from the municipal government, which included a greater amount of refunded tax and political promotion. In addition, they had to face fierce competition with other district governments. However, there was much less disposable budgetary revenue in their hands. Consequently, they became far more enthusiastic about enabling new projects and developments than ever. On the one hand, they aimed to attract various industries to consolidate the local tax base and reclaim more tax for their budgetary accounts. On the other hand, they had to rely heavily on extra-budgetary incomes to facilitate local growth. It is thus at the district level that the pro-growth economic policies were most apparent.

³ 'Advice on the implementation of municipality-district fiscal reform', Shanghai Municipality No.10 Decree, February, 2004.

5.2.2 Land development as the vehicle for growth

Under China's peculiar land development system, land then became the most important instrument in the local district governments' hands to achieve growth. This was particularly significant for suburban districts. According to Shanghai Urban Construction Committee's Policy Document No.365 (1993)⁴, the district governments of Pudong New Area and another six outer suburban districts, including Nanhui, Songjiang, Jinshan, Qingpu, Fengxian, and Chongming had the right to deal with land leasing management and urban construction themselves. Moreover, apart from only 5% which was paid to the central state, they were also able to keep most of the land lease fee themselves. Although the municipal government began to share land lease fees with suburban local district governments in 2001⁵, as the key site of the municipality's new town project Songjiang District Government was exempt from this policy.

Therefore, an entrepreneurial strategy based on land development emerged to increase both budgetary and extra-budgetary incomes. For budgetary accounts, suburban district governments continued to attract industrial investment through low-priced land and preferential tax policies. Due to this policy, local governments might have suffered a financial loss and been unable to generate profits immediately. But in the long run, manufacturing factories provided a stable tax base. At the same time, local governments relied heavily on leasing land for residential and commercial use to generate large sums of extra-budget income. This was realised via market-oriented processes such as public tender (*zhaobiao*), auction (*paimai*), or open bidding (*guapai*), and land prices were determined by the highest bid in open auctions. In other words, land and property development became a main source of revenue and helped cover the expenses resulting from

⁴ *Document for Instruction on Further Devolution of Land Leasing and Establishment of a Two-level Management System*, Shanghai Urban Construction Committee, 1993.

⁵ *Notice on the implementation of land conveyance fee management*, Shanghai Municipal Development and Reform Commission, No. 50 Decree, 2001

land acquisition and infrastructure construction, as well as other public expenditure. Notably, land and property development did not directly stimulate growth; however. Its main contribution was to generate revenue, which was only a one-off return. The government in turn used the money to support manufacturing industries and other public expenditure. Following this logic, ‘inducing investment’ and ‘leasing land’ became two basic and interrelated paths of local economic growth.

5.2.3 Changing entrepreneurial strategies of Songjiang

Based on the above analysis, for Songjiang District Government to start up the new round of economic growth, it was necessary to promote both industrial sectors and property development. As mentioned above, competitive strategies for the two were quite different. Competitive advantages for attracting industrial capital were mainly related to those location-specific benefits that help reduce cost. Therefore, the government established industrial zones in 1996 to provide low-priced land, tax breaks and other preferential policies to build its competitiveness. However, it turned out to be relatively difficult for Songjiang to attract investment in its property industry. As an outer suburban town, Songjiang had never been a favourable residential area. Although the land price was far less than that in the central districts, few investors were optimistic about commercial and housing projects there (Interview G1; D3). Hence, there emerged an urgent need to change Songjiang’s traditional image as merely a place of production and to redefine the objects of its entrepreneurialism. In other words, applying Jessop and Sum’s (2000) analysis of the entrepreneurial city, it became necessary to promote innovation in urban forms to facilitate capital accumulation in the face of new conditions. Central to this was the drive to develop Songjiang into a desirable suburban town.

The rationale behind the adoption of this strategy spans three dimensions. Firstly, the government needed to collect revenue to invest in land development

and attract industrial capital to sustain economic growth. Secondly, new town development helped boost the local property market so that the government could recapture the rent gap of land value. Thirdly, new town development created the distinctive identity of Songjiang, which in turn facilitated capital attraction. Around this entrepreneurial object, new discourses, a new type of space and new method of development were invented, which effectively mobilised diverse actors in the project. These entrepreneurial strategies and practises are examined further in the next section.

5.3 Building Songjiang New Town as an entrepreneurial city

5.3.1 Entrepreneurial discourse: from industrial satellite to comprehensive suburban new town

In search of a new entrepreneurial strategy, the district government grasped the gist of successful land management: it had to convince investors and home buyers of the town's promising future. This required a distinct image from its industrial past. Therefore, from the outset, planning and urban design was regarded as the first and foremost task. In 2001, when Songjiang was selected by the municipal government to be the key site of its suburban new town development, an international design competition was organised to formulate a new identity for Songjiang. The contracts for the bid were completed in early February 2001. As overseas companies were not allowed to make master plans, the winning design company was required to prepare a strategic plan for the entire 60 km² Songjiang New Town, a design of city style for the 23 km² pilot area (the new development area on the north of the old town), and detailed urban design schemes for a 6 km² central business district and a 1 km² transportation hub, as well as an authentic English-style residential district of 1 km². The government then attempted to

contact some design companies through professional organisations such as the Royal Town Planning Institute (RTPI). Some officials visited Europe in February 2002 and negotiated with eight companies based in the UK, France and Italy, five of which were formally invited to the bid: Atkins, Natural Building Design, Sheppard Robinson from the UK, Architettiriuniti from Italy and S.C.U. from France. Three jury panels, a panel of experts for a technical review, municipal officials for a policy review and district officials for a feasibility review were organised to comprehensively evaluate the submitted schemes. Ultimately, Atkins from the UK was announced as the winner (Wang, 2003). The total fee for consultation amounted to \$6 million (Wang, 2002).

Overall, the final plan⁶ envisages Songjiang New Town as ‘a comprehensive suburban new town of Shanghai’. It aims to strengthen Songjiang’s economic base by industrial development. Manufacturing industry, rather than tertiary industry, will continue to be the pillar of its economy. At the same time, however, the new town’s fresh identity was ‘a liveable city with beautiful living environment’ and ‘a historic, cultural and ecological garden city’⁷. This signalled an abrupt shift in development strategy from that of the 1950s and 1990s (Table 5.1). Finally, it is notable that Songjiang attempted to insert itself into the metropolitan-scale and regional-scale of capital flows. With regard to industrial development, Songjiang contributes to the economic growth of the whole Shanghai metropolitan area. As far as urban development is concerned, Songjiang New Town aims to accommodate the population growth of Shanghai. Above all, Songjiang New Town aims to function as ‘the hub of south-west Shanghai’ and ‘a comprehensive node city in the Yangtze Delta’.

⁶ *The Master Plan of Songjiang New Town* was approved by the Shanghai Municipal Government in 2004. Its final form was based on three previous versions, i.e. *Songjiang Northern New Area Planning and Design (1997)*, *Songjiang City Proper Master Plan (1999)*, and *Songjiang New Town Master Plan (2001)*. However, both place promotion and construction for the plan had actually begun before the plan was approved.

⁷ *Songjiang New Town Master Plan (2004)*, quoted in Editorial Board of History of Urban Planning in Songjiang, 2009, page 61.

Table 5.1 Changing Development Position of Songjiang

Planning Documents	Position	Population Target
<i>1958 Songjiang City Plan</i>	An industrial satellite town based on light industry	360, 000
<i>1982 Songjiang Master Plan</i>	An industrial satellite town of Shanghai The administrative, economic and cultural centre of Songjiang County A historic town	150, 000 (by year 2000)
<i>1990 Songjiang Readjustment Master Plan</i>	An industrial satellite town of Shanghai based on light and machinery industry The administrative, economic and cultural centre of Songjiang County A historic and tourist town	250, 000 (by year 2000)
<i>1996 Songjiang New Area Master Plan</i>	A municipal-level industrial zone The administrative, economic and cultural centre of Songjiang County An important historic and cultural town of Shanghai A growth centre along Shanghai-Hangzhou corridor A medium-sized city and the main urban area of Songjiang county	300,000 (by Year 2030)
<i>1999 Songjiang City Proper Master Plan</i>	A new town and historic cultural town of Shanghai The administrative, economic and cultural centre of Songjiang district An independent modern medium-sized city with comprehensive urban functions	250, 000 (by year 2010)

Table 5.1 (Continued)

Planning Documents	Population Target	Population Target
<i>2001 Songjiang New Town Master Plan</i>	A suburb representing Shanghai's economic strength and competitiveness A medium-sized liveable city An cultural and ecological garden city	300,000 (by Year 2020)
<i>2004 Songjiang New Town Master Plan (approved)</i>	A suburb representing Shanghai's economic strength and competitiveness A liveable city with beautiful living environment A historic, cultural and ecological garden city	600, 000 (by Year 2020)
<i>2005 Revision of Songjiang New Town Master Plan</i>	The administrative, economic and cultural centre of Songjiang district The main outlet for population evacuation from Central Shanghai Higher education base of Shanghai	1,000,000 (by year 2020)
<i>2010 Revision of Songjiang New Town Master Plan</i>	A comprehensive node city in the Yangtze Delta The hub of south-west Shanghai A suburb representing Shanghai's economic strength and competitiveness A liveable city with distinctive natural landscape and historic and cultural heritage	1,100,000 (by year 2020)

Source: Compiled from Editorial Board of History of Urban Planning in Songjiang, 2009

5.3.2 Entrepreneurial space: new town development

The new town was created as an innovative type of space to develop an urban economy. Therefore, over the past ten years, great entrepreneurial efforts have been guided by the principle of *Chengshi Yishi* (literally, the consciousness of being urban) (Editorial Board of History of Urban Planning in Songjiang, 2009:61). In essence, *Chengshi Yishi* is meant to promote the new town as an attractive place to live in order to lure property investment and residents and thus prop up land and property prices. This principle has two important aspects: the introduction of spaces with urban functions and the aestheticisation of landscapes. The overall plan for the new town mixed new residential and commercial developments with existing industrial zones. While the old downtown in the south would be redeveloped for traditional business services and cultural tourism, the new area in the north was planned to accommodate functions such as education and administration, as well as commercial and office development. The layout of the new town turned out to be a mixed-use urban settlement, which had a business centre in the middle, surrounded by Songjiang Industrial Zone in the east, University Town in the north, an English residential quarter in the west, and the old downtown in the south (Figure 5.3).

Moreover, the design of the new town highlighted image construction visually through the creation of aesthetic urban landscapes. For example, urban greening was regarded as the most important element by government leaders. It aimed to provide ‘an ecological environment centring on greening, wining with greening, and setting in greening to embody the essence of modern cities’⁸. In the centre of the new town, two large central green belts were developed to constitute its landscape axes. One was 3.1 km in length and 300 m in width, from east to west, the other one was 1.5 km in length and 250 m in width, from south to north. Together they constituted a green area of 660,000 m², and were to symbolise

⁸ See the official site of Songjiang New Town, <http://fsjd.sj.net.cn/index.aspx>, accessed on 22, April, 2011.

‘vitality, originality, innovation and eco-friendliness’⁹. Construction of these belts was the earliest project undertaken by the district government. Thanks to a total investment of 48 million Yuan, one greenbelt was finished in mid 1998, while the other was completed at the end of 2001. In addition, in the new town, there is also a public square and two central parks, as well as many small green spaces in and around neighbourhoods. According to the approved version of the new town’s master plan, there will be 1433.5 ha of public green space by 2020. If the total population in 2020 is 600,000 as estimated, it accordingly means that the green space per capita will be 24m². In 2005, by virtue of such a high rate of green coverage, Songjiang won the honour of ‘International Garden city’ in the Ninth Global International Garden City Competition.

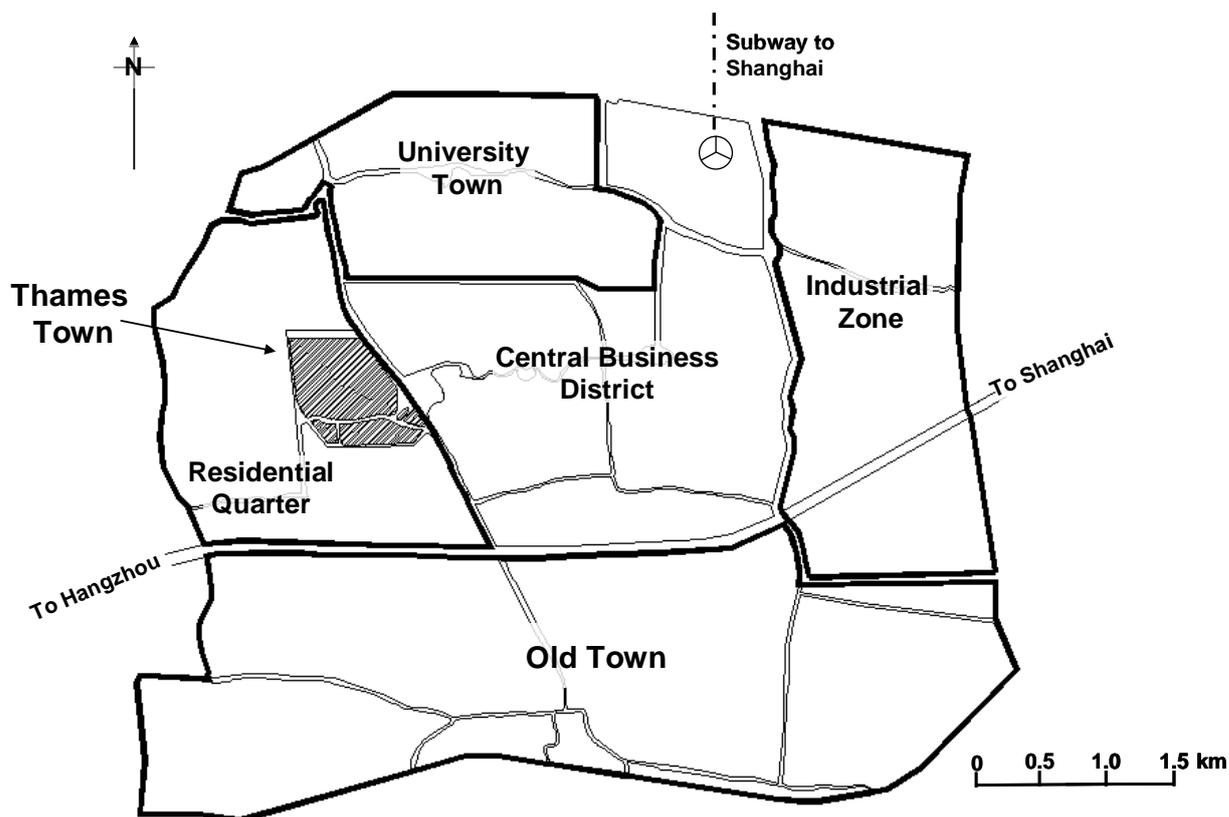


Figure 5.3 Layout of Songjiang New Town

⁹ *Songjiang Northern New Area Planning and Design, 1997*; quoted in the Editorial Board of *History of Urban Planning in Songjiang, 2009*, page 55.

Equally visible and symbolical aestheticisation named ‘*Yi Cheng Liang Mao*’ (literally, one city with two styles) was achieved through strict design control by the local government. The new area in the north is built in an English style (Figure 5.4). The whole city boasts about ‘not only having the flavour of old historic towns of Oxford and Bath, but also the new garden cities as Milton Keynes’ exemplified by the mixed zoning, neighbourhood accessible by the pedestrian, unique green belt and open space’ (Xue and Zhou, 2007). The old city, on the other hand, was restored as a traditional Chinese village with a water landscape. Not only were the key heritage sites preserved and refurbished, but all newly-developed buildings were required to follow the traditional style. For instance, the height of all buildings along the rivers and in the old market areas must not exceed two stories. In order to maintain a coherent look, all buildings should also be painted black, white, grey or be natural wood and have traditional-style roofs, doors and windows (see Figure 5.5)¹⁰. Whether the style is based on an English theme or a vernacular theme, it represents an imaginary landscape to link Songjiang with a distinctive and fantasy lifestyle.

¹⁰ See *Songjiang City Proper Master Plan (1999)*, *Songjiang New Town Master Plan (2001)*, *Songjiang Old City Proper Controlling Detailed Planning (2003)*, quoted in Editorial Board of *History of Urban Planning in Songjiang*, 2009, p 67-71.



Figure 5.4 Typical English building style in Songjiang New Town

Source: Photo by author



Figure 5.5 Typical traditional building style in Songjiang old city

Source: Photo by author

In short, the aim of Songjiang New Town was to re-image Songjiang with almost all the popular elements that could be required by people to satisfy their demand for a good life, such as a natural environment, modern living facilities, Western or vernacular themed settings and access to the metropolitan centre. As the advertisement of Songjiang New Town reads¹¹,

With scientific and rational city layout, efficient multi-dimension transport network, stylish and distinctive modern architecture, excellent eco-environment, comprehensive living facilities and services, Songjiang New Town is the most liveable modernized urban area in south-west Shanghai. Like the newest and most beautiful picture painted on a blank sheet, it represents the essence of a 21st century modern city. Meanwhile, having easy access to central Shanghai, it enjoys all the advantages of the metropolis. With its creative spirit and high-quality living environments, Songjiang New Town is destined to be a heaven for people.

5.3.3 Entrepreneurial governance: mega-projects and a new mode of development

To build a new town from scratch was by no means an easy task, let alone making it attractive and profitable. However, the Songjiang District Government successfully achieved its original goal by undertaking four important high-profile prestige developments: Central Green Park, Songjiang University Town, No.9 Metro Line, and a master-planned community, Thames Town:

- **Central Green Park**, a public facility aiming to beautify the urban landscape; developed by the district government.
- **Songjiang University Town**, a facility fostering the development of an urban economy by importing 100,000 students and staff as instantaneous residents of the new town; the town was co-developed by the district

¹¹ See <http://www.fangsong.gov.cn/>, accessed in April, 2010

government, the municipal government, the Municipal Education Commission (MEC), and seven universities.

- **No.9 Metro Line**, an infrastructure providing rapid access to Shanghai and thus opening new markets for housing development in the new town; it was co-developed by the district government and the municipal government.
- **Thames Town**, a flagship real estate development which recast the identity of Songjiang as a desirable place to live; it was co-developed by the district government, the municipal government and private property developers.

In effect, none of the projects were individually profitable, but each helped to create favourable conditions for different aspects of a booming real estate market. Altogether, they created an optimistic environment for property investment. Meanwhile, with the exception of Central Green Park, the development of the other three illustrated different pro-growth coalitions of the local government with diverse actors, who were all engaged in tying their economic interests to the rise of the land and housing market in Songjiang. These actors provided important sources to initiate these projects.

The formation of a pro-growth coalition was facilitated by a range of innovative institutional arrangements and a new mode of development, in which Songjiang District Government set up development companies as its agency to finance and organise the projects. Specifically, the 23 km² of land to be built was divided into four parts. Each included a government-led 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 building the Central Green Park and cultivating its surrounding land for commercial and residential developments
- **University Town Construction and Development Co., Ltd. (UTCDC)**, responsible for preparing land for the university town project and the

surrounding land for residential developments.

- **Chengtong Rail Transit Investment and Construction Corporation (CRTICC)**, responsible for participating in the construction of a metro line and the land surrounding the stations for residential developments.
- **New Town Construction and Development Co., Ltd. (SNTDC)**, responsible for building Thames Town, a master-planned real estate project, and its surrounding land for residential developments

The operational mode of these companies was described by the government as ‘taking infrastructure as the leading factor, functional development as the main task, environment improvement as the target, and property development as the driver’¹². Their operations were mainly based on land management. The circuit of capital followed comprised: land acquisition → mega-projects and infrastructure construction → land leasing to private developers and the recovery of investment and profits → reinvestment in developing another plot of land. Land was allocated by the government as initial capital, but the development companies were responsible for their own profits or losses. Meanwhile, the local government acted as collateral security by pledging other state-owned facilities or infrastructure as security and helped the companies to raise initial funds via bank loans. The companies’ task was to acquire collective-owned land in the area through land requisition and resettle farmers. They then had to level the land and construct infrastructure. Afterwards, they were directly in charge of the flagship development, leasing the surrounding land out to private developers. In other words, their operating process was to invest in and build the flagship project first, and then earn returns by leasing the surrounding land to real estate developers. In this way, short-term goals of financing the project and generating land revenue, and long-term goals of attracting residents and developing a suburban settlement, were both achieved. Additionally, these companies also provided a platform from

¹² See the official website of Fangsong street office, www.fangsong.gov.cn/

which various public and private actors were invited to co-develop the flagship projects.

In sum, the building of Songjiang New Town represented entrepreneurial efforts explicitly pursued by the local government to enhance its economic competitiveness in both the Shanghai metropolitan area and Yangtze Delta. When considering the strategy, innovations in three fields can be identified as having contributed to the achievement of the goal. Discursively, a new discourse favouring property industry was envisioned for Songjiang's future development. Materially, new town development was facilitated through the development of mega-projects and practically, a new mode of place production was developed, which not only captured new sources of supply, but also promoted the entrepreneurial governance capacities of Songjiang. Taking the development of three mega-projects, i.e. the University Town, No.9 Metro Line and Thames Town as examples, the next three sections further illustrate the mechanism of the new development mode and how the whole project materialised under entrepreneurial governance.

5.4 University Town: forming a coalition with universities

5.4.1 Bidding for the project

In 1999, the same time as Songjiang was about to establish a promising land market, the country's education department implemented its policy to expand higher education. The total number of students enrolled in universities that year was 1.59 million, an increase of 41.2 percent from 1998¹³. The number continued to grow at approximately 30% per annum in the following years (Li et al., 2008). By 2001 Shanghai had 45 universities with 310,000 students in total. However, the Municipal Education Commission (MEC) aimed to promote the enrolment rate of higher education to 50% in five years, which meant that there would be

¹³ See *China moves to solve graduate unemployment issue*, www.Chinaview.cn, 11st, Jan, 2009.

more than 500,000 students of higher education by 2005. Therefore, in order to accommodate growth, the Municipal Education Commission decided to relocate those universities to the suburbs where large plots of cheap land were available. Its overall redistribution plan¹⁴ was to form a '2+3+X' spatial pattern, i.e. to expand the two existing education areas, construct three new university towns and relocate some professional schools into suburban industrial parks.

The redistribution project was publicly justified as an integral part of the municipality's suburban development project. Universities would not only bring large numbers of people to the newly-constructed suburban settlement, but also provide a catalyst for the development of an urban economy and help form an urban atmosphere in a short period of time. Moreover, it was also claimed that the knowledge spill-over effects and externalities would contribute to local economic growth. Therefore, it was envisioned that the relocation of universities would open up a unique 'education-led' path to rapid (sub) urbanisation¹⁵. For suburban district governments, however, the arrival of universities could generate more tangible benefits. It was expected that, in order to support their relocation, the municipal government would set favourable policies and invest in major infrastructure construction. More importantly, the arrival of the university town project itself could help promote positive expectations about local development, which would immediately inflate land prices and attract investment capital.

Therefore, the attraction of university town projects became a bitter contest among suburban districts. All district governments competed to win by offering a lower land price than their rivals. In the end, Songjiang District Government successfully beat others by donating a free area of 3km² to four universities. Later in 2001, after three universities had been built and begun operation, another three settled in the town. In total, the local government contributed an area of 5.47 km² to the project for free. Moreover, the government promised to invest in and

¹⁴ See *University Redistribution Plan*, Shanghai Municipal Development and Reform Commission, 2002.

¹⁵ Ibid.

undertake land acquisition, resettlement and infrastructure construction for the town. In a sense, instead of soliciting manufacturing industries, Songjiang had placed a bet on universities for growth.

5.4.2 Development process

According to its plan, Songjiang University Town was to be built for a new mode of higher education. As there were seven universities clustered together, they shared educational resources with each other, which helped improve their management efficiency and the quality of education. The degrees offered by the universities are complementary; students are thus accordingly allowed to take different courses in different universities. Moreover, all the universities share common student accommodation, dining rooms, sports centres and theatres, etc. The development of the university town is a joint venture between the MEC, Songjiang District Government and the newly-arrived universities. The Songjiang District Government took charge of primary land development, the MEC was responsible for building public facilities and the universities developed their own campus and teaching buildings¹⁶.

The first and foremost task for all the participants was financing the project; they made many diverse attempts to raise money. Songjiang District Government established Songjiang University Town Development Corporation (SUTDC) to operate the development of the land. The company was given an area of about 4 km² in the north of the university town as its initial capital. With the land as collateral and the local authority as a guarantor, the corporation managed to raise enough money for site formation and infrastructure works via a 1 Billion Yuan bank loan. After the primary development was completed, the land around the university town was leased out for real estate development to recoup the initial investment.

¹⁶ Unlike the others, the construction of the Lixin University of Commerce was the responsibility of the MEC.

The educational sectors had little money to initiate their expansion at the time. In the past, their operation had depended heavily upon governments' revenue budget. Now they had to finance the construction primarily via bank loans and private capital. It was expected that their borrowing could be covered by the enrolment of a huge number of students afterwards. The MEC set up a subsidiary organisation, Shanghai Municipal Education Capital Construction Management Centre (SMECCMC), to undertake its task. With the support of Shanghai municipality, it received a 1.5 Billion Yuan loan from a state-owned bank, the Industrial and Commercial Bank of China, to build common facilities in the town. The construction and management of student accommodation was subcontracted to a state-owned real estate company, Shanghai Oriental Real Estate Co., Ltd. All the universities wished to occupy as large an area of land as possible, to allow for future expansion. In order to secure finance for their new campus, in addition to bank loans, some borrowed research funds from their academic staff, some sold off their old campus in the central city. An interesting case is the development of Shanghai International Studies University. As the university was not able to raise large sums of money, the university campus was fully funded and developed by Shanghai Oriental Real Estate Co., Ltd., and then rented out to the university for 50 million Yuan a year. The university makes these payments using the tuition fees it collects from students. In this sense, some universities are indeed operated as enterprises themselves.

While the financing of the project included mobilising market operations and private investment, the development was carried out as a political task. It was listed as one of the major projects of Shanghai municipality, and directly monitored by the Deputy Secretary of Shanghai Municipal Committee. The heads of all the organisations formed a board which directly monitored and coordinated the whole development process. Additionally, a special office was also jointly established to operate specific tasks. The main responsibility of the board and the office, however, was to ensure the progress of the project as required by the

municipal government. The work was subject to an extremely tight timetable. In May 2000, the town's master plan and design was reviewed and approved. The first phase of construction started soon afterwards in November. The municipal government instructed that the main buildings and facilities should be finished before the next new term began. Therefore, the group leading the project laid down detailed targets for the different stages involved in the construction of each institution. Meanwhile, an incentive mechanism was set up in order to mobilise workers and staff. Progress was monitored and reported every month. By September 2001, a total construction area of 220,100 m² was completed. Three universities began operation in October 2001 and 5,700 students began to live and study in the town. The second phase was constructed in 2003. With another four universities settling there in the following years, at present there are approximately 100,000 students and staff living in the town.

