

Moving towards Neoliberal(izing) Urban Space? Housing and Residential
Segregation in Beijing

Guilan Weng

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Reading Committee:

Kam Wing Chan, Chair

Suzanne Withers

David Bachman

Program Authorized to Offer Degree:

Geography

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Abstract

Moving towards Neoliberal(izing) Urban Space? Housing and Residential Segregation in
Beijing

Chairperson of the Supervisory Committee:
Professor Kam Wing Chan
Department of Geography

This dissertation examines China's urban housing system in the reform era and its social and spatial changes in Beijing. This dissertation seeks to understand the nature of China's reform and its socio-spatial ramifications, and challenges the convergence thesis that China's reform is necessarily following the footsteps of those advanced capitalist cities. Using Beijing as a case, this dissertation examines the relationship between the state, society and the urban development. This dissertation particularly focuses on housing inequality and residential segregation in Beijing metropolitan area in the reform era.

Examining of the behavior of state in urban housing system reveals that the different goals of Beijing municipal government and the central government explain the different fates of different types of housing in the new urban housing system of Beijing. Instead of retreating from the market as neoliberalism thesis suggests, the municipal government of Beijing was actively involved in the housing system and took advantage of *hukou*, a socialist institution to achieve its goal of "accumulation through dispossession" at the expenses of ordinary citizens.

Based on the analysis of various urban groups' housing behavior, this dissertation shows that although being self-reliant for one's own housing became the hegemonic discourse during the reform, this subjugation only applies to some of the urban residents, such as migrant workers who were institutionally excluded from any urban welfare. In contrast, residents who have political power or *guanxi* are "exceptions to neoliberalism".

Based on Beijing metropolitan area boundary delineated by Chan and Forstall and data from 2000 population census of Beijing, this dissertation reveals that employees working in "monopoly" sectors and governmental organizations consistently had better housing than their counterparts in the private sector. *Hukou* remains a powerful institution in determining Beijing

residents' access to housing. In addition, based on all examination of spatial distribution and residential segregation of various social groups, this dissertation shows that not only did the disadvantaged groups mostly concentrated in the outer suburbs have poor living conditions, but also they had high level of segregation there. The institutionally created housing inequality is not only social and economic, but spatial as well.

Overall, this dissertation argues that China is not neoliberal in nature. The examination of the state, the urban residents and the social space in terms of the new housing system shows that neoliberalism has not been a dominant ideology in Chinese society. Neoliberalism as policy-based practices is not implemented by either the central government or local government. Neoliberalism as governmentality is not applied to those without any political power and outside the public sector.

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Chapter One Literature Review and Research Framework

“Neoliberalism seems to be everywhere. This mode of free-market economic theory, manufactured in Chicago and vigorously marketed through the principal sales offices of Washington DC, New York, and London, has become the dominant ideological rationalization for globalization and contemporary state reform.....Indeed, proselytizing the virtues of free trade, flexible labor, and active individualism has become so commonplace in contemporary politics – from Washington to Moscow – that they hardly even warrant a comment in many quarters.”

(Peck and Tickell 2002:33)

1.1 Introduction

Neoliberalism¹ which advocates the political and economic practices of the free market, private property rights and individual liberty has gained its prominence in its US and England since Regan and Thatcher’s regimes began in the late 1970s. Coincidentally, China launched its economic reform at roughly the same time following its Asian neighbors, Taiwan, Hong Kong, Singapore and the South Korean (Harvey 2005). It seems that what has been happening in China during its three decades of reform fits nicely in the rubric of neoliberalism. However, unlike its counterparts of the former Soviet Union and east European countries which dismantled the communist institutions and built capitalist countries overnight, China took a gradual way to reform its institutions. It is what Deng Xiaoping, the engineer of the reform, described as “cross the river by touching the stepping stone.” While the “shock therapy” transition has turned out to be traumatic in many Central and Eastern European countries, China’s gradualist transition has led to steady economic growth and a significant reduction of poverty.

Gradual in format, the reform in China has resulted unprecedented changes in the Chinese society (Yang, 2004; Ma & Wu, 2005; Naughton, 1995, 2007). During the reform, there was a decentralization of both power and responsibility. As a result, local governments gained more autonomy and became “entrepreneurial” to fulfill the decentralized fiscal responsibilities (Lin and Liu, 2000; Wu, 2003). Rapid urban expansion at the urban fringe has encroached on vast

¹ Neoliberalism was proposed by Hayek, an Austrian philosopher, as a utopian ideology of the optimal mechanism to socioeconomic development with entrepreneurial, self-reliant individuals competing in open and unregulated markets, liberated from any state intervention. Neoliberal reasoning believes that the market functions more efficiently in resource allocation and individuals will be more competitive in the market if they are self-reliant (Brenner and Nik, 2002; Harvey, 2005; Peck, 2008). Therefore, the state should be lean and only “provides institutional arrangements that favor private property rights, rule of law and the free market” (Harvey, 2009).

amount of farmland, enabling massive housing development projects. With the emergence of a housing market, state-provided housing has increasingly become a residual sector (Wang and Murie, 2000). A consumer revolution brought Chinese consumers a freedom inconceivable during the pre-reform period (Davis, 2000). At the same time, there has been significant retrenchment of the socialist welfare system and a dismantling of the “iron rice bowl” (Leung, 1994; Li and Wei, 2010). Not only has the rigid central planning been significantly relaxed; the *danwei*² system’ is no longer able to dominate all aspects of urban life. The majority of urban employees are working outside the state sectors, but personal wealth has increased together with the emergence of the urban poor. Individuals are educated to internalize the neoliberal ethos to be self-governed and self-reliant subjects (Tomba, 2009). All these stories seem to suggest a convergence of Chinese cities with those in neoliberal market economies as David Harvey (2005) claimed in his well-cited work, *A Brief History of Neoliberalism*, that “China, we may conclude, has definitely moved towards neoliberalization and the reconstitution of class power, albeit ‘with distinctly Chinese characteristics’” .

Apparently for Harvey, China is one of the versions of the increasing globalizing ideology and practice of neoliberalism. Is it true that China is not exceptional but a manifestation of the global neoliberal turn as the convergence thesis predicts? However, Ma and Wu argue (2005) that the linear, causal, simplistic and essentialist rendition of socialist transition masks the complex reality of cities. There is still controversy as to whether China has indeed put on the neoliberalism straightjacket. It has been observed that governments of all levels are still directly involved in the sectors of the economy which they claim are strategically important and significantly shape the society, especially during the 1990s (e.g. Bray, 2005; Pei, 2006; Chan, 2010; Huang, 2011). During the reform, the once highly laudable model of “developmental state,” or “local state corporatism,” in which the local government actively cooperated with entrepreneurs to promote local economic development in the 1980s (Oi, 1995; Whiting, 1999; Chen, 2004) and “growth coalition” in which local government nurtured property developers from 1990s onwards (Zhu, 1999), as well as the persistent biased treatment of domestic and the foreign firms show more, instead of less local government involvement in the economy than before the reform (Huang 2003a, 2003b). Some scholars made mild arguments that the

² In urban China, there are four types of workplace: (1) the private sector, (2) the collective sector, (3) state enterprises, and (4) state institutes and agencies. The work-unit (*danwei*) refers to the third and fourth types and it also covers some large collective enterprises (Wu, 1996).

entrepreneurial city is rather a state project (versus market imperative) and neoliberalism works as an exception (as opposed to a general governing technology) in the Chinese context (Wu, 2003; Ong, 2006), while others made a more categorical claim that China is by no means neoliberal (e.g. Nonini, 2008).

The aforementioned studies mainly focus on the changing behavior of local governments and individuals. They did not pay enough attention to the social and spatial consequence of the ongoing reform. One of the important social consequences observed in those post-socialist countries following neoliberalism principles is salient inequality in households' wealth (e.g. Hamilton, 2005). While the gradualist way was proved to be successful at the beginning, studies have shown that private wealth disparity has been increasing since the reform in China (Li and Zhao, 2009; Meng, 2007). Around this question, there is another debate on whether the old socialist elites or the new market elites benefit more from the transition (Walder, 1994, 1996; Nee, 1989). In other words, they focus on who gained more during China's transition. However, this strand of literature does not pay adequate attention to questions such as "who lose during the transition?" Furthermore, they largely neglect spatial implication of China's transition. Who have the right to the city? Which part of the city? What are the dynamics of urban space and social transition?

Housing allows a good analytical lens to study China's transition towards a market-oriented development trajectory. It is argued that housing is embedded in both locality as a socio-spatial structure and in the institutional structure of society. It is also closely related to the market and the state (Kemeny, 1991). At the same time, housing is a basic need and an expression of lifestyle of households (Zavisca, 2013). Housing thus links the state on the one hand, and the society and space on the other. Therefore, the study of the internal aspects of housing such as overcrowding, multi-occupation and housing quality can show the quality of life of households with different characteristics; the study of the role of the state and institutions in relation with housing can reveal the broad social dynamics. Furthermore, the study of spatial organization of different households within a locality can show the socio-spatial consequences of the social processes.

In addition, examining housing during China's transition can also contribute to the housing study literature. The existing literature on housing is mostly based on advanced capitalist societies. While housing in transitional economies drawing increasing attention, (e.g. Tuner, et

al., 1992; Hamilton, et al (ed.), 2005), there have been a lot of studies study on housing in transitional China. However, they biased towards a perspective. China's experience is quite different from those of the former Soviet Union and Eastern Europe due to the different trajectory of transition. Therefore, the study of housing in China can surely enrich the existing housing literature. Specifically, this study focuses on the urban context because cities "constitute the essence of 'modernity' and that it is in the urban that the basic dynamic of social change can perhaps be found," (Kemeny, 1991, p. 5). In addition, it is a fruitful spatial arena to examine whether there is "actually existing neoliberalism" in China since the neoliberal logic are "interiorized" into urban policies and the neoliberalism is practiced, reproduced, contested and resisted in cities (Brenner and Nik, 2002; Jessop, 2002; Peck, et. al., 2009). Furthermore, cities remain to be the strategic site for negotiating citizenship and social rights, despite of the ongoing globalization (Castell, 1983; Sassen, 1999; Zhang, 2002). More importantly, in contrast to rural housing, urban housing in China has experienced significant transformation during China's reform and real estate is increasingly in the center of the urban economy and governance.

During socialist period before China's economic reform, urban society was tightly controlled by the central government and subjected to detailed central planning. While urban residents were generally paid poorly no matter what jobs they were taking, through *danwei* (work-units), the state of China was responsible for a wide range of resources provision to urban residents³, including cheap public rental housing⁴. This *danwei*-affiliated urban housing system significantly shaped China's urban social space and distinctively differentiated the Chinese cities from their western counterparts: Chinese cities were divided by numerous *danwei* compounds of various sizes. Inside the cellular *danwei* compounds, people working in the same workplaces were living in the same *danwei* compounds regardless of their titles and seniorities (Chai, 1999; Li, 2005; Bray, 2005). Due to the extremely low charge and lack of investment in the public rental housing, the socialist urban housing system was in a vicious cycle and hard to sustain (Wang and Murie, 2000).

³ The distributive role of the state persists even now, but it is mostly confined with the public sector and it distributes welfare to employees working for the public sector.

⁴ The nature of public rental housing in China during the socialist period was quite different from social housing in the Western countries. Social housing in Western countries is a welfare which serves as a way to redistribute resources to the poor. In China, the public rental housing was a wage good provided to all the state employees whose wages were set artificially low to serve the "big-push" industrialization strategy.

Since the early 1980s, the Chinese government has launched a series of reforms to introduce market mechanisms to shed the burden of welfare provision to the market after the economic reform. While the reform-minded government claimed to be building a “harmonious society”, studies show that ironically, China is moving away from an egalitarian country⁵ to one of the most unequal countries among developing countries after its reform (Khan& Riskin, 1998, 2005). During the reform, the government terminated the *danwei*-provided public housing and devoted in developing a housing market. Housing thus, was changed from a ‘wage good’ with no market prices to a commodity with values. The homogeneous *danwei*-divided sociospatial structure was also dramatically reshuffled. Wealthy citizens moved out of old *danwei* housing to villas and luxury condominiums, while the urban poor were trapped in dilapidated old neighborhoods. A small percentage of urban residents with local urban *hukou* (household registration book) managed to purchase subsidized affordable housing; migrants without local urban *hukou* were excluded from the subsidized public housing and likely to end up in self-built peasant housing in “villages in the city”⁶ (Wu, 2002; Wang, 2004; Wang et. al. 2010).

This dissertation aims at shedding light on the ongoing theoretical debates as well as providing the linkage between government behavior, society and the urban space by focusing on the urban housing system during the reform and its social and spatial ramifications with Beijing as an example. This dissertation examines them within China’s political, institutional and social context. Broadly, this dissertation aims at exploring the nature of China’s socialist transition and its socio-spatial ramifications. This dissertation argues that the social and spatial inequality is the consequence of the continuity of socialist institutions as well as the introduction of market. There are three goals of this dissertation: 1) to clarify the misunderstanding about China’s transition towards a convergence of neoliberal practices through examining the housing behavior of various actors; 2) to contribute to the socialist transition literature through studying the urban housing system after the housing reform; and 3) to synthesize the micro-level and macro-level of China housing studies through putting institutions at the center and adding the spatial dimension to housing studies. Specifically, this dissertation answers three questions: 1) What is the behavior of the state in the urban housing system during China’s transition? 2) How do

⁵ In fact, as discussed earlier, China was not as egalitarian as it seemed to be, the disparities among social groups were non-pecuniary and thus more hidden during the pre-reform era.

⁶ They are special geographical units in China which are categorized as rural administratively, but located within city boundary (Chen, 2012).

different social groups access their housing in the new urban housing system? 3) What are the social and spatial consequences? In answering these questions, this dissertation shows that China has not neoliberalized its society and urban space despite practices seemingly similar to those in western countries. Borrowing Ong's (2006) concepts of "neoliberal exception" and "exception to neoliberalism", I argue that the favored groups are exceptions of the new system, freed from neoliberal rules in competing urban space. On the other hand, those devalued and unwanted bodies (such as migrants, laid-off workers) are denied state protection from market competition. This dissertation shows that the very practices of "accumulation by dispossession" (Harvey, 2003) prevailing in market economies are, ironically, pursued through its institutional legacy (i.e. *danwei* and *hukou* system) of the socialist period in China.

The rest of this dissertation is structured as follows. The next section of Chapter One reviews the theoretical and empirical literature that inspires this research as well as literature this research aims to engage in, confront or challenge. Based on the literature review, I provide a conceptual framework for studying China's urban housing system. This chapter will end with a description of data and methodologies. Chapter two paints the backdrop of this study through tracing the historical changes of Beijing's urban structure and social stratification as well as recent social and economic developments in Beijing.

Chapter Three to Six compose the empirical analysis of this dissertation. Chapter Three examines the changing institutions and the behavior of government in urban housing system based on archival materials, news and personal interviews with government officials. The chapter explains the transformation of four most importance institutions: the *hukou* and *danwei* systems which the socialist regime depended on and continue to function during the new regime, as well as the tax and urban land system which provide changing incentive for local government during reform era. Furthermore, this chapter examines the behavior of the central state in the housing reform process. The chapter pays special attention to the behavior of local state in dealing with different types of housing.

Based on personal interviews, Chapter Four examines the everyday housing practices of urban residents such as purchasing a home, renting an apartment, changing residence as well as resisting urban redevelopment. This chapter illustrates that despite the prevailing neoliberal discourse, the new regime favors citizens who have close relationships with the public sectors. It carves out exceptions to neoliberalism for them and protects them from neoliberal practices,

allowing them to benefit from “accumulation by dispossession”. On the other hand, those devalued or unwanted citizens are transformed into neoliberal subjects to be responsible for their own housing. This chapter also shows these disadvantaged citizens are not a consistently silent victim group: while some disfranchised urban citizens were more successfully transformed into ‘neoliberal subjects’ ready to be governed/exploited by the market rules, others who were more actively resisting neoliberal practices and negotiating their right to housing and urban space.

Through examining the aggregated data, Chapter Fives shows that the seemingly contingent individual practices and inequalities discussed in Chapter Four are rather systematic outcomes of the current regime, which institutionally discriminates against unwanted and exploitable citizens. Based on a meaningful Beijing metropolitan area, this chapter explores housing inequality among various social groups within the metropolitan boundary. It exams both the effect of personal attributes and institutional effects on housing cost and housing quality with linear regression models and housing tenure differences with logistic regression models. With micro-level population census data, this chapter not only tests the classic models derived from experiences in western cities, but also exams differences among residents working for public sectors and those for private sectors.

Viewing spatial dimension as an important dimension of housing inequality, Chapter Six examines whether there is residential segregation of disadvantaged social groups with aggregated population census data. Furthermore, this chapter uses factor analysis to explore the causal factors of the concentration of households with inadequate living space as well as the concentration of households with spacious homes. Chapter seven summarizes the main findings and their implications to China’s urban transition, the contributions and limitations of this study as well as pointing out potential directions for future studies.

1.2 Theoretical Motivation

This dissertation research is motivated by several theoretical studies and debates. This section will provide a brief review of these theoretical studies and their implications for my research on China’s transitional housing system and social segregation.

1.2.1 Neoliberalism and the “actually existing neoliberalism”

Neoliberalism is increasingly used to explain the political and social changes in capitalist countries after the fall of Fordism. It is generally viewed as an ideology, as policy-based practices, and/or as a particular logic of governmentality. While neoliberal political practice has been criticized as generating pervasive market failures, dramatic social polarization and an intensification of uneven spatial development, its global reach and overarching power has given it a global hegemony of political and economic rationality of the time (Brenner and Theodore, 2002; Harvey, 2005; Peck et al., 2009). As a political and economic ideology, it is generally agreed that the main elements of neoliberalism are 1) a free market with private property rights; 2) minimal government intervention in market; and 3) self-reliant, entrepreneurial citizens (Jossep, 2002; Harvey, 2005; Ong, 2006; Nonini, 2008; Springer, 2010). As policy-based practices, neoliberal policies generally involve practices such as the deregulation of state control over industry, cuts in public spending, abolishment of barriers to foreign direct investment, privatization of public services and assets, reducing social welfare and limiting the power of the state (Springer, 2010; Xu, 2011). The overarching goal of those policy experiments is to mobilize urban space both for market-oriented economic growth and for elite consumption practices, while at the same time controlling marginalized populations (Peck, et. al., 2009). Lastly, neoliberalism as governmentality is described as an assemblage of rationalities, strategies, calculations, technologies, and techniques that facilitate governance at a distance (Barry et al. 1996; Ong, 2006). Neoliberalism in the sense of governmentality is therefore encouraging both institutions and individuals to conform to the norms of the market (Jessop, 2002).

The neoliberal ideology depicts neoliberalism as an omnipresent, hegemonic force. However, there is growing scholarship which is beginning to question the ubiquity of what Spake (2006) calls “the big N” neoliberalism. Spake argues that writers have assigned the big N neoliberalism too much diversity which requires a set of descriptive duties. In the face of this problem, some scholars suggest that it is necessarily contextually embedded and path-dependent (Brenner and Theodore 2002; Brenner and Nik, 2002; Peck, et al., 2009). The actual practices vary across nations, regions and cities as mutable geohistorical outcomes, embedded within national, regional, and local process of sociospatial transformation. Therefore, Brenner and Theodore (2002) suggest that scholars should pay attention to the “actually existing neoliberalism” within local contexts.

There has not been agreement on whether China is neoliberal now. Some scholars believe that China is a neoliberal country after its economic reform. Judging by the making of the working class and the capitalist class, the commodification of land and housing, as well as economic structure, Walker and Buck (2007), Kornai (2009) contend that China “has passed the point of transition to a predominantly capitalist order, and it has followed a path not so distant from those of Europe and North America.” In a similar vein, Harvey (2005) argues that neoliberalism requires a large, easily exploited, and relatively powerless labor force, then China certainly qualifies as a neoliberal economy, albeit ‘with Chinese characteristics’ (2005: 144). For Harvey, China is certainly moving along the neoliberal line although still under authoritarian state control. Abandoning the view that China’s neoliberalization is a natural part of neoliberalism’s global expansion, Wu (2010) argues that neoliberalism in China served as a system of justification and legitimization for the regime in the face of the failure of Mao’s mode of economic development. Although the functioning of neoliberalism in China is largely concealed beneath the edifice of China’s specific conditions, Wu (2010) insisted that the market dominance, rather than the “retreat” of the state, indicates that China is undergoing a process of “neoliberalization.” The pillars of the socialist governing structure -- the party-state, the work-units system and household registration -- were all shaken by marketization forces after China’s economic reform (Wu, 2002).

From a governmentality perspective, Ong (2006) views neoliberal practices in East Asian countries (outside China) as more conditioned and contingent, tied inextricably to the exceptions to neoliberalism. She argues that the spaces of exception such as the export zones are shaped by elastic, migratory zoning technologies through which states “carve up their own territory so they can better engage and compete in global market.” At the same time, migrant laborers were treated as exceptions to neoliberalism, preventing them from enjoying the gains of the free market. From a structural perspective, Lim (2013) also views the uneven and spatially confined opening to global market as an evidence of neoliberal practice in China. For Lim, the variegated neoliberalization is a precondition rather than an alternative to “socialism with Chinese characteristics.” He argues that the “actually existing neoliberalism” in China’s policy-making is necessarily intertwined with its national strategy to create “socialism with Chinese characteristics.” The state strategically uses a geographically uneven development strategy to juxtapose the neoliberal logic and SOE dominance.

Taking the other side of this debate, Nornini (2008) argues that guanxi (personal connections) are the key to understanding the “actually existing” everyday practices of China’s market socialism. It is echoed by Wang and his colleagues’ (2012) observation that large developers, created out of former state owned public housing construction companies, had significant advantages in the acquisition of land, negotiation for planning and design standards as well as access to potential buyers and the market. Furthermore, unlike the ideal neoliberal individuals who are rational, self-interested market actors, Chinese individuals are embedded in guanxi relationships. Due to the glaring lack of neoliberal elements, Nonini claims that “China is not becoming ‘neoliberal’ in either a strong or weak sense, nor undergoing a process of neoliberalization, but instead shows the emergence of an oligarchic corporate state and Party” (Nonini, 2008, p. 145). In accord with Nonini, Xu (2011) argues that the limitation on state intervention is a core idea of neoliberalism, while China’s practice is arguably against it. What China constructed, Xu contends, is a “highly distorted market in which political power and state intervention helps the privileged few to benefit”.