5.4.3 Local economic impact

To assess the economic impact of the university town project, it is first necessary to establish whether the project resulted in profits for those involved. By moving into Songjiang, the universities substantially reinforced their fiscal capacities through the expansion of enrolment on the one hand and the investment of their assets in land and properties on the other hand (Interview, U1). SMECCMC, the agency of the Shanghai Municipal Education Commission (MEC), was not able to pay back its 1.5 billion bank loan in the end, because it was mainly in charge of the development of the non-profitable public facilities of the university town. The money, which was taken from other public expenditure, was eventually paid off by the municipality (Interview, U1). Finally, the development corporation of Songjiang District Government, SUTDC, was unable to pay back the 1 billion Yuan bank loan. Nevertheless, this by no means indicates that the university town was a loss-making investment for the district government. One important reason is that some pieces of land in the hands of SUTDC were

preserved for future sale by the government (Interview G1; D3). In 2006, SUTDC was merged with another of the government's development corporations, New Town Construction and Development Co., Ltd. (SNTDC), who paid off all its debt and meanwhile acquired all the reserved land. In short, the university town project did not make a profit for the municipal and district government itself.

The second issue concerns the overall economic impact of the project on Songjiang as a whole, whereby the governments obtained substantial returns. The project indeed initiated the shift of local development towards an urban economy. Universities not only brought about an immediate influx of population, but also a range of commercial services and developments. In the south of the town, the planned central business district of the new town attracted a number of businesses due to the high expectations of population growth. Constructed by a private real estate company based in Zhejiang province, Kaiyuan Mediterranean Square, a mixed-use complex encompassing office, retail, entertainment, hotel and residential spaces, opened in 2006. Most importantly, the project had a favourable impact on demand for local housing and helped significantly to raise land prices in Songjiang New Town.

In terms of the impact of the universities on local industrial growth and upgrading, however, knowledge spill-over effects were at a much lower level. As most universities specialise in business, humanities and social sciences, they can hardly interact with and contribute to Songjiang's manufacturing industries. Moreover, the university town functions more like a self-contained enclave with few locally embedded activities. For example, only around 1,000 graduates acquire local jobs and settle down in Songjiang per annum. Therefore, it is more appropriate to describe the role of these universities as an infrastructure for real estate development rather than a stimulus for knowledge-based economic growth.

5.4.4 Summary

Functionally, the introduction of the university town indicates that the focus of Songjiang's entrepreneurial strategies went beyond merely supporting manufacturing industries and was actually targeted at the development of an urban economy. The presence of universities, and the large increase in population they brought about, helped foster the development of service sectors and increase demand for local housing. In a similar way, Songjiang also attracted other public institutions to move from the central city or set branches, including four top-ranking university-affiliated middle schools and a top-ranking hospital¹⁷. The suburbanisation process in Western countries often brings about tension caused by rapid growth and provision for collective consumption (Phelps et al., 2010). In the case of Songjiang New Town, however, because growth was greatly associated with the exchange of land, these service sectors actually acted as a vehicle for growth.

In political terms, the local government involved the MEC and the seven universities, or other similar public-service sectors, in the development process to form pro-growth coalitions. Since market-oriented reform, these public-service sectors have increasingly begun to operate in a way that is usually distinctive to enterprises which seek profits on their own terms. They were drawn to Songjiang by cheap land and low development costs in order to expand their businesses. They played a principle role in development, investing capital and taking charge of their projects. On the other hand, the local government, as the *de factor* land owner, welcomed their arrival by providing direct support such as offering free serviced land. Although the local government did not benefit from this project directly, these sectors serve its interests by raising local land and property values. However, the manipulation of the municipal government influenced these two parties. The

¹⁷ For instance, Shanghai First People's Hospital agreed to set up a branch in Songjiang, for which the district government donated an area of land about 27 ha, which was not only to build hospital buildings, but also housing for the hospital's staff.

municipal government encouraged and sponsored the relocation, or expansion, of public-service sectors from the central city to the suburbs on the one hand, and launched institutional changes and policies to mobilise local initiatives on the other hand. In short, the university town and the like functioned as a typical type of Chinese suburban growth machine which was facilitated by a municipality-manipulated coalition between the local government and public-service sectors.

5.5 No.9 Metro Line: harnessing resources from the municipality

5.5.1 Bidding for the project

Accessibility is of particular importance when bringing about suburbanisation. While the new town aimed to create a decentralised settlement, its development was dependent on the city. This is because the city is still the place where the bulk of jobs, living facilities and hot spots for consumption are located. Considering the fact that the level of car ownership in Shanghai and China is still relatively low, mass transit, rather than a high speed system, helped transport as many people as possible. Therefore, an integral part of the municipality's metropolitan development project was the construction of a mass transit system. According to its long-term plan, all the eight suburban districts and one county would be linked to the central city¹⁸.

Apparently, being the first district to have a metro line linked to Shanghai proved to be a significant competitive advantage for the suburb. Almost in parallel with winning the university town, Songjiang District Government began to lobby the municipality to give priority to the No.9 Metro Line that would connect Songjiang to Shanghai. The government made very 'hard' efforts to obtain the

¹⁸ *Shanghai Rapid Rail Transit Construction Plan 2011-2020*, Shanghai Municipal Planning Bureau, 2009.

project (Interview D3). In the process, the university town proved to be a significant bargaining chip in acquiring support from the municipality. Because half of the total population of the university town, i.e. about 50,000 students and staff, needed to go back home to Shanghai at the weekend, it imposed extreme traffic pressure on the bus-based transport system. A metro link to the city was urgently needed to solve the problem. Thus Songjiang became the first outer suburb to have a metro link to Shanghai.

5.5.2 Development process

No.9 Metro Line was one of four metropolitan rail lines proposed in the 1986 Shanghai Master Plan. It was designed to be a major line running through the city, from the southwest end of Songjiang New Town, via a number of major hubs in central Shanghai, to the northeast end of Caolu town in Pudong district, another newly-planned suburban site for affordable housing development. The first phase was a 30.5km line from Songjiang New Town to Yishan Road, where it was joined to the established central metro network. In effect, it connected the urban core with all the peripheral settlements along the line.

The project was mainly led and organised by the municipal government. Shanghai Shentong Metro Co. Ltd. (SSMC), the listed company set up by the municipality to finance, construct and operate the city's rail transit, took charge of its construction as well as its operation after completion. However, although the segments passing through central districts were exclusively funded by SSMC, segments in suburban districts were co-funded by SSMC and the suburban district governments. It was proposed that, as suburban district governments would benefit greatly from this metro extension, they should share the construction costs. Therefore, because the line passed through Songjiang and Minhang, these two suburban districts had to contribute to the investment of the segments in their jurisdictions and stations along the line. Moreover, they were required to finance and undertake primary land development on their own.

Songjiang was in charge of building a 22.4 km² segment and five intermediate stations. The total investment was 4.5 billion Yuan, two thirds of which was raised by the local authority itself. A development company, Chengtong Rail Transit Investment and Construction Corporation (CRTICC), was established by the district government to carry out relevant tasks on Songjiang's behalf. Songjiang Chengtong Corporation (SCC), another government subsidiary specialising in financing and operating government-led infrastructure projects, helped with borrowing money from banks for the project. Using some of its fixed assets such as roads and bridges as collateral, SCC obtained a 3 billion Yuan syndicated loan from eight banks in 2000. With this amount of money, CRTICC was able to complete the pre-construction work. Meanwhile, in order to cover the cost, various pieces of land near each station were given to CRTICC. After primary development, the land could be leased out for real estate development, while CRTICC could keep 70% of the total lease fee as their profits.

In this way, the first phase of the No.9 Metro Line project was completed by the municipal subsidiary SSMC and two district subsidiary development companies from Minhang and Songjiang. The line began operation on December 29, 2007, and its last section connected to the Yishan Road station was opened on December 28, 2008. The management and operation of the line was then transferred to SSMC. Passenger numbers have been increasing since its inauguration and comprised approximately 500,000 per day in 2011. However, ticket prices are fixed to remain at a low level by the municipal government. Like many other metro lines in Shanghai, the No.9 Metro Line actually runs at a loss for SSMC, which is largely subsidised by the municipality every year.

5.5.3 Local economic impact

The non-profitability of the line is not a problem for CRTICC and Songjiang. The district grasped the essence of suburban transportation, that is, the value of suburban transportation does not lie in moving people, but in raising the price of

the land it passes (Fishman, 1987: 143). The debt of 3 billion Yuan was the largest sum ever borrowed by the government and was not without risk at the time. However, as expected, the announcement of the No.9 Metro Line immediately resulted in a rise in the price of land along the line. During the periods of construction, by gradually leasing the land out, CRTICC maintained balance between capital returns and next-stage investment. Along with the maturity of the area in the following years, CRTICC saw the land in its possession dramatically go up in value year after year. When it leased out the last two pieces of land in 2010, the price reached as high as approximately 10 million per mu¹⁹. After a land sale of about 320 mu in total, the company easily paid off its debt.

When its overall impact on the growth of Songjiang is evaluated, the No.9 Metro Line is vividly depicted as ‘the lifeline’ of Songjiang. The travel distance between Shanghai and Songjiang was greatly shortened and the sites in the northeast of the district are within a one hour commute of the centre of Shanghai. It has become possible to work in the central or inner suburban districts and live in Songjiang. The route has consequently activated a housing market in Songjiang and has turned the suburb into a true settlement. Townships along the line such as Jiuting and Sijing have begun to witness massive property development and an influx of residents since 2000. According to the most recent 2010 census, Jiuting, the first stop when entering Songjiang from Shanghai, has become the most populous township in the district. Its population density has reached as high as 7,688 people per km².

5.5.4 Summary

Transport infrastructure has always played a crucial role in suburban growth. Different from Western cities where massive suburbanisation has been facilitated by intensive highway development and private car usage, Songjiang New Town

¹⁹ 1 Km²=1, 500 Mu.

depended on the development of mass transit. As a part of the government's entrepreneurial efforts, the development of the No.9 Metro Line project reinforced Songjiang's connectivity and thus strengthened its competitiveness in terms of attracting both property investment and residents. Meanwhile, in terms of development process, the metro line illustrates a case in which the municipal and local governments co-invested in infrastructure to facilitate growth. On the one hand, the municipal government motivated the local government to join in the development and share its financing burden. On the other hand, Songjiang District Government beat other suburban districts and managed to harness municipal resources to fuel local growth. Afterwards, by creatively linking land sales, housing development and infrastructure funding, the local government overcame the initial capital constraint in infrastructure development, which supported the emergence of a prosperous housing market.

5.6 Thames Town: engaging the capital of private developers

5.6.1 Thames Town as a flagship project

Thames Town was developed in the western quarter of Songjiang New Town as its flagship master-planned community to promote the image of the new town as a good place to live. It was initiated when the municipal government launched its suburban development project of 'One-city-nine-towns' in 2001. As Songjiang was selected to be the key site of the project, the district government was required to construct a master-planned community with a distinctive British building style. Like master-planned developments found in the US, Thames Town is built as a rounded city-like settlement. It is composed of a cluster of gated communities populated with detached single-family houses and low-rise apartments for 1,100 households. Public facilities, including a commercial street, a sports centre, an

international school and other recreational facilities are packaged to form a self-contained settlement. The most distinctive characteristic of the town is its design which features an ‘authentic’ English town flavour (Figure 5.6). The public areas include buildings of Tudor, Victorian and Georgian styles, with a neo-Gothic church surrounded by lawns, a fake turreted castle by an artificial lake and a dock plaza with red-brick warehouses on the waterfront, as well as bronze statues of Winston Churchill, Florence Nightingale, William Shakespeare and Princess Diana. Typical British businesses and lifestyles have also been cloned, with an English pub selling real ale, a fish & chips shop, a Costa Café, an open market with echoes of Covent Garden, and even European-style wedding services (Figure 5.7). The orchestrated and controlled landscapes and the simulated and unreal experiences are reminiscent of Disneyland.



Figure 5.6 Traditional timber-framed houses and an English café on the High Street in Thames Town

Source: Photo by author



Figure 5.7 Western style wedding services and the Gothic-style church in Thames Town

Source: Photo by author

Thames Town was positioned as a high-end prestige neighbourhood. Its distinctive landscape and exotic town atmosphere include scarce amenities that can only be enjoyed by a few people. All single-family houses in the town were built as gated communities. With luxurious, spacious and elegant building styles and identifiable English names like Windsor Peninsula, Leeds Garden, and Nottingham Greenland, these communities are reminiscent of Western suburbia and attempt to present a sophisticated way of life. For example, Windsor Peninsula, occupying 99,000 m² in total on the northeast of the town, has 69 single-family houses in 28,638 m². The project sells a ‘gracious English life with a total environment.’ Within ornamental fences are English-style houses characterised by a mansard roof, sloping cornices, timber framing, red terracotta and hand-made tracery; each unit has its own garden, basement, garage and a small swimming pool.

However, Thames Town was also positioned to be a tourist attraction of Songjiang New Town. The project was intended to take the lead in improving the quality of the urban environment and further promote the development of the surrounding areas²⁰. There is no rigid access control into the town, despite a magnificent entrance. The shared public space and living facilities, according to the original plan, are expected to serve the whole residential district of the western quarter of Songjiang. Some public buildings such as Songjiang Art Gallery and Songjiang Urban Planning Exhibition Centre are also built within the area. Even a sightseeing cruise along the river of Shenjing Tang is incorporated. Indeed, Thames Town functions as a window to showcase Songjiang's competitiveness.

5.6.2 Development process

The development of Thames town was undertaken by Songjiang New Town Development Co. Ltd. (SNTDC). It is a joint stock company held by the district government and three affiliated development companies of the municipal government²¹: Shanghai Properties Group, Shanghai Star Group, and Shanghai International Group. While the three municipal companies contributed a total investment of 1 billion Yuan, the district government used the land in the western quarter as its contribution and has taken charge of daily management. SNTDC was established to construct the planned 7.36 km² residential district in the western quarter, including Thames Town. The company did not directly take part in detailed design and construction once the land has been leased out; but because Thames Town was the government's flagship project, the company took a hand in

²⁰ Atkins China Ltd, 2002, The Detailed Planning of 'Shanghai Songjiang English Style Residential District. (In Chinese)

²¹ All three companies were set up by the municipal government as vehicles for urban development. Shanghai Properties Group is the state-owned development company set up by the Municipal Land Reserve Centre; Shanghai Star Group is a leading local real estate company directly affiliated to Shanghai Properties Group; and Shanghai International Group is the Investment Trust Corporation set up by the municipal government to fund large infrastructure projects.

the work and managed the town's development personally. With regard to SNTDC's own interests, it expected that Thames Town would give the whole western quarter a good reputation and thus raise land prices. After earlier preparation such as detailed planning and design, land acquisition and the construction of major infrastructure, blocks of land in Thames Town were leased out to private developers, including several commodity housing subdivisions and the commercial area. SNTDC itself constructed other public facilities such as schools, supermarkets, a sports centre, Songjiang Art Gallery and Songjiang Urban Planning Exhibition Centre.

The project was an attractive opportunity for private developers because it was well-planned and sponsored by the government. Many investors expressed their interest during the period of recruitment; SNTDC finally made deals with four of them. Three well-established real estate companies, namely Sansheng Hongye, Shanghai Hengshi, Xuhui Shangjian, were commissioned to construct one villa-style residential subdivision each. A newly-founded company, Henghe Property originating from Zhejiang province, was in charge of the commercial area and three surrounding residential subdivisions. This company became the primary partner with SNTDC. In total it purchased an area representing one-fifth of the town, including the commercial district in the town centre. The company worked closely with SNTDC in order to attract businesses to rent properties and together they made great efforts to market Thames Town.

The role of SNTDC was quite subtle in the public-private partnership. On the one hand, SNTDC actually acted on behalf of the governments. According to one of its department managers, the company performed many government functions and was de facto a 'quasi-public sector' (Interview D2). SNTDC committed itself to building those unprofitable public facilities which are not interesting to private developers. Moreover, SNTDC directly coordinated with private developers on the governments' behalf and supervised the construction progress according to the governments' requirements. Any modification to the original detailed plan had to

be reviewed and approved by SNTDC. All private developers acquired the land development rights from SNTDC on the condition that they must complete the construction within three years.

On the other hand, the SNTDC is a corporate body which independently manages land development to generate profit. Thames Town was not developed for profit (Interview D1). The company has invested more than 1.4 billion in Thames Town so far and there are two main sources of return. Firstly, land was leased out to private developers through negotiation at the price of about 420,000 Yuan per mu (a *mu* is one-fifteenth of a ha) in 2002. The four developers paid about 270 million Yuan in total for land leasing fees. After 40%-50% was passed to the local governments, SNTDC kept the remainder of the fees as its profits. Secondly, although the company is technically not allowed to undertake real estate development, it developed one gated residential subdivision on its own for extra profit, which generated earnings of about 200 million Yuan. Therefore, its total income of about 360 million Yuan from this project was far less than its input. Yet, land leasing fees for the western quarter are its major source of income. By building Thames Town, the company's strategy was to promote the image of the whole area as a high-end residential district and thus raise land values. This tactic has proved to be successful. When all developments in the western quarter were completed in 2006, SNTDC reaped a very good return on the whole.

5.6.3 Local economic impact

Thames Town was a successful property project in its own terms. When finished in 2006, apartments in Thames Town of 50-200 m² were sold at prices ranging from 4,000 to 6,500 Yuan/m², while villa-style houses of 300-600 m² went for 6,000 to 9,000 Yuan/m². The average prices for apartments and villa-style houses have reached as high as 12,000 to 18,000 Yuan/m² and 25,000 to 40,000

Yuan/m² respectively over the last five years²². These prices are very high considering that the location is far beyond the outer ring of Shanghai; they have almost reached the average level of the central districts (Table 5.2). Nevertheless, sales have been quite buoyant. All the properties in Thames Town were sold immediately upon completion. All actors involved made money from the project. As mentioned above, although SNTDC did not earn profit directly from this project, by leasing other land in its possession at high prices, the company managed to make large sums of money.

Thames Town was initiated to promote the image of Songjiang and create the brand identity of Songjiang New Town. Since the launch of the project, Thames Town has received extensive attention. With its fantasy landscapes and appearance as a little slice of Britain in China, it was widely reported by both local and international media, although sometimes controversially, as a novel model of housing development. It garnered multiple awards and accolades from national and local government and other organisations in the building industry, architecture and the environment²³. Besides, Thames Town also helped place promotion by frequently hosting various public events and cultural activities. Through a series of marketing activities, Thames Town successfully set up Songjiang New Town's reputation as a fine-quality suburban residence.

²² Prices for second-hand houses in Thames Town were taken from two property agencies, Wonderland Property and Xinhong Property, in August, 2010.

²³ The awards won by Thames Town include: 'Top Ten Property Investment for 2004,' 'Top Ten Best Selling Garden Residence for 2004,' 'Shanghai Commercial Innovation Prize for 2004,' 'Golden Nest Prize for Best Waterscape Residence for 2005,' 'National Top Ten Brand Value in Building Industry,' and the title of 'Excellent Green Architecture,' and 'Four High Estate of Shanghai for 2006 (high level of planning, design, construction and management).'

Table 5.2 Average housing price of Shanghai's districts from 2002 to 2008

Subdistrict	Average Price of Residential Housing(Yuan/m ²)	2002	2005	2008
Within the Inner Ring				
Huangpu		5,311	8,067	23,375
Luwan		5,741	8,500	15,771
Jing'an		5,902	7,108	12,738
Hongkou		4,126	8,637	15,367
Within the Outer Ring				
Changning		5,502	7,884	19,283
Xuhui		5,791	7,451	9,226
Putuo		4,416	7,231	11,152
Zhabei		4,410	7,850	7,883
Yangpu		4,316	7,477	8,030
Straddling the Inner and Outer Ring				
Pudong		3,944	7,186	9,992
Baoshan		3,484	7,181	7,526
Minhang		2,977	6,191	8,527
Beyond the Outer Ring				
Jiading		2,739	6,050	7,341
Jinshan		1,921	6,677	5,367
Songjiang		3,327	5,682	8,317
Qingpu		2,588	5,304	8,307
Nanhui		3,437	5,991	6,204
Fengxian		2,049	5,662	6,592
Chongming		3,514	2,730	7,429
Average for the Whole City		4,007	6,698	8,182

Source: Shanghai Statistical Bureau, 2003, 2006, and 2009.

5.6.4 Summary

Thames Town perfectly illustrates the manipulation of flagship projects to build the new identity of Songjiang. Specifically, by developing Thames Towns as a high-end residence with distinctive landscapes which, interestingly, mimic those of Western suburbia, the governments' attempted to promote Songjiang as an

appealing place to live. Central to the new image was the embracing of consumption and lifestyles. This is a clear break from previous place marketing which mainly focused on promoting attributes of a good business climate such as tax breaks, competitive labour costs and favourable institutional arrangements. Songjiang New Town is no longer merely underpinned by industrial production, but has witnessed the rise of a consumption-oriented economy.

The development of Thames Towns further illustrates another type of entrepreneurial governance characterised as a private-public partnership. The state set up quasi-public development corporations to act on its behalf to cooperate with private developers. However, unlike the arrangements found in mega-projects in Western countries which are often dominated by private interest groups, the governments' agency played a leading role. This is because, in the case of China, the government monopolises land and other political resources to achieve its own goals. Another notable feature of the Thames Town project was that the municipality had a more direct influence. The municipal government's three subsidiary development companies acted as shareholders and contributed part of the funds to support the project. As a result, unlike the other three local development companies, the district government did not have absolute control over the development company, SNTDC (Interview D3; G1). Therefore, Thames Town resulted from a pro-growth coalition between the municipality, Songjiang District Government and private sectors.

5.7 Growth machine in action

The erection of Songjiang New Town and its new image as a great place to live marked a significant change in the way suburbs act as a place for capital accumulation. The transformation was often justified as the imperative of economic restructuring from low-end manufacturing to high-level tertiary sectors. According to the head of the district government, 'We don't merely rely on low-cost land any more, but aim at attracting investment by high-quality lifestyle

and first-rate service; we are creating heaven for our investors' (*International Finance News*, 2003). Nevertheless, growth was actually underpinned by other mechanisms. As explained in section 2.2, the reality was that the manufacturing industry remained the pillar of Songjiang's economic growth. The real rationale of new town development was to use urban development to generate revenue, which was in turn invested to attract industrial capital. In this section, it is demonstrated that, through a range of entrepreneurial efforts supported by a wide range of actors, the growth machine started to activate in Songjiang.

5.7.1 Property development

By investing in prestige projects, governments managed to raise the land and property values of the whole area. As one local official pointed out, 'the building of Songjiang New Town just rests on successful urban entrepreneurialism...the key to success is to adopt overall strategies, which means to build growth poles for the whole region' (Wang, 2002). The new town was regarded as an entire property development project, and all the flagship projects served as such growth poles to enhance the exchange value of land and buildings in Songjiang. All the investments proved to be worthwhile. The average land price in Songjiang was about 18 thousand Yuan per mu in 1999; after the announcement of the university town project in 2000, the bid price of nearby parcels instantly increased by more than 38 thousand Yuan per mu. Songjiang has built its name on various property-led projects over the past ten years; in 2010, when a land area of 94, 476m² 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, and the cost per square meter for a house to be built would be more than 16, 000 Yuan²⁴. Furthermore, the development of mega-projects and infrastructure also stimulated a voracious appetite for real estate development and property investment. From

²⁴ See <http://news.dichan.sina.com.cn/sh/2010/09/02/207597.html>

2001 to 2008, the annual growth rate of construction and real estate sectors rose by 22.6% and 27.2% respectively (Table 5.3). The total number of real estate development companies and property agencies registered in Songjiang increased from 108 and 45 respectively in 2000 to 321 and 267 in 2008²⁵.

Table 5.3 Economic growth and industrial structure of Songjiang (2001-2010)

Year	GDP (Billion Yuan)	Manufacturing		Construction		Real Estate	
		Value (Billion Yuan)	Proportion to GDP	Value (Billion Yuan)	Proportion to GDP	Value (Billion Yuan)	Proportion to GDP
2001	15.11	8.86	58.6%	0.52	3.4%	0.57	3.8%
2002	18.01	10.86	60.3%	0.59	3.3%	0.70	3.9%
2003	25.25	16.12	63.8%	1.00	4.0%	1.20	4.8%
2004	34.35	22.77	66.3%	1.36	4.0%	1.63	4.7%
2005	45.64	30.73	67.3%	1.74	3.8%	2.53	5.5%
2006	53.54	35.90	67.1%	1.92	3.6%	2.69	5.0%
2007	64.21	42.99	67.0%	2.12	3.3%	3.71	5.8%
2008	73.45	48.92	66.6%	2.23	3.0%	3.26	4.4%
2009	75.70	47.86	63.2%	2.55	3.4%	4.35	5.8%
2010	90.05	58.40	64.9%	2.95	3.3%	4.06	4.5%
Annual growth rate							
	20.2%	24.2%	-	22.6%	-	27.2%	-

Source: Shanghai Songjiang Statistical Bureau, 2002-2011

5.7.2 Industrial growth

In parallel with building Songjiang New Town, the local government continued to attract industrial investment and build its economic growth on manufacturing. In 2000 and 2003, it developed two Export Processing Zones, granted by the State Council, covering 1.98 km² and 2.9 km² of land in the east and west of the new town respectively. Meanwhile, Songjiang Industrial Zone was further extended. About 30 km² of land was newly developed to accommodate

²⁵ In order to increase the local tax base, all companies with projects and a business presence in Songjiang are required to establish their locally-registered branches there.

industries in 2003. As a result, Songjiang continued to be an important production node of the metropolis. While Shanghai has successfully relocated industrial development out of the central city and enhanced its tertiary industry proportion of GDP from 30.8% in 1990 to 59.8% in 2008, the manufacturing industry itself contributed 66.6% of Songjiang's total GDP (Table 5.4). Compared with Shanghai, on average, the proportion of industries like finance, tourism, and transportation, post and information transmission are still much lower.

Table 5.4 Economic structure of Shanghai and Songjiang (2008)

Indicators	Shanghai	Songjiang
GDP (100 million Yuan)	13698.15	734.48
Contribution Rate of Economic Growth (%)		
Primary Industry	0.1	1.0
Secondary Industry	40.1	69.6
Tertiary Industry	59.8	29.4
Proportion of main industries in GDP (%)		
Agriculture	0.8	1.0
Industry	42.2	66.6
Construction	3.3	3.0
Transportation, post and information transmission	5.6	1.2
Wholesale and Retail	9.2	7.7
Finance and Insurance	10.5	2.7
Real Estate	5.5	4.4
Tourism	7.0	3.5

Source: Shanghai Statistical Bureau, 2009.

5.7.3 Growth mechanism

The key to Songjiang's rapid growth is the district government's success in kicking off a positive chain reaction of capital accumulation through a land-centred growth mechanism in which urban development and industrial growth reinforced each other. On the one hand, the rise of the real estate industry helped raise land prices and contributed to the increase of local revenue. Figure 5.8 shows that, under

the new Tax Sharing System, the local government only shared a smaller portion of the total tax. But after turning over the capital belonging to the higher governments, it is real-estate-related taxes (including land leasing fees) that account for the greatest proportion of local public revenue. In 2010, the figure reached as high as 58.6%. Yet, the construction and real estate industries made only a small contribution to total GDP growth (Figure 5.9). On the other hand, thanks to the money collected by urban development, the government was able to invest in infrastructure development and provide various preferential policies to attract industrial capital. Rapid industrial development then stimulated Songjiang's overall economic growth and brought about employment and an increased population, which, in turn, helped to promote urban development. Consequently, rather than decrease, the contribution of manufacturing industries to GDP has risen, from 58.65% in 2001 to 64.86% in 2010 (Figure 5.9). Therefore, both GDP and local revenue have dramatically increased, with an annual growth rate of 20.16% and 28.90% respectively.

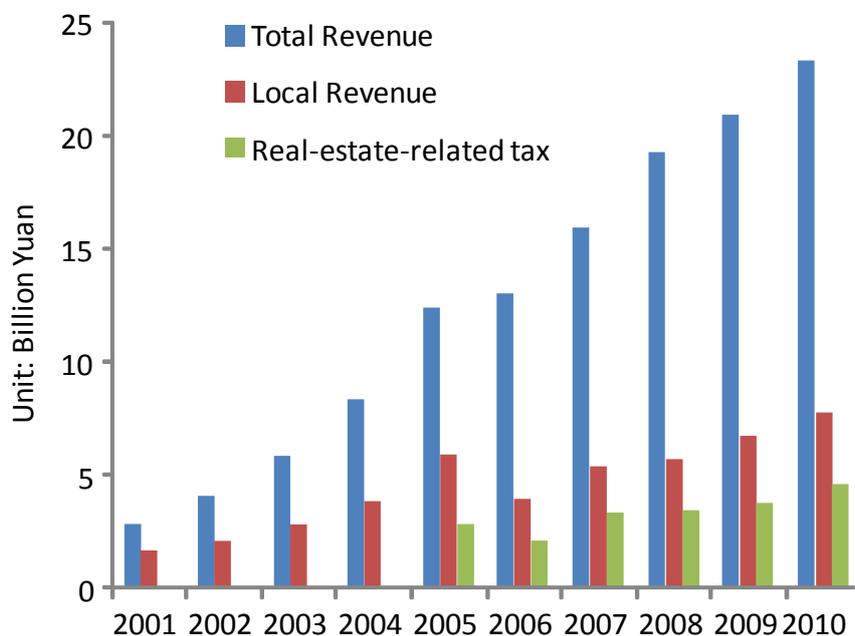


Figure 5.8 Revenue structure of Songjiang District Government 2001-2010

Source: Shanghai Songjiang Statistical Bureau, 2002-2011

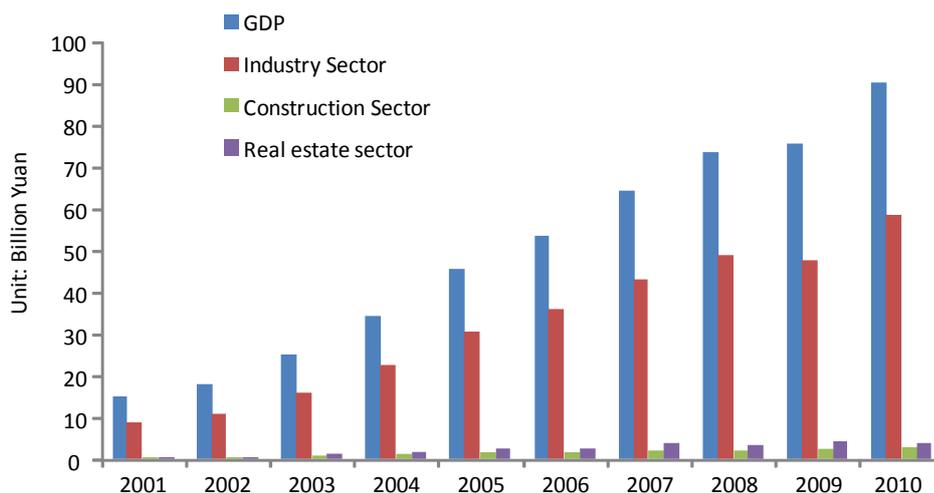


Figure 5.9 Economic structure of Songjiang 2001-2010

Source: Shanghai Songjiang Statistical Bureau, 2002-2011

This mechanism, i.e. using new town development to collect funds first and then invest the money to boost economic growth, can also be further demonstrated by examining capital switching over the past ten years. This was carried out by comparing the ratios of infrastructure, real estate and industrial fixed-asset investment to all economic activity, which reflects how capital investment was distributed among these sectors. The result shows that the ratios of investment in real estate and industry rose and fell alternately. In other words, there was a countercyclical relationship between the two (Figure 5.10). There were two distinctive development periods in the past ten years. 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 clearly reflects that the government invested heavily in infrastructure in the earlier years to initiate new town development. In the meantime, the period saw rapid growth in real estate investment with a decline of industrial investment relative to other types. From 2005 to 2008, after the building boom, investment in both infrastructure and the real estate sector largely decreased. Yet industrial investment saw a relative increase. In short, before 2005, the main focus was on new town development and raised land prices. After that, infrastructure and real estate development began to reduce to a lower level. Because land prices were propped up after the completion

of the new town, the government was able to collect sufficient revenue merely by leasing small amounts of land. Meanwhile, investment in manufacturing and other non-construction industries then increased.

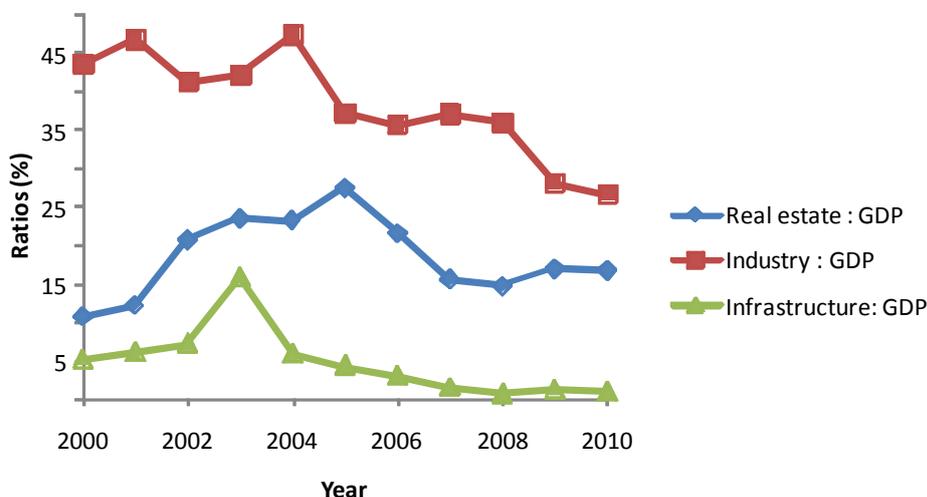


Figure 5.10 Changing ratios of investment in real estate, infrastructure, and industry to GDP in Songjiang 2000-2010

Source: Shanghai Songjiang Statistical Bureau, 2002-2011

Therefore, new town development in Songjiang was by no means similar to the shift of capital into the built environment that characterises the (sub)urbanisation process in Western countries. According to Harvey (1985), massive investment in property development is the outlet for surplus capital in the sphere of production, which is termed capital switching from the primary circuit to the second circuit. Recent studies have emphasised that the built environment is not conditional to the primary circuit, but real estate industry follows its own agenda, which often involves speculation (Beauregard, 1995; Charney, 2001; Gothman, 2006). In the case of Songjiang, there is no evidence that the building boom resulted from the decline of manufacturing industries. On the contrary, they promoted each other. If the changes to total investment in real estate and industry since 2000 are examined (Figure 5.11), it is found that, at least prior to 2008, investment in the two sectors exhibited similar cyclical behaviour. Both experienced rapid expansion in the first few years and later began to show a downturn after 2005. Nevertheless, it is notable that the recent building boom

which reflected speculative profits in real estate began to draw capital away from industrial production. An important background detail is that, in order to stimulate economic growth after the financial crisis of 2008, the central state adopted a 4 trillion-Yuan stimulus plan to spur domestic investment and consumption. It turned out that at least half of the money was not invested in ‘real’ industrial production, but was diverted to stock and the property market (*The Telegraph*, 2009). Correspondingly, since 2008, the new cycle of investment growth in Songjiang saw a rapid increase in real estate development, a relative falloff in industrial investment and a non-significant increase in infrastructure construction. Under such circumstances, the role of new town development as part of the suburban growth machine was further reinforced.

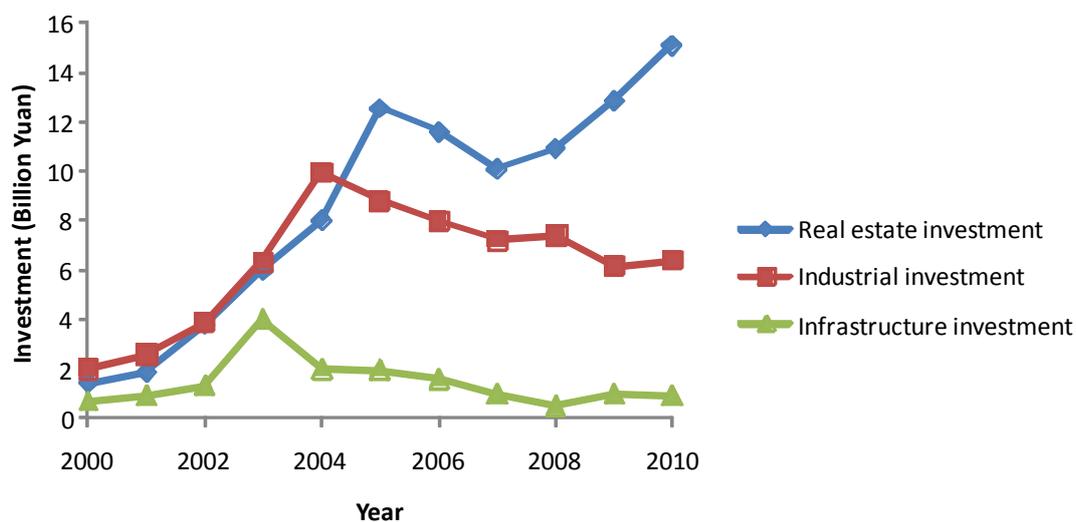


Figure 5.11 Changing total investment in real estate, infrastructure and the manufacturing industry in Songjiang, 2000-2010

Source: Shanghai Songjiang Statistical Bureau, 2002-2011

To sum up, Songjiang’s growth machine involves two capital circuits, i.e. the primary circuit based on manufacturing industries, and the secondary circuit centred on property development; however, their functions were different. On the one hand, the local government managed to attract massive industrial capital to stimulate GDP growth. On the other hand, it used new town development to boost land and property development and collect enough funds to undertake infrastructure construction and make up the gap in local revenue. The growth of

Songjiang, therefore, was realised through a mechanism in which industrial production and property development were mutually reinforced.

5.8 Conclusion

For a long time, viewed either as an industrial satellite town or a rapidly growing industrial zone, Songjiang was an outer-suburban place for industrialisation. In less than ten years, the district has evolved into a multi-functional suburban settlement and become a significant growth pole in Shanghai metropolitan area. This chapter recognised that the rise of Songjiang functioned as a growth machine as seen in many Western countries. However, unlike typical US urban regimes where business groups often play the most influential role in organising pro-growth coalitions (Logan and Molotch, 1987), with both greater incentives and capacities, the local government's entrepreneurialism has played a leading role in the process. Moreover, while the 'suburban entrepreneurialism' of suburban localities is also documented in US and European countries (Althubaity and Jonas, 1998; Phelps et al., 2006), some aspects of Songjiang are found to be unique in the case of China, namely governance capacities, entrepreneurial strategies and development methods.

An analysis of the institutional context reveals that Songjiang's entrepreneurialism resulted from the municipality's rescaling of urban governance. With the launch of the municipality's suburban development project, an adjustment to fiscal and administrative relationships between the municipal and district governments generated great local initiatives. In this sense, Songjiang did not act in exactly the same way as those suburban localities in the US which are able to fully exert their autonomy, or sometimes even manage to secede from the municipality in the pursuit of local growth (Keil, 2000). Nevertheless, by comparison with the urban edge governments in most European cities, where localism is also constrained by their high-level of governments to a greater degree (Harding, 1991), Songjiang District Government and other suburban districts were

given both greater incentives and capacities to organise their entrepreneurial activities. Under such circumstances, to a large extent Songjiang's entrepreneurialism rests on its ability to beat other suburban rivals in bidding for the municipality's strategic support.

Like suburban entrepreneurialism found in Western cities, Songjiang's entrepreneurialism is derived from the local government's need to collect funds and taxes similar to many (post)-suburban places, but in this case it is realised through a different and more sophisticated strategy. With only land as the main resource in their possession, local governments tactically mixed industrial and residential development and created a growth machine in which urbanisation and industrialisation mutually reinforced each other to stimulate local growth. Money collected through land and property development was invested to support the attraction of industrial capital. Consequently, a key element to its entrepreneurial efforts to initiate growth was a method of boosting the local housing market. This was facilitated by intensive investment in infrastructure and public facilities. Through building high-profile mega-projects, Songjiang New Town established its new identity as an ideal suburban place to live. In this way, despite non-residential development and traditional suburban living ideals often causing political tension in (post)-suburban governance (Teaford, 1997), suburban developments in Songjiang effectively achieved a balanced approach between economic development and the provision of collective consumption.

In the end, the development of Songjiang New Town witnessed the emergence of pro-growth coalitions among a wide variety of actors. Unlike the situation in Western countries, however, as the *de facto* owner of the land, the state has great political and financial capacities. Coalitions were organised around land development at the local level. The local government set up its development corporations to manage land development and make money from leasing land on its behalf. As the development of the mega-projects illustrates, these corporations engaged in and formed coalitions with various actors to construct mega-projects

and promote land prices, thus attracting public service sectors by offering free serviced land, co-investing in transport infrastructure with the municipality, developing partnerships with private real estate capital, and in the process, acquiring bank loans involving various financial institutions. The increase in land prices not only created a rent gap and produced large amounts of local revenue, but also helped the government to access more capital and obtain more loans. Beyond the district level, however, the municipality manipulated the entire process. It strategically selected Songjiang as the key site for its suburban project, made favourable institutional arrangements and also directly invested in the development of mega-projects. The suburban regime of China is thus built around a local growth coalition manipulated by the municipality.

All in all, the entrepreneurial governments successfully initiated unparalleled growth in Songjiang. On the one hand, land development opens another conduit for capital accumulation. On the other hand, the manufacturing sector continues to contribute substantially to local growth. This growth pattern, however, determined a heterogeneous composition of Songjiang's population. On the one hand, the manufacturing-based production system relied on a stable, low-cost labour force that was unable to afford the increasingly expensive properties. On the other hand, the land- and consumption-based capital accumulation aims to attract capital elites and the urban affluent. These two newly-arrived populations joined with the local natives to constitute the main groups of residents in Songjiang. The next chapter will focus on how these groups and their residential choices drove and affected the growth of Songjiang.

CHAPTER SIX

MOVING TO THE SUBURBS: DEMAND-SIDE DRIVING FORCES OF SUBURBAN GROWTH

6.1 Introduction

No individual factor brought about China's rapid suburban growth. Institutional changes, particularly the introduction of a land leasing system and fiscal decentralisation, have together offered great incentives for the local governments and various agents to undertake large-scale suburban development. Without pent-up demand for new housing on the urban edge, however, recent suburban expansion would not occur on such a mass scale. The newly-arrived residents and their preferences are also significant influences shaping the suburbs.

Demand-led forces, if there were any, used to be very weak. In the pre-reform era, a set of rigid institutions, including the work-unit system (*danwei*) and household registration system (*hukou*), had greatly prevented suburban growth. There was therefore little urban–rural interaction in the suburban and peri-urban areas. On the other hand, urban-biased policies made central cities the more favourable place to live. Living in the city with an urban registration status meant a steady job, higher wages and better benefits, as well as a full range of living facilities and services provided by work units. Later, although the launch of land reform had greatly promoted urban development and city rebuilding, it did little to improve the attractiveness of the suburbs. Earlier suburbanisation was by and large a government-led process, characterised by government-subsidised residential development and industrial relocation (Zhou and Ma, 2000). The

image of the periphery remained as acres of farmland lacking infrastructure and other living facilities for urban life. Consequently, urban residents were unwilling to move out. The common saying in Shanghai was ‘preferring a bed in Puxi (the central city) to a house in Pudong (the suburbs)’ (Wang and Zhou, 1999).

Since 2000, three important factors have made the idea of living in the suburbs possible, appropriate, or even desirable: a) the relaxation of urban population control and the abandonment of the welfare housing allocation system; b) the rise of consumer culture; c) changes in the suburbs themselves. First and foremost, people are now free to choose where they live and how to live. While millions of migrants have flocked to large cities for opportunities, an increasing number of better-off families have moved to and live in their dream houses in the suburbs. In the meantime, urban residents are experiencing a consumer revolution with an overall improvement of disposable personal incomes and living standards (Davis, 2000). In search of their dream home, people begin to consider elements beyond mere basic housing needs, including comfort, privacy, safety, and symbolic significance. Finally, the suburbs themselves have been turned into better place to live by massive investment in housing and infrastructure construction on the periphery. The burden of commuting to jobs in the central city has been greatly eased by newly-built highways and metro links. Other obstacles such as a lack of living facilities and other services are being progressively mitigated. Added to this are the great marketing efforts made by the governments and developers. Moving to the suburbs now means lower house prices, a larger living space and a better environment. Many suburban gated communities are even packaged as Western suburbia to meet homebuyers’ demands for a good life (Wu, 2010).

Housing consumption and residential preferences are regarded as a significant driving force for suburbanisation in Western countries. Existing studies now indicate that, alongside the increase in housing reform, some of these elements have become increasingly apparent in current suburban development in

China. Nevertheless, there has long been a perception that suburbanisation in China can by no means be based primarily on lifestyle choices by more affluent people (Zhou and Logan, 2008: 156). The heterogeneity of the Chinese suburbs has been widely noted. For example, Zhou and Logan (2008) state that high-end gated communities, apartment developments for working class people and migrant villages coexist in the suburbs. However, the driving forces of demand underlying such spatial heterogeneity are still not clear and there is a lack of empirical studies on this topic. Several questions need to be answered: who are the suburbanites, what has driven them to move to the suburbs, and what are the mechanisms leading to spatial differentiation? Drawing upon a survey undertaken in Songjiang, this chapter addresses this gap of knowledge.

6.2 An overview of growth dynamics

6.2.1 Population growth, booming housing market and structural change

Songjiang enjoyed the largest population growth among all the districts in Shanghai during 2000 to 2010, as its population rose by 146.8% from 0.64 million to 1.58 million. Moreover, the growth reflects an intensive urbanisation. By the end of 2010, more than 1.34 million residents, representing 85.0% of the total, were living in urban settlements. Accompanying this unparalleled growth was an ever booming housing market. Since the launch of the new town project, Songjiang has not only witnessed continuous hikes in real estate investment, but also continuous increases in housing prices in both primary and second housing markets (Table 6.1). For example, despite ups and downs during the last ten years, capital investment in the real estate industry, and sales in both primary and second housing markets, have all maintained very high average annual growth rates of 30.64%, 38.73% and 44.15% respectively.

Table 6.1 Real Estate Market Boom in Songjiang, 2001-2010

Year	Total Investment (Billion Yuan)	Completed Floor Area (m ²)	Sold Floor Area (m ²)	Sales in Primary Market (Billion Yuan)	Average Price (Yuan/m ²)	Transacted Floor Area in Second Market (m ²)	Sales in Second Market (Billion Yuan)	Total Added Value (Billion Yuan)	Vacant Floor Area (m ²)	Vacancy Rate*
2001	1.846	643,400	341,400	-	-	-	-	0.569	-	-
2002	3.732	995,900	993,800	4.247	4,273	250,900	-	0.698	194,000	-
2003	5.945	2,145,800	2,876,500	10.494	3,648	485,400	2.831	1.202	112,300	2.97%
2004	7.99	1,469,100	2,620,700	13.55	5,170	873,000	4.33	1.63	162,400	3.52%
2005	12.535	3,003,700	2,428,500	12.642	5,205	1,127,000	4.66	2.527	237,300	3.59%
2006	11.6	3,525,000	2,937,100	16.879	5,746	1,146,000	2.936	2.687	976,100	12.20%
2007	10.06	3,353,000	4,423,200	10.609	2,398	563,600	6.311	3.711	1,116,100	11.29%
2008	10.9	1,658,000	1,668,100	16.226	9,727	1,011,000	5.837	3.262	851,300	9.97%
2009	12.859	2,300,000	3,210,800	36.411	11,340	754,000	16.191	4.354	741,000	10.14%
2010	15.111	2,036,700	1,821,100	24.259	13,321	2,018,000	16.296	4.062	710,800	11.86%
Average Annual Growth Rate	30.64%	25.81%	46.97%	38.73%	39.95%	46.86%	44.15%	27.18%	-	-

* Vacancy rate = total vacant floor area of each year/total completed floor area in the last three years

Source: compiled from *Songjiang District Statistical Bulletin of National Economic and Social Development 2001-2010*, Shanghai Songjiang Statistical Bureau; *Analysis of Real Estate Market during the Eleventh-Five-Year-Plan period and Reflection on its development for the Twelfth-Five-Year-Plan period*, Internal report of Songjiang Housing Support and Management Bureau, December, 2009

Rapid population growth and a prosperous property market were by no means driven by a single force. As Chapter 5 analysed, the local state has managed to build Songjiang based on two mutually-reinforcing accumulation systems, one based on manufacturing and the other based on land-development. Correspondingly, the development of Songjiang involves four interwoven processes: *industrial restructuring*, *outwards-migration*, *urbanisation*, and *capitalisation*. Each results from both institutional change as well as individual choice, creating a prosperous yet heterogeneous suburban landscape.

6.2.2 Industrial restructuring

The first process is the economic growth of the whole metropolitan area, which has brought about a massive surge in jobs and attracted an influx of migrants. In Songjiang a total of 802,179 new migrants arrived between 2000 and 2010, representing 85.23% of the total population growth during this period¹². Two dynamic processes are included; the first is the self-sustaining rise of Songjiang itself based on industrial growth, while the other is underpinned by overspill effects of the service economy in the central city. On the one hand, an extensive establishment of labour-intensive industries has created large numbers of manufacturing jobs, which in turn have brought about an influx of migrant workers. In 2010, the contribution of the manufacturing industry to the growth rate of Songjiang's GDP climbed as high as 73.4%³. By July 2011, there were a total of 1,362 manufacturing enterprises above a designated size in Songjiang⁴, of which 693 were in the five flagships of the local economy, namely electrical and

¹ It is notable that not all migrant workers living in Songjiang work there as well, as many go to work in nearby suburban districts.

² *Interpretation Series of 2010 Census Data of Songjiang*, 11st May 2011, see <http://www.shanghai.gov.cn/>, accessed on 21st, September, 2011

³ *Analysis of Songjiang's industrial economy in 2010*, 3rd March 2011, see www.tjj.songjiang.gov.cn, accessed on 21st September 2011

⁴ Since 2011, *enterprises above a designated size* are defined as all state-owned enterprises and those non-state-owned enterprises with a sales volume above 20 million Yuan.

electronics, machine building, new materials, the biomedical industry and the chemical industry. In total, all of the manufacturing enterprises provided 202, 828 jobs, about 85% of the total employees in the district⁵. For example, the largest employee in Songjiang is Quanta Computer Incorporated (QCI), which is a Taiwan-based manufacturer of notebook computers and other electronic hardware, and the worlds' largest laptop OEM/ODM manufacturer. In 2010, QCI alone contributed half of the total industrial output in Songjiang and provided more than 40,000 manufacturing jobs⁶. Most of these workers were migrants from inland rural areas. In general, migrant workers in Songjiang have been denied access to homeownership. New commodity houses are priced out of their affordability range. They either reside in dormitories built by the factories, or find low-rent homes in nearby old towns and villages. The result was an ever high demand in the rental market.

On the other hand, a booming service economy in the central city has not only provided numerous opportunities, but also created great housing demand in peripheral areas where rapid access to the centre is available. Unlike the rural-to-urban migrant workers, this group of new arrivals to the city are often upwardly-mobile, young university graduates who have an advantageous position in the labour market and have managed to acquire a decent job in professional services or government agencies. They are forming the so-called 'new Shanghainese' by buying into one housing unit of their own. Furthermore, there are also many institutions making homeownership necessary. For example, migrants' children will not be enrolled in public schools unless they have a family *hukou*, tied with the address of their own houses. In terms of residential choices, however, due to a severe housing shortage and ever-climbing prices in the centre, their opportunities to own desirable apartments in the city are limited. It is much easier for them to purchase properties in the suburbs.

⁵ *Statistic Analysis of Songjiang's Labour Wage in 2010*, 8th March 2011, See www.tjj.songjiang.gov.cn, accessed on 21st September 2011

⁶ See the official site of Quanta East Manufacturing City www.quantacn.com

6.2.3 Outwards-migration

Since intensive infrastructure construction and marketing by the state has successfully shifted the suburbs into a better place to live (see Chapter five), the second driver of Songjiang's growth is housing demand that is led by better-off families' consumption demands. This is an opposite effect from the first. Whereas migrants are drawn by the glory and opportunities of the big city, some urban residents are attempting to escape from its negative aspects. Although suburbs as a desirable living environment lacks roots in China, in order to accommodate the style of consumption, the government and real estate developers have successfully changed people's perception through intensive marketing and advertising campaigns. Suburban housing estates are now heavily invested with a new mainstream standard of aesthetic and domestic consumption.

Notably, Songjiang New Town is built to represent such a consumption-centred lifestyle. In effect, its attraction draws out both local residents from the old downtown of Songjiang and those from central Shanghai. On the one hand, it is interesting that the local middle class such as civil servants constitute the major market for the estates in the new town, which has often been regarded as a key factor for the success of the whole project. For instance some developers originally targeted residents in inner areas such as Minhang and Xuhui and intensively advertised their estates in those districts. But it turned out that the local market itself was large enough (Interview D4, D5 and D6). On the other hand, the 2011 census data shows that 69,801 people in Songjiang are residents from the central city, of which 55,250 arrived in the last ten years. Some were displaced by inner-city redevelopment projects. Yet, at the same time, many middle- to upper-class families bought high-end estates in the suburbs as their second home where they spend their holidays. For these people, it is precisely the ideal of a quiet and green life only found in suburbs that has drawn them to Songjiang.

6.2.4 Urbanisation

Moreover, the new arrivals mentioned above were joined by local landless farmers. Urbanisation releases land and labour for industrial and property development, providing preconditions for both accumulation systems. It is a process in which state intervention is significant. Land expropriation and a policy package of ‘*nong zhuan fei*’ (literally, turning agricultural to non-agricultural status) provided the tools to urbanise the rural areas. In most cases, the district government could acquire the collectively-owned land by offering compensation packages to the collective authorities and landless farmers. For example, as compensation for the loss of their land, each household could either receive a one-off lump sum payment or buy one or two apartments in central villages at a price lower than the market value. Afterwards, landless farmers would not only be registered as urban residents, but also obtain a social security account contributed by the government. With their compensation payments, many families bought into new commodity houses in the new town or nearby townships. Meanwhile, young people found new means of livelihood there. In this way, vast areas of land were cleared to allow industry and urban development. Over the last ten years, the proportion of local non-agricultural population to the total local population has increased from 30.58% to 80.59%⁷. Willing or not, many rural families have moved to urban settlements and started living an urban life.