Some other scholars take a more eclectic view of China’s reform and transition and emphasize the partial embracing of neoliberalism in China. Liew (2005) argues that the state of China neither wants to nor is able to fully engage in neoliberalism due to three main reasons: 1) the persistent and far-reaching power of the CCP (Chinese Communist Party) made it possible to retain the dominance of SOEs to prevent serious social disparity; 2) the CCP successfully reinvented itself by co-opting the new social strata of wealthy and potentially powerful new groups of the entrepreneurial class; and 3) the central government had a hard time enforcing market rules at the local level (Liew, 2005). Following the same line, Ma (2009) remarks that China’s capitalism is “on a strong but flexible leash” held by the CCP. Fligstein and Zhang (2011), Peck and Zhang (2013) claim that China is capitalism with “Chinese characteristics.” Other new terms such as “neoliberal developmentalism” (Anagnost, 2004) and “state neoliberalism” (Chu and So, 2010) are coined to refer to the partial embracing of neoliberalism. However, I would argue that these tactical tropes might convey the fundamental patterns of China’s transition. Judging by the “three self-confidence”⁷ and the anecdotal “seven non-

⁷ It refers to “self-confidence about the theory, the road and the institutions of socialism with Chinese characteristics” proposed by the new leader Jinping, Xi. obtained through: “Confident in three self-confidence: marching on the Chinese road firmly” <http://theory.people.com.cn/n/2013/0531/c49150-21684041.html>

talking”⁸ proposed by the new leaders after the Eighteenth meeting of the National People’s Congress, the Chinese government continues to tighten the control of the Chinese society.

Overall, for those who take the side that China is neoliberal, while noticing the deviations of China’s practices from orthodoxy neoliberal ideology, they put all the deviations under the umbrella of “neoliberalism with Chinese characteristics.” With such an escape clause, they risk obscuring presentations and fundamental characteristics. More importantly, these scholars tend to take a birds-eye view to emphasize the structural changes in China’s economic sphere. With a few exceptions (e.g. Ong, 2005; Ong, 2006), the behavior of individuals on the ground are missing from their analysis. As a result, while they notice the increasing social inequality in China, they take it to be a necessary consequence of neoliberalism as happened in other market economies. At the same time, they do not pay adequate attention to the practices that persisted during the reform era.

Studies taking the side that China is not neoliberalism in any sense predominantly focus on economic realms such as SOE restructuring, foreign investment and so on. Little attention has been paid to the social sphere such as the restructuring of the housing system, which has significant impact on ordinary citizens’ daily life. In addition, these studies tend to over-emphasize the informal and sporadic and anecdotal practices of those with power or *guanxi* which break the market rules to achieve personal gains. These studies do not pay adequate attention to the institutions and more systematic practices which reflect the underlying structure of the transition in China. Therefore, instead of calling to examine the “actually existing neoliberalism,” I propose that we should take one step back and pay attention to the “actually existing reform” in China which might lead to a better answer of whether or not China is embracing neoliberalism.

1.2.2 Socialist Transition

The most dramatic and probably traumatic socialist transitions happened in the former Soviet Union and eastern European countries. Those countries used the “big bang” approach to destroy the Leninist one-party-state societies overnight with the aim to provide the preconditions for a more balanced and effective market economy (Lieberman et. al., 1995; Aslund, 1995; Brezis and

⁸ It is widely disseminated at the internet that an internal document: a notice about current ideology, issued by General Office of the CPC Central Committee forbid higher education institutions to talk about universal value, freedom of the press, civil society, citizen rights, historical mistakes of the CCP, power capitalists, independent judicial system. Obtained through: <http://www.rfa.org/mandarin/yataibaodao/kejiaowen/gx-05102013112922.html>

Schnytzer, 2003). Following the Washington Consensus, the state monopoly of the economy was replaced by private property rights and the Leninist one-party rule was replaced by multi-party parliamentary democracy (Szelenyi, 1996). However, this “shock therapy” did not lead to fast growth as expected, following a brief “transitional recession” (Bradshaw and Stenning, 2000). On the contrary, the economy plummeted for a prolonged period of time in most of those former socialist countries (Stiglitz, 2002). In addition, the privatization process seemed to benefit socialist elites more as insiders (Roland, 2000).

While avoiding a sudden economic plummet, the gradualist reform in China has also created income inequality and wealth concentration in a few hands (Nee, 1996; Khan & Riskin, 2005). The booming economy promoted by the reform policies during the reform era has generated a growing number of the urban middle class on the one end of the urban spectrum who create the niche market for urban-based capital accumulation. On the other end of the spectrum, it was seen that the number of urban poor is also rising. While there is a consensus on who are the losers during China’s transition (Wang, 2000; Wu, 2004), there is no agreement whether business elites gained more through playing in the market or socialist elites gained more through their political power and connections.

Perhaps the most influential group of sociological literature on the transition economy has been the “market transition debate” literature (Bian and Logan, 1996; Nee, 1989, 1991, 1996; Rona-Tas, 1994; Walder, 1996). This literature is built on Szelenyi’s (1978) argument that redistributive and market mechanisms produce countervailing effects on social inequality. While both sides agree that inequality will increase over the course of the transition, no consensus has been reached on which group gains more (Walder, 1996). The market transition theory predicts that market coordination will replace the socialist state in resource allocation. It contends that the transition will eventually undermine the power and accompanying economic gains of state cadres and shifts power and new opportunities to direct producers and entrepreneurs, who were in a disadvantaged position in the socialist redistributive system (Nee, 1989). The state cadres may retain their privileges during the transition, which only reflects their technocratic competence (Nee, 1991) or their advantages in social networks (Tona-Tas, 1994). This theory thus predicts rising income returns to human capital relative to political capital as the labor market develops. The power persistence hypothesis, on the other hand, states that the market reform retains or even reinforces the cadres’ privilege during the transition because they are holding strategic

positions (Bian and Logan 1996), which enable them to convert their political capital and connections to economic gains (Rona-Tas, 1994). Bian and Logan (1996) argue that the persistent power of the cadre is the fundamental reason for the income inequality during China's transition (Bian and Logan, 1996).

Another significant discussion on socialist transition was the property rights redefinition and clarification among various actors (Walder, 1994). Clearly delineated and enforced property rights are usually viewed as fundamental to a market economy to help reduce uncertainty and externalities in the market (Coase, 1960; Demsetz, 1967). Economists argue that private property rights provide an incentive to maintain and use assets effectively because of the potential market rewards (e.g. Rose, 2004). Therefore, the final solution of the problems lies in clarifying property rights (Bertaud and Renaud, 1994). On the other hand, based on the study of Transylvania, Romania, Verdery (2004) shows the transformation of socialist property relations does not necessarily create "good" because property is firmly embedded in local social relationships.

The property right transition in China has also been subjected to wide study. Some argue that ambiguous property rights derived from gradualism in the reforms has led to an inefficient allocation of development resources, particularly land (Ho, 2001, Zhu, 2002, 2004; Lin, 2005). The underlying assumption of these studies is that privatization and private property rights are a panacea for all society. Without any consideration to the particular history and culture that property rights are embedded in, these studies oversimplify the property rights transition trajectory and the solution to the problems in the process. In my dissertation research, I follow Verdery to view property rights as "simultaneously a cultural system, a section of social relations, and an organization of power," all of which "come together in social processes" (Verdery, 2005). This dissertation examines how the socialist legacy of housing as a wage good and perception of the property transition influence the practices of urban residents in terms of their housing choices.

1.2.3 Accumulation by Dispossession and Housing Wealth

"Accumulation by dispossession" coined by Harvey (2003) refers to the ongoing process of what Marx called as "primitive accumulation." Neoliberalism as an instrument of "accumulation by dispossession" is believed to "transfer assets and channel wealth and income either from the mass of the population toward the upper classes or from vulnerable to richer countries" (Harvey, 2003). In his earlier work, Harvey proposed three circuits of capital

accumulation, among which capital was spatially “fixed” in the built environment in the second circuit of capital accumulation. It provides an efficient way to absorb the over-accumulated capital and enlarges the system of accumulation (Harvey, 1985, 2003). In this dissertation, I link Harvey’s “spatial fix” thesis with “accumulation by dispossession” and examines the social and geographical implications of the “spatial fix” as a way of “accumulation by dispossession” in the context of Chinese cities and explore the different mechanism from that of the capitalist society.

In contrast to Harvey’s work on the production aspect of capital movement, there is another strand of studies which focus on the consumption side and study the inequality of housing wealth in socialist and public policy literature. In a study of housing stratification in the U.K., Rex (1971) proposed “housing classes” to analyze the struggles of different groups with different power in the housing market. Inequality of housing wealth has been viewed as an important dimension of racial and ethnic stratification in social studies (Flippen, 2001). Studies show that the accumulation of housing wealth by minority groups is much less than their white counterpart (Oliver & Shapiro, 2006; Flippen, 2004; Krivo & Kaufman, 2004).

In the context of China, my dissertation research aims at making a connection between the studies on the production of urban space following the Marxist line with socialist and public policy studies on unequal housing wealth accumulation, through putting the consumption question into a spatial and institutional framework. The gradualist reform in China not only ensured a rapid economic growth but lead to a tendency of over-accumulation during the transition due to the constraints on investment channels. The booming property market provided an excellent outlet for investment. On the other hand, after more than three decades of economic reform under the slogan of “letting some people get rich first,” a small proportion of people accumulated sizable wealth. Probably the most salient process of “accumulation by dispossession” in urban China is the expropriation of rural land and urban redevelopment (Tan et, al., 2005; Song, et, al., 2005; He & Wu, 2005; Tian & Wong, 2007) through which capital is fixed in the built environment. At the same time, it has resulted in many disputes which attract wide attention from both public media and academic inquires (Ho, 2001; Ho & Lin, 2003). Less confrontational and thus more neglected (with a few exceptions such as Li, 2007) is the demand side of housing consumption and wealth accumulation. The consumption side of housing wealth accumulation may not fit seamlessly in the concept of Harvey’s “accumulation by dispossession” because it does not directly reduce the means of others. However, I argue that the consumption

of housing provides a most desirable way for those with capital to accumulate wealth, while excluding those "have-nots" from both reaping housing-related benefits and accessing desirable locations and facilities. In this sense, "accumulation by dispossession" is relevant to the accumulation of housing wealth in Chinese cities.

1.2.4 Urban social space

The earliest and the most well-cited model depicting the pattern of urban social space is Burgess's concentric zone model (Burgess, 1925). This model follows the neoclassical economics logic and frames urban social space in Western countries as fragmented by concentric zones with people of different socioeconomic attributes, races and ethnics becoming concentrated in particular zones as a result of competition, invasion and succession. The underlying assumption is that all those social groups are economically rational. And the institutional constraints have no influence on the choices of social groups, especially the group with market resources.

The political economy approach explains the transformation of urban social space by examining the underlying socioeconomic structure. For example, Harvey (1973) argues that the spatial patterns in urban residential structures should be regarded as the geographical expression of structural conditions within the capitalist economy. He further articulates this framework by identifying three circuits of capital, in which the over-accumulation in the first circuit can be temporarily solved through switching capital flows into the secondary circuit of fixed asset and the urban built environment (Harvey, 1985). Therefore, suburbanization and gentrification can be attributed to the "spatial fix" in the suburb and later in the inner city provide solutions to the under-consumption problem to sustain an effective demand for products and thereby facilitates the accumulation of capital (Castells, 1977; Smith, 1996).

In contrast, institutional perspective argues that the sectorial and locational switching of capital can only be achieved through the behavior of various private and public institutions. Studies have shown that financial institutions play an important role in determining who lives where, as they regulate the flow of money into the housing market (Murdie, 1986; Jones and Maclennan, 1987). In some cases, real estate agents, through their gatekeeping role, try to maintain the social status of a neighborhood. In addition, government policies can also influence the operation of housing market and thus influence residential differentiation. Overall, these

competing views on the production of urban space are predominantly based on experience in market economies.

During China's economic reform, the newly created land-use rights together with the freedom of urban residents to purchase housing at the market has had significant implications for China's urban spaces (Zhou and Ma, 2000; Gu et al., 2006; Feng et al., 2007, 2008). The existing studies are mostly descriptive and positivist with little consideration of theories developed in the western countries. With China moving towards a market-oriented society, it is meaningful to examine to what extent theories based on developed countries can explain the changes of China's social space. In addition, what role are the government and institutions, such as hukou and danwei from the socialist era as well as the new market playing in reproducing the urban social space through the new housing system?

1.3 Literature Review

1.3.1 Changing behavior of local government

Kemeny (1991) argues that the state should not be treated as a passive black box through which social power is exercised. Rather, the state can and does act autonomously in pursuit of its own vested interests in wider society. The advanced capitalist countries have experienced a transition from Fordism mass production to post-Fordism flexible accumulation, from the Keynesianism welfare state to a neoliberal workfare regime since the late 1970s. During this course, they saw a shift from government administration to partnership-based governance (Jessop, 2008). The role of urban governments shifted from the provision of welfare and services to fostering and encouraging local growth and economic development (Hubbard and Hall, 1998). Logan and Molotch (1987) use the analogy of "growth machine" for the entrepreneurial cities in which local governments form informal coalitions with private interests.

In the Asian context, from an institutional perspective, the "developmental states" theory is used to explain the behavior of local government. The concept of "developmental states" takes a contrasting view of the state compared to the "predatory state" concept implied by the rent-seeking and public choice theories. The main characteristics of development states are the state capacity in promoting growth and the strong interaction between state bureaucracy and economic and societal actors. The most cited examples of developmental states are the newly industrialized economies (NIEs) especially in East Asia and Southeast Asia (Douglass, 1994).

In China, after the economic reform, the combination of new market elements and decentralized state power has given rise to the entrepreneurialism in China's governance as their western counterpart (Wu, 2002). Especially, the introduction of a fiscal contractual system in the 1980s decentralized fiscal power and granted local government great freedom to use their "extra-budgetary revenue" (Wong, 1991; Naughton, 1995). This scaling-down of decision-making provided local government incentive to behave like "industrial firms" to promote local economic development (Walder, 1995). The 1994 tax and fiscal reforms established a tax sharing system with the aim of recentralizing tax and fiscal authority to the central state, especially revenue from industry (Wong, 1997). A significant result of the fiscal recentralization was the hardened budgetary constraints facing most localities, which shifted their interest to promoting projects related to land and property development (Duckett, 1996; Zhu, 1999; Wu, 2002; 2003; Zhang, 2002).

Political science scholars have debated whether the state is becoming a "helping hand" in China similar to those in East Asian developmental states, or whether it is increasingly becoming a "grabbing hand" as the predatory states in Africa (e.g. Oi, 1995; Pei, 2006). Some scholars borrow the "growth coalition" or "growth regime" concepts for the analysis of the political economy of urban development in the transitional urban China (e.g. Zhu, 1999; Zhang, 2002). They argue that China's urban growth coalitions rise along with the transformation of local states into post-socialist developmental states that pursuit increasing local revenue through aggressive economic growth, particularly through land development (Zhu, 1999). However, observations show that while private business groups have obtained power to drive the growth machine during the reform era, they are still politically weak if economically strong. In addition, communities still only have a weak voice both economically and politically, and thus play a less important role in the coalition (Zhang, 2002). These findings challenge the explanatory power of the US-style regime politics in transitional China.

Based on studies of local states' behavior in promoting local economic development in the countryside, Oi (1995), Whiting (2000) and Chen (2004) show that fiscal decentralization has provided positive incentive for local governments to promote rural industry development. Decentralization is the key institutional factor that made it possible for local governments to determine localized policy agenda and stimulated the formation of local pro-growth coalitions in Chinese cities (Zhu, 1999; Zhang and Fang, 2004). In addition, the evaluation system which tied

up local cadres' career advancement with economic development provided them a strong incentive to protect local industry in the adverse environment with ambiguous property rights (Oi, 1995; 1999; Whiting, 2000). On the other hand, Pei (2006) contends that decentralization has changed China from a centralized predatory to a decentralized predatory state, in which local states tend to be rent-seeking at the expense of ordinary citizens. However, without examining the institutionally defined incentive and constraints facing local states, this argument oversimplified the behavior of local states by assuming the necessary predatory behavior at the expense of ordinary citizens.

Overall, these empirical studies show that the changing behavior of local government during China's transition does bear certain resemblance of their western counter-parts in that it is pro-growth and entrepreneurial. The theories developed in the western countries can potentially provide us useful perspectives in explaining the mechanisms of the behavior of local government in the new environment. However, we should also be careful about using them in the China context. In addition, the dichotomy views of local states as "helping hand" vs "grabbing hand" fail to capture the dual responsibilities of the local states for welfare provision and development promotion.

In addition, the role of local states is not static. It is important to provide an updated view of the changing role of local states with regard to the constraints and opportunities they face, the negotiation between the central state and the local states as well as between the local state and urban residents. Zhang (2002) points out that China's local coalitions do not form within a liberal democratic system as in the US. Important local officials are usually appointed rather than elected; as the key stakeholder in local coalitions, they are still held accountable to their superiors and the central government.

Furthermore, most of the studies on the changing behavior of Chinese local government focus on rural China. Recently, attention has been paid to the transformation of China's urban land system, in which local government has been proactive in promoting property development (Zhu, 2005; Hsing, 2010). However, insufficient attention has been paid to the changing behavior of government in the transitional urban housing system. One goal of this dissertation is to examine the local government's behavior in housing provision and the consequent housing inequality caused by the changing housing system in urban China.

1.3.2 Housing inequality

Housing inequality in Western cities has long been a focus of social sciences. Empirical evidence documents that minority households, especially black households, are less likely to own homes and the value of housing property they own is generally lower compared to their white counterparts' (Jackman and Jackman, 1980; Horton 1992; Krivo 1995). In addition, minorities are less likely to access housing in communities with high values and high levels of appreciation (Massey and Denton 1993). Most early work try to explain these glaring housing inequalities within the rubric of a neoclassical economic theory. They find that racial and ethnic inequality is mostly a reflection of intergroup differences in income, values and microeconomic characteristics such as age, education, marital status, and number of children (Alba and Logan 1992; Flippen 2001). Based on this point of view, the life-cycle thesis states that homeownership and housing quality is closely tied to individuals' life-cycle characteristics (Alba and Logan 1992; Krivo 1995; Rosenbaum 1996). Drawing on the neoclassical economic perspective, the spatial assimilation model (Massey and Denton 1993; Flippen, 2001) posits that immigrants, who usually enter at the bottom of the occupational ladder, would experience upward mobility and over the time and they would seek to translate these labor market awards into improved home equity.

While the microeconomic explanations seem appealing, researchers have found that structural factors greatly limit minorities' housing options, suppress their homeownership rates and negatively affect the potential appreciation of their homes (Jackman and Jackman 1980; Oliver and Shapiro 1995; Yinger 1995; Myers and Chung 1996). Evidence shows that minority households are discriminated in the housing market at each stage of the process of becoming homeowners, from home searching to financing their homes (Farley 1996; Massey and Denton 1993; Ross and Yinger 2002). Steering, redlining, and other forms of mortgage-lending discrimination make it more difficult for minority households to access those communities with better quality dwellings and amenities, such as good-quality schools, parks, and so on (Massey and Denton 1993; Oliver and Shapiro 2006; Flippen 2001b). In addition, studies show that historical barriers, what Oliver and Shapiro call as 'sediment effect' to homeownership for blacks, continue to impede their potential to generate housing wealth (Krivo and Kaufman, 2004; Oliver and Shapiro, 2006).

After the sudden transformation of Eastern European and the former Soviet Union, there was massive privatization of public assets, including the public housing. What used to be an entitlement had been transformed into a fortune. However, due to the legacy of the socialist housing system, the past housing inequality continued during the privatization since the best housing units were occupied by the former nomenklatura and apparatchikes who could benefit from the privatization. In contrast, those who were in the waiting list in the socialist housing system were totally excluded from the opportunity of being homeowners through privatization (Struyk, 1996). Zavisca (2012) finds that factors such as economic resources, occupation, and education which are important in western capitalist countries are not statistically significant in obtaining homeownership in Russia. Rather, the traditional negative view on mortgage makes a housing regime “property without markets”, in which housing is privatized but incompletely commodified in Russia. With a housing market in-the-building, it is interesting to see whether housing inequality is also similar as that in western cities and what are the differences between that of Chinese cities and other post-socialist cities.

1.3.3 Residential differentiation/segregation

Residential segregation has significant spatial ramifications and is viewed as a key aspect of social inequality (Charles, 2003). Where people live affects their proximity to good job opportunities, educational quality, safety from crime, as well as the quality of social networks (Jargowsky 1996, Wilson 1987). Massey and Denton (1993) contend that social segregation is fundamental to the status of black Americans and the origin of the urban underclass.

There were three competing explanations of the persistence of residential segregation even after the passage of the 1968 Fair Housing Act in the existing literature: 1) differences in socioeconomic status, 2) personal preference, and 3) discrimination. The spatial assimilation model assumes that minority groups generally had lower socioeconomic status which leads to their residential segregation from whites, and therefore accumulate less wealth compared to whites (Oliver & Shapiro 1995). However, studies found that blacks do not get the expected payoff even with improved social class status. Furthermore, quite contrary to other groups, the blacks are even penalized for owning a home because the dual housing market restricts black homeowners to more segregated and less affluent neighborhoods (Massey & Denton 1993; Logan et al. 1996).