6.2.5 Capitalisation

Rather than consumer demand, the fourth factor for the growth of the housing market in Songjiang is the demand of capital investment, which is often ignored and has been less examined. Featuring specific qualities, the sale price and rent level of a particular property are not only determined by the relationship between supply and demand in the market, but also greatly influenced by the

⁷ 2011 census data.

comparative advantages of its locality. Therefore, expectations around the future changes which may take place in a location, and may hence expedite an increase in property price, attract investment capital into the market and lead to speculation. As Songjiang is a government-led project with continuous investment in transportation, this is sufficient cause to ensure a rise in anticipation. The statement by one developer significantly reflects the thought of the investors who bet their money on Songjiang, ‘when coming to invest in Songjiang, we didn’t worry much about risks. It was supported by the government and all infrastructures had been fully equipped. We did not even put much effort into marketing and sales as we felt all would be easily sold’ (interview D5).

Nevertheless, there were several other conditions on the demand side that made Songjiang’s estates a hot investment choice; the first was the developers’ aspirations. Before 2005, the minimum capital requirements for entering the real estate market were quite low. Not only were developers able to easily access large sums of money at low interest rates, but homebuyers could also purchase commodity housing with a deposit of only 20-30% or even 0%⁸. Real estate became a key rising industry, giving rise to the emergence of a large number of new private development enterprises. Nevertheless, potential and opportunities were not evenly distributed. For one thing, ever-increasing land prices made building in the centre a high-cost investment. For another, because redevelopment projects were often proprietary to state-owned or large-scale developers with good connections to the government, small-scale developers had limited access to land in advantageous locations. For these reasons, minor developers were pushed out to the periphery, spurring an upsurge in suburban real estate development.

The second wave of intensive investment started up when the central state input four trillion Yuan to sustain economic growth in response to the global financial crisis in 2009. This time, housing developers were joined by many

⁸ See ‘zero down payments opened in Shanghai construction bank’, *Liberation Daily*, 28th July, 2000.

private industrial owners and middle-class families. In the face of an increasingly difficult situation in the export market, many owners of private manufacturing factories found Shanghai's booming property market to be a low-risk way of making profits and preserving the value of their assets. For example, the average transaction price of housing in Shanghai jumped by 108.35% from 10,079 yuan/m² to 21,000 yuan/m² in two years⁹. This means if a buyer bought an apartment of 100m² with a down payment of 300,000 in early 2009, he/she could have sold the house for 2,000,000 Yuan by the end of 2010. Even after paying off the mortgage and extra interest to the bank, it is a more reliable and profitable business than manufacturing production. Therefore, many manufacturing enterprises in the surrounding provinces obtained bank loans in the name of boosting production, but then spent the money on properties in Shanghai. The 4 trillion credit plan was thus widely blamed as the main factor for the dramatic increase of property values throughout 2009 to 2010. Almost around the same time, the overheating economy resulted in high inflationary pressures in the country. With few investment options, property has become a primary store of wealth. Millions of middle class families rushed to purchase their second or third houses as a hedge against inflation. As non-professional investors without large amounts of money, both groups are drawn to the suburban housing market. Compared with investment in expensive apartments in the centre, the threshold of entry is relatively low, the return is quicker, and the capacity for price increase is larger. Some investors bought small units to rent out, others just left their houses empty for a while and then soon sold them on at a better price.

Based on all the analysis above, three groups are identified as being connected to Songjiang's prosperity: migrants from other places, residents from

⁹ See 'Shanghai's Housing market in 2009: retrospect and prospect', published report of Chinese Index Research Institute, 18th January, 2010 (<http://esf.soufun.com/loan/newsdetail/3034309.htm>, accessed on 1st, October, 2010); 'Shanghai's Housing market in 2009: retrospect and outlook', published report of DTZ (a global real estate advisor), 27th December, 2010 (<http://wenku.baidu.com/view/017f12e69b89680203d825e2.html>, accessed on 1st October, 2010).

the central city and local Songjiangnese. Additionally, there is the demand of middle-class investment capital which directly results from a depressed export market and unmanageable inflation. Properties as pure investment, however, rightly provide a private rental market for migrants. In spatial terms, the multiple-dimension of structural changes and a growing and diverse population have created an increasingly crowded, yet heterogeneous Songjiang. It is established that, in order to satisfy their unique housing needs and preferences, different groups tend to gravitate towards different types of housing and locations. Suburban communities are hence developed with different features, and the next section goes on to explain how.

6.3 Spatial differentiation

6.3.1 Housing types: villas versus apartments

As a formal development, Songjiang New Town is deliberately designed as a packaged suburbia featuring aesthetic landscapes, all-around amenities and a high-quality environment. Self-led informal development, known as urban villages and widely found in peri-urban areas, is almost absent here. Housing development in Jiuting and Sijing is less guided and controlled by government-led master plans. Urban villages coexist with formally-developed commodity houses. However, for the purpose of comparison, only formally-developed estates built after the year of 2000 are considered. Therefore, two major types of housing are identified, which contrast with each other in both spatial forms and social groups (Figure 6.1).

Firstly, single-family houses have emerged to distinguish the suburbs from the central city. Most villas were built into gated communities, featuring spacious rooms and decorative styles; but while single-family homes are accessible to the middle-class in Western countries, villas in Songjiang are solely an upscale market for the elite. To cater to their tastes, most villa estates are located far from

crowded urban areas and mass transit, hidden in fields where idyllic scenery is still well preserved for their privilege and status. However, these communities do not have many permanent residents. This is firstly because elites still have businesses in the city and are urban-based, so many villas merely serve as second homes or holiday resorts. Moreover, a large proportion of buyers have bought villas purely as investments. As there is a limited rental market for these luxurious and spacious houses, most houses remain vacant for a long time. Led by a number of flagship master-planned communities, Songjiang's villa development stands out among others in Shanghai (Table 6.2). Since 2001, the total floor areas of villas have always occupied more than 20% of the total estates in Songjiang. The location quotients of villa development in Songjiang have remained above at least 5.0, indicating the quantity of villas here were far greater than the average level of Shanghai. By the end of 2009, the total floor area of villas still accounted for about 18.87% of total houses in Songjiang.

Table 6.2 Villa development in Shanghai and Songjiang (2001-2009)

Year	Shanghai (Thousand m ²)			Songjiang (Thousand m ²)			Location Quotient
	Total	Villa	Percentage	Total	Villa	Percentage	
2001	234,750	4,430	1.89%	5,050	1,220	24.16%	12.80
2002	269,060	5,800	2.16%	6,300	1,220	19.37%	8.98
2003	305,600	9,410	3.08%	18,150	3,660	20.17%	6.55
2004	352,112	12,959	3.68%	23,564	5,474	23.23%	6.31
2005	379,970	13,800	3.63%	26,110	6,050	23.17%	6.38
2006	408,565	14,640	3.58%	24,761	4,689	18.94%	5.28
2007	432,840	16,390	3.79%	28,420	5,510	19.39%	5.12
2008	471,955	18,011	3.82%	30,718	6,045	19.68%	5.16
2009	502,106	19,352	3.85%	33,964	6,411	18.87%	4.90

Source: Shanghai Statistical Bureau, 2001-2010



Figure 6.1 Low-density villa and high-density apartment developments in Songjiang.

Source: photo by author

Furthermore, middle- to high-rise apartments, which are not common in Western suburbs, are widely spread. Guided by the one-city-nine-towns project, earlier development in Songjiang was dominated by low-density villa and high-end estates, which, however, were widely criticised for their incorrect market orientation and ignorance of genuine local demand. Alongside restrictions on detached villa development introduced by the government in 2003, apartment projects began to increase and became the dominant form. By the end of 2010, among all the houses under construction, the units of high-rise buildings, middle-rise buildings and villas accounted for 45%, 26.7% and 11.05% of total construction respectively, so it is noticeable that the proportion of apartments had greatly increased¹⁰. Unlike villas, apartment developments are not dissimilar to those already existing in the central areas. Moreover, while villa developments target the extremely rich, the apartment market shows greater diversity and emphasises product differentiation. In general, whereas high-rise small-unit apartments are clustered along the metro line to attract those employed in the centre, middle-rise estates are often seated near parks and amenities and are targeted at better-off families. Some projects deliberately mix apartments and townhouses together, aiming to capture niche markets of middle-income families. Besides, more commonly than villas, many apartments that were bought as property investments have been rented out, fitting perfectly with migrants' high demand for housing.

¹⁰ *Analysis of Real Estate Market during the Eleventh-Five-Year-Plan period and a Reflection on its Development for the Twelfth-Five-Year-Plan period*, Internal report of Songjiang Housing Support and Management Bureau, December, 2009

6.3.2 Differentiation within the district: whiter-collar commuter suburb, migrant worker suburb and suburban new town

On a larger scale, spatial unevenness is evidenced by the differences between three main urban areas in the district¹¹. Table 6.3 compares their developments. In the north-eastern corner of Songjiang, *Jiuting* is nearest to the central city and is also the first stop of No. 9 Metro Line entering Songjiang from Shanghai. It was once merely a small township until it was formally promoted as an administrative town in 1993. However, Jiuting grew most rapidly in the last ten years, with its population increasing from 50,507 in 2000 to 253,110 in 2010. Being the closest site to Shanghai city, it became one of the hottest real estates in Shanghai as early as the late 1990s. This first wave of the building boom was largely spurred by the arrival of residents from the central city, who were displaced by downtown redevelopment projects. From then on, big real estate developers from Shanghai, one after another, came to Jiuting, turning large tracts of land into middle- to high-rise housing blocks. At the time, the town's government could not afford large-scale investment in infrastructure, but the developers were willing to construct all supporting facilities themselves. Therefore, housing development in Jiuting was less regulated by the government. Private developers exerted considerable influence. Although the local government originally planned to develop low-density villas, the site was soon occupied by high-rise buildings. Today, Jiuting is notable as a dormitory for young, migrant professionals and their families. Nevertheless, as its growth is more of a chaotic expansion of the central area, Jiuting now suffers greatly from under-provision of amenities and services, and problems of congestion.

¹¹ According to *2005 Songjiang New Town Readjustment Master Plan*, Songjiang New Town comprises one major urban area and two other large urban clusters Jiuting and Sijing. In the revised version published in 2011, it is admitted that the other two towns should not be included, as they are hardly an integral part of the main area in terms of function. Nevertheless, because the three do indeed represent one of the largest urban areas in Songjiang, this research continues to focus on all of the three as main study areas.

Table 6.3 Comparison between three main urban areas in Songjiang

	<i>Fangsong</i>	<i>Sijing</i>	<i>Jiuting</i>
Distance to the centre of Shanghai	30 km	27 km	18 km
Area	33.87 km ²	23.48 km ²	32.06km ²
Population	161,438	94, 279	253,110
Population density	4766 people/km ²	4015 people/km ²	7656 people/km ²
Development mode	<ul style="list-style-type: none"> • Government-led commodity housing development 	<ul style="list-style-type: none"> • Developer-led commodity housing development • Government-led resettlement and affordable housing development 	<ul style="list-style-type: none"> • Developer-led commodity housing development
Development positions and functions	<ul style="list-style-type: none"> • The administrative, economic and cultural centre of Songjiang district • Mixed-land use and functions: residence, retail, education, industry 	<ul style="list-style-type: none"> • New township for driving the development of adjacent rural areas • Municipal resettlement and affordable housing base • Residential land use 	<ul style="list-style-type: none"> • South-western gateway to central Shanghai • Residential land use
Landscapes	<ul style="list-style-type: none"> • Low- to middle-density development dominated • Master-planned layout • Aesthetic landscapes • All-around amenities and services 	<ul style="list-style-type: none"> • Low- to middle-density development • Piecemeal development • Lack of amenities and services 	<ul style="list-style-type: none"> • High-density development dominated • Fragmented yet congested development • Chaotic scenes • Lack of amenities and services

Unlike Jiuting, *Sijing* was a traditional watery town with a history of more than 1,000 years, but it has only started growing in the last six or seven years. Being farther away from Shanghai and in the middle of No.9 Metro Line, the town has been less affected by overspill either from the central city or the Songjiang New Town. Its development has relatively lagged behind. Underdevelopment, however, made it suitable for luxury villa developments. The first commodity housing project in *Sijing*, 'Liyin Villa', was funded by a locally based real estate developer in 2004. This was then followed by the construction of 'Beyond the Clouds', 'Silver-lake Villa', 'Jewel Villa', all of which were high-end, single-family villa developments. Things changed soon after the opening of No.9 Metro Line. Firstly, thanks to local convenient transportation and relatively cheap land, the municipality placed one of its resettlement and affordable housing projects in the town. Secondly, real estate developers began to discover the new market potential of *Sijing*. Plots along the new metro line were soon developed into high-rise buildings with small unit apartments. Although the local government disapproved of these changes, it seemed incapable of controlling the trend. As the Deputy Mayor of *Sijing* commented,

Sijing should be only for villa development, and for the rich. But it is all out of our control, you know. For the affordable housing project, it is politics. The municipality took our land almost for free, but sent us only the poor and the elderly. For those newly-built-up apartments, it follows totally market logic. Mass transit comes and then the population spills over here (Interview G5).

High-density developments have soon led to a rapid increase of population in *Sijing*. By the end of 2010, the town had already received 94,279 inhabitants, an increase of more than 222% from the number in 2000. It is widely predicted that *Sijing* will soon become another Jiuting in the next few years. Spurred by this anticipation, newly-built apartments have also drawn large amounts of private investment. However, at present, many of these properties are rented to migrants

working nearby. As a result, the town has witnessed an influx of migrants, particular unskilled workers or odd-job people, which make up more than 80% of its current total population.

Lastly, *Fangsong* represents precisely where the new town project is located. Bordering the north end of the old town of Songjiang, the area in which it now sits was once under the jurisdiction of three different town governments. The three governments were closed down and replaced by a street office under direct control of the district government. As elaborated in Chapter five, the whole urban area was master-planned and built up with a nice living environment and aesthetic landscapes. By 2010, there were a total of 161,438 inhabitants distributed throughout more than 70 real estates and one administrative village. In terms of incoming residents, a large proportion of its residents are native Songjiangnese, either from the old downtown or from surrounding small towns and rural areas. Compared with Jiuting and Sijing, Fangsong's housing market involves more speculative investment. As explained by a real estate consultant, a range of favourable factors such as the university town project, No.9 Metro Line and intensive marketing campaigns gave rise to an overly optimistic anticipation of increased housing demand. Although houses were sold quickly after completion, most were bought for the purpose of speculation. However, the second housing market did not flourish as expected afterwards. It was not until 2007-2008 that permanent residents gradually began to increase (interview E4).

6.4 Heterogeneous Songjiang: empirical evidence

Based on the above observation and analysis, it is clear that the demand-based growth dynamics of Songjiang are multidimensional. There are three major groups that have come to reside in Songjiang: local natives, residents from the central city and migrants from other places. They appear to have different housing needs and preferences, and hence choose to live in different types of communities and districts, which in turn lead to a heterogeneous spatial

pattern. Based on a questionnaire survey conducted with residents in Songjiang, this section empirically examines these assumptions, further explaining the factors driving people to Songjiang and the forms of spatial differentiation.

6.4.1 Data and method

The survey covered all three main urban areas in Songjiang and has generated a random cluster sample of 393 face-to-face questionnaires in total. The sampling method was explained in Chapter three (see section 3.3.3). For the purpose of the research, rather than their current *Hukou* location, all households are categorised into three groups according to *their origin* before they moved to Songjiang. Firstly, overall comparisons of the three groups are conducted through ANOVA analysis or Pearson's Chi-square test. Secondly, multinomial logistic regression analysis is applied to test spatial sorting of the three groups and the resultant spatial differentiations. In the models, the outcome variables are categorical variables, and the model is used to test to which of the categories a household is likely to belong, given certain other information. Specifically, the outcome variable of the first model is the place of origin, examining whether the identity of a household to a certain group is associated with the housing type and the place they live. The second model uses the housing type as its outcome variable, testing the probability of a household presenting in villas versus apartments, and hence identifying the differences between the households in different housing types. In the third model, the outcome variable is the district. It addresses how different attributes of a household would influence the chance of the family living in different districts. For each model, there are three sets of variables in total. The first set is socio-demographic variables, including age, educational attainment and income, origin of place, *Hukou* classification, housing tenure and car ownership. The second set is variables concerning residential mobility. One is related to push factors affecting the residential moves, whereas the other is the pull factor that has attracted the residents to their present houses.

And the last includes spatial-related variables, namely housing types and districts. Furthermore, qualitative analysis based on interviews with realtors and staff in residential committees, as well as different types of residents is also used to help explain the quantitative results and uncover residents' housing demands and residential choices.

6.4.2 Socioeconomic profiles

Tables 6.4 and 6.5 show the socioeconomic profiles of the three groups. The latter is the result of a one-way ANOVA analysis on age, and the former is the result of Pearson's chi-square test on other categorical socioeconomic variables. Overall, except for monthly family income and car ownership, all other aspects are disproportionately distributed among the three. Migrant people are essentially different from the other two groups. This group, as expected, are more likely to be young and single or married, but separated from their spouses. About 30% are still registered as agricultural *hukou*, while the percentages of local natives and those from Shanghai total no more than 5%. In terms of educational attainment, the proportion of people with higher education within the migrant group is only 23.8%, in contrast to the local group's 39.9% and Shanghainese group's 41.4%. From an economic viewpoint, it would appear to be more difficult for migrants to enter into public sector and state-owned enterprises. Moreover, their access to homeownership seems to be limited. About two-fifth of migrants lived in rental housing, while about 96% of the local natives and 98.6% of residents from central Shanghai were homeowners. Nevertheless, it is notable that the proportion of high-income families in the migrant group is no less than in the other groups. This is because not all migrants are unskilled workers. This group also includes well-educated migrant professionals and wealthy investors running businesses in Shanghai.

Local natives and those from Shanghai are similar in many aspects. Both groups are dominated by people with urban *Hukou* registration. About half have

formal jobs in public sectors and state-owned enterprises and most are homeowners. Notably, however, a large number of local natives were originally farmers. Although they have their own houses in urban areas, with limited education attainment and skills it might not be easy for them to find new livelihoods. Therefore, local natives have the highest proportion of low-level educational attainment and low-income households.

Table 6.4 Comparison of socioeconomic profiles among the three groups

Attributes	Value	Group (%)			Total (%)	χ^2 significance
		Local	Shanghai	Other places		
Marital status	Single	4.7	4.3	20.2	11.4	$\chi^2 = 26.040$ p<0.001
	Married and living together	91.2	92.9	73.2	83.7	
	Married but separated	4.1	2.9	6.5	4.9	
Educational attainment	Primary and below	22.3	4.3	19.6	17.9	$\chi^2 = 23.143$ p<0.001
	Secondary	37.8	54.3	56.5	49	
	Tertiary	39.9	41.4	23.8	33.2	
Hukou classification	Non-agricultural	94.6	97.2	70.2	84.5	$\chi^2 = 46.315$ p<0.001
	Agricultural	5.4	2.8	29.8	15.5	
Employer type	Public sector	29.8	28.4	7.9	19.8	$\chi^2 = 59.237$ p<0.001
	SOE/COE	25.5	32.8	12.1	20.9	
	Private/Foreign/Joint venture enterprise	28.4	28.4	46.1	36.2	
	Private business owner	5.0	7.5	12.7	8.8	
	Others	11.3	3.0	21.2	14.2	
Monthly income	<5,000	47.0	37.9	38.0	41.5	---
	5,000-9,000	30.2	30.3	36.7	33.1	
	10,000-19,999	13.4	16.7	13.3	13.9	
	20,000	9.4	15.2	12.0	11.5	
Housing tenure	Own	96.0	98.6	59.6	80.8	$\chi^2 = 84.209$ p<0.001
	Rent	4.0	1.4	40.4	19.2	
Car ownership	Yes	49.1	47.1	38.3	44.0	---
	No	51.0	52.9	61.7	56.0	

Table 6.5 Mean age by groups

	Group (year)			Total
	Local	Shanghai	Other places	
Age	44.73	49.55	37.64	42.55
<i>One-way ANOVA (Levene=3.068, p<0.5)</i>				
Overall effects: Welch F=22.019, p<0.000				
Contrasts	T-value	Significance (two-tailed)		
(Local and Shanghai) Vs Other places	6.648	p<0.001		
Local Vs Shanghai	2.281	p<0.05		

6.4.3 Residential mobility

Residential moves are usually driven by two kinds of factors: push and pull. Push factors refer to those giving rise to the imperative for a move. In China, many involuntary moves are not motivated by residents' own will. For example, when farmers are forced to give up their land or inner-city residents have to leave their previous houses when the place they used to stay is selected to undergo (re)development projects. Meanwhile, with the establishment of the housing market, voluntary moves are increasingly dominant. There are two common push factors driving these moves. One is related to important events in a person's life history, i.e. marriage or a change in job. The other is housing consumption factors that are often associated with people's aspirations to improve their living conditions.

Table 6.6 displays the cross-tabulation between push factors and the three groups of residents. Accordingly, push factors are categorised into four groups, namely involuntary, life-related, housing-consumption and other voluntary factors. The results suggest that, with regard to both local natives and central Shanghainese, although voluntary moves dominate there are still a fair number of involuntary moves. However, both local natives and those from central Shanghai were more likely to move to achieve better living conditions. On the contrary, the

migrant group are less concerned with housing consumption factors, and their moves are more likely to be triggered by life-related changes.

Table 6.6 Push factors for residential mobility for three groups

Push factors	Group (%)			Total (%)	χ^2 significance
	Local	Shanghai	Other places		
Involuntary	12.8	18.6	4.3	10.2	$\chi^2 = 54.171$ $p < 0.001$
Life-related	31.8	24.3	65.0	44.6	
Housing-consumption	51.4	50.0	25.8	40.2	
Other voluntary factors	4.1	7.1	4.9	5.0	

Pull factors are the particular attractions of a certain locality or estate. Respondents were asked to report the most important factor that pulled or attracted them to where they live now. Specific attributes are grouped into six categories: 1) a good environment; 2) rapid access; 3) employment opportunities; 4) cheap housing prices; 5) high-quality estate; 6) others. Among these, the first four are attractions of Songjiang, whereas number 5 is an attribute of particular houses and neighbourhoods. Table 6.7 shows the frequencies of these factors by groups.

Firstly, local natives and those from Shanghai are more consumption-oriented. Among respondents in the two groups, those who said they moved to Songjiang mainly because of consumption related factors make up the largest group. This reflects a transformation of Songjiang itself from a traditional industrial suburb into a multifunctional urban settlement. All the endeavours by the state and developers have paid off. On the other hand, and importantly, the result pinpoints the important role of consumption in bolstering the suburban housing market. For many residents, the advantages of the suburbs are space, comfort and being close to nature. Many interviewees, not limited to those living in high-end villas, talked about the negative features of the centre. 'Environmental degradation in the city is increasingly intolerable. I once counted the total number

of air conditioning units in a twenty-floor building near where I work, and it turned out there were 1,100 in total. So how could air quality be good in a place like that!’ (Interview R_S2). ‘The city is noisy and disordered. Sometimes, I even feel the ground is shaking which I think should be attributed to excessive high-density development, both overground and underground’ (Interview R_J1). ‘I think that people here could live longer than those in central Shanghai’ (interview R_J3). Alternatively, they praised the suburbs for ‘brand new houses suitable for modern life’ (Interview R_S2), ‘low-density’ (interview R_F3), as well as the natural environment featuring ‘fresh air, green space, singing birds and fragrant flowers, just like you were living in a park’ (Interview R_F6).

Table 6.7 Pull factors for residential mobility for three groups

Pull factors	Group (%)			Total (%)
	Local	Shanghai	Other places	
<i>Suburb with a good environment</i>				
A good city plan	7.5	0.0	2.4	3.9
University Town	1.4	0.0	1.2	1.0
A good living environment	13.6	14.3	6.1	10.5
All-around facilities and services	15.7	7.2	6.7	10.2
Total	38.2	21.5	16.4	25.6
<i>Rapid access</i>				
No.9 Metro Line	13.6	24.3	15.2	16.3
Highways	1.4	0.0	0.6	0.8
Total	15	24.3	15.8	17.1
<i>Employment opportunities</i>				
Total	8.2	11.4	39.0	22.0
<i>Cheap rent/housing prices</i>				
Total	25.2	20.0	18.9	21.5
<i>high-quality estate</i>				
Distinctive building style	2.7	5.7	1.2	2.6
A good internal layout	3.4	4.3	0.6	2.4
Well-known devt company	0.0	0.0	2.4	1.0
A good investment	1.4	2.9	.6	1.3
Good privacy	0.0	0.0	0.0	0.0
High status neighbours	3.4	7.1	4.3	4.4
Total	10.9	20	9.1	11.7
<i>Others</i>				
Total	2.7	2.9	0.6	1.8

Migrant people are less likely to be attracted by consumption-oriented factors. Instead, work-related factors are of primary importance. The survey data shows that 39% of the total number of migrant people reported that they made their move mainly for employment opportunities or proximity to their workplace, a far greater percentage than that for local natives and central Shanghainese. In many cases, a move into homeownership has become the means through which young migrants can settle down, further their career and organise their home in Shanghai. The statements were revealing: ‘You have to buy a house of your own for the purpose of stabilisation and reassurance’ (Interview R_S3). ‘We are different from those born in Shanghai. We don’t have others to depend on. Moreover, think about the ever increasing housing prices, you would never be able to enjoy a good life here if you missed your chance of being a homeowner’ (Interview R_J5). Therefore, migrants were more concerned about use value when making residential choices. ‘We didn’t consider either living environments or proximity to retail and other amenities at all. We merely wanted to find a place to stay in the city, and any place would be fine’ (Interview R_S3). ‘Both my husband and I are not that kind of person who care much about face. We don’t care about brand or quality either. Practicality is all for us’ (Interview R_J5). For the people employed in the central city, living in Songjiang was largely a trade off between a good living environment and long commutes, where the former was favoured. ‘No matter how tired and depressed after a busy day, when you arrive at your comfortable home, it's all worth it!’ (Interview R_J5).

Rapid access has proven to be another attraction of Songjiang. While mass suburbanisation in Western countries was largely facilitated by heavy investment in highways and the widespread use of automobiles, in the case of Shanghai it is mass transit that has paved the way for massive suburban development. Links to the central areas are particularly important to those from central Shanghai. About a quarter of this group mentioned No.9 Metro Line as the determinant for their residential moves to Songjiang. This indicates their strong connections to the

centre. For example, interviewees mentioned their strong sense of belonging to the place where they used to live. 'I still go shopping to the markets and stores in the city where I used to go. Even vegetables there appear much cleaner and fresher' (Interview R_J1). 'Too many things are not as good and convenient as that of our Shanghai' (Interview R_J3). In addition, many still had relatives and friends in the city and needed to visit the central districts from time to time.

Finally, for all three groups, about a fifth of people made their moves because of cheaper housing/rent prices. Many people are reluctant to leave the centre; by large, their contemporary homes are a comprise choice. When asked why they did not choose to live in the city, many interviewees expressed their frustration about moving to the periphery. 'We had no alternative as we could afford a decent house in the city at all.' 'When I was looking for a property, I even dared not to see any unit in the central area. Living in the city is too far beyond my reach' (Interview R_S3).

6.4.4 A model of spatial sorting

Driven by different motives that cut across a range of socio-economic attributes, do suburban inhabitants self-select into particular neighbourhoods and places and make up a heterogeneous spatial pattern? Table 6.8 shows the distribution of samples among different groups and the housing types they chose, as well as the districts in which they settled. A Chi-square test reveals that spatial concentrations of three groups are statistically significant. First, compared with the other two groups, those from central Shanghai are more likely to live in villas. Second, in terms of district concentration, local natives are more concentrated in Fangsong, residents from central Shanghai in Jiuting and migrants in Sijing.

Table 6.8 Distribution of sample by reason to move to Songjiang, neighbourhood type and district

		Group (%)			Total (%)	χ^2 significance
		Local	Shanghai	Other places		
Neighbourhood	Villa	3.4	21.1	5.4	21.3	$\chi^2 = 46.777$ p<0.001
	Apartment	96.6	78.9	94.6	78.7	
District	Fangsong	47.7	21.1	27.4	34.0	$\chi^2 = 23.663$ p<0.001
	Sijing	26.2	33.8	41.1	32.0	
	Jiuting	26.2	45.1	31.5	34.0	

The results of the logistic regression analysis suggest that, when the effects of other variables are considered, educational attainment and housing tenure are the two variables that have the most significant effects on which group a household falls within. Moreover, and importantly, after controlling for these attributes, both motivation-related variables and spatial-related variables are significant, indicating unique relationships between the household's place of origin and the factors leading to their residential moves, the types of housing in which they live and the districts in which they stay (see Table 6.9).

Table 6.9 Spatial sorting of the three groups in Songjiang (logistic regression results; outcome variable =place of origin: local; Shanghai; other places)

Effect	Model Fitting Criteria	Likelihood Ratio Tests	
	-2 Log Likelihood of Reduced Model	Chi-Square	df
Constant	479.108	0.000	0
Age	481.916	2.808	2
Marital status	482.827	3.719	2
Educational attainment	492.857	13.749**	4
Hukou classification	484.706	5.598	2
Employer type	487.257	8.149	8
Monthly family income	489.949	10.841	6
Housing tenure	503.069	23.961***	2
Car ownership	481.855	2.747	2
Push factors	498.507	19.399**	6
Pull factors	489.680	10.572	8
Housing type	486.617	7.509*	2
District	502.210	23.102***	4

Table 6.10 details the specific effects of each variable on different groups. In terms of socio-economic attributes, the three are statistically different in terms of educational attainment, monthly family income and housing tenure. Compared to migrant people, both local natives and those from central Shanghai are more likely to acquire tertiary education or higher than secondary education. Meanwhile, both are more likely to be homeowners, by factors of approximately 9 and 11 respectively. However, compared to migrants, local natives are more likely to have the lowest level of family income; compared to those from central Shanghai, their educational attainment is more likely to be only at primary level or below. These results confirm our earlier analysis that, of the local natives who bought into the new commodity houses, a large number are former farmers. Although they have recently become urban residents, they do not have the advantage in the labour market of non-agricultural sectors. In contrast, migrant workers with secondary education provided the main labour force for industrial production, and their income is not necessarily low.

The three groups are not significantly different from each other when life-related cause is compared to housing-consumption as push factors for their recent residential moves, although the signs of coefficients imply that migrant people are less concerned about housing consumption than the other groups. The likelihood of those from central Shanghai being passively displaced, rather than actively searching for better living conditions, is significantly greater than migrant people, but not higher than local natives. With regard to what attracted residents to move to their present location, there are no significant differences among local natives and central Shanghainese. Nevertheless, when they are compared to migrants, they are less likely to be pulled by work-related factors than the quality of the estates. This suggests that migrants are less consumption-oriented.

Table 6.10 Spatial sorting of the three groups in Songjiang (logistic regression results)

Independent variable	Local Vs Other places ^a			Shanghai Vs Other places ^a			Shanghai Vs Local ^b		
	B	SE	Exp (B)	B	SE	Exp (B)	B	SE	Exp (B)
<i>Age</i>	0.006	0.18	1.006	0.031	0.02	1.031	0.024	0.17	1.025
<i>Marital status (single=1)</i>	-1.154	0.645	0.316	-1.089	0.885	0.337	0.065	0.893	1.067
<i>Educational attainment (Reference: tertiary)</i>									
Primary	-0.148	0.601	0.863	-1.852	0.878	0.157	-1.705*	0.821	0.182
Secondary	-0.938*	0.417	0.391	-0.676*	0.493	0.509	0.262	0.461	1.3
<i>Hukou classification (nonagricultural =1)</i>	1.013	0.563	2.753	1.672	1.032	5.321	0.659	1.091	1.933
<i>Employer type (Reference: others)</i>									
Public sector	0.396	0.63	1.486	1.601	1.072	4.959	1.205	1.053	3.337
SOE/COE	0.890	0.609	2.434	1.882	1.068	6.567	0.992	1.04	2.697
Private/Foreign/Joint venture enterprises	0.323	0.545	1.382	1.485	1.016	4.413	1.161	1.012	3.194
Private business owner	-0.576	0.748	0.562	0.232	1.145	1.261	0.808	1.163	2.244
<i>Monthly Family Income (Baseline: > 20,000)</i>									
<5,000	1.546*	0.646	4.693	0.857	0.805	2.357	-0.689	0.769	0.502
5,000-10,000	0.323	0.6	1.381	0.204	0.725	1.226	-0.119	0.703	0.888
10,000-20,000	0.241	0.631	1.272	0.291	0.741	1.337	0.05	0.728	1.051
Housing tenure (own=1)	2.188***	0.579	8.921	2.431*	0.992	11.37	0.243	1.089	1.274
Car ownership(Yes=1)	0.625	0.38	1.869	0.4	0.463	1.491	-0.226	0.422	0.798

Table 6.10 (continued)

Independent variable	Local Vs Other places ^a			Shanghai Vs Other places ^a			Shanghai Vs Local ^b		
	B	SE	Exp (B)	B	SE	Exp (B)	B	SE	Exp (B)
<i>Push factors (Reference: housing-consumption-related reasons)</i>									
Other voluntary reasons	-0.165	0.708	0.848	0.204	0.821	1.226	0.369	0.773	1.446
Involuntary mobility	0.905	0.739	2.473	1.68*	0.808	5.368	0.775	0.627	2.171
Life-related reasons	-1.280	0.388	0.278	-0.449	0.483	0.638	0.831	0.46	2.295
<i>Pull factors (Reference: quality estates)</i>									
A good environment	0.751	0.614	2.12	-0.054	0.71	0.947	-0.806	0.622	0.447
Rapid access	0.484	0.66	1.622	-0.065	0.744	0.937	-0.549	0.659	0.578
Employment opportunities	-0.339**	0.679	0.712	-1.012	0.819	0.363	-0.673	0.799	0.51
Cheap housing/rent prices	0.855	0.629	2.352	-0.34	0.733	0.712	-0.195	0.648	0.303
<i>Housing type (Luxury villa =1)</i>	-0.949	0.937	0.387	1.139	0.807	3.123	2.088*	0.815	8.07
<i>District (Reference: Fangsong)</i>									
Sijing	-1.801***	0.48	0.165	0.154	0.613	1.166	1.955**	0.582	7.064
Jiuting	-1.108**	0.421	0.33	0.442	0.553	1.555	1.55**	0.511	4.721
Constant	-2.744*	1.213		-7.068***	1.922		-4.324*	1.914	

Table 6.10 (continued)

Model statistics	
N	349
χ^2	241.531
DF	12
Sig.	$\rho < 0.001$
-2*log likelihood	497.108
Cox & Snell R^2	0.499
Nagelkerke R^2	0.571

Notes: a. Outcome variable is the place of origin, and the group of migrants from other places is selected as reference

b. Outcome variable is the place of origin, and the group of local natives is selected as reference, results of the comparison between local natives and migrants are not shown

* $\rho < 0.05$; ** $\rho < 0.01$; *** $\rho < 0.001$

After controlling for the effects of other individual-level attributes, different groups are found to be sorted into different housing markets and districts, demonstrating that multiple growth dynamics have created a heterogeneous spatial pattern in Songjiang. Firstly, in terms of housing types, compared to local natives, Shanghainese are proved to be about eight times more likely to live in high-end villas, if the socioeconomic status holds constant. This result suggests that urban elites are indeed leading the way of embracing lifestyles that mimic Western middle-class suburbia. Secondly, the model shows an uneven distribution of the three groups across the three urban areas, meaning different suburban spaces are created by different driving forces of suburbanisation. Local natives tend to concentrate in the new town Fangsong, while, in the opposite direction, both those from central Shanghai and migrants are highly concentrated in the two districts closer to Shanghai. Therefore, while centrifugal pull is emerging here, centripetal force remains strong. Although Songjiang New Town was well-planned and developed into a high-quality living environment, persuading people to move out of the central areas is not easy, particularly into the outer metropolitan area. It turns out that the new town has more of a magnetic pull of its surrounding areas.

6.4.5 Spatial differentiation I: villas versus apartments

A logistic regression model on the likelihood of living in villas compared to apartments confirms the significant differences between the two (Table 6.11). It is evident that households living in villas are more established and are more likely to be high income earners, regardless of their educational attainment, employer type and Hukou classification. Moreover, as expected, they are all homeowners and much more likely to own private cars. When it comes to originality, a similar conclusion is reached, that is, people from central Shanghai are more likely than local natives to live in villas. The chances between this group and the migrant group to live in villas, however, are not significantly different. Overall, these

results point to the fact that people living in villas are difficult to identify in terms of distinctive socio-demographics except for their wealth. According to interviews with some staff in residential committees and the homeowner associations of some gated villa subdivisions, there are generally three typical types of residents (interviews C2, C3 and C4): rich businesspeople from surrounding provinces such as Zhejiang and Jiangsu¹², entrepreneurs from Hong Kong and Taiwan who run factories or conduct business in Songjiang, and government senior officers. By all accounts, it is clear that access to single-family houses in China is still restricted to the few privileged families who are upper-class rather than better-off waged families.

Table 6.11 Likelihood of living in villas
(logistic regression results; $y=1$ if the household is living in a villa)

Independent	B	SE	Exp (B)
<i>Age</i>	0.237**	0.074	1.268
<i>Marital status (single=1)</i>	-0.922	17.159	0.398
<i>Educational attainment (Reference: tertiary)</i>			
Primary	-0.893	1.873	0.409
Secondary	0.585	1.114	1.795
<i>Hukou classification (nonagricultural =1)</i>	0.594	1.699	1.811
<i>Originality (Reference: Shanghai)</i>			
Other places	-1.982	1.506	0.138
Local	-3.478*	1.571	0.031
<i>Employer type (Reference: others)</i>			
Public sector	3.007	2.377	20.229
SOE/COE	3.128	2.369	22.836
Private/Foreign/Joint venture enterprises	1.583	1.932	4.87
Private business owner	3.524	2.021	33.91
<i>Monthly family income (Baseline: > 20,000)</i>			
<5,000	-9.533**	2.949	0.00
5,000-10,000	-4.972**	1.771	0.007
10,000-20,000	-3.369*	1.5	0.035

¹² For example, many residents are from Wenzhou in southern Zhejiang Province. People from Wenzhou have a reputation for being good at business. Recently, they shifted their investment towards real estate, and have been widely criticised for property speculation in an overheated housing market.

Table 6.11 (continued)

Independent	B	SE	Exp (B)
Housing tenure (own=1)	21.052***	0	1.39E+09
Car ownership(Yes=1)	5.565**	2.001	261.207
<i>Push factors (Reference: housing-consumption-related reasons)</i>			
Other voluntary reasons	-4.222	6.362	0.015
Involuntary mobility	-5.638	4.066	0.004
Life-related reasons	-2.457	1.546	0.086
<i>Pull factors (Reference: quality estates)</i>			
A good environment	-4.576*	1.903	0.1
Rapid access	-3.825	2.667	0.22
Employment opportunities	-3.381	1.906	0.34
Cheap housing/rent prices	-4.449*	1.873	0.12
<i>District (Reference: Fangsong)</i>			
Sijing	0.623	1.586	1.865
Jiuting	-1.801	1.378	0.165
Constant	-32.662***	4.491	
Model statistics			
N	349		
χ^2	128.529		
DF	25		
Sig.	$\rho < 0.001$		
-2*log likelihood	42.402		
Cox & Snell R^2	0.308		
Nagelkerke R^2	0.796		

Notes: * $\rho < 0.05$; ** $\rho < 0.01$; *** $\rho < 0.001$

Another noteworthy commonality of families in villas compared to those living in apartments is that they are much more consumption-oriented. Although the variable of push factors is not significant after controlling for other variables, the model indicates that the odds ratio of moves motivated by housing-consumption related factors is very high. An analysis of the pull factors also supports this point, which implies that the quality of the estates themselves is the most important attraction for the families. Moreover, compared to the majority, they are much less concerned about housing prices. As a matter of fact, the survey shows that among all the respondents in villas, about 71% of households have

more than one house in Shanghai. This is statistically different from the families in apartments, of whom only about 23.5% have another or more houses ($\chi^2=31.039$ with 1 degree of freedom, $p<0.001$). Therefore, the villas would appear to be less likely to be merely shelter for the residents. The single-family houses satisfy their needs for space and comfort. ‘We were considering living together with our parents, and villa-style houses are spacious and have enough bedrooms’ (Interview R_J2). Some moved to villas out of a desire for an Arcadian lifestyle. ‘I love single-family style and have always wanted to have a garden of my own. With all the things here, the fresh air, the sky, and the earth, our home is a natural world of our own’ (Interview R_J1). Others were attracted by distinctive building styles and a particularly Western milieu. ‘We went to see many estates nearby, but the design here is stunningly unique. We decided to give up others and buy into this community immediately. I have never seen anyone else as nice as this in mainland China’ (Interview R_F4). ‘The community and its landscapes just remind me of our joyful experiences in foreign countries’ (Interview R_F5).

Last, but not least, the model suggests that, compared to others, families in villas are statistically more concerned with their own neighbourhoods than surrounding environments and public facilities. This result reflects that, to a large extent, villa communities are like enclaves in the socially-mixed suburbs. The survey reveals that residents in villas actually have few local connections, and they seldom use local public facilities. Moreover, compared to people in apartments, the frequency of their non-working trips to the central districts is statistically high. While only 30% of families in apartments stated that they went to central Shanghai at least once a week, the result for families in villas is 82.2% ($\chi^2=32.118$ with 2 degrees of freedom, $p<0.001$). This fact indicates that they continue enjoying their life in the city. Meanwhile, complaints about the lack of an urban atmosphere and high-quality commercial facilities were common. ‘The milieu of local shops is just like those in the 1980s’ (interview R_J3). ‘We have to visit the city frequently mainly because it is difficult to find exquisite

restaurants nearby' (Interview R_F4). This is particularly apparent in Sijing and Jiuting. People in villas stated that, although they liked their houses, they had never been satisfied with the place. 'Things are awful once you step out of the gate, disordered, filthy, and noisy. It appears the town would never rise above its rural character' (Interview R_J1).

Villa communities are highly homogenous inside the gate. Compared to those families in apartments, residents in villas care much more about who their neighbours are. In the survey, about 12.9% of respondents in villas reported that high quality neighbours are one of the primary reasons they chose their current houses, whereas only 3.9% people in apartments mentioned this ($\chi^2=42.923$ with 6 degrees of freedom, $p<0.001$). Nevertheless, the class homogeneity does not mean that people value neighbourhood interaction or feel a sense of community. The interviewees showed no interest in developing close relationships with their neighbours. About 65.5% of respondents in villas stated that they disliked or felt indifferent to neighbourhood interaction, whereas the proportion for those in apartments is 40% ($\chi^2=7.797$, with 1 degree of freedom, $p<0.01$). 'Here houses are all detached from each other. So we have little contact with our neighbours' (Interview R_F4). 'It is good for me at least. You don't have to deal with people upstairs or downstairs anymore. And you could finally get rid of the gossips and disputes' (Interview R_F6). The pursuit of privacy and exclusivity is most apparent in their worries about security. While only 29.7% of respondents in apartments ranked access control as the most important property management service, the proportion for villa respondents is about 46.9% ($\chi^2=4.034$, with 1 degree of freedom, $p<0.05$).

6.4.6 Spatial differentiation II: whiter-collar suburb, migrant suburb and suburban new town

To better understand the differences between the three districts, logistic regression analysis using the district as the outcome variable was carried out. Overall, the three districts appear to be distinct from one another in the ways that were expected (Table 6.12). The results confirm that, when compared to the other two districts, Fangsong is a place where local better-off local families concentrate. Residents here have statistically greater chances of being local natives and having secure jobs in public sectors. Moreover, it is found that Fangsong has more high-income families than middle- or low-income ones. As many interviewees suggested, to a large degree, it is local better-off families and their housing needs that have supported Fangsong's housing market. More specifically, local civil servants constituted the most important customer group of the new houses (Interview E4). However, it is notable that, because Fangsong is relatively self-contained, residential mobility is more likely to be pushed by residents' desire to live closer to workplaces and children's schools, if compared to housing-consumption related factors only. This contrasts with the situation in the other districts. Therefore, it is reasonable to find that, in terms of pull factors, compared to the estates' quality, the effects of rapid access to the centre, cheap housing prices or employment opportunities do not appear to be as important for residents in Fangsong as they are for residents in Sijing and Jiuting.

It is more appropriate to characterise Sijing's residents as young, single migrants rather than well-off local families, which is particularly significant when compared to Fangsong. They are therefore less likely to have formal jobs; in particular, they are statistically 3.83 times less likely than residents in Fangsong to hold positions in public sectors. Moreover, the income level of people in Sijing is relatively low, no matter where they came from or what kind of jobs they did. Practical considerations such as rapid access, employment opportunities and

cheap housing/rent are their primary considerations. For example, compared to residents in Fangsong and Jiuting, respectively, they were about ten times and four times more likely to have moved to their houses because of the metro line nearby; about twelve times and eight times more likely to have settled down for job opportunities; and about twenty-five times (although not significantly) and five times more likely to have been mainly attracted by cheap housing/rent.

However, since it is also affected by spillover effects from the central city, Jiuting's residents are characterised by quite different socio-economic attributes. On the one hand, the regression model indicates that Jiuting's residents are older, which is significant when they are compared to Fangsong. This coincides with the fact that a large number of elderly people were displaced from central Shanghai. As one local realtor described,

Since 2000, many people came from Shanghai and bought houses here. In most cases, they could have a lump sum compensation payment of about two to three million Yuan, while a big house here needed only half of the money. Therefore, many families took it as a good idea to move to Jiuting, particularly for those aged retirees who would not have much to do with the central areas. It was common that old couples bought into an apartment, and then made down payment for another house in the centre for their children with the money left (Interview E2).

On the other hand, Jiuting's residents are more likely to have acquired higher education, implying a concentration of well-educated migrants who are often employed in service sectors in the city. Moreover, families in Jiuting are more likely to have a middle-income than high-income. Therefore, the elderly from central Shanghai and young professional migrants are the two main groups in Jiuting. Correspondingly, their residential moves to the suburbs are more likely to be driven by their housing needs rather than other life events. Cheap housing in the periphery location is thus the most important factor that has made them choose

their current houses. For most middle-income families, Jiuting is a compromise featuring commuting distance, life quality and housing price. Therefore, compared to residents in Fangsong, people here are statistically about five times less likely to live in villas, demonstrating their choice to move to Jiuting is less consumption-oriented and less related to suburban lifestyles.

Table 6.12 District differentiations (logistic regression results)

Independent	Sijing Vs Fangsong ^a			Jiuting Vs Fangsong ^a			Jiuting Vs Sijing ^b		
	B	SE	Exp (B)	B	SE	Exp (B)	B	SE	Exp (B)
Age	0.21	0.17	1.022	0.39*	0.16	1.039	0.017	0.016	1.017
Marital status (single=1)	-1.419*	0.573	0.242	-0.643	0.566	0.526	0.777	0.58	2.175
Educational attainment (Reference: tertiary)									
Primary	0.912	0.571	2.489	-1.264*	0.64	0.282	-2.177***	0.609	0.113
Secondary	0.312	0.445	1.366	-0.148	0.398	0.863	-0.46	0.397	0.632
Hukou classification (nonagricultural =1)	0.361	0.48	1.435	0.377	0.526	1.457	0.016	0.49	1.016
Originality (Reference: other places)									
Local	-1.852***	0.478	0.157	-1.15**	0.438	0.317	0.72	0.434	2.018
Shanghai	0.131	0.586	1.14	0.376	0.554	1.456	0.245	0.462	1.277
Employer type (Reference: others)									
Public sector	-1.342*	0.65	0.261	-0.898	0.65	0.408	0.444	0.659	1.559
SOE/COE	-0.494	0.574	0.61	0.23	0.622	1.024	0.518	0.594	1.678
Private/Foreign/Joint venture enterprises	-0.303	0.506	0.738	0.347	0.546	1.415	0.65	0.531	1.916
Private business owner	0.449	0.804	1.567	1.026	0.788	2.79	0.577	0.709	1.781
Income (Baseline: > 20,000)									
<5,000	1.674*	0.726	5.332	0.485	0.653	1.625	-1.188	0.675	0.305
5,000-10,000	1.2	0.684	3.321	0.795	0.596	2.214	0.406	0.639	0.667
10,000-20,000	0.92	0.774	2.51	1.621**	0.631	5.509	0.701	0.688	2.016
Housing tenure (own=1)	-0.362	0.495	0.696	-0.304	0.525	0.738	0.058	0.45	1.06
Car ownership(Yes=1)	0.251	0.411	1.286	0.008	0.386	1.008	-0.244	0.378	0.784

Table 6.12 (continued)

Independent	Sijing Vs Fangsong ^a			Jiuting Vs Fangsong ^a			Jiuting Vs Sijing ^b		
	B	SE	Exp (B)	B	SE	Exp (B)	B	SE	Exp (B)
<i>Push factors (Reference: housing-consumption-related reasons)</i>									
Other voluntary reasons	1.045	1.14	2.844	1.426	1.057	4.164	0.381	0.642	1.464
Involuntary moves	1.252	0.666	3.498	0.25	0.708	1.026	-1.227*	0.566	0.293
Life-course related reasons	-1.245**	0.455	0.288	-1.201**	0.417	0.301	0.044	0.399	1.045
<i>Pull factors (Reference: quality estates)</i>									
A good environment	0.056	0.703	1.058	-0.392	0.562	0.675	-0.448	0.708	0.639
Rapid access	2.304**	0.753	10.015	0.905	0.64	2.471	-1.399*	0.683	0.247
Employment opportunities	2.517**	0.732	12.391	0.485	0.666	1.624	-2.032**	0.72	0.131
Cheap housing/rent prices	3.234	0.747	25.37	1.687**	0.645	5.403	-1.547*	0.658	0.213
<i>Housing type (Luxury villa =1)</i>	-0.502	0.846	0.605	-1.625*	0.748	0.197	-1.122	0.804	0.326
<i>Constant</i>	-2.582*	1.234		-1.574	1.126		1.009	1.218	

Table 6.12 (continued)

Model statistics	
N	349
χ^2	196.271
DF	48
Sig.	$p < 0.001$
-2*log likelihood	568.778
Cox & Snell R^2	.430
Nagelkerke R^2	.484

Notes: a. Dependent variable is district, Fangsong is selected as reference

b. Dependent variable is district, Sijing is selected as reference, results of the comparison between local natives and migrants are not shown

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

6.5 Conclusion

This chapter has examined the demand-based forces driving Songjiang's rapid growth. It is clear that suburban Songjiang, no matter how hard the governments and developers have tried to attract residents by borrowing concepts and landscapes from Western suburbia, has not experienced a similar path of transformation. While the move to suburbs in the US and many other Western countries has been predominantly driven by people's residential preferences for suburban living, the underlying forces in China include multiple dimensions. There are four pillars buttressing Songjiang's rapid growth. Economic growth built on metropolitan industrial restructuring was one of the supports. Providing a large number of jobs for manufacturing workers on the one hand, and affordable housing for white-collar workers on the other hand, Songjiang has become the destination of migrants. At the same time, the logic similar to that of suburbanisation in Western countries has started to work. Along with a rise in demand for better living conditions, housing development in Songjiang has indeed attracted many better-off families in its own right. Thirdly, supporting such production- and consumption-based processes, however, is the fast urbanisation of rural areas. The government enforced massive conversion of agricultural land for industrial and urban development. After losing the land they depended on for generations, farmers have moved into urban settlements and adapted themselves to jobs in non-agricultural sectors. In other words, suburban growth in China involves the urbanisation of the suburbs. Lastly, in addition to housing demand, the demand for investment capital plays a necessary role. Of course, the city centre is not overlooked. Yet Songjiang as a peripheral location is more attractive for small or non-professional developers and investors due to its low entry threshold, low investment risk and quick returns. Without the flow of private capital in large amounts, Songjiang's housing market would not have experienced the prosperity it has seen.

Therefore, Songjiang's residents consist of three groups: migrant people, local natives and residents from central Shanghai. Based on survey data collected in three main urban areas in Songjiang, it is evident that, even after controlling for the contribution of confounding factors, the three groups not only differ in terms of some socio-economic attributes, but also in their motivations and residential choices. Firstly, compared to the other two groups, migrant people are more likely to have a lower level of education. Yet, the income level of this group is not necessarily low, and a certain proportion of high-income migrant families does exist. In addition, when it comes to housing conditions, results are also discordant. On the one side, migrants constitute the major tenant group of the local rental market, where odds ratios are far greater for them to be tenants than the other two groups. On the other hand, the likelihood for migrants to live in high-end villa communities is not significantly different from the other two. These findings are consistent with the fact that, being employed in different sectors, migrants are themselves diverse in socioeconomic status. Furthermore, support was found for the hypothesis that migrants are more likely to have made their residential moves to Songjiang for work-related factors rather than housing-consumption.

Secondly, including a fair number of people who were previously farmers, local natives are not advantaged in terms of educational attainment or income. However, compared to the migrant population, local natives are more likely to have their own houses. Therefore, rather than purely being determined by work, their residential moves are more likely to be associated with their pursuit of better living conditions; when making residential choices, they are more consumption-oriented. Lastly, those from central Shanghai are not significantly different from others in most socio-economic attributes, except that they are obviously better educated. Yet, factors driving this group to Songjiang are peculiar. On the one hand, compared to migrants, the likelihood of involuntary moves caused by (re)development projects is significantly greater. On the other hand, although both are motivated by their desire for better living conditions,

compared to local natives, residential migrants from central Shanghai are more likely to move into villas, embracing a different way of life from that in the city.

In spatial terms, it is evident that different driving forces of growth have resulted in a heterogenous suburban space. This is realised through the self-sorting of different types of households into different types of neighbourhoods and districts. In general, and on a larger spatial scale, both migrants and those from central Shanghai tend to concentrate in the nearer suburbs, namely Jiuting and Sijing. Local natives, on the other hand, tend to be located in the outer suburban new town Fangsong. Moreover, it is also supported that the three districts are developing into three distinctive types of suburbs. Jiuting is a typical high-density suburban settlement for white-collar commuters with jobs in the central city. Sijing is a less-developed suburban node in which migrants with informal jobs and lower income concentrate. Lastly, Fangsong is a well-planned suburban new town. Featuring relatively low density and high-quality living environments, it has successfully attracted many better-off families. However, its development is driven more by local growth. All in all, pull forces of the centre still appear to be strong. In this sense, the original aim of the municipality to develop the new town as a magnet pull has not been fully achieved.