Behavioral perspective rejects the assumption of the fully rational “economic man” used in neoclassical models. Instead, it supposes that people choose their residence with incomplete information and based on their aspiration level and satisfaction. According to behavior perspective, residential differentiation can be seen as an aggregation result of people’s choices. Behavioral approach emphasizes household characteristics affecting residence choices, such as age or life cycle (Rossi, 1955). Other factors including things such as preference and residential satisfaction are also found to influence households’ residential choices (e.g. Brown and Moore, 1970). The behavioral approach admits the existence of constraints in people’s spatial choices, but it views them as an exogenous structure. The behavioral approach claims that ecological fallacies often occur when inferences about individual behavior are made from aggregated data. Therefore, it usually uses individual or micro-level data. However, an obvious weakness of studies on residential differentiation with the behavioral approach is that it overlooks the societal and structural constraints on human behavior.

Some scholars attribute the persistent residential segregation to racial prejudice (Bobo & Zubrinsky 1996, Logan et al. 1996, Massey & Denton 1993). Yinger (1995) finds that Blacks and Hispanics are more likely to get poor service, be denied to access housing and to be steered to segregated neighborhoods. In addition, Blacks and Hispanics are experiencing persistent discrimination by financial institutions (Dedman, 1988; Yinger, 1995). Therefore, their homeownership rates are lower than that for whites and they are less likely to live in white-dominated suburbs. As a consequence, minority groups are mired in neighborhoods with high rates of unemployment and crime, poor schools and other social services, and low home values (Massey & Denton 1993; Jargowsky 1996).

In terms of methodologies for studying residential segregation, the descriptive tradition of the early human ecology studies has gradually been replaced by studies with quantitative methods. Many one-dimensional measurements of social segregation have been developed, such as interaction indexes (Bell, 1954), dissimilarity (Duncan & Duncan, 1955) and Gini index (White, 1986). Massey and Denton (1988) later developed a five-axis measurement, including evenness, exposure, concentration, centralization, and clustering. With the development of more sophisticated statistical methods and GIS technology, more recent studies incorporate spatial dimensions into the previous aspatial studies (Morrill, 1991; Wong, 1999; Dawkins, 2004).

Different from capitalist cities, Socialist cities presented homogenous sociospatial patterns. After the housing reform in China, the urban social space consisting of cellular and homogenous communities was transformed by the emergence of new forms of communities. Residential enclaves such as gated communities accommodating wealthy households and “villages in the city (*chengzhongcun*)” concentrated by migrant populations are emerging, sometimes side by side in large cities (Ma and Xiang, 1998; Huang, 2005; Wu, 2002). With a gradualist approach to transforming its society, Chinese cities express a more complex picture than either socialist or market economies with the new layer of social structure caused by market forces laid on top of the socialist layer. While educational attainment and income are increasingly related with housing inequality and residential segregation, Li and Wu (2008) argue that residential segregation in China is not solely a result of market forces, but institutional. In addition, unlike Western cities where racial segregation is a salient and persistent dimension, Chinese cities lack this dimension (Huang, 2005; Li and Wu, 2008). In recent years, studies on the urban social structure of various Chinese cities have increased (Chai, 1999; Gu and Sheng, 2003; Gu et al. 2005; Shen, 2005; Feng, 2005; Feng et al., 2007). Some studies pay direct attention to residential segregation in Chinese cities (Huang, 2005; Li and Wu, 2008). These bodies of research contribute to the understanding of urban social restructuring in China during the reform. However, these studies have several limitations. First, due to data constraints, some studies use district-level data, which are too crude to show a meaningful picture of residential segregation (e.g. Huang, 2005). Second, using administrative boundaries instead of functional metropolitan area boundaries, these studies either miss the actual urban residents and thus the dynamic residential pattern at the urban fringe, or include a large agricultural population, who are under a different institutional regime (e.g. Feng et al., 2007, 2008). Third, these studies mostly used global statistical models which failed to show the regional variations of factors that influence the urban social structure and residential segregation. These regional variations often times are directly related with the institutional arrangement and spatial development policies. In addition, using only one residential segregation axis while missing other dimensions such as concentration and cluster. Last but not the least important, while recognizing socialist institutions as important factors in housing inequality and residential segregation, very few studies differentiate residents working for public sectors from those working for private sectors.

1.3.4 Literature on Chinese housing

The uniqueness and complexity of the transformation process in China's urban housing system have been subject of a wide range of inquiries in social sciences, such as geography, sociology, and urban planning. In the existing literature on urban housing in China, there are two main perspectives: 1) studies on housing reform and housing policy at a macro level, and 2) studies on housing behavior and residential mobility at micro level.

The first strand of studies describe and analyze the process of housing reform (Chen and Gao, 1993; Shaw, 1997; Logan and Bian, 1999; Wu, 1996, 2001; Ho and Kwong, 2002; Song et al., 2005, Wang, 2004). These studies are mostly descriptive. They document the features distinctive from those in advanced capitalist economies such as the US and European countries and attribute these features to the gradualist reform approach in China's urban housing reform. In addition, some scholars also pay attention to the social and spatial implications of the housing reform at the macro level, such as housing affordability and inequality (e.g. Lee, 2000; Wang, 2000; Wang and Murrie, 2000). For example, Logan and his colleagues (1999) examine the sources of housing inequality in urban China and emphasize the influences of political position, socio-economic background, and the status of work units on housing inequality. Wu (2002a, 2002b, 2004) examines the housing disadvantages of one particular group of urban poor – rural migrants -- and conclude that institutional constraints rooted in the traditional *hukou* system are one major source of their disadvantage.

With a state-centered approach, some studies focus on the behavior of local states in the urban housing system (Walder, 1994; Oi, 1995; Bian and Logan, 1996; Lai, 1998; Zhang, 2002; Huang, 2004). Based on the notion of bringing the state back in, Huang (2004) explains housing choice within a framework that takes into account the role of local governments in housing production and allocation in the transitional housing system. Similarly, Zhang (2002) focuses on the formal structure of the marketization of the housing system and examines the governments' policy reaction to housing problems. Lai (1998) studies housing policy in China from a political economy perspective and examines the changing governance in housing sector. More recent work on China's urban housing system tends to borrow political theories, such as urban growth machine and urban regime theories, as well as concepts such as neo-liberalism and governance to explain the China's urban housing development (Wu, 2010; Zhang and Wu, 2008; Lee and Zhu,

2003; He and Wu, 2009). These studies view China's urban housing system as a convergence of those in advanced capitalist countries.

In contrast, studies that focus on housing behavior and residential mobility at the micro level normally use household survey data to explore the changing patterns of housing behavior after the housing reform. They try to examine whether factors such as individual preferences, life cycle and household characteristics influence housing behavior as shown in western models of residential mobility in the market economy during market penetration in China. Most analyses reveal the increase in residential mobility in Chinese cities since the reform, due to both individual voluntary choices under market mechanisms as well as forced mechanisms such as inner-city redevelopment projects (Chai et al., 2002; Li, 2003; Li and Siu, 2001; Wu, 2004). It is found that preferences and socio-demographic factors are becoming more and more significant in determining individual choices in China's transitional urban housing system (Huang and Clark, 2002; Huang, 2003a, 2003b, 2004; Li, 2000a, 2000b, 2004; Wang and Li, 2003, 2004; Du and Li, 2012).

However, the emerging urban housing market in China shows features different from the housing markets both in advanced capitalist economies and in other transitional economies (Wang and Murie, 1999). Therefore, one cannot fully explain the housing behavior in China's housing system without reference to its institutional foundation, since the individual behavior is being reshaped by the institutional transition (Huang, 2004; Chen, 2011). Some studies have paid attention to institutions in influencing housing inequality, especially the persistence of institutions established during the socialist period. They suggest that factors deriving from the pre-reform socialist system, such as party membership, *hukou* status and *danwei* institution remain important in determining the unequal access to housing, although individual choices according to personal preferences and socio-demographic characteristics are becoming more and more significant (Huang & Clark, 2002; Huang, 2003a, 2004; Li, 2000, 2004, Bray, 2005). Those working in state organizations and/or with higher rank, party members, and those with urban *hukou* usually enjoy larger and better quality housing than rural migrants, as well as ordinary urban residents (Logan et al., 1999, 2009; Huang and Clark, 2002; Huang, 2003, 2004; Huang and Jiang, 2009; Chen, 2011, 2012).

In summary, studies on macro-level housing policies and their socio-economical implications attempt to explain China's changing urban housing system from a top-down, state-controlled

approach. It is probably due to China's top-down administrative hierarchy. However, they tend to neglect the diversity of interests in policy making and implementation, which may not follow the state's political agenda. In addition, the state-centered approach views urban residents as passive subjects of state policies and thus does not attribute enough importance to urban residents' everyday practices in shaping the urban space. Research based on urban governance framework developed in advanced market economies incorporates more actors to examine the new urban housing system than does the state-centred approach. However, they tend to over-emphasize market forces and market actors. In fact, market actors play a much less important role in China's political economy of urban development than their western counterparts (Zhang, 2002). On the other hand, micro-level studies on residential mobility and housing choices based on aggregate data do not pay inadequate attention to actors in the housing system. In addition, they tend to build on a neoclassic economic framework which assumes rational "economic men" who move and choose their housing according to their socioeconomic characteristics.

Overall, the existing literature on urban housing in China has not paid adequate attention to the spatial dimension of the housing differentiation and segregation. In addition, these studies do not use a consistent and well-delineated metropolitan boundaries. Instead, some of them use the administrative boundary of city districts as a proxy, which often leads to counterintuitive findings⁹ (e.g. Feng, et al., 2007, 2008). More importantly, with a few exceptions, housing research on China has not been able to engage in and make contributions to many ongoing debates in related social science disciplines. For example, there is an ongoing debate in sociology whether socialist elites or new market elites benefit more from the socialist transition (Bian and Logan, 1996; Nee, 1989, 1991, 1996; Rona-Tas, 1994; Walder, 1996). Housing research on urban China should challenge, extend, and thus further the existing empirical and theoretical studies. Based on a meaningful metropolitan area boundary of Beijing, this dissertation aims at filling this gap through paying attention to the unique institutional features of the emerging housing market in China and examining how different actors are involved in housing reform,

⁹ For example, Feng et al. (2007) found that agriculture population was an important social group in metropolitan Beijing in both 1982 and 2000. Furthermore, the percentage of this factor explained of the total variance increased from 1982 to 2000. As urban area with population engaging in non-agriculture activities, Beijing metropolitan area had agriculture population as significant social group is certainly counter-intuitive.

such as the states (both central and local) and urban residents, as well as what are the social and spatial consequences.

1.4. Analytical Framework

This dissertation takes an institutional perspective which argues that the study of urban spatial transformation should be put in its social, political and institutional context and be studied in as a synthesizing way. Focusing on the urban social dialects within China's urban housing system, this research aims at clarifying the misunderstanding of China's transition and exploring the nature of China's reform. In this framework, the housing system is located at the center because it links the state, the society (residents) and the urban social space, all of which are embedded in institutions both from the socialist regime and the emerging market and facilitates the sociospatial processes to transform the urban social space.

Unlike the globalization and neoliberal discourse, which argues for "the eclipse of the state" due to the dominance of transnational forces in the local economy and the triumph of the market on the one hand, and the statist approach, which puts the state at the center of analysis on the other, this framework views the state as one of the most important actors in the social spatial processes and examines the changing role of the state in the new urban housing system. The state here is not seen as an integrated one, but includes both the central state and the local state. Due to the fact that economic reform has rescaled the state power from the central government to local governments to a large extent (Fock and Wong, 2008), this dissertation research focuses more on the behavior of local state who is directly involved in the urban housing system. It is very important to understand the behavior of the local states as both a conveyor belt of central policies and an independent actor in shaping the transformation of the urban housing system. At the same time, this dissertation also pays attention to the central state's policies, which determines the basic trajectory of China's housing reform, because the housing reform was initiated and carried out by the central government through a top-down process.

Although urban residents are subject to many constraints, maybe more than those facing urbanites in Western countries, urban residents in China are not merely the subjects of state policies. This dissertation argues that urban residents are increasingly changing from passive socialist subjects accepting any rental housing units allocated to them to active players in the

urban housing system. The relationship between the urban housing system and urban residents is no longer a static one-way process, but dynamic two-way processes.

The pre-reform urban space was an outcome of centralized urban planning. And the main goal of the planning was to facilitate production (Gu, 2006). After the economic reform, while urban planning still played a significant role in shaping the urban space, the production of social space was influenced by more forces, including both planning and the market; both the state and urban residents. All these forces reshaped and reproduced the urban social space in the reform era.

The socialist institutions -- more specifically, *danwei* (work units) and *hukou* (household registration) systems -- were two gate-keeper institutions determining the citizenship and entitlements to urban housing during the pre-reform period. Urban employees with local urban *hukou* had access to various social benefits, including public housing provided by their employers according to their rank, seniority and marriage status (Solinger, 1999; Huang and Clark, 2002; Huang, 2003, 2004). On the other hand, peasants without urban *hukou* were not eligible for the allocation of social housing. In this way, housing also became an important way to control urban residents' life: the changes of both residence and employer were hard. The economic reform shed many responsibilities for urban employees previously attached local governments, while increase wages at the same time. With the emergence of a housing market after the housing reform, urban residents are less dependent on their employers for providing housing. While functioning with a diminishing role, the socialist institutions persist in their influence over the actors of the social spatial processes. Market institutions, at the same time, are gradually increasing in their significance. Overall, all the actors in the social spatial processes are embedded in the socialist and market institutions which defines their constraints and opportunities.

1.5 Research Questions

In this research, I aim to explore the complexity of China's urban social transition through the lens of housing and urban socio-spatial inequality. Specifically, this study aims at answering the following three questions, broken down into several subparts to deal with the case of Beijing:

(1) What is the behavior of local in the urban housing system during China's transition?

- a) How does local government implement policies and regulations in Beijing?

- b) How does the development of land and housing-related policies during the reform era reflect the changing role of Beijing government?
- c) How have these policies and regulations solved or exacerbated the problems of social segregation and housing inequality in Beijing?

(2) How do different social groups behave in terms of their housing in the new urban housing system?

- a) What are the factors influencing residents' housing location and tenure choices in Beijing?
- b) What are the strategies that different groups of Beijing urban residents use to cope with their housing difficulties and finance their housing?
- c) How does the perception of property rights influence Beijing residents' housing practices?

(3) What are the social and spatial consequences of the changing behavior of the state and urban residents in the urban housing system during transition?

- a) What are the patterns of housing inequality among various social groups in Beijing? What are the implications to housing wealth accumulation?
- b) What are the spatial patterns of housing inequality and residential segregation in Beijing during the transition? Has the urban social space become more similar to those in neoliberal societies?

1.6 Data and Methodologies

1.6.1 Research Data

I employ different types of data in order to answer these questions. The first type is statistical data. The main part of the statistical data is Beijing 0.1% microdata of the Population Census of Beijing conducted in 2000. Due to the different sources, this dissertation uses two datasets based on the population census: the first dataset contains 131,341 individual observations within Beijing metropolitan area with detailed socio-economic characteristics and housing information. Among them, there are in total 43,948 households in this dataset. The analysis of housing inequality is based on 30,013 households with household heads older than 18 within the Beijing metropolitan area this dissertation delineated. The detailed information about household heads' employment allows differentiating of those working for the public sector from those working in the private sector. The second dataset contains sub-district aggregated statistics

with spatial information and housing information. In addition, I also use supplementary data, including publicly available data such as statistical yearbooks and real estate yearbooks.

The second source of data draws on in-depth interviews. I conducted in-depth interviews with 82 Beijing residents between 2008 and 2009 and two group interviews with 5 residents in each interviews. I used a snowball sampling approach to access my informants. Through this way, my sample includes a good mix of informants in various locations of Beijing. They include employees in the private sector and in state-owned *danwei*, laid-off workers and rural-urban migrants. Respondents were asked semi-structured questions about their residence location and tenure choices, housing finance difficulties and strategies to access housing as well as their perceptions of property rights. Since I have wished to focus on the underlying dynamics of the disadvantaged *danwei* communities and “villages in the city,” in addition to this snowball sampling of interviewees regardless of their residence locations, I also selected one old *danwei* community and one “villages in the city” to conduct group interviews. Further, I also interviewed government officials from housing-related organizations, including Beijing Construction Commission, Beijing Land Bank Center, Beijing Municipal Commission of Housing and Urban Rural Development.

The last type of information I use in this dissertation is publicly available documents. This dataset includes land and housing-related national laws, policies and regulations, Beijing local policies and regulations, and newspaper and journal articles. They provide rich information for me to analyze the role of the state in the urban housing system.

1.6.2 Methodology

This dissertation takes a mixed-method approach. In order to explore the role of the local state in the housing system during the transition, this dissertation conducts a qualitative analysis on documents and interviews of government officials. It also examines in-depth interview data of urban residents to understand the everyday housing practices of various social groups in the new housing system.

The second part of the analysis is statistical analysis, which tries to reveal the spatial patterns of housing inequality and residential segregation in Beijing as consequences of both the state policies and individual choices. With the 0.1% sample of the fifth population census data, I conduct regression analysis, hotspot analysis with GIS and geographically weighted regression with GWR to provide a spatial pattern of social differentiation/segregation.

Figure 1.1 shows the workflow chart of this dissertation. The arrows show the flow of analysis. After a brief explanation of the social spatial transformation of Beijing as a backdrop for this study in Chapter Two, I first explain the behavior of the state (Chapter Three). Chapter Three explains the institutional changes during China transition, which define the incentive and constraints of the state. Further, this chapter examines the role of the central state in shaping the housing reform process. In particular, this dissertation focuses on the behavior of local government involvement in the emerging housing market, providing affordable housing as well as dealing with the semi-legal “small property right” housing. Through examining of the behavior of both the central government and Beijing municipal governments in the urban housing system during the transition, this dissertation tries to reveal whether the practices of the state are indeed moving along the neoliberal line as many China observers believe.

In Chapter Four, this dissertation moves on to explore the behavior of urban residents in. The main focus is on how homeowners search for their housing, finance their homes, and why they decide to move. In addition, this chapter also studies the housing experiences of renters such as their housing difficulties and their resistance against urban redevelopment. This dissertation does not treat either homeowners or renters as coherent groups. Instead, it pays attention to the housing experiences of different types of homeowners, such as homeowners through privatization, homeowners of subsidized affordable housing and homeowners who purchased on the market, as well as different groups of renters, including presumably temporary renters such as college graduates, permanent renters such as the urban poor and disfranchised non-*hukou* migrant renters. Through examining the housing behavior of various social groups, this chapter shows a mixed picture of the juxtaposition of neoliberal subjects in-the-making and the privileged socialist subjects in the urban housing system.

The last but not the least important part of the empirical analysis of this dissertation is the social and spatial ramifications of the transition in China’s urban housing system (Chapter Five and Chapter Six). The most significant social consequence of the housing reform, this dissertation argues, is housing inequality. Chapter five examines housing inequality in terms of how crowded homes are, housing quality and housing tenure. Chapter Six explores the spatial inequality. It particularly examines the spatial concentration of various social groups and the degree of residential segregation in Beijing.

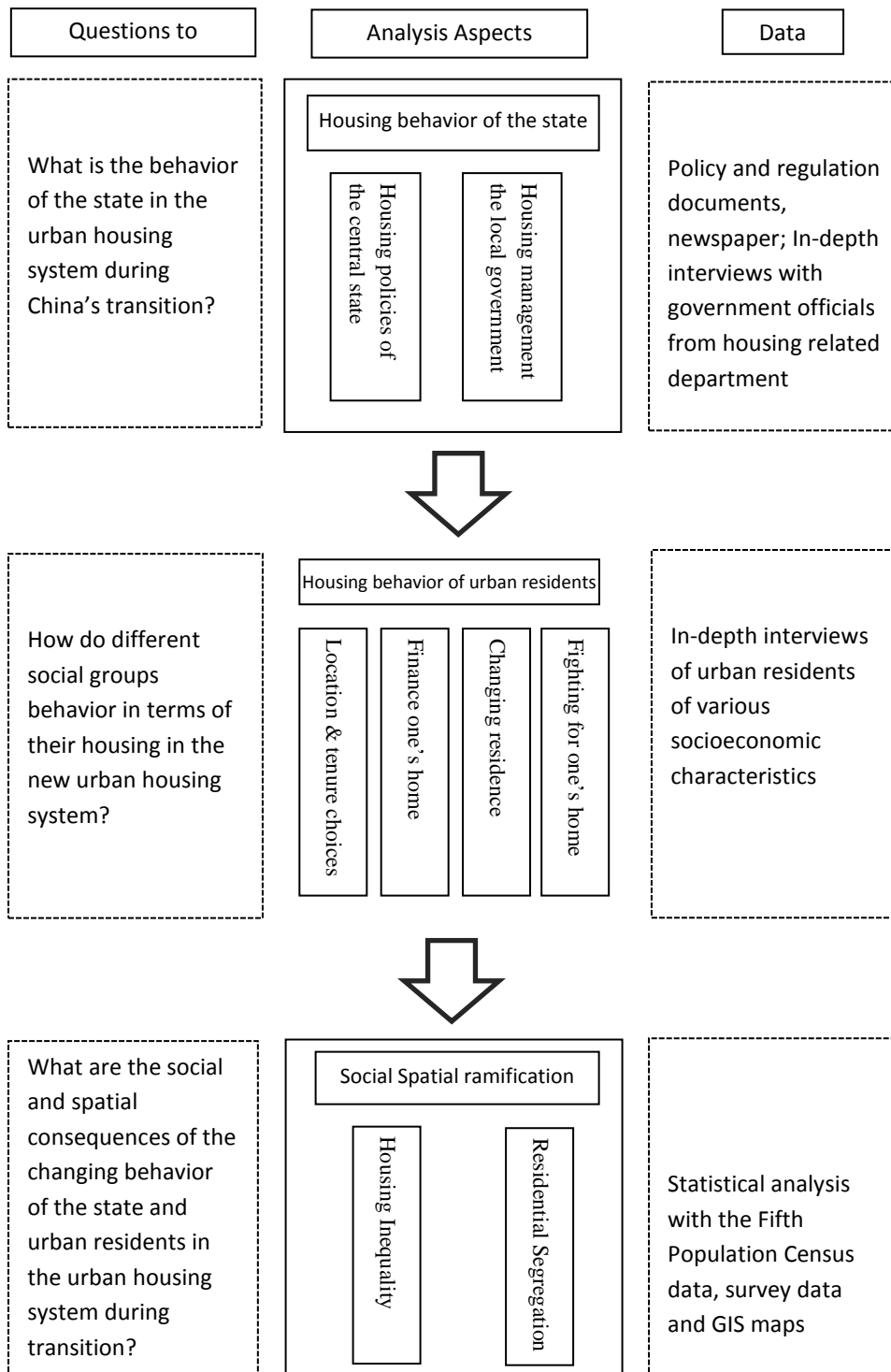


Figure 1.1 Analytical Framework/Workflow

1.6.3 Definition of key terms

1.6.3.1 Beijing municipality, urban districts and Beijing metropolitan area

Beijing municipality includes 16 city districts and 2 counties by 2009 (Figure 1.2). The 16 districts include four inner city districts (Dongcheng, Xicheng, Chongwen and Xuanwu), four inner suburban districts (Chaoyang, Haidian, Shijingshan, and Fentai) and eight outer suburban districts (Shunyi, Changping, Mentougo, Tongzhou, Fangshan, Daxing, Huairou and Pinggu). The two counties are Yanqing and Miyun. The inner city districts form the city core of Beijing and are roughly comparable to the central city of large cities in Western countries. While all the 16 districts were officially categorized as city districts (*shi qu*), they actually included a lot of rural area. Therefore, many scholars studying urban Beijing sometimes used only the four inner city districts and the inner suburban districts. However, the actual urbanized area gradually exceeded these eight districts after the economic reform, while still much smaller than the area of Beijing municipality. Therefore, it is important to define a meaningful boundary to study urban Beijing. Metropolitan area is a “daily activity” region used internationally as a basis for comparing large urban areas. It is a functional unit which is based on a daily labor market concept and often defined based on commuting data. For Western cities, the boundaries of metropolitan area usually are larger than the municipalities. However, the boundaries of municipalities are usually larger than metropolitan areas for large Chinese cities. This dissertation uses the boundary of Beijing metropolitan area delineated by Chan and Forstall (2013) (see Chapter Five for details).

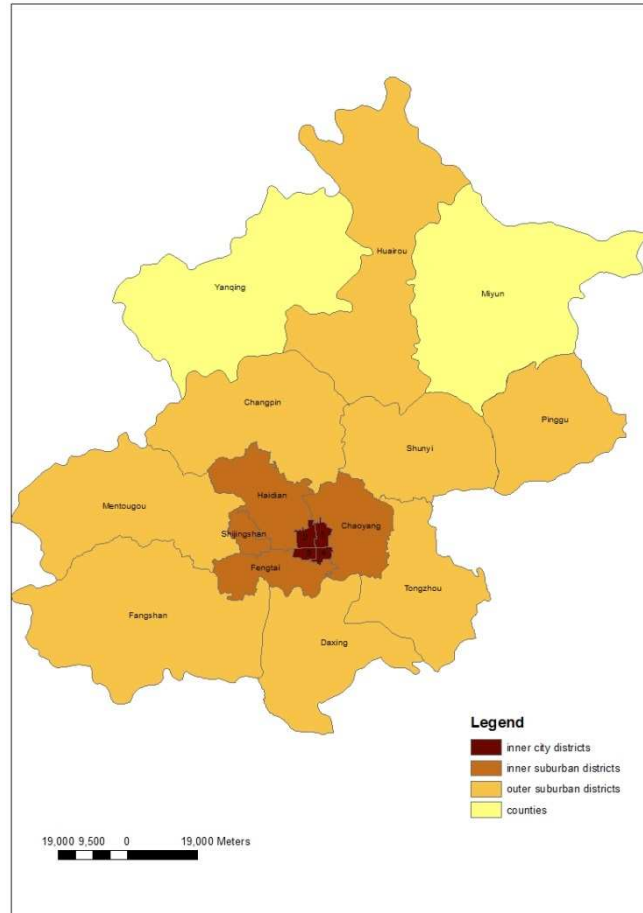


Figure 1.2 Map of Beijing Municipality, 2009

1.6.3.2 *Jiedao*

In the Chinese administrative hierarchy, *jiedao* has the lowest level of government under the district government. Below *jiedao* is neighborhood committee, which is not a level of government. As a geographic unit, *Jiedao* is a sub-district unit. *Jiedao* is similar to census tract as a geographic unit while neighborhood committee is similar to census bloc. In Beijing, there were totally 135 *jiedao* by 2009. This dissertation uses *jiedao* as the basic geographic unit for statistical analysis in Chapter Five and Chapter Six.

1.6.3.3 Socialist period and reform period

The socialist period in this dissertation refers to the period before the economic reform in 1978 when China had a Stalinist society. This dissertation used it interchangeably with “pre-reform period”. According to Dowlah and Elliott (1997, p 67), the characteristics of the politico-economy of the Stalinist model includes: 1) dictatorship by the communist party over the state; 2)

personal tyranny by Stalin over the communist party; 3) a closely knit set of institutional innovations for party/state control and coordination of the economy, namely collectivization of agriculture, state ownership of the means of production, centralized planning, and a strong bureaucratic machine; 4) rapid industrialization, with emphasis on investment in heavy industry and shifts in resources from agriculture to industry; and 5) domination by the dictator, party and state over society through monopolization of control over the armed forces, the media of mass communication, ideology, and education and the systematic use of secret police terror. The politico-economic system of China during the pre-reform period largely imitated the Stalinist model, although some periods were pushed to an even more extreme level, such as Great Leap Forward period. The reform period in this dissertation refers the period from 1978 onwards.

Chapter Two The Research Context: Urban Transformation of Beijing

Current Beijing has impressed the world with its modern office buildings, giant shopping malls, western-style gated communities and wide elevated freeways. However, as argued by Stark and Bruszt (2001) that “the concept of path dependence is useful not because it signaled a generalized 'history matters', but because it forced us to be rigorous about identifying critical junctures in which the temporality and sequencing particular events are consequential.” The examination of Beijing’s urban social transformation cannot be separated from its long-standing history. As the national capital for several dynasties, Beijing not only embodies the orthodox traditional planning ideology throughout the ancient times, but is imprinted by the Zeitgeist of the socialist period, as well as the reform era. Tracing the history of Beijing’s urban transformation, we can see that the transformation is not straightforward. Rather, the current urban social structure of Beijing is embedded in its historical context.

2.1 Urban Transition during the Socialist Period

The socialist period saw a significant transformation of its imperial cities after the foundation of the People’s Republic of China in 1949. After the prolonged Sino-Japan war and the Civil War which followed, the new-enthroned communist government felt it to be urgent to develop the war-encumbered country and catch up with the Western powers who had humiliated the once glorious China for about a century. With the help of the Soviet Union, the key goal of the first Five-Year Plan starting in 1953 was to transform cities from consumer places to centers of production through developing industry, especially heavy industry. As the capital city of the newly founded country, Beijing was set as role model for the rest of the cities in China to develop heavy industry. At the same time, commerce was seen as capitalist virus incompatible with the new communist country and thus to be eliminated. China was repeatedly described as a “poor and blank (yi qiong er bai)” country, although it was not exactly true. Through this discourse of scarcity and lagging behind, the communist government successfully mobilized the so-called master of the poor mass to voluntarily sacrifice their current well-being to rebuild the wealth of the country.

Centered on the discourse of scarcity and lagging behind, the three main goals of the socialist city planning was to 1) industrialize cities, 2) limit the size of the cities and 3) shorten the journey to work. In essence, the communist government attempted to utilize all the resources available to achieve the goal of a "big-push industrialization" through "economizing on urbanization" (Chan, 1994). There were several proposals for planning the new capital city. While there was a lot of disagreement on the location of the administrative center, a general consensus was on transforming Beijing into an industrial center (Wang, 2011). Following the Soviet model, the socialist cities were basically tailored to be places of production to realize the goal of rapid industrialization. Under the slogan of "production first, living second," factories took the prime locations in cities and urban life was organized around various factories (Bertaud and Renaud, 1994). These basic ideas of urban planning were based on the experience of the Soviet Union. But the practice in Beijing pushed the Soviet model even further. During the period of the first five year plan, 50 big factories were built in Beijing, with a total floor space of 1.87 million square meters. During the Great Leap Forward period, another 2.94 million square meters of factory space was built (Sit, 2005). A lot of industry was located in the central city. Estimation shows that by the early 1980s, 61% of manufacturing activities with 75% of Beijing's employment were concentrated in inner urban areas (Yang, 2013). The traditional administrative center and consumer city was then transformed into one of the biggest industrial centers in China.

In order to achieve the goal of controlling the size of cities, the government utilized the *hukou* system, first introduced as a population registration system, to firmly control the movement of people through linking it with the consumer goods rationing system and urban employment system (Chan et. al, 1999; Gu et al., 2006; Chan, 2009). Ironically, while the population mobility was controlled to a large extent, the size of the administrative area of the city expanded a lot to include the surrounding agricultural area. This was because the government tried to maintain a high level of self-sufficiency of the large cities in terms of food supply and guarantee enough agricultural area within the municipality to support the urban population. Beijing, like most of other large Chinese cities, incorporated a huge rural adjunct in its jurisdictions. Therefore, the administrative boundary was far greater than the urbanized area, which leads to a lot of confusion in studying urban China. Statistics show that when PRC was founded, the total size of Beijing administrative area was 707 km² accommodating population of 1.56 million. However, the actual urban land was only roughly about 2.6% of the total area of the

municipality during the socialist period and the rest of the land was basically agricultural (Sit, 1995).

The idea of minimizing the journey to work was put into practice through building residential areas within working compounds to form self-contained units all over the cities. While the urban planning followed the Soviet model, the organization of *danwei* went beyond the Soviet model to combine production and living within a small area¹⁰. It was claimed that it was an effort to combine agriculture with industry, rural living with urban living and mental labor with manual labor. In reality, the construction of various *danwei* with both production and residence functions was a result of consideration of self-sufficiency and population control (Gaubatz, 2001; Bray, 2005). As both production unit and social institution to provide social goods to their employees, *danwei* also facilitated the "big-push" industrialization. As a result, *danwei* compounds became the basic structural cells of the urban space and key units of urban life¹¹ (Ma and Wu, 2005; Bray, 2005). They were also designed with the idea of minimizing commuting time. However, even with the provision of all-encompassing services within *danwei* compounds, this idea had never been achieved since one of the couples had to commute to work if the couple worked in different *danwei*. The planning of *danwei* did, however, significantly transform the social spaces. Within the *danwei* compounds, managers and organization officials lived together in the same semi-public space. Although the central and local government officials also lived in the traditional imperial city in the urban center, the spatial differentiation among other social groups was dismantled by various *danwei* compounds.

Through these efforts, the most prominent characteristics of the socialist Chinese cities are: homogenous functional organization, poor living standards, and covert residential inequality (Sit, 2005; William & Chan, 2008). Except for the old city districts, the newly developed urban districts during the socialist period were homogeneous with little functional differentiation. The construction of *danwei* compounds dismantled the original social structure based on social status and became the primary spatial organization and the basic element of cities of Chinese cities

¹⁰ This does not mean that nobody needed to commute during that period. For example, women were very likely to live in housing provided by their husbands' work-units and need to commute to their own work-units (Gaubatz, 2001). Those who had not yet gotten *danwei*-housing but lived in their own family housing also needed to commute to work. In big cities like Beijing, it sometimes took more than an hour to reach their work-units (Sit, 1995)

¹¹ Besides *danwei* housing, there was also municipally owned housing managed by the city housing bureau and allocated to urban residents who did not belong to any state *danwei*. This housing was usually located in the old inner city and was transformed from private housing into municipally owned housing after the communist revolution.

during the socialist period. Within the walled *danwei*, there were a lot of utilitarian and drab matchbox-like three-to-five-story residential buildings. In addition, there were also shops, kindergartens, recreation places, dining halls, medical facilities and so on. The *danwei* compounds provided almost all the necessary services for their employees and served as the principal urban space of any urbanites employed by public employers. Therefore, the occupation of residents was homogenous while the social status was heterogeneous. However, it does not mean there was a high degree of social equality. Rather, social differentiation was not expressed by distinct urban space. In fact, housing size and quality varied according to employment rank, seniority and family size even though employees from the same *danwei* lived in the same *danwei* compounds.

The emergence of *danwei* has changed the landscape of the imperial Chinese cities into a somewhat homogeneous and unidentifiable one. The explicit social and spatial inequality based on class and ethnicity was transformed into seemingly homogeneous socialist spaces where residential location was determined by one's *danwei*, instead of factors such as income, race or gender observed in western cities. Through producing a homogenous socialist urban space, the government also effectively illustrated their rhetoric of equality to the ordinary urbanites. As Huang argues (2005), it is both the production place and the reproduction space.

The socialist period was also characterized by low living standards for the ordinary urban residents. Viewing consumption as a capitalist behavior, the majority of investment went to "productive" use, such as industry, warehouses and so on. By 1979, these usages took up 67% of all building land. In contrast, residential land only accounted for 22.5%. In the 1966-76 period, urban planning was abandoned and minimum standards in construction were adopted. In 1953-57, the ratio of floor space constructed for productive uses and that for living and residence uses were 1 to 1.12. It dropped to 1 to 0.9 in 1958-76 period. During the Great Leap Forward period, the ratio was at its lowest: 1 to 0.64. In addition, the living space dropped from 4.75 sq m per person in 1949 to less than 4 in 1960s in Beijing (Sit, 1995). During the Great Leap Forward period, individual working units were encouraged to fill whatever space was available based on the idea of 'driving pins into any visible gaps (*jian feng cha zhen*)' and low standards were viewed as good. Under the anti-capitalism ideology, a lot of simple apartment buildings with no private kitchen, restroom and tap water were constructed during the Cultural Revolution.

While the living situations of urban residents in Beijing were generally poor, housing inequality existed. The socialist urban social space was divided by various *danwei* compounds which successfully concealed the inequality within the compounds. Sit (2005) shows that housing allocation standard for the elites were above 9 square meters per person, which was 2 to 2.5 times more than those for the average worker. For government officials working in city government it was 5.27 square meters. Besides these advantages, central government officials enjoyed a lower rent -- roughly 3% of their (higher) incomes compared to 3.6-4% of income for ordinary workers, not to mention the difference in non-wage goods. Same differences also existed among different work units. For employees in big state-owned enterprises or state government institutions such as Petrochemical Corporation, Construction Bureau could have over 10 square meters of living area per person, while a large number of ordinary workers in small work units only had 0.45 square meters per person (Sit, 2005, pp. 221).

2.2 Urban Transformation during the Reform Period

The reform era saw unprecedented transformation of the urban space. One characteristic was the rapid urbanization and urban sprawl (Zhou and Ma, 2000; Ma and Wu, 2005). China is claimed to have some of the fastest sprawling cities in the world (Campanella, 2008). Gu and Shen (2003) estimate that the built-up area of Beijing increased from 335 km² in 1978 to 488 km² in 1998. In about twenty years, the city built-up area increased over 50%. The 4th ring road that was completed in 2001 was intended to become the dividing line between urban and rural areas. However, the urbanized area dramatically expanded alongside the 5th ring road, starting from the northern direction with the completion of several major projects such as Zhongguancun Science Park, and extended to the southern part of the ring road later on (Figure 2.1) (Yang, et al., 2013). In terms of the administrative area of Beijing, the increase was even more impressive.

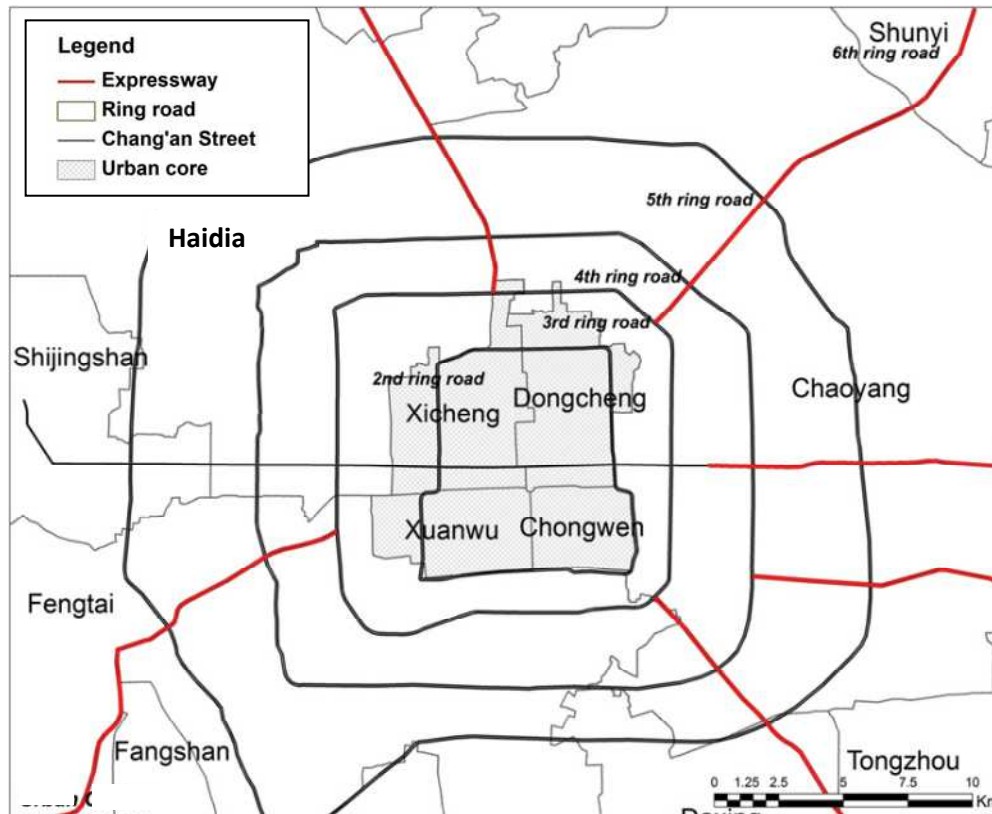


Figure 2.1 The Ring Roads and Main Freeways in Beijing

Source: Yang, et al., 2013

The commercial and industrial areas in cities were also transformed. Concentrated commercial, office, and retail functions were developed in the city center and commercial, office and industrial functions created in large peripheral developments. The generalized socialist urban form was changed to be more specialized both in terms of the return to cities' commercial function, and to some new functions such as specialization of IT industry in certain areas of the city. For example, Haidian District has been constructed to be the Chinese "Silicon Valley," specializing in high technology. Unlike Western cities, specialization in Chinese cities is not an outcome of the market, but rather an expression of state priority for certain types of development (or a lack of state priority). Another significant transformation during this period was moving heavy industry to the urban fringe to help with reducing pollution, as well as to make better use of the land in central city. However, Lin and Bian (1991) contend that throughout the 1980s, the *danwei*-related social differentiation between neighborhoods remained prominent in Chinese cities.

From the early 1990s, developers started to build single family homes at the urban fringe, especially concentrated in Chaoyang District, followed by Changping and Daxing. Before the economic reform, the urban structure of the old built-up area did not change much. In contrast, the urbanized areas at the fringe of Beijing expanded rapidly. The expansion of the city of Beijing was around the ring roads. There were a lot of residential buildings developed during the 1990s by various *danwei* for their employees between the second and third ring road. From the Third ring road to the Fifth ring road was mostly commodity housing constructed by developers. Most development projects were outside the fourth ring road (Figure 2.2). As to the price of the recently constructed projects, those located inside the Second ring road were the most expensive. The prices decreased with increasing distance to the urban center. However, the unit price of housing between the Fourth and Fifth ring roads was higher than that between the Third and Fourth ring road. One possible explanation may be that the quality of housing was better, and some housing units may even be single family homes.

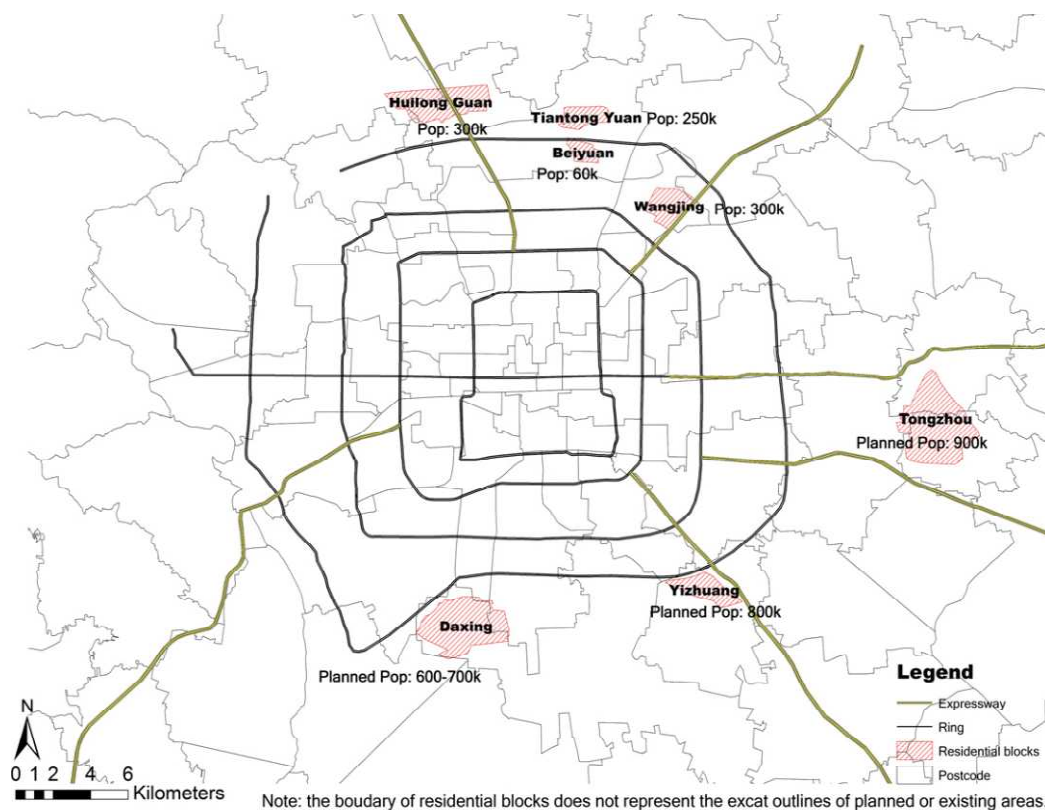


Figure 2.2 The Main New and Planned Residential Areas in Beijing

Source: Yang, et al., 2013

The development of housing during this period is very different from that during the socialist period. There is also an increase in housing supply. Housing is provided by both *danwei* and private developers. The funding for constructing residential buildings also changed from solely state investment to multiple sources: the state, foreign investment and individuals. As a result, there was a significant increase in construction. The impact on the urban structure was profound because it cut the spatial linkage of employees to their workplaces. The housing reform provided some urban residents opportunities to live outside their *danwei*. The *danwei* compounds are no longer the prime choice of urban employees and there is even a "residualization" of *danwei* housing, where families who could not afford to move out stayed in *danwei* housing (Huang, 2005). The out-moving of younger employees to the outskirts of Beijing to improve their living situation also caused increased aging of residents of the old buildings in *danwei* compounds. At the same time, the Beijing government made efforts to move residents out of the downtown area. There were 32 housing development projects under construction since 1990 to serve this purpose (Gaubatz, 2001). Based on his study on Beijing, Feng (2003) finds that population in central districts decreased, while surrounding districts experienced rapid population increase. The development of residential districts is a result of the removal of industry from established residential areas and the construction of completely new districts on the outskirts of the cities. Because of the employment areas developed at the urban fringe, inner-city residents need to commute to the suburbs to work, while residents living in the new apartments at the urban fringe need to travel to the city center for shopping and other social services. In addition, the relaxation of the *hukou* resulted in an influx of migrants from the countryside to the cities to find jobs. Most of them live in self-built housing by farmers at the urban fringe (Huang, 2005). They account for much of the increase of population in "villages in the city" at the urban fringe.