However, the suburbs are by no means without their own attractions. To return to the question of whether preferences favouring a distinctive suburban lifestyle play a role in Songjiang's growth, the answer here is affirmative. Single-family villas and gated communities represent the ultimate form of the pursuit of a good life. Our survey shows that these communities share similar elements with Western suburbia. Lured by enchanting living environments, quality amenities, exclusive services, safety and security, as well as neighbourhood homogeneity and symbolic status, villa residents have voted with their feet and embraced a distinctive consumption-centred way of life. In the meantime, they maintain strong connections to the city, continuing to accrue

wealth and pursue their leisure in the centre. Nonetheless, unlike Western suburbia, villas as a dream home are privileged to a few extremely rich families rather than the masses. Suburban growth in China remains primarily dominated by middle- to high-density apartment development and is supported by the expansion of mass transit like that to Jiuting and Sijing. Therefore, it would be incorrect to claim that suburban residents in China live a unique way of life, or that moves to the suburbs reflect changes in living habits and costumes or cultural attitudes, as found in conventional Western suburbia (Frey, 1979; Gans, 1967; Beauregard, 2006). Urban lifestyles characterised by agglomeration, high-density and diversity (Wirth, 1938; Jacobs, 1961) still dominate most people's daily lives.

CHAPTER SEVEN

CONCLUSION

7.1 Introduction

Since 2000, urbanisation in China has evolved into a new phase in which suburbs have begun to function as the new frontier of economic growth. Major cities are witnessing unprecedented expansion towards outer suburban areas in a different form of mixed-use clustered development. The new stage has been captured by some scholars with reference to concepts such as a polycentric structure or post-suburbia (Feng et al., 2009; Yue et al., 2010; Wu and Phelps, 2008). Nevertheless, few studies have systematically addressed this phenomenon and provided an explanation for the changing dynamics of China's suburbanisation. Therefore, this research aims to investigate the origins, forms and functions of the emerging suburban settlements in China.

In the meantime, Chinese suburbs offer a valuable empirical case for enriching current suburban theory. In a study on China's earlier suburbanisation, Zhou and Ma (2000: 228-229) comment that 'the circumstances under which urban decentralisation and suburbanisation have occurred in the west and China and the ensuing economic and spatial consequences have been vastly different...the forces of urban change...are unique to the transitional economy of China'. This statement is still applicable to the comparison between contemporary suburban growth in China and in Western countries. Institutionally, the state continues to play a powerful role in urban China. Economically, the country's growth is still predominantly underpinned by export-oriented manufacturing rather than a service economy. Socially, the middle class is relatively weaker and

luxury consumption is privileged to only a small group of urban new rich. Meanwhile, the cities are seeing an unparalleled influx of rural-to-urban migrants. Chinese suburbs, therefore, have roots in a specific socio-economic context and unique local institutional innovations. The study attempts to identify the similarities and the differences between China and other countries.

The research, therefore, attempts to explain *why Chinese suburbs have evolved into their current form and how they have grown so quickly, i.e. the dynamics of recent suburban growth in China*. Referring to existing literature of other places, an analytical framework is developed to examine the underlying forces that gave rise to the specific pattern of suburban growth. The framework accounts for both production- and consumption-based factors, and meanwhile sets up a platform for comparative analysis. The foundation for the explanation is that the rising suburbs resulted from capitalism's creation of a new space to facilitate both the production and reproduction of capital. However, suburbanisation takes distinctive forms and involves different processes tailored to the needs of a specifically Chinese context. Based on this point, the study further explores the role of different actors involved in shaping the process. On the supply side, the rationale, the practise and the coalitions among various public and non-public sectors are examined. On the demand side, the composition of suburban residents and their residential choices are analysed. All the three themes are placed in a comparative perspective.

In terms of methodology, the study builds its findings on a case study of Shanghai and one of its suburban districts, Songjiang. A single case study is a suitable and reliable strategy to collect in-depth information regarding manifold aspects and deal with interrelations between a wide range of factors. Songjiang in Shanghai was selected for its representativeness. A mixed method combining qualitative and quantitative analysis is adopted. Empirical materials come from two resources. Firsthand data includes 1) 42 face-to-face interviews with a range of people including government officials and planners, design and planning

consultants, property developers and real estate agents, as well as home buyers; 2) a questionnaire survey on a random sample of 393 residents in Songjiang. Second hand data consists of a wide variety of channels; open publications, planning and design documents, internal reports and media reports as well as promotional materials are extensively used.

In this conclusion chapter, the empirical findings of the research elaborated in previous chapters are first summarised. These are organised in line with the three analytical themes, providing answers to the three research questions. The chapter then moves to compare the Chinese suburbs with others in terms of their forms, functions and processes. Finally, the last section provides a discussion on the broader implications of the Chinese case in both theoretical and practical terms.

7.2 Dynamics of suburban growth in China: empirical findings

7.2.1 Suburbs as a space for capital accumulation

The thesis on suburbanisation as a solution to the capital accumulation crisis was well developed in the Western context. While earlier mass suburbanisation is an integral part of Fordist capitalism (Harvey, 1985; Walks, 1981), current post-suburban settlements have emerged as a new spatial fix of the post-Fordist regime (Keil, 1994; Phelps and Wood, 2011). The study thus aims to explore *‘what is the role of suburbanisation in China’s contemporary capital accumulation regime’*. It is demonstrated that suburbanisation in the form of new town development is an essential accumulation strategy in response to a variety of specific new circumstances. In essence, it represents a peculiar land-centred accumulation regime facilitated by the state. This answer is further developed in the following three aspects.

Changing conditions. A range of new conditions that are embedded in China's local context have emerged since 2000. On the supply side, there emerged an urgent need to expand accumulation and sustain growth. This not only required an increase in amounts of investment, but also involved the goal of economic restructuring towards higher-skilled and higher-value-added industries. Such expansion, however, was confronted with more stringent institutional restrictions. In particular, a strict land policy necessitated a more intensive growth mode. On the demand side, after twenty years of rapid economic growth, Chinese cities saw rapid population growth and an accompanying process of class and social stratification in urban society. It became imperative for the new accumulation regime to accommodate these social changes and tackle the problems that might impede further growth. In short, there were both motives and opportunities for furthering suburbanisation in the form of new town development to sustain growth.

New town development as an accumulation strategy. Suburban new town development is essential to a successful accumulation strategy in six major ways. Firstly, suburban new town development expands the space for accumulation and, secondly, it makes it possible to reorganise economic activities on the metropolitan scale. In effect, this aids the process of deindustrialisation in the central city, but meanwhile strengthens industrialisation on the periphery. Thirdly, by building suburban new towns, a new type of space is created to facilitate capital accumulation in the second circuit (Harvey, 1985). The fourth reason is that the provision of different types of housing and living facilities in new towns offers the means of reproduction of the influx of a diverse labour force. Fifth, through promoting homeownership and high living standards, new towns help boost the domestic market in housing and other consumer durables. Finally, new town development achieves a more intensive use of space than previous featureless urban sprawl and drives growth by taking advantage of an agglomeration economy.

Land-centred accumulation regime. In China, land is owned by the state and is actually the most important resource in local governments' hands to achieve economic growth. Land is not only a factor of production, but also generates revenue for the local coffers itself. Therefore, for local governments, land development is critical to organising economic activities. Suburban new town development represents a sophisticated manipulation of land development to sustain growth. On the metropolitan scale, the central cities need their periphery to 'enlarge their spaces of engagement' (Cox, 1998), and importantly, to acquire more land resources. Moreover, through urban planning, land use control and other regulatory policies, municipalities manage to shift central cities' economies towards the service sectors on the one hand, and build suburbs as new industrial nodes on the other hand. Moreover, at the local level, mixed-use development is tactically used to facilitate growth. Some of the land is leased out for residential and commercial development, which is often carried out through open auction at highly-profitable prices. Land leasing and the property industry only generate one-off gains and do not drive economic growth directly. Therefore, discounted serviced land and other preferential policies are offered as local advantages to attract industrial enterprises. The arrival of manufacturing industries spurs local economic growth, increases local employment and, in turn, brings about population growth and boosts the local housing market. A growth mechanism is established in which real estate development and industrial development mutually reinforce each other.

The role of the state. Compared to many other countries, the state plays a decisive and indispensable role in creating conditions for suburban growth and thus capital accumulation. It is the municipal government that formulates development strategies and mobilises various resources and powers to ensure its materialisation. State interventions exert influence on the suburbanisation process through four aspects. First and foremost, in essence, suburbanisation through the form of new town development is a strategic project led by the municipality in

response to a range of new conditions. Secondly, policies regarding land assembly, infrastructure financing, land leasing on the supply side, tax incentives, homeownership-related benefits such as social welfare or local *Hukou* registration on the demand side have been laid down to create a favourable market environment. Thirdly, the state directly invests in infrastructures and public facilities to support the development of strategically-selected suburbs. Last but not least are institutional changes, including the introduction of market operations and the adjustment of governance structure. A wide variety of actors and their resources are then engaged in the process.

7.2.2 The building of suburbs: state-led entrepreneurial governance

Pro-growth coalitions among public sections and business interests played a significant role in Western suburban and post-suburban development (Logan and Molotch, 1987; Phelps et al., 2006). The modes of suburban politics, however, vary over time and space. When examining Chinese suburbs, some important questions are: ‘*Who are the characters of suburban governance in China? How are pro-growth coalitions formed? How do they work to facilitate suburban growth?*’ It is shown in this study that suburban politics in China is characterised by *state-led entrepreneurial governance*. This point is discussed as follows.

Institutional context and urban entrepreneurialism. It is argued that, under China’s peculiar institutional context, the rise of suburban new towns is predominately underpinned by the state’s entrepreneurial action. Non-state business interests have much less influence on local entrepreneurial agendas. The state has both motivation and power to organise local pro-growth coalitions. As a result of the rescaling of urban governance, great incentives for growth were generated and gave rise to fierce inter-locality competition at different levels of government. Through a series of fiscal and administrative decentralisation tactics,

the central state transferred its powers to lower levels. In effect, it is the municipal governments that preside over urban management (Xu and Yeh, 2009). Correspondingly, the municipalities further down the state scale function to district governments, which are the lowest level of urban governance and inter-locality competition. Moreover, although economic reform since 1978 has broken down the monopolistic role of the state and a variety of non-state actors are involved, the state still plays a leading role in urban development due to the peculiar public ownership of land. This makes the state the *de facto* land owner, i.e. a market player on the one hand, and at the same time the policymaker of the market (Wu et al., 2007).

Building new towns as entrepreneurial cities. The launch of the tax sharing system and the strictest land use policies by the central state made it an imperative for local governments to develop new entrepreneurial strategies to sustain growth. Suburban new towns were developed as entrepreneurial cities to improve local competitiveness. New town development is not only designed to shift away from industrialisation. Instead, the rationale underlying the strategy is to generate revenue by boosting land and property development, which is then used to sponsor industrial development. Revolving around the strategy of building suburbs as good environments in which to live, a new discourse, new urban form, and new methods of space production are invented. Strategically, the key to success is to install infrastructures for an urban economy, including physical infrastructures such as transportation and living facilities, social infrastructures such as new residents, and cultural infrastructures such as flagships and distinctive local brands and identities such as an attractive garden city of Shanghai. Practically, as the land owner of the new towns, the local governments set up development corporations as their agents to take charge of land management. Following a strategy flow such as ‘land acquisition → mega-projects and infrastructure construction → land leasing to private developers and the recovery of investment and profits → reinvestment in developing another plot of land’,

these corporations operate like entrepreneurs and precisely embody the entrepreneurial nature of the state.

Organisation of suburban growth coalitions. Suburban politics is illustrated by the building of Songjiang New Town as a growth machine underpinned by land-based coalitions led by a district government and followed by various public and private sectors, but one which is manipulated by the municipal government. As the actual administrator of the locality, the district government plays the leading role in local growth coalitions. On the one hand, quasi-public development corporations are established to perform on its behalf and develop partnerships with other public and private sectors. On the other hand, the district government struggles to beat other districts and attain sponsorship from the municipal government. In such a case, the two levels of government establish a horizontal and cooperative relationship. Nonetheless, beyond the local level, it is the municipality that initiates the whole suburban development project and makes a wide variety of institutional changes to facilitate suburbanisation. The role of the municipal government should never be underestimated in the Chinese context.

7.2.3 Living in the suburbs: a heterogeneous world

The pursuit of an Arcadian ideal by the middle class is a key factor giving rise to mass suburbanisation in the Western context (Fishman, 1987; Beauregard, 2006), although the distinctive suburban lifestyle has largely been eroded by recent diversification of suburbs (Hall and Lee, 2009). The study attempts to further explore the demand-based driving forces of suburbanisation in China by asking: ‘*What are the demand-based growth dynamics that are driving suburban growth? Who are the suburban residents? What factors have driven them to move to the suburbs? What are the characteristics of suburban spatial differentiation?*’ It is revealed that, on the demand side, suburban growth results from four interwoven processes: industrial restructuring and economic growth, outwards-migration, urbanisation, and capitalisation. Three types of people, i.e.

migrant people, local natives and residents from central Shanghai, constitute the main groups of suburban residents. Their spatial sorting creates a heterogeneous suburban space.

Demand-based growth dynamics. Four structural changes have an impact on the demand side of suburban growth. The first is metropolitan industrial restructuring and economic growth in both the centre and the suburbs. The central city has shifted towards a service economy and attracted large numbers of white-collar workers. However, they are pushed out by the high housing prices in the central area and seek affordable housing in the suburbs. The suburbs themselves have seen the growth of manufacturing industries and also an influx of blue-collar workers. Consequently, suburbs have become places which accommodate the newly-arrived labour force of both types. The second is outwards-migration led by the emerging new rich. With great spending power, this group of people has become the vanguard of consumerism. Housing and other domestic expenditure is at the heart of their consumption-oriented life. They are attracted to the suburbs by spacious rooms and a tranquil living environment. Thirdly, urbanisation is an important pillar of suburban growth. Farmers are coerced to give up their land and move into the newly-development commodity houses in urban areas. Finally, suburban housing development is driven by the high demand for investment capital. The effects have become increasingly apparent since 2008 when capital began to shift away from manufacturing towards the property industry. Although the inflow of capital alone does not contribute to population growth directly, it has created a rental market for migrant workers.

Different groups, diverse motives. Suburban residents consist of three groups of people: migrant people, residents from central Shanghai and local natives, who are diverse in terms of socioeconomic attributes and settle in the suburbs for different reasons. Migrants from other provinces are the fastest-growing group of people in the suburbs. Notably, their socioeconomic attributes are not identical

within the group. At one end of the spectrum are younger rural-migrant workers with a lower level of educational attainment and who have manufacturing or low-end service jobs. In the middle are white-collar workers with higher levels of educational attainment and high-end service jobs. At the other end are rich private entrepreneurs or business owners. However, their arrival is mainly driven by a common purpose, namely the careers and opportunities the city provides. People from central cities are more likely to have attained a higher level of education, but do not show superiority in most other attributes. It is unsurprising that the likelihood of involuntary moves for this group is significantly greater than that for migrants. Nevertheless, consumption-oriented factors such as the pursuit of better living conditions or a nice living environment in the suburbs are important considerations and drivers of their residential moves. Finally, local natives, including landless farmers in large numbers, have not received a better education or enjoyed better economic conditions compared with the migrants. Nevertheless, this group of people are entitled to have their own houses. By selling or renting out their original houses, some of them have even taken advantage of the rent gap created by local property boom. Houses have become an important source of wealth. Therefore, they have more chances to make residential moves for better living conditions.

Heterogeneous suburban space. Different types of people tend to self-sort into different spaces. Focusing on formally-developed settlements, this study identifies two types of estates and three types of sub-districts in the suburbs. With regard to types of estate, unlike Western residential suburbs that are predominantly occupied by single family houses, both low-density villa developments and middle- to high-density apartments are found in China. However, representing the pursuit of a consumption-centred lifestyle, villas are privileged to only a few extremely rich families. Instead, apartments for the middle class represent the dominant form of mass suburbanisation. Similar to those in the central city, these suburban housing estates are only an outward

expansion of housing developments, rather than embodying a suburban lifestyle that is distinctive from that of the inner city.

As for types of sub-districts, the three urban areas in Songjiang are largely recognised as having developed into three different types of suburban settlements. As the district nearest to the central city, Jiuting has become a typical high-density residential suburb of white-collar commuters. Sijing remains less touched by formal development so far. Featuring low-price property and rapid transit, it has attracted large numbers of migrants with informal or low-income jobs. Fangsong is where the well-planned suburban new town is located. At present, it still functions more as a new residential settlement of local residents.

7.3 Chinese suburbs: a variation of post-suburbia

Suburban studies in the Western context tend to regard recent suburban development on the urban edge as something different from the traditional suburb. Harris and Larkham (1999:8) define traditional suburbs in five dimensions: peripheral location, residential land use, low density, distinctive social and cultural norms of life, and separate community identities. Nevertheless, the rise of ‘technoburbs’ (Fishman, 1987), ‘edge cities’ (Garreau, 1991) and ‘edgeless cities’ (Lang, 2003) challenge such conventional definitions of suburbs. Findings in non-European-American countries further threaten the validity of existing theories on urbanisation based on the Western experience. Some scholars thus suggest that the term ‘post-suburbia’ should be applied to capture contemporary suburban growth across the world, which provides an analytic perspective of comparison in both temporal and spatial terms (Phelps et al., 2010).

This study uses the concept of ‘post-suburbia’ to frame Chinese suburbs for two reasons. Elements similar to those found in current Western suburban development are identified in China. These elements are evidently different from conventional residential suburbanisation. Nevertheless, Chinese suburbs exhibit unique traits and different dynamics. Going beyond physical forms, the concept

opens up the possibility of placing Chinese suburbs in a broader theoretical background. Prior to this research, Wu and Phelps (2008:477) have attempted to examine how the concept of 'post-suburbia' is related to Chinese recent suburban development. It is recognised that some suburban settlements in China indeed 'present some of the traits of "post-", in sense of the break from residential decentralisation, but with Chinese characteristics.' This section further confirms, but refines this argument based on empirical evidence from the development of Songjiang in Shanghai.

7.3.1 Physical form and population composition

In appearance, Chinese suburbs are very different from Western low-density traditional suburbia or edge cities, but closer to peri-urban development *desakota* in other densely populated countries in East and Southeast Asia (McGee, 1991). Although luxury villas and gated communities are emerging, they are only available to a few rich people. Predominantly dominated by mid- to high-density developments, suburbs in China are far more intensified. Moreover, instead of private cars and highways, mass suburbanisation in China is supported by the expansion of public mass transit. Nevertheless, two distinguishing post-suburban features are identified. The first is the mixing of land use and a spatial pattern characterised as a 'patchwork structure' (Kraemer, 2005: 44). The layout of Songjiang New Town (Chapter 5, Figure 5.3) explicitly illustrates the co-existence of diverse, but disjointed types of space, juxtaposing a variety of elements, industrial zones, university towns, a central business centre, high-rise apartments and single-family houses. The second feature is that, rather than being exclusive to the middle-class, suburban residents are quite diverse and have different socioeconomic attributes, ranging from wealthy families living in luxury villas to rural-to-urban migrant workers living in private rental houses. It is the heterogeneity of landscapes and residents that indicates an essential difference between Chinese suburbs and Western middle-class suburbia.

7.3.2 Function

In terms of function, this study recognises that Chinese suburbs match the concept of post-suburban settlements in two respects. Firstly, unlike traditional Western residential suburbs, the rising suburban nodes in China are economically significant, serving as strategic growth poles for the whole metropolitan area. New towns in Shanghai are developed as part of the municipality's entrepreneurial strategy to compete with other cities in the Yangtze River Delta in order to build itself into a global city. To a great extent, this is similar to the 'metropolitan model' reintroduced in Western countries since the end of the 1980s, in which 'the metropolitan territory has become the scale on which the central cities reason' (Lefèvre, 1998: 22). With regard to the trajectory towards the model, suburban growth in China has taken a form of amalgamation similar to Canada or Western Europe rather than secession like in the US (Lefèvre, 1998; Keil, 2000).

Secondly, they function as both employment centres and residential areas. As the case of Songjiang illustrates, its rapid growth was built on the mutual reinforcement of the manufacturing industry and housing development. For Teaford (1997:5), the emergence of American post-suburbia results from the fiscal need to introduce economic activities and there is thus a tension between suburban living ideals and economic growth. On the contrary, the Chinese suburbs are evolving from industrial satellite towns towards comprehensive new towns. Residential development is particularly promoted which, interestingly, sometimes mimic settings of Western suburbia to attract home buyers and rebuild the image of the suburbs.

The functional differences of the Chinese case are also apparent, which can be understood from perspectives of time and dimensional disparities (Phelps et al., 2010). Compared with Western developed countries, China is still a country experiencing industrialisation. Although the rising suburban settlements are developed with urban functions and amenities in order to stimulate local property development, the real growth driver remains the manufacturing industry. In fact,

in the case of Shanghai, the suburban development project was originally associated with the municipality's strategic plan to develop the service industry in the centre, but keep its economic strength by encouraging industrial development on the periphery. Therefore, this is a different process from post-suburbanisation in Western cities. While suburbs in developed countries have been experiencing the rise of service sectors, deindustrialisation and the recent trend of retrofitting (Zukin, 1991; Nelson, 2006; Dunham-Jones and Williamson, 2009), Chinese suburban new towns serve more as regional industrial nodes. However, recently, the government has begun to promote the development of producer services in these new towns. In the next few years, an economic transition toward service employment is not unforeseeable.

Another disparity concerns the relationship between the central city and the suburbs, as well as the degree of importance of suburban growth to the whole metropolitan area. The post-war US, UK, and other Western European countries experienced a shift to 'parasitic urbanisation', whereby suburban growth depended on 'draining people and investment from the old industrial central cities' (Beauregard, 2006: 40). This study has demonstrated that such urbanisation has not occurred in China; although suburbs are rising as new growth nodes in their own right, centripetal forces remain dominant. Central cities continue to prosper. Suburban growth has not weakened their attraction but, on the contrary, helped facilitate their industrial upgrading. Therefore, the relationship between the central and the periphery is still far from being turned 'inside-out' (Soja, 2000).

7.3.3 Dynamics

Broadly, it is argued that the new round of suburb development in China, in which elements similar to post-suburbia are found, is underpinned by the same logic of capitalism. The motion of the new town project in Shanghai is in essence growth-oriented. During the process, there have been impacts resulting from the transfer of Western technology and ideas. For example, not only were Western planning ideas such as ‘garden cities’, ‘new urbanism’, ‘decentralised concentration’, ‘polycentric structure’ etc. widely introduced to justify the project, but Western residential suburbia was transplanted as an attractive setting to build the new image of the periphery. However, it is important to note that these similar morphologies have emerged more as a response to locally-embedded conditions, and the underlying growth mechanisms are unique to China.

Chinese capital accumulation is different from both post-war suburbanisation and recent post-suburban development in advanced Western countries. It is documented that post-war residential suburbanisation is part of the Fordist-regime of mass production and consumption. In particular, the property circuit became an outlet for surplus capital and thus a response to the crisis in the primary circuit (Harvey, 1985; Walks, 1981). Post-suburban development in Western countries was largely associated with a shift towards a flexible post-Fordism production system, the rise of service sectors and global interregional competition (Keil and Ronneberger, 1994). However, in the case of China, suburbanisation through new town development is a strategic selection by the municipal governments to hurdle local accumulation barriers which have been directly created by the recentralisation of both fiscal and land development power. An intensive development mode based on an agglomeration economy, new town development provides a complete solution, which has not only tactically circumvented the restrictions of the central state, but also boosted the local housing market to increase land revenue. Funds raised through land development are then used to

facilitate manufacturing production. Both primary and second circuits of capital accumulation are in action.

The Chinese suburban regime is distinctive in terms of its reorganisation of entrepreneurial governance. If business models on the edge are distinguished as based on the roles played by the state and non-state sectors, there are roughly two groups countries can fall within. In the first group are the US and some Southeast Asian countries such as Malaysia, Indonesia, Thailand, etc. whereby private business interests often dominate the pro-growth coalitions of suburbanisation and where suburban incorporation and private governance are widespread (Logan and Molotch, 1987; Dick and Rimmer, 2009). In the other group are the European countries and some Asian countries with a history of a strong developmental state; for example, Korea, where suburban development is largely guided or organised by the state and where local suburban governments often enjoy less autonomy (Phelps et al., 2006; Lee and Shin, 2011). Apparently China belongs to the latter group. Moreover, Chinese suburban urban politics are built around land interests and are thus close to the growth machine model (Logan and Molotch, 1987). Compared with other countries in which the state-led mode dominates, the unique nature of the Chinese case lies in three respects: 1) as the *de facto* land owner, local governments are the major stakeholder and are directly involved in the development as a market player; 2) local governments have much greater governance capacities to achieve their goals, while other actors can exert much less influence; 3) the municipality still administers suburban districts and leads the whole process of suburban development; nevertheless, suburban district governments are given greater decision-making power to organise pro-growth coalitions in their own ways.

Demand-based factors driving suburban growth in China are manifold. Suburbs in Western countries are predominately at the mercy of centrifugal force, first residential suburbanisation and later the 'urbanisation of the suburbs' (Muller, 1976). In the case of China, the rise of the suburbs involves the urbanisation of

rural farmers, rural-to-urban migration led by metropolitan economic growth and outwards-migration from the central city, where the former two are dominant. Given that the Chinese suburbs used to be densely populated agricultural areas, large numbers of farmers are affected by suburban development. They are forced to give up their rural lives and resettle in suburban new towns. Meanwhile, employment opportunities have attracted migrants from other places. In the US and many other Western countries, immigrants and rural migrants flocked to the central city, but drove away white middle-class families (Frey, 1979). However, central locations are much less accessible to migrants in China, and most tend to live in the periphery. Finally, residential suburbanisation driven by the pursuit of suburban living is new to China and still exclusive to a few people. Therefore, in general, suburban growth is much less associated with changes in residential preferences or an embrace of a consumption-centred lifestyle by the masses.

To sum up, the case of the Chinese suburbs confirms the necessity for comparative work across different spatial contexts to contribute to contemporary suburban theory. Echoing Golubchikov and Phelps' (2011) emphasis on 'political' processes rather than 'place', when examining the political economy of place, in order to develop a flexible framework it is important to establish some essential elements of post-suburban settlements and also to examine the local context giving rise to these traits. The emerging Chinese suburban nodes bear one important feature distinguishing post-suburban settlements from middle-class residential suburbia; that is, they have developed into multifunctional settlements with a heterogenous population, and have played a significant role in the regional economy. Beyond this, however, as a response to local structural changes and being materialised through a unique development method, the form is created by locally-rooted factors.

7.4 Broader implications

7.4.1 Emerging urbanism in China

The final broader implication of this study on Chinese suburban growth concerns the role of urbanisation in China's contemporary capital accumulation regime. Since 2000, two major transitions have led China's economic development. One is the fact that the country is receiving massive FDI inflows and becoming a world factory. The other is that China, which was once known as a rural-dominated society, is evolving towards an urban society. Recent census data shows that by 2010, about 49.68% of the total population have lived in urban areas¹. Accompanying the rapid growth of the urban population is the emergence of mega cities and radically-changing urban landscapes. Notifying the spread of consumption-oriented landscape elements familiar to postmodern Western countries, some scholars have linked the phenomenon to the emergence of urbanism in China (Lin, 2007; Wu, 2010). Yet, the question remains, from the perspective of capital accumulation: how is it possible to explain these urban landscapes, given that China is still a country experiencing industrialisation?

Broadly speaking, suburban development is at the forefront of China's urban revolution and its growth dynamics provide a useful explanation on urbanisation as an engine of China's growth. It is demonstrated that urbanisation and industrialisation are mutually-promoted processes. On the one hand, the state attempts to attract foreign investment by offering a low cost labour force and land resources. On the other hand, it capitalises on land and housing development to raise funds to subsidise industrial development, which, in turn, leads to the promotion of a consumer culture and the creation of consumption space. In this way the production of urban space functions as a critical element of capital circulation. If developing itself as a world factory represents the country's efforts

¹ See <http://www.stats.gov.cn/>, accessed 30th Nov, 2011

to promote economic growth under global labour division, urban-based accumulation provides an indispensable means to achieve this goal.

7.4.2 Prospect of the Chinese state-led mode

There are debates on whether suburban development under strong state control or a more liberalised system is more favourable to achieving sustainable growth (Phelps and Wood, 2011). Based on this study, suburban development in China can be depicted as a state-led mode. The state is prominently entrepreneurial in nature. Local states play as a market actor themselves and have direct economic interests in the land and property market. The governments thus not only mobilise various resources and administrative measures to remove possible obstacles to urban development, but also directly invest in infrastructure and other public facilities to create favourable conditions for a booming suburban housing market. Unlike the state in many South-east Asian countries, however, which tend to stimulate growth by privatisation and deregulation (Marcotullio, 2003), the Chinese government still have strong powers over land development. It is the great capacity and power of the state that ensures the rapid progress of new town development. Landscapes and the image of suburbs have been dramatically changed in a short period. Bearing in mind that the new towns are justified as a rational spatial arrangement alternative to an earlier land-extensive pattern of growth, it is important to question the overall effects of such development under strong state intervention, i.e. whether Chinese state-led suburbanisation is sustainable in economic, social and environmental terms.

Economically, building entrepreneurial new towns in this way is not without risk. Because local governments are able to avoid investment loss by seeking help from the central state, they tend to excessively invest in infrastructures and mega-projects to attract private capital investment (Xu and Yeh, 2005). However, it is quite possible that there is still a lack of sufficient local demand. A large proportion of the suburban local labour force comprises

manufacturing workers, most of whom cannot afford to buy a house. In such a case, it is particularly important to attract wealthier residents from the central cities. Otherwise, over-optimistic expectations derived from the support of the government could lead to active speculation. Moreover, in social terms, property speculation in turn further intensifies social inequity and polarisation. Because rising housing prices are increasingly far beyond migrants' reach, they tend to be trapped in private rental houses and poor neighbourhoods. Overall, with regard to the effects of growth containment, some empirical studies have shown that the outcome is far from stable at present (Zhao et al., 2009). Under the decentralised administrative system, suburban local governments within the same city rival each other for capital investment and economic growth. In many cases, they tend to work on their own behalf and risk breaking the municipal plan. The excessive competition among districts thus inevitably leads to ineffective growth management. To sum up, although the Chinese state-led mode can transform the suburbs quickly, there are hidden threats to sustainability in the long run.

Appendix 1 Interviewee list

Categories	Code	Character	Date
Government Officials (7 cases)	G1	Deputy director of Songjiang Planning and Land Resources Management Bureau (SPLRMB)	13/07/2010
	G2	Director of Songjiang Planning and Design Office, SPLRMB	12/05/2010
	G3	Chief of Planning and Construction Management Section, SPLRMB	25/05/2010
	G4	Deputy mayor of Jiuting Township	11/06/2010
	G5	Deputy mayor of Sijing Township	10/06/2010
	G6	Deputy Chief of Planning Management Section, Shanghai Municipal Planning and Land Resources Management Bureau (SMPLRMB)	24/05/2010
	G7	Deputy Chief of Chief Engineer Office, SMPLRMB	10/02/2009
Planners and Designers (4 cases)	P1	Head of Shanghai Urban Planning and Design Research Institute (SUPDRI)	13/01/2010
	P2	Deputy director of SUPDRI	24/05/2010
	P3	President of Shanghai Association of City Planning Ex-head of SUPDRI	20/05/2010
	P4	Senior planning consultant of Atkins Co. Ltd, Shanghai branch	23/07/2010
Developers (7 cases)	D1	Chief executive director of Songjiang New Town Development Corporation (SNTDC)	07/06/2010
	D2	Chief of construction department, SNTDC	26/05/2010
	D3	Deputy director of Songjiang Chengtong Rail Transport Investment and Development Co. Ltd	07/06/2010
	D4	Chief executive director of Xiangda Real Estate Development Co.Ltd, Shanghai Star Group	08/06/2010
	D5	Deputy executive director of Shanghai Juying Real Estate Development Co.Ltd	26/05/2010
	D6	Chief of sales department, Shanghai Yu'an Property Co.Ltd	07/06/2010
	D7	Project manager, Shanghai Chengtou Property (Group) Co.Ltd	10/06/2010

(Continued)

Categories	Code	Character	Date
Real estate consultants and realtors (4 cases)	E1	Senior real estate consultant of Centaline Property, Shanghai branch	14/01/2009
	E2	Senior manager of Shanghai Brilliant Future Real Estate consulting Co. Ltd	24/06/2010
	E3	Head of Research and Design Institute, E-house China	07/07/2010
	E4	Senior director of real estate investment department, Centaline Property, Shanghai branch	29/06/2010
University administrators (2 cases)	U1	Deputy director of Songjiang University Town Management Committee Vice president of Donghua University	01/06/2010
	U2	Chief of school office, Shanghai Institute of Visual Art	22/06/2010
Street office and residents' committee staffs (4 cases)	C1	Chief of community service and management Centre, Fangsong street office	01/07/2010
	C2	Chief of Thames Town residents' committee, Fangsong street	02/08/2010
	C3	Chief of community service and management Centre, Jiuting township	07/07/2010
	C4	Chief of Jingyuan residents' committee, Sijing township	29/07/2010
Residents (14 case)	R_F1	Migrant, apartment house, Fangsong	22/06/2010
	R_F2	Local native, apartment house, Fangsong	17/07/2010
	R_F3	Local native, apartment house, Fangsong	14/08/2010
	R_F4	Migrant, villa-style house, Fangsong	27/07/2010
	R_F5	Local native, villa-style house, Fangsong	27/07/2010
	R_F6	Resident from central Shanghai, villa-style house, Fangsong	27/07/2010
	R_S1	Resident from central Shanghai, apartment house, Sijing	25/07/2010
	R_S2	Resident from central Shanghai, apartment house, Sijing	25/07/2010
	R_S3	Migrant, apartment house, Sijing	22/07/2010
	R_J1	Resident from central Shanghai, villa-style house, Jiuting	10/07/2010
	R_J2	Resident from central Shanghai, villa-style house, Jiuting	10/07/2010
	R_J3	Resident from central Shanghai, apartment house, Jiuting	09/07/2010
	R_J4	Migrant, apartment house, Jiuting	06/06/2010
	R_J5	Migrant, apartment house, Jiuting	22/05/2010

Appendix 2 Survey Questionnaire

Songjiang Residents' Residential Mobility and Living Conditions Survey

Dear Sir/Madam:

I am PhD student in the School of City and Regional Planning, Cardiff University, UK, undertaking a research project on suburban residents' living conditions and daily lives. I hereby invite you to participate in our survey, which is currently being conducted in a number of neighbourhoods in Songjiang. The aim of the survey is to provide valuable empirical evidence on Songjiang residents' residential mobility and living conditions, and to make useful policy recommendations for Shanghai's suburban development.

Your family represents many other similar households in Songjiang and the information you provide is very important to the research. We would be very grateful if you could spare some time filling out the questionnaire. Undergraduate students from the School of Social Development, East China Normal University will help distribute the questionnaires. Information provided here will be used to derive a series of aggregate analyses, and will be kept strictly CONFIDENTIAL and not be used for any other purpose except academic research.

Thank you for your cooperation and if you have any queries on the survey, please do not hesitate to contact us.

Yours sincerely

Jie Shen
PhD Researcher,
The School of City and Regional Planning, Cardiff University, UK
Tel: +44 (0)29 208 75170 Email: ShenJ4@cardiff.ac.uk

A: Basic information for household head

A1: Age: _____

A2: Gender

- 1, Male 2, Female

A3: Marital Status

- 1, Single
2, Married and living with spouse
3, Married but not living with spouse
4, Divorced or widowed

A4: Educational attainment

- 1, Uneducated 2, Primary
3, Junior high school
4, Senior high school
5, Technical or vocational training
6, Junior college
7, Undergraduate degree
8, Postgraduate degree

A5: Hukou Classification

- 1, Local non-agricultural hukou
2, Local agricultural hukou
3, Nonlocal non-agricultural hukou
4, Nonlocal agricultural hukou
4, Foreign nationality

A6 : Hukou location

- 1, Shanghai Songjiang
2, Other districts in Shanghai
3, Relocated from other places
(A6a. Present district: _____)
4, Relocated from other districts in
Shanghai
(A6b. Original district: _____)
5, Other places
6, Foreign countries

A7: Occupation

- 1, Farmer
2, Manual worker/social service worker
3, Skilled worker/ technician
4, Professional
5, Civil servant
6, Manager/ director/cadre
7, Private enterprise owner (More than
one employee)
8, Small business owner
9, Freelance
10, Others (A7a. Please specify: _____)

A8: Employer type

- 1, Government
2, Public sector (e.g. education,
healthcare, research institutions)
3, Large-scale (central or provincial)
state-owned enterprise
4, Small- to medium-sized (local)
state-owned enterprise
5, Collective owned enterprise
6, (Self-owned) private enterprise
7, (Non-self-owned) private enterprise
8, Foreign Enterprise
9, Joint venture
10, Household business
11, Others (A8a. Please specify: _____)

A9: a. Family monthly income

- 1, < ¥1, 000
2, ¥1,000 ~ ¥5,000
3, ¥5,000 ~ ¥10,000
4, ¥10,000 ~ ¥20,000
5, > ¥20,000

b. Which level applies to your family's
standard of living?

- 1, Wealthy
2, Xiaokang (moderately well off)
3, Wenbao (basic living needs)
4, Poor

- A10: a. Total family members living together with you _____;
- b. Total generations living together _____;
- c. Total non-family members living together with you _____;
- d. What are your relationships with people you live with? (Multiple choices)
- 1, Spouse/partner 2, Children
- 3, Parents 4, Parents in law
- 5, Other relatives 6, Friends
- 7, Colleagues
- 8, Household maid

B: Housing conditions and residential mobility

B1: Housing tenure:

A. Home ownership:

- 1, Inherited housing
- 2, Subsidised/welfare housing
- 3, Affordable housing
- 4, Incomplete property right housing
- 5, Full property right new commodity housing
- 6, Full property right second-hand commodity housing
- 7, Resettlement housing
- 8, Others (B1a. Please specify: _____)

B. Renting:

- 9, Private rented housing
- 10, Public rented housing from work units
- 11, Public rented housing from the government
- 12, Others (B1a. Please specify: _____)

If you live in your own home, please

answer B2-B6

- B2: a. When did you buy the house?
_____ (mm/yy)
- b. Total cost _____ (Ten thousand Yuan)

- B3: Did you buy the house on mortgage?
- 1, Yes
(B3a. Down payment percentage _____)
- 2, No

B4: Sources of funding (multiple choices):

- 1, Income savings
- 2, Money raised by selling previous houses
- 3, Housing Provident Fund (HPF)
- 4, Parents or other relatives
- 5, Housing subsidy from work unit/employer
- 6, Loans from work unit/ employer
- 7, Private loans
- 8, Accumulation fund mortgage
- 9, Commercial mortgage
- 9, Housing subsidy from the government
- 10, Redevelopment compensation fee
- 11, Others (B4a. Please specify _____)

B5: Use of the house:

- 1, As usual residence for self and family
- 2, As holiday residence for self and family
- 3, As usual residence for children
- 4, As usual residence for parents
- 5, For rent
- 6, For investment
- 7, Others (B5a. Please specify _____)

B6: Do you have another house in Shanghai?

- 1, Yes (please answer B6a)
- 2, No

B6a: Total houses you own in Shanghai

If you live in a rental house, please

answer B7- B8

B7: a. Rental term: from _____ (mm/yy)
to _____ (mm/yy)

b. Monthly rent:
_____ Yuan/month

B8: The most important reason for not
buying a house _____

- 1, Unable to afford down payments
- 2, Unable to guarantee the repayment of
the mortgage
- 3, Renting a house is more cost-effective
- 4, To wait and see how the property
market goes
- 5, Insecure employment
- 6, Others (B8a. Please specify _____)

All please continue to answer the

following questions

B9: The date when you moved in this
house: _____ (mm/yy)

B10: a. Total building area of the
house _____ m²; b. Total bedrooms

c. Total living rooms _____

B11: The reason why you moved out of
your previous house:

A: Passive move

- a1, Relocated by public works
- a2, Relocated by property projects
- a3, Housing congestion alleviation
programmes
- a4, Relocated by land acquisition
- a5, Welfare housing allocation
- a6, Others (B11a. Please specify _____)

B: Active move

- b1, For a location closer to work
- b2, For a location closer to children's
school
- b3, Marriage or moving with family
- b4, To improve living space
- b5, To improve living environment
- b6, To enhance life quality
- b7, For cheaper rent
- b8, Others (B11b. Please specify _____)

B12: The reason for which you moved into
your current house (please select three most
important factors among the options below):

- a. The first important factor _____;
- b. The second important factor _____;
- c. The third important factor _____;

Living environment

- 1, A good city plan
- 2, Songjiang University Town
- 3, Quality living environment in suburbs
- 4, All-round living facilities and services

Accessibility

- 5, No.9 Metro Line
- 6, Highways

Employment

- 7, More/better employment opportunities
- 8, Close to work place

Cheap housing/rent prices

- 9, Cheap housing price
- 10, Cheap rent

Quality estates

- 11, Distinctive design style
- 12, A good internal layout
- 13, Good privacy
- 14, Well-know development company
- 15, A good investment
- 16, High status neighbours
- 17, Others (B12d. Please specify _____)

B13: Please indicate how satisfied you are with the following factors of your current living conditions:

- 5=Very satisfied 4= Satisfied
 3= Neutral 2=Dissatisfied
 1=Very dissatisfied 0=N/A

	Score
a Living area	
b Housing quality	
c Neighbourhood relationship	
d Community service	
e Schools and childcare	
f Market and shops	
g Transportation	
h Security	
i Cleanliness	
j Recreation and leisure facilities	
k Forestation and greenery	
l Property management	
m Overall satisfaction with the estate	
n Overall satisfaction with district	

C: Daily life

C1: Does your family own cars?

- 1, Yes
 2, No (please go to C3)

C2: a. When did you buy your first car?
 _____(mm/yy)

b. The most important use of the car:

- 1, Commuting 2, Children shuttle
 3, Visiting relatives and friends
 4, Shopping
 5, Entertainment and recreation
 6, Others (C2c. please specify _____)

C3: How do you commute to work?

- 1, On foot 2, By bike
 3, By bus 4, By rail
 5, By car
 6, Not applicable/ working at home
 (Please go to C5)
 7, Others (C3a. Please specify _____)

C4: How long is your one-way commute time? _____ Minutes

C5: a. How much was your family's electric bill this June? _____ Yuan

b. What does your family spend on petrol every month on average?
 _____ Yuan

c. What does your family pay for rail transport every month on average?
 _____ Yuan

d. What does your family spend on bus transport every month on average?
 _____ Yuan

C6: a. Except for work, how often do you and your family go to the central city?

b. The most frequent destinations are (multiple choices)

- 1, Shops
 2, Sport complexes
 3, Parks
 4, Cultural and entertainment places
 5, Restaurants
 6, Library/hospital/post office
 7, Visiting relatives and friends
 8, Others (C6c please specify _____)

C7: How often do you and your family contact your neighbours?

- 1, Frequently 2, Sometimes
 3, Seldom 4, Never

C8: How do you feel about close contact with neighbours?

- 1, Troublesome 2, Unimportant
3, Very important 4, Indifferent

C9: How much are the property management fees in your neighbourhood?

_____ Yuan /m²/month

C10: Which is the property management service that you value most?

- 1, Environmental maintenance
2, Facility maintenance
3, Housing maintenance
4, Access control
5, Others (C10a. Please specify _____)

C11: Do you think a homeowners association is necessary?

- 1, Necessary (Please go to C11a)
2, No need (Please go to C12)
3, Indifferent (Please go to C12)
4, Never heard of that (Please go to C13)

C11a. What do you think is the most important responsibility of a homeowners association?

- 1, To supervise property management and maintain a good living environment
2, To maintain the quality of the estate and promote property values

- 3, To protect homeowners' interest

C12: Are you satisfied with the job that the homeowner association in your neighbourhood does?

- 1, Very satisfied 2, Neutral
3, Dissatisfied
4, No homeowner association

C13: Which kind of lifestyle do you prefer?

- 1, Urban lifestyle
2, Suburban lifestyle

C14: Has your present life met your original expectations?

- 1, Yes 2, No

C15: Do you and your family plan to settle down in Songjiang?

- 1, Yes
2, No
3, Hard to say

C16: Do you have a sense of belonging to the district where you live now?

- 1, Strong
2, Some
3, None

References

- Adams, C. F., Fleeter, H. B., Kim, Y., Freeman M. and Cho, I. (1996). Flight from blight and metropolitan suburbanisation revisited. *Urban Affairs Review*, 31 (4), 529-43.
- Alba, R.D. et al. (1999). Immigrant groups in the suburbs: a reexamination of Suburbanisation and spatial assimilation. *American Sociological Review*, 64(3), 446-460.
- Allard, S. (2004). *Access to Social Services: the Changing Urban Geography of Poverty and Service Provision*. Metropolitan policy program, survey series. Washington, DC: The Brookings Institution.
- Althubaity, A. and Jonas, A. (1998). Suburban entrepreneurialism: redevelopment regimes and co-ordinating metropolitan development in southern California. In T. Hall and P. Hubbard (eds.), *The Entrepreneurial City: Geographies of Politics, Regime and Representation*. Chichester: John Wiley, 149–172.
- Babbie, E.R. (2007). *The Practice of Social Research*. Belmont, CA: Thomson Wadsworth.
- Baldassare, M. (1986). *Trouble in Paradise*. New York: Columbia University Press.
- Baldassare, M. (1992). Suburban communities, *Annual Review in Sociology*, 18, 475–494.
- Bater, J. (1980). *The Soviet City: Ideal and Reality*. London: Edward Arnold.
- Beauregard, R. (1994). Capital switching and the built environment: United States, 1970-1989. *Environment and Planning A*, 26 (5), 715-732.
- Beauregard, R. (1995). Edge cities: peripheralizing the centre. *Urban Geography*, 16: 708–721.
- Beauregard, R. (2006). *When America Became Suburban*. Minneapolis, MN: University of Minnesota Press.
- Beauregard, R. A. (1993). *Voices of decline: The postwar fate of U.S. cities*. Boston: Blackwell.
- Bell, W. (1958). Social choice, life styles, and suburban residence. In W.M. Dobriner (eds.), *The Suburban Community*. New York: G. P. Putnam's Sons, 209–224.
- Bernhardt, C. (2005). Planning urbanization and urban growth in the socialist period. *Journal of Urban History*, 32(1), 104–119.
- Berry, B. J. L. (1976). The counterurbanization process: Urban America since 1970. In B. J. L. Berry (eds.), *Urbanization and Counterurbanization*. Beverly Hills/London: Sage, 17-30.

- Berube, A. and Frey, W. H. (2002). *A Decade of Mixed Blessings: Urban and Suburban Poverty in Census 2000*. Washington, DC: The Brookings Institution.
- Bian, Y. and Liu, Y. (2005). Social stratification, housing property rights and living quality — an analysis of Chinese Census 2000. *Social Science Research*, 20 (3), 82-98. (In Chinese)
- Blakely, E.J. and Snyder, M.G. (1997). *Fortress America: Gated Communities in the United States*. Washington, DC: Brookings Institution Press.
- Bontje, M. and Burdack, J. (2005). Edge cities European-style: examples from Paris and the Randstad, *Cities*, 22(4), 317–330.
- Borén, T. and Gentile, M. (2007). Metropolitan processes in post-communist states: an introduction. *Geografiska Annaler*, 89 B (2), 95-110.
- Brenner, N. and Theodore, N. (2002). Cities and the geographies of “actually existing neoliberalism”. *Antipode*, 34(3), 349–379.
- Brown, E. (1992). War on waste and other urban ideals for Latin America. In R. M. Morse and J. E. Hardoy (eds.), *Rethinking the Latin American City*. Washington, DC: Woodrow Wilson Center Press, 110-127.
- Burgess, E. W. (1967). The growth of the city. In R. E. Park, E.W. Burgess, and R.D. McKenzie (eds.), *The City*. Chicago: University of Chicago Press.
- Caldeira, T. (1996). Fortified enclaves: the new urban segregation. *Public culture*, 8(2), 303-328.
- Cartier, C. (2001). ‘Zone fever’, the arable land debate, and real estate speculation: Chinas evolving land use regime and its geographical contradictions. *Journal of Contemporary China*, 10 (28), 445-469.
- Cervero, R. and J. Day (2008). Suburbanisation and transit-oriented development in China. *Transport Policy*, 15(5): 315-323.
- Charney, I., (2002). Three dimensions of capital switching within the real Estate sector: a Canadian case study. *International Journal of Urban and Regional Research*, 25 (4), 740-758.
- Clapson, M. (2000). The suburban aspiration in England since 1919. *Contemporary British History*, 14(1), 151-174.
- Clapson, M. and Hutchison R. (eds.) (2010). *Suburbanisation in Global Society. Research in Urban Sociology*, 10.
- Cox, K. (1998). Scales of dependence, spaces of engagement and the politics of scale, or: looking for local politics, *Political Geography*, 17 (1), 1–23.

- Cox, K. (2010). The Problem of Metropolitan Governance and the Politics of Scale. *Regional Studies*, 44(2), 215-227.
- Cox, K. R. (1968). Suburbia and voting behaviour in the London metropolitan area. *Annals of the Association of American Geographers*, 58 (1), 111–27.
- Davis, D. (eds.), (2000). *The Consumer Revolution in Urban China*. Berkeley, CA: University of California Press.
- Davis, D. S. (2005). Urban Consumer Culture. *The China Quarterly*, 183, 677-694.
- Davis, M. (2006). *Planet of Slums*. New York: Verso.
- 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.
- Deng, X. Z., Huang, J. K., Rozelle, S., and Uchida, E., (2010). Economic Growth and the Expansion of Urban Land in China. *Urban Studies*, 47(4), 813-843.
- Dick, H. W. and Rimmer, P. J. (1998). Beyond the third world city: the new urban geography of South-east Asia. *Urban Studies*, 35(12), 2303-2321.
- Ding, C. (2004). Urban spatial development in the land policy reform era: evidence from Beijing. *Urban studies*, 41 (10), 1889–907.
- Downey, D. J. and Smith, D. A. (2011). Metropolitan reconfiguration and contemporary zones of transition: conceptualizing border communities in postsuburban California. *Journal of Urban Affairs*, 33(1), 21-44.
- Dunham-Jones, E. and Williamson, J. (2009). *Retrofitting Suburbia: Urban Design Solutions for Redesigning Suburbs*. Chichester: Wiley.
- Dunleavy, P. (1979). The urban basis of political dealignment: Social class, domestic property ownership, and state intervention in consumption processes. *British Journal of Political Science*, 9 (4), 409–43.
- Editorial Board of History of Urban Planning in Shanghai (1999). *History of Urban Planning in Shanghai*. Shanghai: Shanghai Academy of Social sciences Publishing House. (In Chinese)
- Editorial Board of History of Urban Planning in Songjiang (2009). *History of Urban Planning in Songjiang*. Shanghai: Shanghai Lexicographical Publishing House. (In Chinese).
- Ekers, M., Hamel, P. and Keil, R. (2012). Governing suburbia: modalities and mechanisms of suburban governance. *Regional Studies*, 46 (3), 405–422
- Fan, C. C. (2001). Migration and labour market returns in urban China: results from a recent survey in Guangzhou. *Environment and Planning A*, 33 (3), 479-508.

- Fan, C. C. (2002). The elite, the natives, and the outsiders: migration and labour market segmentation in urban China. *Annals of the Association of American Geographers*, 92(1), 103–124.
- Fasenfest, D., Booza, J., and Metzger, K. (2006). Living together: a new look at racial and ethnic integration in metropolitan neighbourhoods, 1990-2000. In B. Katz and R. Lang, *Redefining Urban and Suburban America: Evidence from Census 2000*. Washington, DC: Brookings Institution Press, 93-117.
- Fava, S. F. (1956). Suburbanism as a way of life, *American Sociological Review*, 21 (1), 34–37.
- Feng, J., and Zhou, Y. (2005). Suburbanisation and the changes of urban internal spatial structure in Hangzhou, China. *Urban Geography*, 26 (2), 107–136.
- 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 suburbanisation in Beijing since 1990: from government-led to market-oriented. *Regional Studies*, 42(1), 83- 99.
- Firman, T. (2004). New town development in Jakarta Metropolitan Region: A perspective of spatial segregation. *Habitat International*, 28(3), 349–368.
- Fishman, R. (1987). *Bourgeois Utopias: The Rise and Fall of Suburbia*. New York: Basic Books.
- Fleischer, F. (2007). ‘To choose a house means to choose a lifestyle’: the consumption of housing and class-structuration in urban China. *City & Society*, 19(2), 287-311.
- Fleischer, F. (2010). *Suburban Beijing: housing and consumption in contemporary China*. Minnesota, U.S.A: University of Minnesota Press.
- Frey, W. H. (1979). Central City White Flight: Racial and Nonracial Causes. *American Sociological Review*, 44, 425–448.
- Frey, W. H. (2001). *Melting Pot Suburbs: A Census 2000 Study of Suburban Diversity*. Washington, DC: The Brookings Institution.
- Frey, W. H. (2003). *Boomers and seniors in the suburbs: aging patterns in Census 2000*. Living Cities Census Series, Center on Urban and Metropolitan Policy, Brookings Institution, Washington, DC.
- Frey, W. H. and Berube, A. (2003). City families and suburban singles: an emerging household story. In B. Katz and R. E. Lang (eds.), *Redefining Urban and Suburban*

- America: Evidence from Census 2000, Vol. I.* Washington, DC: Brookings Institution Press, 257–289.
- Gans, H. J. (1967). *The Levittowners: Ways of Life and Politics in a New Suburban Community.* New York: Vintage.
- Garreau, J. (1991). *Edge City: Life on the New Frontier.* New York: Doubleday.
- Gentile, M. and Sjöberg, Ö (2006). Intra-urban Landscapes of Priority: the Soviet Legacy. *Europe-Asia Studies*, 58 (5), 701-729
- Golubchikov, O. and Phelps, N. A. (2011). The political economy of place at the post-socialist urban periphery: governing growth on the edge of Moscow. *Transactions of the Institute of British Geographers*, 36 (3), 425-440.
- Goodman, D. S. G. (2008). *The New Rich in China: Future Rulers, Present Lives.* London, UK: Routledge.
- Gotham, K. F. (2006). The secondary circuit of capital reconsidered: globalization and the U.S. 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.
- Gottdiener, M. (1977). *Planned Sprawl: Private and Public Interests in Suburbia.* London: Sage.
- Hall, M. and Lee, B. (2010). How diverse are US suburbs? *Urban Studies*, 47 (1), 3-28.
- Hanlon, B. and Vicino, T. (2007). The Fate of Inner Suburbs: Evidence from Metropolitan Baltimore. *Urban Geography*, 28(3), 1–27.
- Hanlon, B., Vicino, T. and Short, J. R. (2006). The new metropolitan reality in the US: rethinking the traditional model. *Urban Studies*, 43 (12), pp. 2129–2143.
- Harding, A. (1991). The rise of urban growth coalitions, UK-style? *Environment and Planning C*, 9(3), 295 – 317
- 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. Research in Urban Sociology*, 10, 15-47
- Harris, R. and Larkham, P. (1999). Suburban foundation, form and function. In R. Harris and P. Larkham, (eds.), *Changing Suburbs: Foundation, Form and Function.* London: Spon Press, 1-31.