2.3 Changes of Urban Social Structure

During the pre-reform period, the social structure was organized by political power: the closer one was to the political power center, the higher rung one was on the social ladder. Here I use a simple pyramid (Figure 2.3) to illustrate the social structure during the socialist period. The social stratification between different social groups were based on political power and public resources related to it, such as opportunities to go to college, access to relatively larger housing units within their *danwei* and having higher political status. In terms of economic difference,

while there were differences between working for different *danwei*, by and large the difference of personal wealth in the pre-reform society was very small. Therefore, the living standard of the urban residents was dependent on the quality and quantity of state provision, instead of being based on household wealth. Inequality during this period was also more based on political power than on personal wealth (Li, 2004).

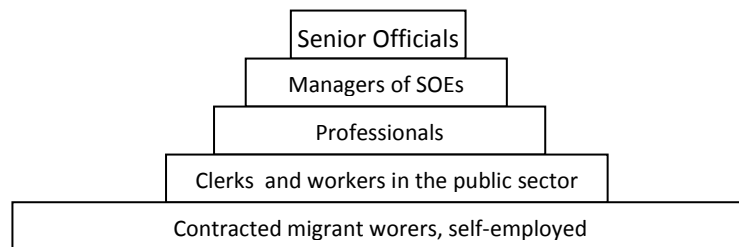


Figure 2.3 Urban Social Stratification before the Economic Reform

On top of the social ladder were party and government leaders at all levels. These people were the key decision makers in pre-reform China. The second level included directors of various public academic and professional institutions, and managers of large state enterprises. It was followed by a professional group of technicians in SOEs and intellectuals in various schools and research institutions. Clerks and ordinary workers in public organizations or factories formed the fourth class. At the bottom of this ladder were those without formal jobs in the public sector, including petty retailers and a very small number of migrant workers doing contracted work in public sector.

The economic reform reshuffled the social structure through introducing a market mechanism which created new social classes in the urban society. Figure 2.4 provides a conceptual structure of social stratification after the economic reform. The left hand side are what are normally called "within the system" (*tizhi nei*) social groups. From top to bottom, the ability to access political resources decreases. The right hand side are social groups which emerged after the economic reforms which can be called "outside the system" (*tizhi wai*) social groups. They have no direct access to political resources. In addition, from top to bottom, the ability to access market resources decreases. A caveat is that social class at the same rung in this conceptual structure may not be exactly on the same social position in reality, since there is no agreement on whether social groups with more access to political resources or market resources should be on higher rung of the social ladder. The point here is that the social structure after the

economic reform become more complex, with classes created by the market mechanism grafted onto the pre-reform society. As Li asserts (2004), the social structure of China after the economic reform has become more diversified and fragmented. More importantly, differences among social groups lie more in income and wealth than in other dimensions. Therefore, the more covert inequality during the pre-reform era has been transformed into increasing manifested inequality in the reform era. It is argued that although there was a decrease in income inequality in the early stage of market reform, inequality increased afterwards (Walder, 1996).

In addition to the newly created wealthy group and the emerging middle class¹² in the urban society, there are two disadvantaged groups: the laid-off workers who were deprived of both the public resources they used to have and the market resources, and millions of migrant laborers working diligently for the “China miracle” at the bottom of the urban society (Chan, 2006). The laid-off workers worked in SOEs and enjoyed some social benefit from their employers before the economic reform. They were left out by both public sphere and the market sphere during the reform era: they were kicked out of the public sector, but a lot of them could not enter the private sector successfully. The *hukou* system institutionally forced the migrant workers without local urban *hukou* to take up low-paid, manual jobs in host cities. Khan and Riskin (2005) suggest that the income differences between migrant labor and urban residents came partly from the exclusion of the migrants from much of the formal labor markets. In addition, the uncertainties of their residency status gave rise to opportunities for employers to exploit migrant workers (Chan, 2005). Statistics show that employers in state owned units decreased both in their share of units overall and in absolute number. The total employees in state owned units decreased about 29 million, accounting for about 27% of total employees in state owned units nationally from 1997 to 2000 (National Bureau of statistics). As the national capital city, Beijing protected its state employees better. Even so more than 14% of state employees lost their jobs between 1997 and 2000.

¹² Although the middle class in China is still relatively small, it is argued that the middle class in China is rising and have more influence in the society (Tomba, 2004).

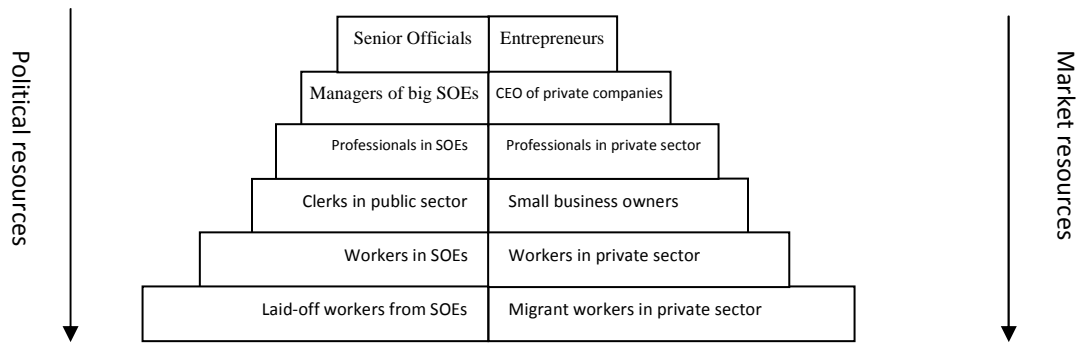


Figure 2.4 Social Structure after the Economic Reform

The economic reform created the "China miracle" by significantly increasing the national GDP and improving most people's living standard nationwide in the first decades of reform (Lin et al., 2003). However, the fruits of the reform were not equally shared by various social groups; rather, they are increasingly concentrated in the hands of small social groups, such as the owners of big companies, high government officials, and so on. If the 1980s can be seen as a period of "reform without losers" (Lau, Qian and Roland, 1997), the years from 1990 onwards should be marked as a period with the emergence of losers. It is argued that after more than two decades of reform, China has moved away from an egalitarian country to one of the most unequal countries among developing countries (Khan & Riskin, 1998; Khan & Riskin, 2005). A report published by World Bank shows that Gini coefficient was 0.28 in the 1980s, and it increased to 0.38 in 1995 and 0.458 in the late 1990s¹³. A survey conducted by China Statistics Bureau and other six ministries in 1999 shows that 20% of the high-income group had 42.4% of the total income of urban residents, while the 20% of the poorest residents had only 6.5% of total income (Sun, 2004). It is argued that "one of the significant outcomes of the economic reform in China is that a small percentage of newly wealthy group has accumulated a large amount of wealth who increasingly distance themselves from the low-income group," (Sun, 2004: p 63).

Employees working in highly profitable state enterprises, especially state monopolized sectors such as telecommunications, still enjoy higher wages. Employees in governmental or quasi-governmental organizations still received better welfare than those in non-state sectors.

¹³ World Bank, 1997, Sharing the Rising Income: Inequality in China, http://books.google.com/books?id=XRHitIIXYX0C&pg=PA3&lpg=PA3&dq=world+bank+report+++sharing+increasing+income+++1997&source=bl&ots=zfosizS1yi&sig=bvU_XaIRRArVpZCTN36UI7zafPc&hl=en&ei=_q7PTIr aDJSeQOvrPSiAg&sa=X&oi=book_result&ct=result&resnum=4&sqi=2&ved=0CCQQ6AEwAw#v=onepage&q&f=false

These groups are more advantaged from the old system than ordinary workers in factories. However, the most salient inequality exists between the newly emerged middle class including *getihu* (private business owners), managers and professionals working in private sectors and urban poor including laid-off workers and rural-urban migrants (Li, 2005). After more than two decades of economic reform under the slogan of “letting some people get rich first,” a small proportion of people accumulated sizable wealth. The booming private sectors promoted by policies during the reform era generated a growing number of urban middle class on one side of urban spectrum. On the other side, the size of urban poor is also growing. Estimation shows that the total number laid-off and other unemployed people nationally in urban areas had reached 15 million in 1997 (Wang, 2005). In 2000, there are 140 million temporary migrants who live outside their own *hukou* registration place (NBS, 2000).

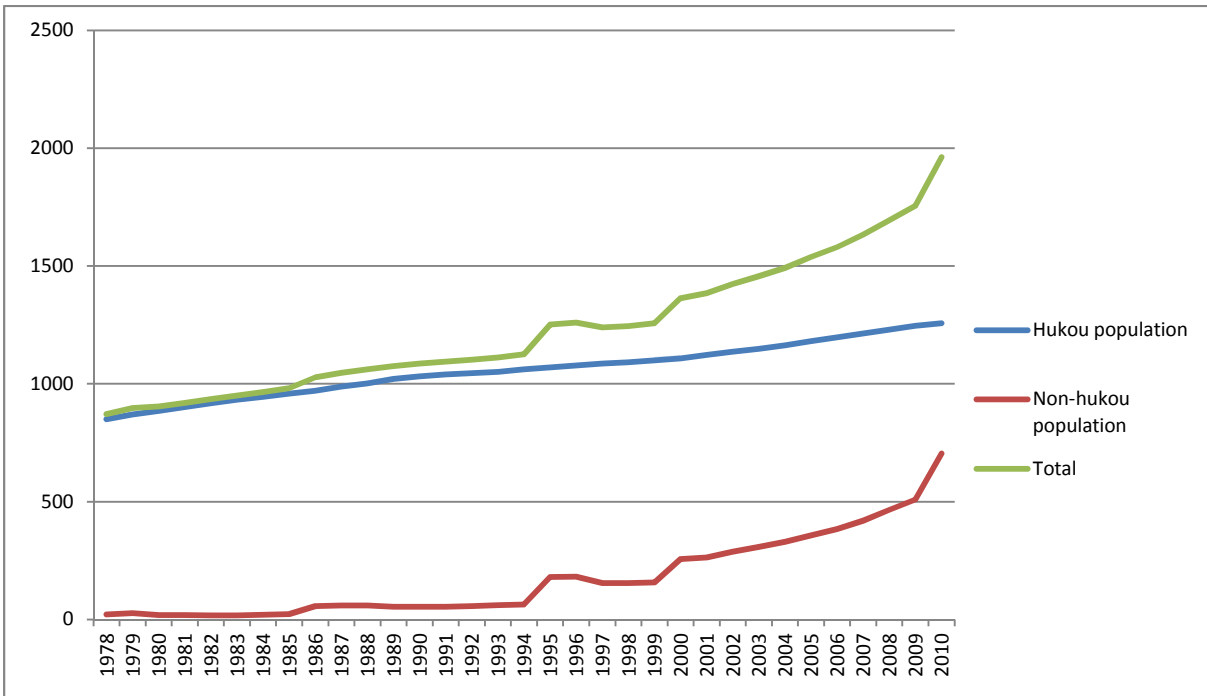
2.4 The Urban Change: Some Statistical Evidence

Based on the discussion in the previous section, we can see that Beijing has undergone significant transformation since the economic reform. In this section, I will further show the general patterns more visually with statistical data. A caveat here is that since the data used in this section are mostly from the official statistical yearbooks, which usually only calculate the *hukou* population, the real magnitude of changes might be smaller if including migrants.

2.4.1 Increasing Non-*hukou* Migration

One significant change in Beijing’s society was the ever-increasing numbers of migrants after the economic reform. Figure 2.5 shows the trend of total population growth and that of the breakdown of *hukou* and non-*hukou* population. We can see that the population size within Beijing administrative boundary increased steadily after the economic reform. In this figure, the *hukou* population also includes *hukou* migrants who officially changed their *hukou* registration place to Beijing after moving there. The increase of *hukou* population was quite steady with very little fluctuations. In contrast, there was a surge of non-*hukou* migrants in 1995 and another one around 2000. While there is slight a drop afterwards, the increase of non-*hukou* migrants increased rapidly after 2000 with a much larger increase rate than that of *hukou* population, which accounted for accelerating growth of the total population. By 2010, the number of non-*hukou* migrants in Beijing reached 7 million, an increase from 2.5% to 36% of total population since 1978. Usually, the non-*hukou* migrants are largely confined to the “3 D” (dirty, difficult

and dangerous) jobs due to the fact that they do not have official residency right (Chan et al., 1999). For the same reason, they are not eligible to any public provided or subsidized. Studies show that most non-*hukou* migrants end up to staying in crowded rental apartment, “villages in the city” or dilapidated neighborhoods (Wu, 2002, 2004; Wang, 2004)



Note: A caveat of this figure is that the criterion to categorize urban and rural population before 1990 was based on the criterion of hukou management; The criterion used for data during 1990 to 1999 period is based on 1990 census population criterion; the criterion of 2001-2005 is based on 2000 population census criterion; the criterion of 2005-2008 is based on criterion released in 2006 and the criterion used for 2009-2010 data is based on criterion in “Approval by the State Council on Regulations of statistically Divide Urban and Rural Population”. In addition, the administrative boundary changed over time (for details, see Zhou and Ma, 1995).

Figure 2.5 Hukou and Non-*hukou* Population in Beijing Administrative Area

Unit: 10,000 persons

Source: Beijing TJNJ, 2011

2.4.2 Change of the Employment Structure

During the socialist period, except for a relatively small number of self-employed residents in the cities, the majority of urban employees were in the public sector. Figure 2.6 shows that while the absolute number of urban employees in the public sector did not decrease until about 1998, the share of employees in it dropped right after the economic reform in 1978. After 1998, the number of employees working in state owned units dropped rapidly. After several years’ stagnation, employment in collective sectors also decreased with an even greater rate. The

number of employees in the private sector increased quickly both in absolute number and its share after 1992, although it was negligible at the beginning of the economic reform. However, employees in public sector still took the lion's share both nationally and in Beijing till 2000. The number of employee state-owned units and collective owned units combined still took up more than 50 percent of total employment in 2000, more than one decade after the economic reform. The total number of employees in state-owned and collective-owned units was almost three times that in the private sector. There was an upsurge of employment in the private sector after 2001. In the meantime, the number of employees in the public sector dropped significantly. The share of employees in the private sector outnumbered those in state-owned and collective-owned units for the first time in 2004. By 2010, the share of employees in the public sector only consisted of about 30 percent of the total labor force in urban Beijing.

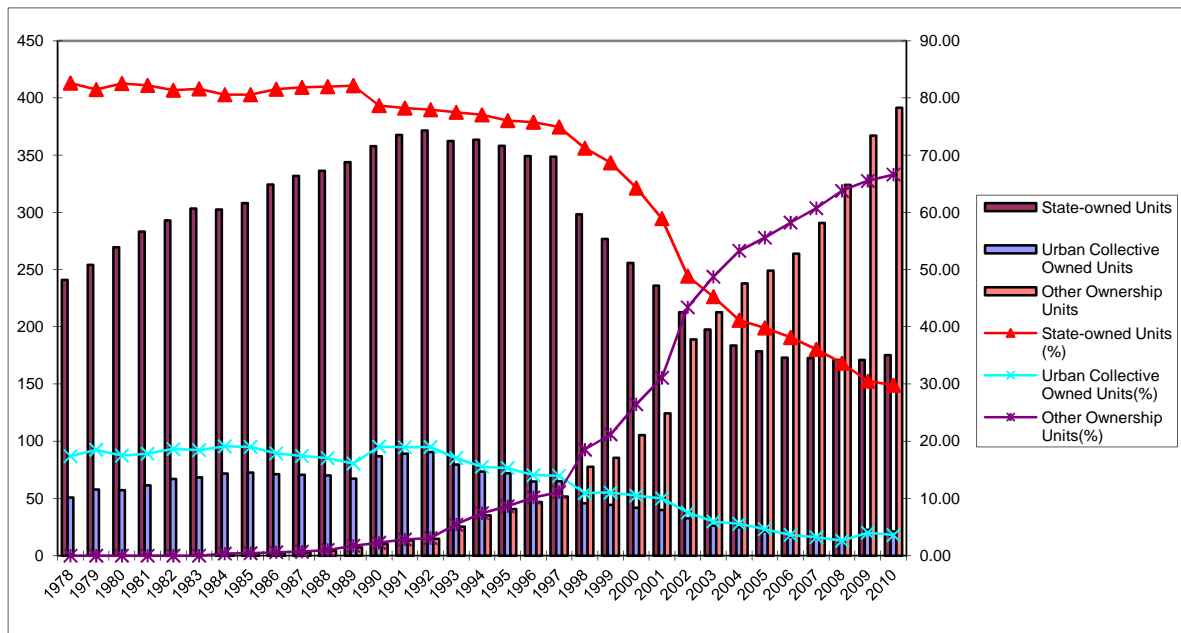


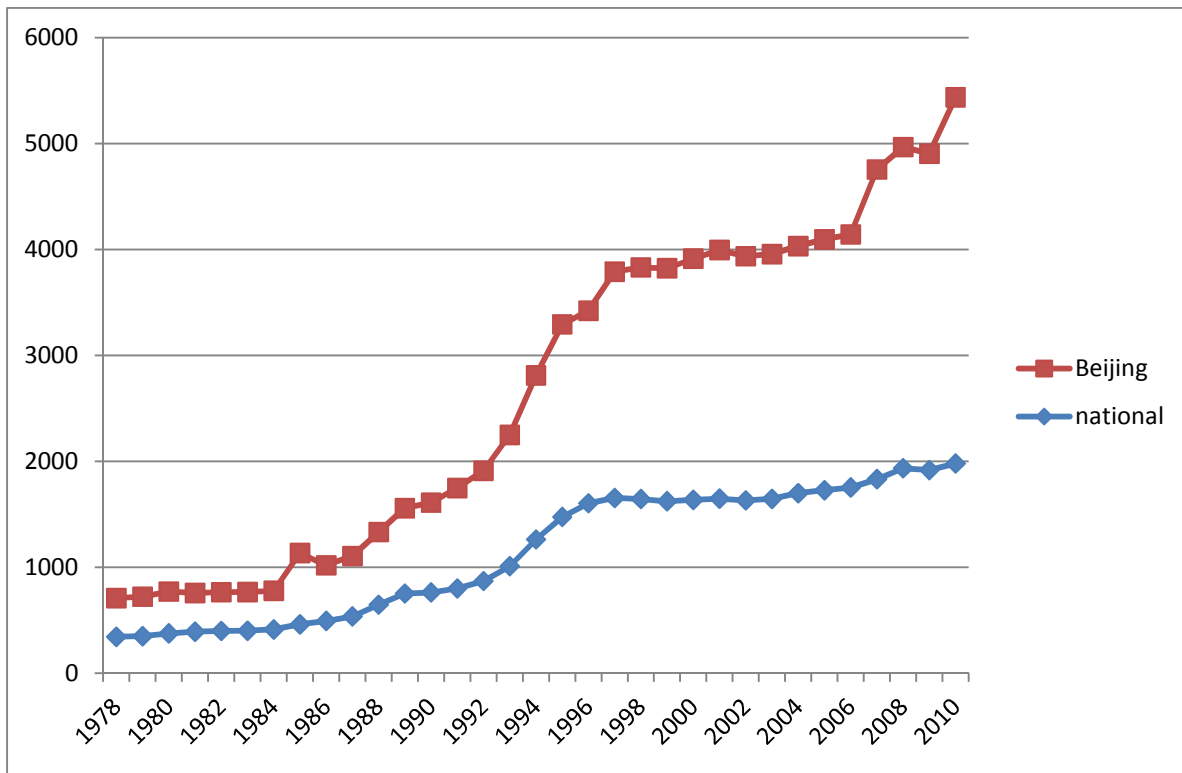
Figure 2.6 Employees in State-owned, Collective and Other Units in Beijing

Unit: 10,000 persons

2.4.3 Increasing personal wealth and living standards

One of the biggest contributions of the economic reform in China was that it brought a large number of the Chinese population out of poverty. In the urban area nationally, the annual per capita disposable income has increased gradually since the economic reform (figure 2.6). Taking inflation into consideration, the disposable income of urban residents almost increased threefold from 1978 to 2000 on average nationally. It increased rapidly from 1988 to 1994. The trend of

Beijing is even more impressive. The annual disposable income doubled the national level in the late 1990s. Especially, after Deng’s Southern tour in 1992, disposable income of urban residents in Beijing skyrocketed. While the disposable income decreased slightly after 1996 nationally, it continued to grow in Beijing and it had a big jump up in 2006. The increased income implied an increasing purchasing power for urban residents, which they had not enjoyed in the pre-reform era. Here one should bear in mind that the income of urban households is notoriously complicated and usually underestimated. One reason is that households tend to underreport their income due to the tradition of "hide family wealth." The other reason may be due to the fact that urban households have sources of income other than salary. Some may not be totally legal. According to a report by an economist, “gray income” in China was 5.4 trillion yuan in 2008 (Wang, 2007)¹⁴.



Note: only the numbers of *hukou* population were used to calculate per capita disposable income, which inflated the actual figure (for more details about the problems in calculating per capita figures in China, please see Chan and Wang, 2008). On the other hand, a lot of non-wage goods were not calculated. It would slightly offset the inflation of income by leaving migrants out of the calculation.

¹⁴ Wang, Xiaonu. 2007, Gray income and income differences of Chinese citizens. China Reform. (zhongguo jumin huise shouru ji shouru bu pingdeng, Zhongguo Gaige).

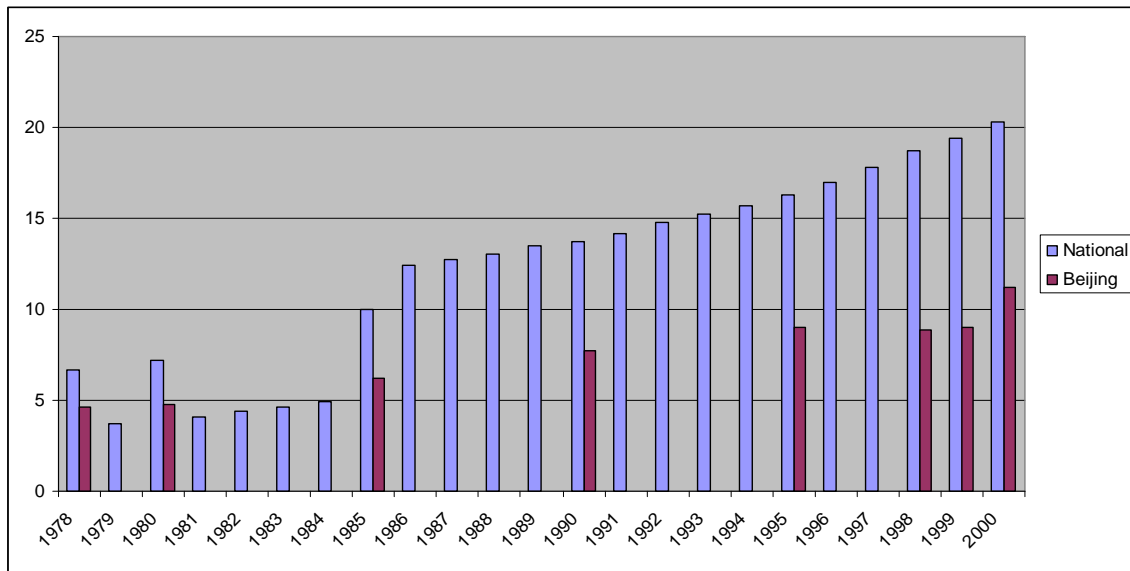
<http://www.wyzxsx.com/Article/single/%E7%8E%8B%E5%B0%8F%E9%B2%81%E5%9B%BD%E6%B0%91%E6%94%B%E5%85%A5%E5%88%86%E9%85%8D%E7%A0%94%E7%A9%B6%E6%8A%A5%E5%91%8A.htm>

(Unit: yuan, in 1978 value)

Figure 2.7. Per Capita Annual Disposable Income of the Hukou Population

The floor space of housing per capita is also an important indicator of the standard of living. Except for some fluctuation right after the economic reform, the per capita living space in urban areas kept increasing (Figure 2.7). The living space doubled from 1984 to 1985 nationally in just one year and it increased steadily afterwards. The per capita living space in 2000 increased more than fivefold from that in 1979 in urban areas to more than 20 square meters per capita, which is an impressive improvement in the standard of living of urban residents. It is worth mentioning that the formal housing reform did not start until 1998. Therefore, the improvement of living space was mainly due to more investment in residential building by the state before the housing reform.

The trend is quite clear that the living space of Beijing also increased after the economic reform, although Figure 2.8 does not show a whole picture of Beijing due to the lack of data. However, comparing with the level nationally, Beijing residents lived in a more crowded environment and the magnitude of improvement in living space is smaller.



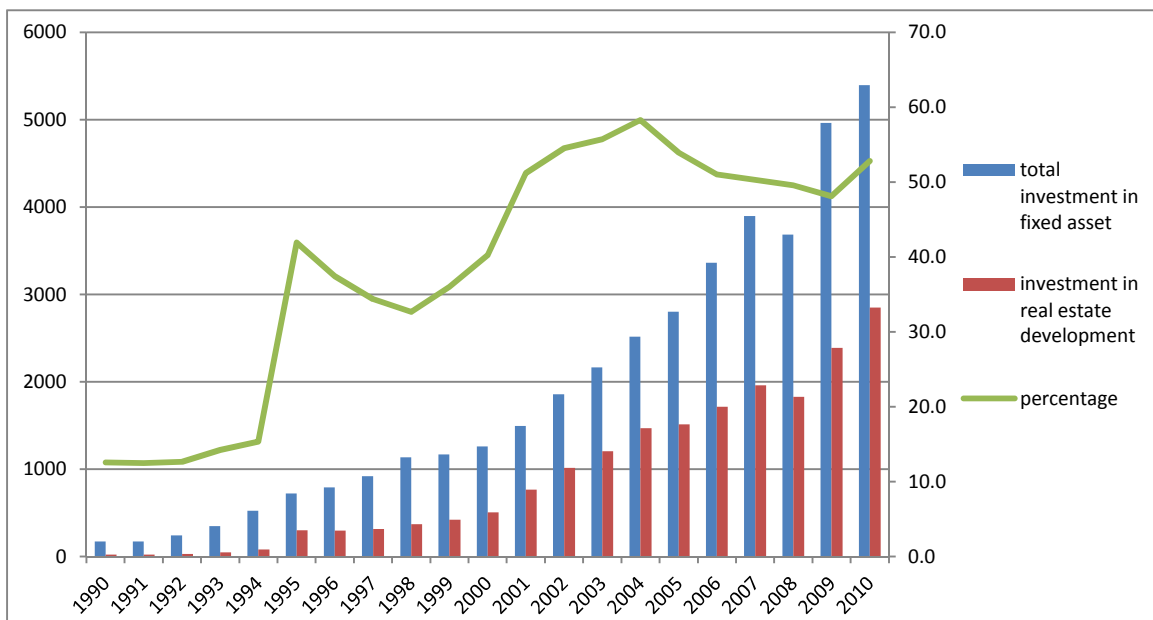
The living space of urban residents may be even smaller since the data here only includes the hukou population. Usually, migrants has poorer living situation than hukou population. In addition, this data includes population of the whole Beijing municipality. And rural residents normally have more living space than do urban residents. It also inflates the average of all residents.

(Unit: square meters)

Figure 2.8 Per Capita Living Space of Hukou Population in Urban Areas Nationally and in Beijing

2.4.4 Emerging housing market

The economic reform did not just increase the living standards of most urban residents in Beijing. Although it is argued that China is still under a dual-track system with the residual welfare system interwoven with a market-oriented system, the housing marketization in urban China since 1998 has significant implications. Both the way of producing and the way of consuming urban space have been transformed. It is characterized by institutional changes involving the reduction of state's direct intervention in housing provision and distribution, as well as the development of a private housing sector. In addition, the nascent private housing industry is being seen as the driver for economic growth and the urbanization process, as well as improved quality of life in cities (Guan, Feng, and Zeng, 2001). The housing marketization, along with the reform in the urban land system, also has been a major force affecting the process of urban development and spatial restructuring in China (Wu, 1997; 2001).

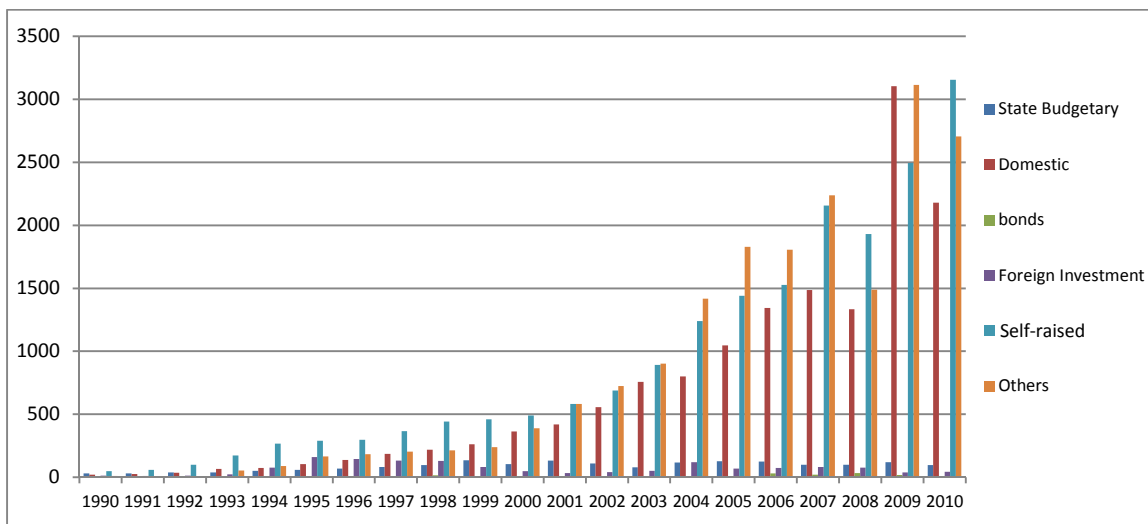


(unit:100 million yuan, in 1978 value)

Figure 2.9 Investment in Real Estate Development and its Share in Total Fix Asset Investment by year, Beijing

The amount of investment in real estate development was relatively small before 1994 (Figure 2.9). It increased significantly afterwards. From 1990 to 2010, the amount of investment in real estate development increased more than seven folds. Based on the share of investment in real estate of the total investment in total fix asset investment, we can see that the increase in real

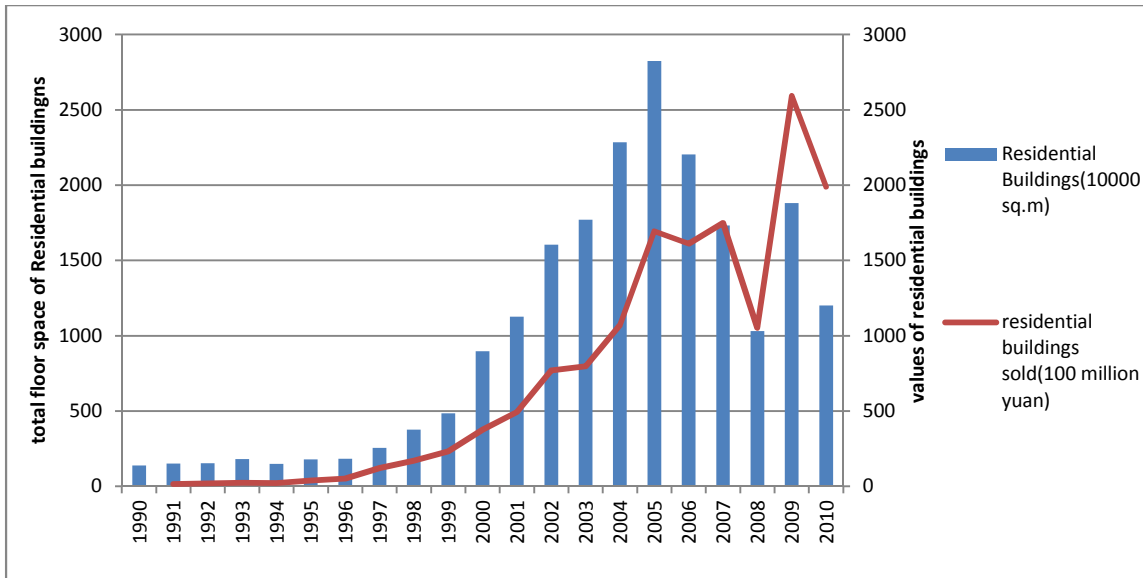
estate investment was modest before 1994, the starting year of housing reform experiment. It jumped from around 15 percent in 1994 to over 30 percent in 1998, the starting time of the national housing reform. The share of investment in real estate increased rapidly afterwards and it reached almost 60 percent in 2004, indicating an overheating in real estate development. Although the share went down a little after 2004, the real amount kept rising.



(Unit: 1,000,000 yuan, in 1978 value)

Figure 2.10 Sources of Investment in Real Estate Development in Beijing

Figure 2.10 shows the sources of investment in real estate in Beijing. While state budgetary funds, bonds and foreign investment only fluctuated slightly over the years, the domestic loans, self-raised funding and funding from other sources increased significantly over time. Until 2000, self-raising funds were more than all other sources of fundings. After that, domestic loans and other funding sources caught up, suggesting the funding sources of real estate was more diversified. At the same time, the share of state funding dropped from 25% in 1990 to 7% in 2000 and less than 2% in 2010. It is interesting to note the the real amount of foreign investment decreased. It may be due to the central regulation on foreign capital in real estate industry and the fact foreign investors fear that the real estate market is overheated. Overall, funding from private sources was the main funding source of real estate development.



(in 1978 value)

Figure 2.11 Floor Space and Total Value of Residential Buildings Sold in Various Years in Beijing

Before 1997, the total floorspace of residential buildings sold was quite stable. After that, it increased significantly, probably because the housing reform not only prevented *danwei* from allocating housing to their employees, but provided an emerging market for households to choose their own housing. The total floorspace of residential buildings sold in 2000 was 3.5 times of that in 1997 (Figure 2.11). It was almost tenfold 1997's level in the peak year of 2005. After, it has fluctuated but is down overall, probably due to the government regulation of the overheated real estate market. It reached its nadir in 2008 when the global recession happened and bounced back after that due to the active promotion of the housing market by the government. The total value of the residential buildings sold echoed the trend of the floor space sold. However, the downturn was rather mild, which countered the drop in the amount of residential buildings sold. After 2008, the rebound of total value sold was even greater, suggesting a big jump in housing prices.

2.5 Conclusion

The planning ideology had significant impact on the urban social structure of the imperial Beijing. The main goal of the socialist city planning was to change Beijing into an industrial city, to economize on the costs of urbanization and to shorten the journey to work. While these goals

were never achieved, these planning ideologies led to homogenous functional organization, poor living standards for ordinary residents, and residential inequality between officials and ordinary employees, and between large *danwei* and small *danwei*. After the economic reform in 1978, Beijing saw rapid expansion with a lot of large neighborhoods developed at the urban fringe. With an emerging housing market, more and more Beijing residents live outside the *danwei* compounds. In addition, an influx of migrants in Beijing were totally excluded from *danwei*-allocated housing and mostly lived in informal housing at the urban fringe. The *danwei*-delineated urban space was gradually dismantled. In addition, the emerging market also provided new job opportunities and created new social groups. The statistical data shows that the living standards of most of Beijing residents were improved after the economic reform. However, migrants were outside the social welfare system and had much constrained improvement in their living standards. Overall, rather than replacing the already existing social groups created by the socialist system, the social groups created by the market were only grafted to the old social structure.

One of the most significant changes which has profound social, spatial implications was the emerging housing industry. Statistics in this chapter have shown that the investment in real estate increased dramatically and its shares in fixed asset investment kept increasing. However, the marketization of urban housing system has also brought about a lot of economic and social problems, such as the lack of affordability and housing inequality among various social groups. As Lee (2000) remarks, “the housing scene in China for the masses is still a picture of chaos, extreme scarcity, and unfair distribution...” (p.74) The next chapter will explore the government’s management of the new housing system.

Chapter Three Moving towards Neoliberal Urban Governance?

For whatever reasons, from western developed countries' voluntarily embarked on the neoliberal train following Regan and Thatcher's call of "there's no alternative," to the debt-ridden Latin American and African countries' involuntarily falling into the trap of 'structural adjustment' enforced by the international financial institutes such as WTO, World Bank and IMF, neoliberalism has "become a dominant ideological rationality for globalization and state reform" since the turn of last century (Peck and Tichell, 2002). Whether China has embraced neoliberal governance is debatable. One thing is agreed is that the new generation of government is playing an active role in the creation of the neoliberal subject to legitimize its reform and shed its social responsibility. It is argued that neoliberal urban governance is "characterized by distinct intergovernmental relations, including the devolution of responsibilities to municipal and local government and the development of 'new institutional relays' enabling the direct control of development outcomes by powerful business interests (Brenner & Theodore 2002, p. 369).

At the beginning of the economic reform, the social architect Deng Xiaoping declared to the whole world that China was going to construct a "market economy with Chinese characteristics." It was by no means a minor correction of China's development trajectory and governance in history, as it shed the straitjacket of the planned economy¹⁵, legitimized the existence of the market, and turned the locomotive away from the orthodoxy of the Marxian track¹⁶. The three decades' of socialist governance was on the verge of being transformed¹⁷. Since then, China has seen the burgeoning of rural enterprises in the countryside (Oi, 1995), a flood of rural-to-urban migrants taking up manual jobs in cities (Chan, 1994, 2003; Liang, 2004, 2007), a reform of state owned enterprises and the breaking of the "iron rice bowl," as well as a

¹⁵ The practices include replacing markets with officially-mandated allocation of resources and outputs, setting prices to extract savings from farmers and consumers and extracting revenues from state-owned enterprises to the state coffers through profit remittances and so on (Rawski, 2013).

¹⁶ Although the Chinese leaders still officially claimed that China is a socialist country, the practices of the government during the reform period were not based on orthodoxy Marxist and the practices were also quite different from those during the socialist period.

¹⁷ It is argued that 'governance' is a neo-liberal creation promoted by the international organizations such as the World Bank and the IMF to rebuild a pro-market government (Jessop, 1998). Therefore, it is different from the direct involvement of 'government'. In this dissertation, I apply governance to both the socialist period and the reform period since even the socialist period with tight control of government, it was not solely the government, but other institutions governed the society as well.

decentralization of power to the local level, all of which were unimaginable during the pre-reform era. Therefore, many China observers assume that China is moving to be a capitalist country with no fundamental difference from other market economies, especially in the economic sphere. It is true that Deng never explained explicitly what "Chinese characteristics" are, except that China must stick with the leadership of the communist party. While the central government claiming almost anything desirable as "Chinese characteristics", left enough room for China to explore during the reform in economic sphere, it also implicitly suggested that the market would be the main means of governance since the emphasis of the phrase "market economy with Chinese characteristics" is still "market economy" itself no matter how many Chinese characteristics it bears. However, it is not hard to see the contradiction of the two parts of the concept and the inner imbalance with the following. On the one hand is the infinite container of "Chinese characteristic" which the government can put almost everything in, from the unshakeable leadership of the communist party, to the direct control of strategic industries, to the constant intervening in the economy. On the other hand is the limited "market economy" that is at risk of being hollowed out and overridden by the former. It begs the question: to what extent are the "Chinese characteristics" compatible with a "market economy," and is there any boundary limit that "Chinese characteristics" cannot push beyond and still have a "market economy?" In other words, can we still call it a "market economy" or "neoliberal governance" when there are too many "Chinese characteristics?"

In this chapter, I do not plan to provide a full picture of the transition of China's urban governance. Instead, I will confine my analysis within the area of housing to shed some light on the question raised above. The main goal of this chapter is to show to what extent the socialist urban housing system was transformed and how the governance has been changed. In the following sections, I will first explain the function of the two most important socialist institutions and their transformation during the reform era. Then, I will move to examine the process of housing reform in terms of different types of housing to show the changing role of government in the urban housing system.

3.1 Leveling the ground for neoliberal governance?

Studies on the socialist regimes predominantly focus on the public sector and central planning system. Unfortunately, with a few exceptions (e.g. Chan, 2007), scholars have paid less attention to the socialist institutions, *hukou* and *danwei*. These two institutions are viewed as only serving in supplementary roles for the socialist system. I would argue that *hukou* and *danwei* are the key institutions to maintaining the socialist governance of the society. They serve as gatekeepers which determine ordinary residents' citizenship rights, and thus eligibility for public goods. While they diminished in importance during the reform era, they have not become dead institutions bound to the socialist regime and found only in history books; nor have they shed most of their active functions and turned into empty terms. Instead, they continue to function as gatekeepers in the new era. In the following sections, I will describe the changes of these two institutions. More importantly, I will talk about how they retained their main function by working through new ways during the reform period.

3.1.1 The transformation of *hukou* system

Saunders (1986) suggested that “the more the state's interventions are directed towards provision for consumption, ...the more those in key positions are predisposed to support principles of allocation grounded in concepts of citizenship rights” (p. 307). According to Marshall (1964), there are three interrelated and progressive types of citizenship: civil, political, and social. Civil citizenship provides individual rights, such as freedom of speech, the right to own property, and equality before the law. Political citizenship gives citizens the opportunity to exercise political power by participating in the political process. The last type, social citizenship, is related with the health, education, and welfare needed to participate fully in their cultural communities and in the national civic culture. In China, there has been a great leap in granting civil citizenship to ordinary citizens during the reform era. However, minimal political citizenship is still firmly confined to the village level, the lowest administrative level in the countryside¹⁸, with little influence in policy-making. It has not yet been obtained by the urban population. Therefore, it is fair to say that ordinary citizens have generally enjoyed these two types of citizenship to some extent. What muddies the water is the social citizenship right, which

¹⁸ In urban areas, there is not yet any sort of election in which ordinary citizens can participate.

has never been an equal right for Chinese citizens, even during the claimed-to-be egalitarian period before the economic reform. The most important institution enforcing differentiated social citizenship rights and ensuring the unequal "allocation grounded in concepts of citizenship rights" is the *hukou* system (household registration system). Those who have local urban *hukou* were born with citizenship rights to a variety of public goods, the content of which changed over time. In contrast, those who have rural *hukou* are excluded from the public goods and are responsible for themselves in all aspects of their lives.