- Harris, R. and Lewis, R. (1998). Constructing a fault(y) zone: misrepresentations of American cities and suburbs, 1900–1950. *Annals of the Association of American Geographers*, 88, 622–639.
- Harvey, D. (1985). *The Urbanisation of Capital*. Oxford: Blackwell.
- Harvey, D. (1989). From managerialism to entrepreneurialism: The transformation of urban governance in late capitalism. *Geografiska Annaler*, 71B, 3-17.
- Harvey, D. (2005). *A Brief History of Neoliberalism*. Oxford, UK: Oxford University Press.
- Hayden, D. (2003). *Building Suburbia: Greenfields and Urban Growth, 1820–2000*. New York: Pantheon.
- He, S. (2009). New-build gentrification in Central Shanghai: demographic changes and socioeconomic implications. *Population Space and Place*, 16 (5), 345–361.
- He, S. and Wu, F. (2009). China's emerging neoliberal urbanism: perspectives from urban development. *Antipode*, 41 (2), 282-304.
- Hill, E.W., Wolman, H. L., and Ford III, C. C. (1995). Can suburbs survive without their central cities? Examining the suburban dependence hypothesis. *Urban Affairs Review*, 31(2), 147-74.
- Hirt, S. (2007). Suburbanizing Sofia: characteristics of post-Socialist peri-urban change. *Urban Geography*, 28(8), 755-780.
- Hirt, S. and Stanilov, K. (2009). *Twenty Years of Transition: The Evolution of Urban Planning in Eastern Europe and the Former Soviet Union*. Nairobi: UN-HABITAT.
- Hise, G. (1997). *Magnetic Los Angeles: Planning the Twentieth Century Metropolis*. Baltimore, MD: Johns Hopkins University Press
- Ho, S. P. S., and Lin G. C. S. (2004). Non-agricultural land use in post-reform China. *The China Quarterly*, 179, 758-781.
- Huang, Y. (2003). A room of one's own: housing consumption and residential crowding in transitional urban China. *Environment and Planning A*, 35, 591-614.
- Huang, Y. (2004). The Road to Homeownership: A Longitudinal Analysis of Tenure Transition in Urban China (1949-94). *International Journal of Urban and Regional Research*, 28 (4), 774-795.
- Huang, Y. (2008). *Capitalism with Chinese Characteristics: entrepreneurship and the state*. Cambridge: Cambridge University Press.
- Huang, Y. and Jiang, L. (2009). *Housing Inequality in Transitional Beijing*. *International Journal of Urban and Regional Research*, 33(4), 936-956.

- Hudnut III, W. H. (2003). *Halfway to Everywhere: A Portrait of America's First-Tier Suburbs*. Washington, DC: Urban Land Institute.
- International Finance News* (2003). Songjiang builds new town to improve soft investment environment, 20th, October. Available at <http://www.people.com.cn>; accessed 14th, September, 2009.
- Jacobs, J. (1961). *The Death and Life of Great American Cities*. New York: Vintage Books.
- Jargowsky, P. A. (2003). *Stunning Progress, Hidden Problems: The Dramatic Decline of Concentrated Poverty in the 1990s*. Washington, DC: The Brookings Institution.
- Jessop, B. (2006). Spatial fixes, temporal fixes and spatio - temporal fixes. In N. Castree and D. Gregory (eds.), *David Harvey: a Critical Reader*. Oxford, UK: Blackwell publishing, 142-166.
- Jessop, B. and Sum, N-L. (2000). An entrepreneurial city in action: Hong Kong's emerging strategies in and for (inter) urban competition. *Urban Studies*, 37 (12), 2287-2313.
- Jim, C. Y. and Chen, W. Y. (2007). Consumption preferences and environmental externalities: A hedonic analysis of the housing market in Guangzhou. *Geoforum*, 38(2), 414-431.
- Jonas, A. E. G. and Wilson, D. (1999). The city as a growth machine: critical reflections two decades later. In A. E. G. Jonas and D. Wilson (eds.), *The Urban Growth Machine: Critical Perspectives Two Decades Later*. Albany: State University of New York Press, 3-20.
- Keil, R. (2000). Governance restructuring in Los Angeles and Toronto: amalgamation or secession. *International Journal of Urban and Regional Research*, 24 (4), 758-781.
- Keil, R. and Ronneberger, K. (1994). Going up country: internationalization and urbanisation on Frankfurt's northern fringe. *Environment and Planning D*, 12 (2), 137-166.
- Kennedy, L. (2007). Regional industrial policies driving peri-urban dynamics in Hyderabad, India. *Cities*, 24(2), 95-109.
- Kingsley, G. T. and Pettit, K. L. S. (2003). *Concentrated Poverty: A Change in Course*. Washington, DC: The Urban Institute.
- Kirkby, R. J. R. (1987). A review of satellite town policies in the People's Republic of China: the experience of Shanghai. In D. R. Phillips and Yeh, A.G.O. (eds.), *New Towns in East and Southeast Asia*. Hong Kong: Oxford University Press.
- Knox, P. L. (2008). *Metroburbia*. New Brunswick, NJ: Rutgers University Press.
- Kostinsky, G. (2001). Post-socialist cities in flux. In R. Paddison (eds.), *Handbook of Urban Studies*. London: Sage, 451-464

- Kraemer C, (2005). Commuter belt turbulence in a dynamic region: the case of the Munich city-region. In K. Hoggart (eds.), *The City's Hinterland: Dynamism and Divergence in Europe's Peri-urban Territories*. Aldershot: Ashgate, 41- 68.
- Kruse, K. M. and Sugrue, T.J. (eds.), (2006). *The New Suburban History*. Chicago: Chicago University Press.
- Kulcsar, L. J. and Domokos, T. (2005). The post-socialist growth machine: the case of Hungary. *International Journal of Urban and Regional Research*, 29 (3), 550-563.
- Kundu, A., Pradhan B. K., and Subramaniam A. (2002). Dichotomy or Continuum: Analysis of Impact of Urban Centres on their Periphery. *Economic and Political Weekly*, 37(14), 5039–5046.
- Lacy, K. R. (2004). Black spaces, black places: Strategic assimilation and identity construction in middle-class suburbia. *Ethnic and Racial Studies*, 27 (6), 908-930.
- Lang, E. (2003). *Edgeless Cities: Exploring the Elusive Metropolis*. Washington, DC: Brookings Institution Press.
- Langley, P. (2009). Debt, discipline, and government: foreclosure and forbearance in the subprime mortgage crisis. *Environment and Planning A*, 41(6), 1404 – 1419.
- Lash, S. and Urry, J. (1992). *Economies of Signs and Spaces: After Organized Capitalism*. Cambridge: Cambridge Policy Press.
- Lee, Y-S and Shin, H. (2011). New towns for suburbs? Developmental state politics and new town development in Seoul capital region. In N.A. Phelps, and F. Wu, (eds.), *International Perspectives on Suburbanisation: A Post-Suburban World?* Basingstoke, Hampshire: Palgrave Macmillan, 225-244.
- Lefèvre, H. (1991). *The Production of Space*. Oxford, UK: Blackwell.
- Lefèvre, C. (1998). Metropolitan government and governance in western countries: a critical review. *International Journal of Urban and Regional Research*, 22(1), 9-25.
- Lewis, R. (eds.), (2004). *Manufacturing Suburbs: Building Work and Home on the Metropolitan Fringe*. Philadelphia, PA: Temple University Press.
- Li, S. M. (2010). Mortgage Loan as a Means of Home Finance in Urban China: A Comparative Study of Guangzhou and Shanghai. *Housing Studies*, 25(6), 857-876.
- Li, Y., and Tang, Z. (2005). Transformation of social space structure in the suburban areas of Shanghai from 1980 to 2000. *Urban Planning Forum*, 6, 27–36. (In Chinese)
- Li, Y., Whalley J., Zhang S., Zhao Z. (2008). The higher educational transformation of China and its global implications. *National Bureau of Economic Research (NBER) Working Paper*, No. 13849.

- Lin, G. C. S (2007). Chinese Urbanism in Question: State, Society, and the Reproduction of Urban Spaces. *Urban Geography*, 28 (1), 7-29.
- Lin, G.C.S. (2007). Reproducing spaces of Chinese urbanisation: new city-based and land-centred urban transformation. *Urban Studies*, 44(9), 1827–55.
- Lin, G.C.S. and Yi, F. (2010). Urbanisation of capital or capitalisation on urban land? Land development and local public finance in urbanising China. *Urban Geography*, 32 (1), 50-79.
- Logan, J. R. and Golden R. (1986). Suburbs and Satellites: Two Decades of Change. *American Sociological Review*, 51 (3), 430-37.
- Logan, J. R. and Schneider, M. (1981). The stratification of metropolitan suburbs. *American Sociological Review*, 46 (2), 175–186.
- Logan, J. R., and Molotch H. L., (1987). *Urban Fortunes: The Political Economy of Place*. Berkeley: University of California Press.
- Logan, J. R., Bian Y. and Bian, F. (1999). Housing inequality in urban China in the 1990s. *International Journal of Urban and Regional Research*, 23(1), 7–25.
- Logan, J. R., Fang, Y. and Zhang, Z. (2009). Access to Housing in Urban China. *International Journal of Urban and Regional Research*, 33(4), 914-935.
- Losada, H., Martinez, J., Vieyra, J., Pealing, R., Zavala, R., and Cortés, J. (1998). Urban agriculture in metropolitan zone of Mexico City: changes over time in urban, suburban and peri-urban areas. *Environment and Urbanisation*, 10(2), 37-54.
- Lovell, S. (2003). *Summerfolk: a history of the dacha, 1710-2000*. Ithaca: Cornell University Press.
- Low, S. (2004). *Behind the Gates: Life, Security, and the Pursuit of Happiness in Fortress America*. London: Routledge.
- Low, S. (2008). Incorporation and Gate Communities in the Greater Metro-Los Angeles Region as a Model of Privatization of Residential Communities. *Home Cultures*, 5(1), 85-108.
- Ma, Y. L. and Xu, R. S. (2010). Remote sensing monitoring and driving force analysis of urban expansion in Guangzhou City, China. *Habitat International* 34(2): 228-235.
- Madden, J. F. (2003). The changing spatial concentration of income and poverty among suburbs of large US metropolitan areas. *Urban Studies*, 40 (3), 481–503.
- Marcotullio, P. J. (2003). Globalization, urban form and environmental conditions in Asia-Pacific cities. *Urban Studies*, 40 (2), 219-247.

- Massey, D. (1985). Ethnic Residential Segregation: A Theoretical Synthesis and Empirical Review. *Sociology and Social Research*, 69(3), 315-50.
- Mazierska, E. and Rascaroli, L. (2003). *From Moscow to Madrid: Postmodern Cities, European Cinema*. London: I B Tauris.
- McGee, T. (1991). The emergence of *desakota* regions in Asia: expanding a hypothesis. In N. Ginsborg, B. Koppel, T. McGee (eds.), *The Extended Metropolis: Settlement Transition in Asia*. Honolulu, HI: University of Hawaii Press, 3-25.
- McKenzie, E. (1994). *Privatopia: Homeowner Associations and the Rise of Residential Private Government*. New Haven: Yale University Press.
- McKenzie, E. (2005). Constructing the Pomerium in Las Vegas: A Case Study of Emerging Trends in American Gated Communities. *Housing studies*, 20(2), 187-203,
- Medvedkov, Y. and Medvedkov, O. (2007). Upscale housing in post-Soviet Moscow and its environs. In K. Stanilov (eds.), *The Post-socialist City: Urban Form and Space Transformations in Central and Eastern Europe after Socialism*. Dordrecht: Springer, 245–265.
- Mikelbank, B. A. (2004). A typology of U.S. suburban places. *Housing Policy Debate*, 15 (4), 935–964.
- Muller, P. O. (1976). *The outer city: geographical consequences of the urbanisation of the suburbs*. Washington: Association of American Geographers.
- Murphy, A. K. (2007). The suburban ghetto: the legacy of herbert gans in understanding the experience of poverty in recently impoverished American suburbs. *City & Community*, 6 (1), 21-37.
- Nelson, A.C. (2006). Leadership in a new era: comment on ‘planning leadership in a new era’. *Journal of the American Planning Association*, 72 (4), 393-409.
- Nicholls, W. J. (2006). Power to the periphery: suburban empowerment in Toulouse, France. *Environment and Planning A*, 38, 1715-1737.
- Nuissl, H. and Rink, D. (2005). The ‘production’ of urban sprawl in eastern Germany as a phenomenon of post-socialist transition. *Cities*, 22 (2), 123-134.
- Nuissl, H. and Rink, D. (2005). The ‘production’ of urban sprawl in eastern Germany as a phenomenon of post-socialist transformation. *Cities*, 22(2), 123–134.
- Olds, K. (1997). Globalizing Shanghai: the ‘Global Intelligence Corps’ and the building of Pudong. *Cities*, 14 (2), 109-123.
- Orfield, M. (2002). *American Metropolitcs: The New Suburban Reality*. Washington, DC: Brookings Institution Press.

- Phelps, N. A. and Wood, A. M. (2011). The New Post-suburban Politics? *Urban Studies*, 48 (12), 2591–2610.
- Phelps, N. A. and Wu, F. (2011). *International Perspectives on Suburbanisation: A Post-Suburban World?* Basingstoke, Hampshire: Palgrave Macmillan.
- 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, Hampshire: Palgrave Macmillan.
- Phelps, N. A., Wood, A. M. and Valler, D. C. (2010). A post-suburban world? An outline of a research agenda. *Environment and Planning A*, 42(2), 366–383.
- Phelps, N.A. (2010). Suburbs for nations? some interdisciplinary connections on the suburban economy. *Cities*, 17 (2), 68-76.
- Pow, C. P. (2009). *Gated Communities in China: Class, Privilege and the Moral Politics of the Good Life*. Abingdon, Oxon: Routledge.
- Pow, C-P and Kong, L. (2007). Marketing the Chinese dream home: gated communities and representations of the good life in (post-) socialist Shanghai. *Urban Geography*, 28(2), 129–159.
- Rimmer, P. J. and Dick, H. (2009). *The City in Southeast Asia: Patterns, Processes and Policy*. Singapore: NUS Press.
- Rudolph, R. and Brade, I. (2005). Moscow: processes of restructuring in the Post-Soviet metropolitan periphery. *Cities*, 22, 135-50.
- Sailer-Fliege, U. (1999). Characteristics of post-socialist urban transformation in East Central Europe. *GeoJournal*, 49, 7-16.
- Schoenberger, E. (2004). The spatial fix revisited. *Antipode*, 36 (3), 427-433.
- Shanghai Jinshan Almanac Editorial Board (1990). *Jinshan County Almanac*. Shanghai: Shanghai People's Publishing House. (In Chinese)
- Shanghai Songjiang Almanac Editorial Board (1991). *Songjiang County Almanac*. Shanghai: Shanghai People's Publishing House. (In Chinese)
- Shanghai Songjiang Statistical Bureau (2001~2011). *Songjiang Statistical Yearbook (from 2001 to 2011)*. Shanghai: Shanghai Songjiang Statistical Bureau.
- Shanghai Statistical Bureau (2001~2011). *Shanghai Statistical Yearbook (from 2001 to 2011)*. Official Web Site of Shanghai Statistical Bureau, <http://www.stats-sh.gov.cn>.
- Shanghai Statistical Bureau and Shanghai Agricultural and Forestry Bureau (2002). *Shanghai Suburb Statistical Yearbook 2002*. Shanghai: Shanghai Statistical Bureau.

- Shanghai Urban Planning Management Bureau (2007). *Urban Planning Administration Practices in Shanghai*. Beijing: China Architecture and Building Press. (In Chinese)
- Shin, H. B. (2008). Living on the edge: financing post-displacement housing in urban redevelopment projects in Seoul. *Urban Studies*, 20 (2), 411-426.
- Simon, D. (2008). Urban environments: issues on the peri-urban fringe. *Annual Review of Environment and Resources*, 33, 167-185
- Soja, E. W. (2000). *Postmetropolis: Critical Studies of Cities and Regions*. Oxford: Blackwell.
- Soja, E. W. (2011). Beyond postmetropolis. *Urban Geography*, 32(4), 451-469.
- Stanilov, K. (eds.) (2007). *The Post-Socialist City: Urban Form and Space Transformations in Central and Eastern Europe after Socialism*. Heidelberg: Springer.
- Stanilov, K. and Hirt, S. (2009). *Twenty Years of Transition: the Evolution of Urban Planning in Eastern Europe and the Former Soviet Union, 1989-2009*. Nairobi: UN Habitat.
- Stone, C. (1989). *Regime Politics: Governing Atlanta, 1946–1988*. Lawrence, KS: University Press of Kansas.
- Szelényi, I. (1996). Cities under socialism—and after. In G. Andrusz, M. Harloe, and I. Szelényi (eds.), *Cities after Socialism: Urban and Regional Change and Conflict in Post-Socialist Societies*. Oxford, UK: Blackwell, 286-317.
- Tammaru, T. (2001). Suburban Growth and Suburbanisation under Central Planning: The Case of Soviet Estonia. *Urban Studies*, 38 (8), 1341–1357.
- Tammaru, T. (2005). Suburbanisation, employment change, and commuting in the Tallinn metropolitan area. *Environment and Planning A*, 37, 1669-1687.
- 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.
- Teaford, J. (1997). *Post-suburbia: Government and Politics in the Edge Cities*. Baltimore, MD: Johns Hopkins University Press.
- The Telegraph* (2009). Chinese stimulus cash is inflating new stock market bubble, officials warn, 30th, June. Available at <http://www.telegraph.co.uk>; accessed 18th, November, 2011.
- Tian, L. (2008). The Chengzhongcun land market in China: boon or bane? – a perspective on property rights. *International Journal of Urban and Regional Research*, 32 (2), 282-304.
- Tsui, K. and Wang, Y. (2004). Between separate stoves and a single menu: fiscal decentralization in China. *China Quarterly*, 177, 71–90.

- Wacquant, L. J. D. (2008). *Urban Outcasts: a Comparative Sociology of Advanced Marginality*. Cambridge: Polity Press.
- Walker, R. (1981). A theory of suburbanisation: capitalism and the construction of urban space in the US. In M. Dear and A. Scott (eds.), *Urbanisation and Urban Planning in Capitalist Societies*. London: Methuen, 383–429.
- Walker, R. and Lewis, R. D. (2001). *Beyond the crabgrass frontier: industry and the spread of North American cities, 1850–1950*. *Journal of Historical Geography*, 27, 3–19.
- Wang et al., (2011). Urban Infrastructure Financing in Reform-era China. *Urban Studies*, 48 (14), 2975-2998.
- Wang, D. and Li, S.-M., (2004). Housing preferences in a transitional housing system: the case of Beijing, China. *Environment and Planning A*, 36, 69-87.
- Wang, F.H. and Zhou, Y.X. (1999). Modeling urban population densities in Beijing 1982–1990: suburbanisation and causes. *Urban Studies*, 36, 263–279.
- Wang, L., Kundu, R. and Chen, X. (2010). Building for what and whom? New town development as planned suburbanisation in China and India. In M. Clapson and R. Hutchison (eds.), *Suburbanisation in Global Society. Research in Urban Sociology*, 10, 319-345.
- Wang, Y. P., Wang, Y. and Wu, J. (2009). Urbanisation and informal development in China: urban villages in Shenzhen. *International Journal of Urban and Regional Research*, 33 (4):957-973.
- Wang, Y. P., Wang, Y. and Wu, J. (2010). Housing Migrant Workers in Rapidly Urbanizing Regions: A Study of the Chinese Model in Shenzhen. *Housing studies*, 25 (1), 83-100.
- Wang, Z. (2002). Institutional innovation in the rapid development process of Songjiang New Town in Shanghai. *Urban Planning Forum*, 6, 51-54. (In Chinese)
- Wang, Z. et al. (2003). *A Classical Planning of New Town in China*. Shanghai: Tongji University Press.
- Wirth, L. (1938). Urbanism as a way of life. *American Journal of Sociology*, 44 (1), pp. 1–24.
- Wong, S. and Tang, B. (2005). Challenges to the sustainability of 'development zones': A case study of Guangzhou Development District, China. *Cities*, 22(4): 303-316.
- Wu, F. (1999). The 'game' of landed-property production and capital circulation in China's transitional economy, with reference to Shanghai. *Environment and Planning A*, 31, 1757-1771.
- Wu, F. (2002). China's changing urban governance in the transition towards a more market-oriented economy. *Urban Studies*, 39(7), 1071–93.

- Wu, F. (2004). Intraurban residential relocation in Shanghai: modes and stratification. *Environment and Planning A*, 36, 7-25.
- Wu, F. (2010). Beyond gradualism: China's urban revolution and emerging cities. In F. Wu (eds.), *China's Emerging Cities: the Making of New Urbanism*. Abingdon, Oxon: Routledge.
- Wu, F. (2010). Gated and packaged suburbia: Packaging and branding Chinese suburban residential development. *Cities*, 27(5), 385-396.
- Wu, F. (2010). How neoliberal is China's reform? the origins of change during transition. *Eurasian Geography and Economics*, 51 (5), 619–631.
- Wu, F. and Phelps N. A. (2011a). Post-suburban worlds? In N.A. Phelps, and F. Wu, (eds.), *International Perspectives on Suburbanisation: A Post-Suburban World?* Basingstoke, Hampshire: Palgrave Macmillan, 245-257.
- Wu, F. and Phelps, N. A. (2008). From suburbia to post-suburbia in China? Aspects of the transformation of the Beijing and Shanghai global city regions. *Built Environment*, 34, 464 -481.
- Wu, F. and Phelps, N. A. (2011b). (Post) suburban development and state entrepreneurialism in Beijing's outer suburbs. *Environment and Planning A*, 43(2), 410-430.
- 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.
- Wu, F., Xu, J. and Yeh, A. G.-O. (2007). *Urban Development in Post-reform China: State, Market and Space*. London: Routledge.
- Wu, W. (2002). Migrant housing in urban China: choices and constraints. *Urban Affairs Review*, 38 (1), 90-119.
- Wu, W. (2008). Migrant Settlement and Spatial Distribution in Metropolitan Shanghai. *The Professional Geographer*, 60 (1), 101-120.
- Wyly, E. et al. (2006). American Home: Predatory Mortgage Capital and Neighbourhood Spaces of Race and Class Exploitation in the United States. *Geografiska Annaler B*, 88(1), 105-131.
- Xu, J. and Yeh, A.G.O. (2005). City repositioning and competitiveness building in regional development: new development strategies of Guangzhou, China. *International Journal of Urban and Regional Research*, 29 (2), 283–308.
- Xu, J. and Yeh, A.G.O. (2009). Decoding urban land governance: state reconstruction in contemporary Chinese cities. *Urban Studies*, 46 (3), 559–81.

- Xue, C. Q. L. and Zhou, M. (2007). Importation and adaptation: building 'One City and Nine Towns' in Shanghai: a case study of Vittorio Gregotti's plan of Pujiang Town. *Urban Design International*, 12, 21-40.
- Ye, G. et al. (2003). *Shanghai Spatial Development Strategic Research*. Shanghai: China Architecture & Building Press. (In Chinese)
- 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*. Abingdon: Routledge, 52-69.
- Yeh, A.G.O. and Wu, F (1996). The new land development process and urban development in Chinese cities. *International Journal of Urban and Regional Research*, 20 (2), 330–353.
- Yue, W. Z., and Liu Y. et al. (2010). "Polycentric urban development: the case of Hangzhou." *Environment and Planning A*, 42(3): 563-577.
- 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, L. (2010). *In Search of Paradise: Middle-class Living in a Chinese metropolis*. New York: Cornell University Press.
- Zhang, T. (2000). Land market forces and government's role in sprawl. *Cities*, 17(2), pp. 123–135.
- Zhang, T. (2002). Urban development and a socialist pro-growth coalition in Shanghai. *Urban Affairs Review*, 37(4), 475-499.
- Zhao, B. (1997). Consumerism, Confucianism, Communism: Making Sense of China Today. *New Left Review*, 222, 43-59.
- Zhao, P., Lü B., and Woltjer, J. (2009). Growth management and decentralization: an assessment of urban containment policies in Beijing in the 1990s. *International Development Planning Review*, 31(1), 55-79.
- Zheng, S., Fu, Y. and Liu, H. (2009). Demand for Urban Quality of Living in China: Evolution in Compensating Land-Rent and Wage-Rate Differentials. *Journal of Real Estate Finance and Economics*, 38(3), 194-213.
- Zhou, Y and Logan, J. R. (2008). Growth on the edge: the new Chinese metropolis. In J. R. Logan, (eds.), *Urban China in Transition*, Oxford: Blackwell Publishing, 140–160.
- Zhou, Y. and Ma, L. J. C. (2000). Economic restructuring and suburbanisation in China. *Urban Geography*, 21(3), 205-236.

- Zhu J. (2009). Anne Haila's 'the market as the new emperor'. *International Journal of Urban and Regional Research*, 33(2), 555-557.
- Zhu, J. (1999). Local growth coalition: the context and implication of China's gradualist urban land reforms. *International Journal of Urban and Regional Research*, 23(3), 534-548.
- Zhu, J. M. and Hu, T. T. (2009). Disordered land-rent competition in China's periurbanisation: case study of Beiqijia Township, Beijing. *Environment and Planning A*, 41(7), 1629-1646.
- Zhu, S. (2004). The city-map and consumerist ideology. In X. Yu and X. He (eds.), *Shanghai: Its Urbanisation and Culture*. Washington, DC: The Council for Research in Values and Philosophy.
- Zukin, S. (1991). *Landscapes of Power: From Detroit to Disney World*. London: University of California Press.