In fact, the *hukou* system was not a new creation after the foundation of PRC, but evolved from the imperial *baojia* system and transformed based on the model of the Soviet internal passport system. As detailed by many scholars, it was not designed as a discrimination system at the beginning (Chan, 1994; Cheng and Selden, 1994; Chan and Zhang, 1999; Wang, 2005; Chan and Buckingham, 2008). When it was restored from the population registration system that existed before the communist revolution in cities in 1951 and then extended to rural areas in 1955, it only aimed at recording and monitoring anti-government elements, as well as implementing socialist type programs (Chan and Zhang, 1999; Chan, 2009). However, with more and more peasants migrating from the countryside to cities to find jobs, they brought about a serious burden to the state because it was directly responsible for providing almost all essential services and facilities in life such as education, housing, medical care and pension for the urban residents. The central government viewed the surging migration as jeopardizing their strategy of "economize on urbanization" (Chan, 1994) and required the "blind flow" to move back to their hometowns. In 1958, the National People's Congress passed a decree forbidding anybody without a valid urban *hukou* from buying food or grain in cities. The rationing system was soon extended to other consumer goods as well. In addition in the centrally-planned regime prior to the market reforms, what consumer goods a person could purchase, from rice to cloth to a bike, was determined by the number of ration coupons allocated to him/her every month. Residents with urban local *hukou* were allocated coupons to buy these goods, while residents with rural *hukou* were not eligible for the coupons and thus unable to settle down in the cities. Furthermore, without local urban *hukou*, one is not eligible for the state allocation of jobs. The linkage of *hukou* with the rationing and job allocation system proved to be very effective in controlling the rural-urban migration and binding people to their place of birth (Chan & Zhang, 1999; Fan, 2004). Through these ways, the *hukou* system took away the freedom of migration which was

written in Constitution and was formally institutionize as a population movement control institution (Chan, 2009). It not only minimized the costs of the city, but confined peasants in the agriculture production for exploitation. This system thus formed an invisible wall separating urban residents from their rural counterparts and prioritizing cities over the countryside, urbanites over the peasants and became the keystone of the rural-urban divide (Chan, 1994; Cheng and Selden, 1994). In essence, it is an inevitable outcome of the command economy to serve the “big push industrialization strategy” (Chan, 1994, 2009). I would argue in addition to function as a mechanism of control over the Chinese population (Cheng and Selden, 1997), the *hukou* system also served as an effective means of governance, depriving outsiders without local urban *hukou* the social citizenship rights to access to the privileged public welfare in the locality they lived as "temporary" residents during the socialist period.

The economic reforms in 1978 saw significant changes in the socialist regime. Private business was legalized and buying and selling on the market was allowed. It became possible for rural residents to buy grain at the market and stay in cities. On the one hand, due to the booming private sector and a large number of jobs created in cities, there was suddenly a great need for manual labor. On the other hand, there was a rapid increase of rural surplus labor generated by the introduction of household responsibility. With the push and pull factors, many peasants migrated to cities to take up jobs urbanites did not want. The state of China gradually realized that it was also increasingly impossible to control migration. Therefore, it gave tacit consent for peasants to live and sell their cheap labor in cities without actually converting their *hukou* to local urban *hukou*. With the end of food and grain rationing in 1992, the distinction between agricultural and non-agricultural *hukou* lost most of its importance. At the same time, *hukou* also lost most of its initial migration control function (Chan, 2009). It is reasonable to argue that during this period of time, the function of the *hukou* system to control the population movement was relaxed to a large extent, though it did not totally disappear. However, no matter how long those peasant workers lived in the host cities and thus were *de facto* urban residents, as long as they are not able to change their *hukou* status from rural to urban, they had no access to urban welfare. Therefore, the transition of *hukou* institution in the new era created a system in which people are free to move without being granted entitlement or social citizenship rights. In this system, migrants are not allowed to access subsidized housing in their residing host cities. The only choices for them to stay in the cities are to rent rooms from official urban residents or to

reside in dormitories provided by their employers (Mackenzie, 2002). In the new era, the *hukou* system has shed its function of directly controlling the population migration. However, the function as a gatekeeper for social citizenship the rights has not yet changed, which almost prevents the "temporary" urban residents from permanently settling down in the cities.

The transformation of the *hukou* system during the reform era confuses public media as well as the ordinary Chinese citizens. Chan and Buckingham (2008) noticed that there were a large number of news stories, both domestically and internationally, claiming that China has abolished its notorious *hukou* system. It is true that with China moving towards a market-oriented economy and opening the food market, *hukou* has lost most of its function of controlling population mobility during the socialist period, if not all of it. Migration is increasingly becoming similar to that in other countries with a market economy, with people moving from the less developed countryside to the more developed cities. However, I would argue that the essence of the *hukou* system as a mechanism to channel resources from the countryside to cities and implement an economizing urbanization development strategy remains untouched. Since cheap labor has become one of the most important competitive advantages of Chinese cities to compete in the global market during the reform era, the central government made a timely adjustment of the *hukou* system to allow the free movement of cheap labor. At the same time, the government continues to practice the strategy of economizing on urbanization and industrialization through depriving the non-*hukou* migrants the same social citizenship right as the local residents. As Chan and Buckingham (2008) argue, *hukou* is still "a major source of injustice and inequality, perhaps the most crucial foundation of China's social and spatial stratification." Overall, the transformation of the *hukou* system paved the road to the neoliberal urban governance over the neoliberal subjects, the non-*hukou* migrants who are 'free' from the control of the *hukou* system and totally responsible for all aspects of their lives in the destination cities. On the other side of the story, *hukou* migrants are still subjected to the state planning quota and are lumped together with the local urban residents to be granted with accessibility to government subsidized medical care, housing and education according to their *hukou* status and the *danwei* they are associated with. I will explain in more detail how it works in the later sections on *danwei* system and especially in the context of the housing system.

3.1.2 The transformation of the danwei system

For most Chinese urban residents, *danwei* (literally, work-unit) is far more than a place one works and earns a living. For a long time before the economic reform in the late 1970s, *danwei* were responsible for the so-called a cradle-to-grave welfare (Bian and Logan, 1996), providing comprehensive welfare from free kindergarten and cheap rental housing to free medical care and pensions for its employees. Before the 1990s, the *danwei*-based welfare system covered more than 90% of the urban labor force and their dependents. And even in 1998, it still covered some 70% of welfare provision (Gu, 2001). Thus, it is safe to say the *danwei*-based welfare system in urban China constituted a backbone of the socialist welfare system of China. Even today while it does not provide benefits so obviously, it is still an important element in the welfare system.

One major goal of housing reform was to free *danwei* from housing provision. However, *danwei* persist in housing and subsidy provision. In this early period of housing reform, due to the reduction of central budgetary investment in housing construction, *danwei* assumed an even greater role in providing housing. They started to buy commercial housing from the housing market and sold it to their employees at extremely low prices. According to one statistic, among all apartments purchases in Beijing in 1996, about 76 percent were purchased by government agencies, large corporations, and military headquarters, which were then resold at a subsidized price to their employees (Zhou, 2004).

Even after the central government banned direct housing provision by *danwei*, many of them still follow the socialist practices of providing housing to their employees according to their positions. In addition, the policies issued in 1998 required *danwei* to provide housing purchase subsidies (*goufang butie*), and the housing provisioning fund (*zhufang gongjijin*) provided a chance for *danwei* to play their traditional role and as a result reconsolidated former inequality within and between *danwei*. Employees with high positions and seniorities or in large *danwei* could have more benefits, such as large and high quality housing. Moreover, housing subsidies were calculated according to the salary of employees which directly related with their positions within the *danwei*¹⁹. As Bray argues, “*danwei* has retained a significant if diminishing role within the urban scene, even adapting to take advantage of opportunities that have arisen through

¹⁹ For example, the calculation of money that should be contributed by *danwei* to the Housing Provident Fund of each employee is 5% of one's salary (State Council, 1994).

reform,” (Bray, 2005). In this way, *danwei* maintains the inequality of the socialist period to some extent in the reform era.

3.2 Fiscal reform and the changing incentive

Among studies on China’s transition, the “developmental states” thesis stresses the state’s interests in economic growth rather than revenue extraction or rent seeking. It claims a positive relationship between state intervention and economic development. As Evans (1995) argues, for modern states promoting industrial growth has become an increasing interest and responsibility. In the context of transitional China, fiscal decentralization gave rise to the “local developmental states” (e.g. Oi, 1992; Whiting, 2000). Decentralization of state power made it possible for local governments to determine localized policy agenda. Scholars argue that decentralization is the key institutional change in China’s transition economy that has stimulated the formation of local pro-growth coalitions in major Chinese cities (e.g. Zhu, 1999; Zhang and Fang, 2004). On the other hand, Pei (2006) argues that decentralization has changed China from centralized predatory state to a decentralized predatory state, in which local states act as grabbing hands. I would argue, however, without examining the incentive and constraints as well as the institutions local states are imbedded in, Pei’s argument oversimplified the behavior of local states.

The transformation of China’s urban housing and welfare system is closely related with the fiscal reforms during the transition. Many studies on fiscal reform show that it has greatly influenced the behavior of local states through redefining constraints and opportunities for them. The first fiscal reform in the 1980s establishing the system for fiscal contracts provided fiscal incentives for local states to cooperate with private entrepreneurs to promote industrial growth in rural China, which is referred to as “local state corporatism” (Oi, 1992). However, this fiscal decentralization greatly undermined the revenue base of the central state, which resulted in the introduction of the tax sharing system to recentralize fiscal resource to the central state in 1994. According to the second fiscal reform, national and local tax revenues were divided based on fixed ratios instead of *ad hoc* contracts (Liu, 2004). The central government retains 75 percent of all value-added tax revenue, the largest source of government tax revenue, as well as all of the consumption tax revenue. Local governments were left with only some other minor taxes (Whiting, 2000). In addition, the tax sharing system separated the unified tax administration into

State Administration of Taxation and Local Tax Bureaus, which further limited local states' ability to retain tax revenues in their localities. One important result of fiscal recentralization was the hardened budgetary constraints facing local states. Due to the new arrangement of fiscal resources, promoting industrial development became less profitable for local states while land transfer fees became an important source of non-tax revenue. While major fiscal resources were channeled to the central state, public good provision remained a responsibility of local states, which exacerbated the fiscal hardship facing them (Wong, 2002). In this context, local states were more likely to form coalitions with developers to develop commercial housing for high-end niche markets with little regard to the affordability and accessibility of the majority of urban residents (Wu, 2007).

3.3 The Transformation of Governance over the Urban Space

3.3.1 The urban land system: from *de facto* danwei ownership to a neo-scissors' price regime

The newly-founded PRC fundamentally transformed the private land system practiced in China for centuries. Land in both cities and the countryside were confiscated from landlords, bureaucratic capitalists, and foreign capitalists (Wang, 2006). In the rural areas, it was reallocated to peasants as a private means of production. But this system was replaced by the people's commune in the 1950s, in which peasants joined production teams and communes and shared both production tools and agricultural production during the Great Leap Forward period. While the highly centralized ownership of production means including land was terminated after the three years of so-called "natural catastrophe," which significantly disrupted agricultural production and resulted in the death of millions of people by hunger, the collective land ownership of township and villages in the countryside did not change much throughout the pre-reform era. It tightly tied peasants to the land and the countryside without providing them enough incentive to increase production, since all the production was shared by the collective members regardless of their contribution

In cities after the socialist land reform in the 1950s, urban land was not allocated to individual urban citizens, but transferred to a full state ownership (Zhang, 1997; Lin, 2004; Ding and Gerrit, 2005; Zhu, 2005). During this period, with exception for housing purposes, private

land ownership disappeared and land transactions were formally banned by the Chinese Constitution (Zhu, 2004). It was a property regime which Deng (2005) called "Three No System" in which users could obtain the right to use land from the government with "no payment, no termination date of occupancy, and no right to transfer property to other parties." In the cities, the state owned the land and the *danwei* (i.e. state owned enterprises, state institutes and organizations) were granted land use rights for an indefinite period of time with no right to transfer them to others. Theoretically, land, as the most important means of production, belonged to all citizens. In reality, the *danwei* served as *de facto* masters of the urban land (Zhu, 2005; Wang, 2006; Hsing, 2010). Except for very rare cases, the state lost control over the land once allocated to a *danwei* and could not take the land back. And the *danwei* could use the free allocated public land for their own production and welfare provision such as building housing, hospitals and canteens for their employees for an unlimited time. During the pre-reform period, a lot of large SOEs were able to obtain a large proportion of the land in the center of cities. It is estimated that by the early 1980s, 30 percent of the core areas in Chinese cities were occupied by various SOEs (Hsing, 2010). In essence, it was a *de facto danwei*-ownership regime in which the *de jure* land own, the state or the citizens, had little room to exert their ownership right once land was allocated to *danwei*.

The embedded problems in land ownership were first addressed in the countryside through adopting the household responsibility system in the late 1970s, which marked the starting point of China's economic reform. Based on this new institutional arrangement, each rural household were allocated a piece of land and could fully reap the gain of agricultural production from their land after paying the local government the agreed amount of production. The separation of the collective land ownership and land use right turned out to be quite successful. It significantly changed the incentive of peasants and greatly increased productivity in the countryside. While the rural land was never directly controlled by the state, the ownership of urban land was mostly transferred to the state after the socialist land reform in the 1950s. However, conflict between attracting foreign investment to join the global commodity chain and the nontransferable land system, and the conflict between economic development to modernize the country and government failure in land allocation was increasingly at odds with the economic reform. As Deng characterized as "crossing the river by groping for stones," there was no blueprint for transforming the governance over urban land for the whole country. Rather, the political

uncertainty and ideology barrier was addressed through establishing “special economic zones” (SEZs) in some selected cities. It was not until the middle of 1980s that the State Council began to experiment in trading land through markets, first in Shanghai, Tianjin, Shenzhen, Guangzhou, and Hainan (Fung et al. 2006; Lu, 2008). The Shenzhen special economic zone made the first move to trade land use rights through markets, which was followed by other SEZs (Cartier 2001; Fung et al. 2006). Foreign investors could gain access to land in those areas by leasing land use rights (Ding and Knap, 2005). While land ownership still belonged to the state or collectives as it was stipulated in *1982 Constitution*, the *Land Administration Law* issued in 1986 institutionalized the separation of land use right and ownership rights. According to the *Land Management Law*, the state has the *de jure* ownership of the urban land, but the local governments in fact had the *de facto* rights (Deng, 2005). The 1988 Constitutional Amendment further lifted the legal barrier of selling, leasing and transferring in order to support the implementation of *Land Administration Law* (Xie et al. 2002; Clarke et al., 2006).

The transformation of urban land management was a milestone of the history of the PRC: land and housing was attributed value and could be transferred (Xue, 1994; Walker and Li, 1994; Ding and Knap, 2005). Not only did the nascent land market bail out a lot of State Owned Enterprises (SOE) which were about to go bankrupt through selling their allocated land in the inner city; more importantly, it served as a cash cow to fill local governments’ coffers. It is reported that after the fiscal reform in 1994, land transactions became an important source of local finance and contributed more than half of local fiscal income in some cities²⁰. There are two basic ways to acquire land use rights: through administrative allocation and paid transfer. The former applies to the following purposes: official or military use; urban infrastructure construction and other public use; national major energy, transportation, water conservation projects; and other purposes permitted by law²¹. The latter applies to land users other than those stipulated in allocation measures. There are three forms of land transfer: negotiation, auction and tender (Lin, 2004). The first form allows the potential land users to negotiate land prices with local land management agencies. A minimum transfer fee standard was set by the State Land

²⁰ http://www.mlr.gov.cn/pub/gtzyb/tuditiaokong/mtbd/xhs/t20061019_76895.htm

²¹ LURs tenure are determined according to land use purpose: urban residence 70 years; industrial construction 50 years; education, technology, cultural, health, sports facilities 50 years; commercial, tourism, entertainment use 40 years; comprehensive use and other purpose 50 years. See PRC Regulations on Urban State Owned Land Use Right Transaction and Transfer. Promulgated in May 19th, 1990.

Bureau in 1995, which includes land requisition costs, development costs, bank interest, and net profit. Auction and tender are transfer through the land market, which aim to increase land prices through market competition. Users with allocated land cannot transfer their land to another party without the permission of the prefecture or county governments in which the land resides. When the transfer is approved, the original land user must remit the land transfer fee to the governments. Three years later, the State Council announced *The Provisional Regulation on the Granting and Transferring of the Land Rights over State Owned Land in Cities and Towns*, which re-emphasizes market transactions according to supply and demand. At the same time, power was decentralized. Governments above the county level were granted the power to approve land transactions and transfers. Throughout the 1980s and 1990s, governments at various levels, including municipal government, district government and township government, were actively involved in land transfer and land development (Hsing, 2010).

The story so far seems a significant leap towards a market economy. I would argue that it is too hasty to jump to the conclusion that the Chinese government has undertaken the breakthrough of establishing a land market for transferring land use rights. In fact, only state owned land can be priced and transferred. In other words, farmland owned by rural collective is not legitimized for market transaction unless the urban government expropriates the land and converts it to state-owned urban land, which they then lease to developers (Cartier 2001). In essence, this legal framework aims to exclude direct land transaction between the peasants and urban land users and monopolize the supply of urban land. At the same time, it left an opening for administrative allocation of land free of charge. If the project is for the “public interest”, it is eligible for administrative allocation of land. For example in Beijing, if the project is to build the green belt zones, construct a small town on farmland at the urban fringe, redevelop unsafe neighborhood or develop high-tech industrial parks, it is eligible to negotiated land-use right. This policy document officially established a dual land system with a juxtaposition of the administrative allocation inherent in the “socialist” regime and market transfer borrowed from capitalism (Zhu, 1994; Ding and Knaap, 2005). Since a negotiated land price was often significantly lower than that of auction and tender, the price difference generated considerable profits by selling the acquired negotiated land at market prices up to ten times higher (Ho and Lin 2004; He and Zhang 2000). Local states and the “socialist land masters”, various *danwei*, were actively involved in real estate development. Among the 623 development companies in

Beijing in 1995, 108 were owned by *danwei* and 485 were owned by municipal agencies of various types (Hsing, 2010).

The intentional design of the gradual reform of the land system was riddled with problems. Land transfer outside the market was still the dominant in the land system throughout the 1990s. An estimation shows that 70% of state-owned land was administratively allocated. Of the transferred land, 89% was through negotiation and only 11% (or 3% of the total land in the market) was actually transferred through auction, tender and bidding (Ho and Lin 2004). In 1998, for example, there was almost four times as much land transferred administratively than through the market. Of the land that did sell on the market, nearly 90% was through negotiation, which was the least transparent, least competitive way (and, not coincidentally, most easily manipulated). What made things worse was that the dual land management system, the socialist legacy of administrative allocation, and the high profits available from land transfer gave birth to a black market for land. Usually, the negotiated land price was significantly lower than that of auction and tender. Thus, it is not surprising that this price difference generated considerable profits through selling the land acquired through negotiation on the land market at higher prices (He and Zhang 2000; Ho and Lin 2004). In addition, the flawed land management system created incentives for local governments, which had discretionary power on land requisition and land management, to pursue personal gains. Embezzlement of land revenue was widespread and severe; the system became the hotbed of rent-seeking and corruption (Yeh and Wu 1996; Zhao and Zhang 1999; Ho and Lin 2003). The second more serious and undesired, consequence was that urban governments actively joined the urban competition for investment through providing cheap or free land to support local developing zones and real estate development, which in turn jeopardized rural collectives' and farmers' interests (Hsing, 2010). The local governments are taking advantage of the fact that the newly created property rights were not clear about who represents the state, what constitutes the local government role in land management and what rights are assigned to the state entities that occupy land. Related to the poorly-defined property rights is a question of who is empowered to acquire land from peasants for urban development, and who is entitled to benefit from the gains (Ding and Knaap, 2005; Zhu, 2002). Municipalities are actively acting as agents of the state to expropriate land and sell it to commercial users. It is estimated that the revenue generated through expropriating agricultural land cheaply and converting it to high-value commercial uses accounted for 30 percent of municipal revenue, and

70 percent in some extreme cases (Lin, 2005). Since it is highly profitable to expropriate farm land and convert it into commercial land, local governments are actively involved in expropriating agricultural land to commercial users including real estate developers. Tsui (2011) conceptualizes this process as a "land-infrastructure-leverage strategy" through which local governments are able to "drive the institutional terrain to their advantage." In 2002, more than 80% of legal cases filed by peasants against governments in Zhejiang were related to land acquisition (Ding, 2005). In addition, the "land economy" based on selling land use rights to business and developers, also left agricultural land subject to expropriation.

By the early 1990s, the overheated "land economy" based on extensive use of land had shown its bitter fruits of the juxtaposition of over-investment in real estate and abandoned unfinished buildings due to the lack of follow-up funding, and of greatly reduced farmland in the countryside and vast unused land in cities (Feng, et al., 2002). Estimation shows that 30-50 million square meters of built floor areas was vacant nationally (Hsing, 2010). If the urban growth machine in the US can be viewed as a private-dominated coalition with local states, it is clear that the China counterpart is a government-dominated one. This dual track system is very unbalanced, with a big and powerful public track and a small and weak market track. While ensuring a less traumatic transition of the urban land system and persistently high economic growth in the cities, the dual land system also brought many problems that the central government would like to eliminate. Since the middle 1990s, the central government has started to emphasize governmental control over urban land through a serial of policy documents. For example, in 1992 the State Council issued a policy document, *Notice on Various Problems in the Development of Real Estate*, requiring centralized management of urban land. In the next year, the national land bureau released another policy document, *Notice on Macro Adjustment and Good Management of Land Market*, to call for more involvement of the government in the land market under the name of "macro adjustment". Under the guidance of these documents, Shenzhen and Shanghai made the first step to establish a land bank to strengthen the control of land acquisition and supply by municipal government in 1996. In June 1999, Ministry of Land and Resources (MOLR) issued an internal circular to promote Hangzhou and Qingdao land banking experiences among national land management agencies (Tan 2003). In 2001, the State Council announced a national policy requiring setting up land reserve centers. Land right transfer revenue and land mortgage loans from financial institutions were allowed to be used by the land

banking agencies. Later in 2002, the Ministry of Land and Resources issued an ordinance requiring land auctions and public tenders for all commercial land. This effort which also claimed to "follow the international standard," was soon adopted by many cities such as Hangzhou, Nanjing, Qingdao and Wuhan. There were more than 1000 land reserve agencies at the beginning of the new millennium and by 2008, and more than 2000 cities had established land reserve organizations (Lu, 2008). While the names of the organizations differ in different cities, the basic functions are quite similar: appropriating land, providing basic infrastructure²² for raw land and then holding the land for sale, and selling the land use rights. It is believed that the establishment of a land bank can facilitate 1) establishing a "equal, fair and open" land market; 2) implementing urban planning and redeveloping dilapidated old neighborhood; 3) alleviation of conflict in land expropriation and a reduction of development risks; 4) curbing land speculation by developers and protecting agricultural land; 5) increasing of the market mentality of the governments; and 6) maximization of government gains from the land (Feng, et, al., 2004; Lu, 2008; Hsing, 2010). While there is no evidence that the first four goals have been achieved, the latter two goals were reached quite successfully. It is a puzzle that while the land bank system created as many problems as it solved, this system is increasingly welcomed by local governments. I argue that it is because this institution successfully strengthened the control of government over urban land. Through establishing the "one inlet, one pool, one outlet" system, purchasing, storing and supplying all commercial use land is controlled by a single organization, the land reserve center. It serves as the agency of the government to implement their plan. As an official from the Beijing land reserve center said:

"Our duty is to implement the spatial construction quota planned by the Ministry of Land and Resources. But the central government is not involved in our daily management. Every year we announce the land supply plan for Beijing, including the amount for infrastructure, the amount for commercial housing, the amount for control-price housing and so on. We also announce the annual land use plan on which land parcels we decide to develop this year. This is basically to implement the land use quota from the Ministry of Land and Resources. If we allow them [the developer] to develop, then they can develop.... Urban planning is also dependent on us to implement their plan. If they plan a land parcel as residential housing, but I don't sell that piece of land, there is no way for them to implement their plan."

(personal interview, 2008).

²² It normally refers to "seven availabilities and one leveling (qi tong yi ping)" which includes availability of water, electricity, road, phone, TV, bus, broad band and land leveling.

The land reserve center at the municipal level is the highest local land management authority. They are responsible for directing land reserve centers and other relevant agencies. Land reserve centers are eligible for cheap credit guaranteed by the local government. After retaining some profits for running and management costs, the profit for selling commercial land is remitted to the municipal fiscal department. It will be either reinvested in the land banking business or used to finance urban construction projects (Tan, 2003). It is also clear that the practice of land management of local governments is quite different from the argument that role of local governments has changed from managerialism to entrepreneurialism as Harvey (1989, 2005) described in market economies after the neoliberal turn (Wu, 2008). On the contrary, the local government consolidated the control over land and promoted what Hsing (2010) called "land-centered regime of accumulation." I would argue that this regime is not qualitatively different from the practice during the pre-reform period. Recalling the price scissors practice during the socialist period, I contend that the land banking system in essence established a neo-price scissor regime. During the socialist period, the prices of agricultural products were set arbitrarily low while the prices of industrial products were set arbitrarily high. Through unequal exchange between the countryside and the cities, resources of the rural areas were siphoned to the cities for the goal of "economical industrialization" (Chan, 1994). Comparing this regime to the current land regime, it is not hard to find great similarity. In theory, the land bank's reserve land comes from three acquisition channels (Chen, 2011): 1) retrieving land from users who fail to renew, fail to construct, or fail to pay or change the use without permission, as well as abandoned infrastructure; 2) purchasing land from market for implementing urban planning or fulfilling other public interests; and 3) expropriating land from individuals or rural collectives. In reality, very little land is retrieved due to breaking rules or lack of funding. The second channel is very expensive since the local governments need to pay market prices. Therefore, the most commonly used way to obtain reserve land is by expropriating it, especially farm land. According to Land Management Law, land expropriation is compulsory, must be for the public interest, and compensation must be made to the collectives and original land users. This practice seems quite similar to the eminent domain in Western countries. However, the untransferable nature of collective land makes it very different from the practice in the West. Since farm land cannot be transferred, there is no market price for it. The Land Management Law 'solves' the dilemma through stipulating that compensation for farmland should be 6-10 times the annual average

output of the past three years from the land plus 4-6 times of the annual average output of the past three years from the land. But the compensation should not be over 30 times the annual average output. It is not hard to come up to the conclusion that this gives compensation far below the market price for the land when it is reclassified as urban. The establishment of land banks in the cities is a way to monopolize land transfer and urban land supply and therefore siphon the most valuable resources, land, to urban areas for "economized urbanization." What is different now is that with the construction of a market, the municipal government can take advantage of this far-from-institutionalized market to further reduce the cost of urbanization and outsourcing troubles. According to a government official from the Beijing land reserve center, there are three ways to develop raw land for it to be ready to be sold at the market. The first way is to develop it themselves, the second way is to authorize a state owned organization, and the third way is to invite tender offers from a private development company. How they decide which way to use is that "If we want to develop the raw land, we do it ourselves. If we don't want, we find a state owned company to do it for us. But if there's no state owned company who wants to do it, we will find a private company through public bidding," (personal interview, 2008). He further explained the reasoning:

"Beijing is even more liberalized than Western countries now. In Western countries, residents have to agree to move as long as they get market compensation.... We dare not use forced eviction. Once we use it, citizens will lodge appeal to the government.... Chinese citizens are aggressive. If they saw others get 100,000 yuan in compensation, they want that amount, too. They don't care that their dilapidated apartments were only 20 square meters, while others' were 200 square meters.... We let development companies develop the raw land; we don't care whether they will relocate the residents back or not. They need to negotiate with residents and let the residents move....".

(Personal interview, 2008)

It is clear that instead of being the goal, the market became an important tool for the government to reduce the cost and extract the maximum revenue, and at the same time outsource undesired troubles. Once the troublesome tasks are outsourced to private companies, they are not the government's business anymore -- that it is the logic of the market.

3.3.2 Urban housing reform: towards establishing a housing market?

The "China miracle" (Lin, et. al, 2003) has drawn international attention from both the media and the academia. However, the transformation of the socialist urban space has not been a

smooth one, but one ridden with negotiation, contestation and even confrontation (Tomba, 2005; Hsing, 2005). Some scholars argue that China's socio-spatial transition is no less dramatic than what occurred in those former socialist countries in Central and Eastern Europe (Ma and Wu, 2005; Wu, 2007). As an integral part of China's ongoing transition, the privatization of urban public housing and the construction of a housing market significantly transformed the public ownership-dominant housing system. After economic reform and the initiation of housing reform, the homeownership rates were similar to that of the United States and England, and were even higher than those in many European countries (Li and Yi, 2007). For homeowners, housing becomes personal wealth which can be transferred in the market. For local government, it is reported that land transactions have become an important source of local fiscal income after the fiscal reform in China in 1994²³. This shift has also imprinted itself on the urban social landscape. The ongoing housing reform has been reshuffling the social space that was relatively homogeneous with different social groups from a same *danwei* living in the same compounds during the pre-reform period.

During the pre-reform period before 1978, urban housing was predominantly publicly owned²⁴ (figure 3.1) (Chen and Gao, 1993; Wu, 1996). The majority of urban residents rented apartments from their employers (*danwei*) or the local government²⁵. *Danwei* also viewed providing housing for employees as a tacit social contract with them to compensate for low wages (Deng, Shen and Wang, 2009). Urban housing was predominantly financed by the central state and constructed and allocated by various *danwei*. The central state budget supplied over 90 percent of the total urban housing investment (Chen and Gao, 1993). After the construction of housing with investment from the state, *danwei* allocated housing of various qualities to employees according to their occupational ranks, years of work experience, family number and so on (Wang, and Murie, 1996; Wu, 1996). Employees who were allocated housing only needed to pay token rents as a symbolic gesture. In this property right regime, the central state was the *de jure* owner while state owned *danwei* had *de facto* ownership rights. During this period, renters were not granted the right to buy their sitting apartments because housing was meant to

²³ http://www.mlr.gov.cn/pub/gtzyb/tuditiaokong/mtbd/xhs/t20061019_76895.htm

²⁴ While the majority of housing was owned by SOEs and organizations or the urban housing management bureau, privately owned housing also existed. But the percentage was very low.

²⁵ If urban residents did not belong to any state-owned companies or organizations, they could apply for an allocation of public housing from the local housing bureau.

be kept predominantly public. At the same time, due to very low salaries, few people could afford to buy housing units at market value.

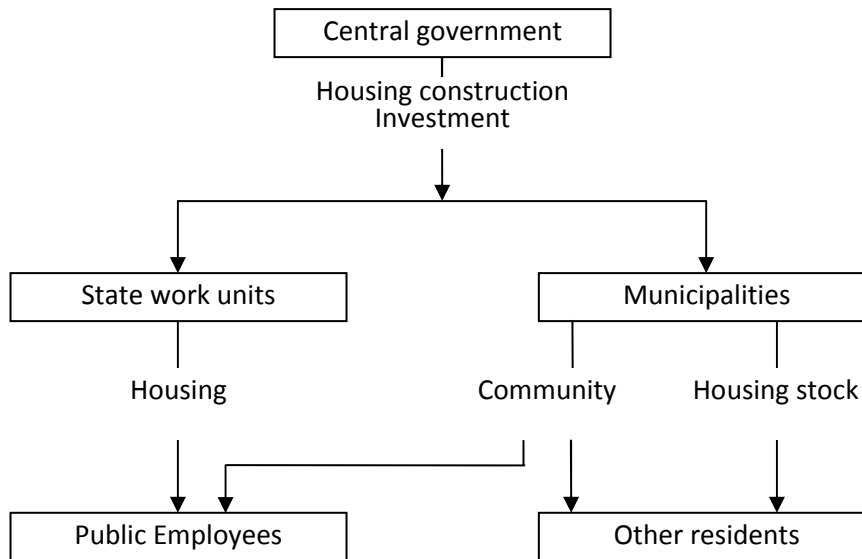


Figure 3.1 Housing allocation system before the reform

Adapted from: Lai, 1998 and Kwong, 2001

Compared to renter's rights in a market economy, the rights of urban renters in China were much stronger: *danwei* could not re-appropriate the housing units once they were allocated. Residents could even pass their housing units to their offspring. While they did not legally own their housing, residents viewed their allocated housing as their own property because they could live in the housing units with no time limit. In fact, the low salary offered to state employees during that period served as a tacit "social contract" to allocate the public housing with no time limit, which in fact turned renters into *de facto* owners. In addition, since the *de jure* owners, *danwei* or the urban housing administrative bureau, seldom exerted their ownership rights, renters had more rights than those in the Western countries, which in turn reinforced renters' perception of themselves as *de facto* owners. Overall, the housing system during the pre-reform period was a welfare-oriented system dominated by public rental housing, in which renters had more rights than legally defined renters in the west (Li and Yi, 2007). However, this system put a heavy burden on the central state. While the central government claimed that it was important to improve living conditions, Cheng (1999) argued that the motivation for housing reform was more about shedding the burden of supporting the expensive public welfare housing system than improving the living conditions of urban residents. No matter what the real reason was, the

central government had made up its mind to reform the housing system as part of the economic reform.

Then, starting from 1979, the central government initiated experiments to privatize public housing in several cities. Realizing the problems in the previous period, the central government started to look for ways to reform the public housing system through privatization. There were three main ways that privatization was enacted: sale of newly-constructed housing at construction cost, subsidized sale of housing, and rent reform (Wang and Murie, 1999). However, due to the extremely low rent and low salary, this experiment failed. From 1986 to 1988, the central government re-selected four other cities to start a new round of experimental reform and soon expanded this policy to the whole nation²⁶. During this period, the main methods used were adjusted to increase both rent and salary of urban residents. Overall, housing reform at its outset did not have a clear goal of marketization, but rather was pragmatically concerned with dealing with the problems of an increasing housing construction burden and an urban housing shortage through sharing the responsibility of housing investment among the government, *danwei*, and individuals so that the cost of welfare housing could be minimized (Song, et. al., 2005; Ho & Kwong, 2002). Despite reduced control from the central government, the early stage of urban housing reform was characterized by increasing rather than decreasing state intervention of local governments and *danwei* due to greater responsibilities assumed (Wang & Murie, 1999b; Wu, 1996).

In 1994, new policies tried to push forward the marketization of housing system through setting up a housing provident fund and increasing the rent of public housing. In addition, the central government introduced subsidized commercial housing (Economical and Comfortable housing)²⁷ to middle and low income households. More importantly, the new policies required *danwei* to sell their public housing to the sitting residents. However, during this period, while

²⁶ The publication of the central government policy document, *Implementation Plan for a Gradual Housing System Reform in Cities and Towns* (State Council, 1988) marked the turning point of housing reform from pilot schemes to overall implementation in all urban areas. The major goals were to share the responsibility of housing investment among the government, *danweis*, and individual buyers and to establish a direct linkage between rent and wages so that the cost of welfare housing could be minimized (Ho & Kwong, 2002).

²⁷ Economical and Comfortable housing is a type of semi-commercial housing. It was first proposed in a governmental document "Notice about actively and safely continue housing reform," which proposed a type of economical and comfortable commodity housing. Further, central government institutionalized this type of housing type as "Economical and Comfortable housing" in 1998. Local governments allocated free land to developers to construct residential buildings. There is a price cap for this type of housing.

danwei ceased in direct construction and provision of housing, some *danwei* continued the practice of welfare housing provision through purchasing housing from developers and then reallocating it to their employees (Zhu, 2002). Others formed their own real estate companies to construct housing for their employees. In Beijing, nearly half of all housing constructed was purchased by *danwei* in 1990 (Leaf, 1995). It is clear that the mentality of providing housing as one of the basic responsibilities to and a social contract with their employees was not changed. Instead, the increased fiscal freedom made *danwei* with resources more likely to increase housing benefits (Deng et al., 2009). As a result, the housing difference between rich *danwei* and poor *danwei* increased (He, 1993). In addition, the dependence on *danwei* was, ironically, also increased for public employees who wanted to obtain housing or improve their living conditions. While some residents did obtain private housing through purchase, the process of housing reform was slow and not firmly enforced by any level of governments.

The year 1998 witnessed the Asia financial crisis sweeping almost all Asian countries. Although China was not severely impacted by this financial crisis as it had not opened its currency to the international financial market, exports, one of China's economic pillars and employment generator, decreased because other Asian countries devalued their currencies. In this context, generating domestic demands to ensure economic development became an imperative and housing demand was viewed as promising to sustain the falling economy. I argue that turning urban citizens into "neoliberal consumers" is more a state agenda than developers' strategy. Not only did the state terminate the welfare housing allocation by *danwei*²⁸; it emphasized repeatedly the importance of building a domestic market. The private real estate sector was encouraged to expand and replace the public sectors (local housing authorities and work units) as the major housing provider. The main goal is very clear: it aims at "pushing the marketization and socialization of housing" and "promoting housing industry to be the new

²⁸ In 1998 the State Council issued a new document, *Notice on further reform of urban housing system and speeding up housing development* (Document No. 23), in which the state firmly forbade any form of welfare housing allocation from work units to employees (State Council, 1998). In addition, this policy adopted a method called "old people old method, new people new method" in which residents employed before 1998 were granted housing subsidies and lower than market prices to buy their sitting apartments. Residents employed after 1998 were required to purchase housing from the market. It is a way to ensure a smooth process of housing reform. Together with direct policy on housing provision, the central state also lowered the interest rate and exempted developers from many related tax in order to promote the development of the housing market.

economic growth point”. With the firm termination of new public housing provision²⁹, preferential monetary policy, and the demand for improved housing condition by urban residents, housing prices started to skyrocket in major Chinese cities. In addition, the credit market opened to potential home buyers³⁰, which made it possible for potential home buyers to get access to large sums of money to buy a home. In a sense, the period of public rental housing as welfare ended and a housing system dominated by home owners started. The housing system in China during the reform era can be conceptualized as follows (Figure 3.2):

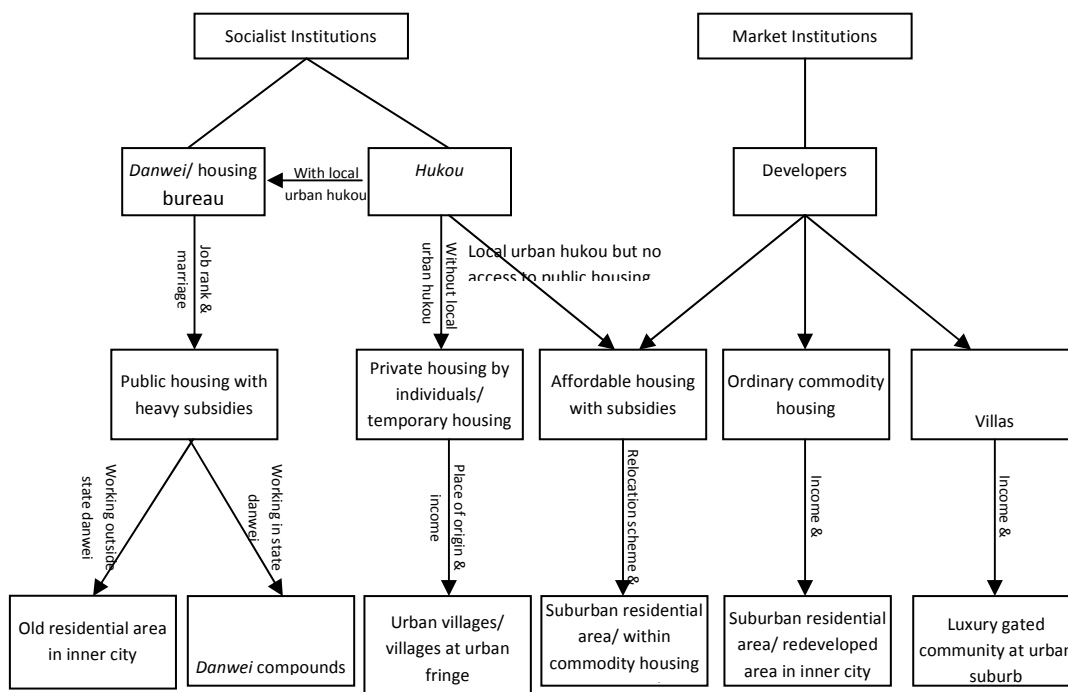


Figure 3.2 Housing System in the Reform Era³¹

In 2003, the State Council issued a policy document in which the real estate industry was promoted to pillar industry³². Following the guidance of the central government, local governments came up with preferential policies to attract investment in the real estate industry. Through privatization of public housing and establishing a housing market, the rate of homeownership, which is taken as a sign of a more stable social situation, has increased greatly:

²⁹ In fact, direct provision of welfare housing never stopped in some big *danwei* with a lot of resources, or those at the national level until many years after the housing reform.

³⁰ In 1998, the People’s Bank issued a policy document, *Notice on Increase Housing Loan and Support Housing Consumption and Construction* (Document no. 190, 1998). One year later, the People’s Bank issued another policy document, *Guidance on Personal Consumption Loan* (Document no. 73).

³¹ Adapted from: Huang, 2009, *Housing Inequality in Transitional Beijing*

³² Announcement of State Council about promoting healthy development of the housing market (Guowuyuan guanyu cujan fangdichan shichang jiankang fazhan de tongzhi) (State Council, [2003] No. 18). URL: http://www.gov.cn/zwggk/2005-08/13/content_22259.htm

from 20% in the 1980s to 84.3% in 2010 (Huang and Clark, 2002; Man, 2012). The living space has increased even more dramatically. The average per capita floor space was 6.7 square meters at the beginning of economic reform and it increased to 20.3 square meters in 2000 and 32.9 in 2012 (NSB, various years).

Furthermore, the housing reform not only helped transform the false welfare system, but changed the "backwards" attitude of urban residents. In a speech Guangtao Wang, minister of the Ministry of Construction, he emphasized Secretary General Zemin Jiang's words that we need to throw away three backwards thoughts: (1) low rent and allocation system is a superior aspect of socialist country; (2) housing is a political issue; and (3) housing expenditure should not be part of individual spending (Wang, 1999 in housing policy collection). The once-superior aspect of socialist countries over capitalist countries was turned on its head into a negative aspect that blocked the progress of housing reform. It showed the attitude of the central government in moving towards the capitalist road. However, the reform of existing public housing stock was still based on job position and seniority, the same criteria for allocating housing in the pre-reform era. In the policy, the subsidized living area for employees below section chief is 60 square meters, 70 square meters for section chiefs, 90 square meters for department directors, and 120 square meters for bureau directors in Beijing (State Council, No. 10, 1999). Thus, bureau directors received twice the subsidy given to employees below section chief in terms of area alone. The basic subsidy is 1265 *yuan* per square meter, plus a percentage of the salary of 1998 and the working year. Because higher-ranking employees also had higher wages and longer employment time, the basic subsidy itself would generate 17,500 *yuan* more for employees with position of director of bureau than employees with positions below that of section chief.

3.4 The Role of the Governments

3.4.1 The central government

Zhang (2002) points out that urban politics in the transitional China does not happen in a liberal democratic context as in the US. The central government is an important stakeholder in China's local policy practice because of its control over the state bureaucracy. At the same time, the transition to a market economy requires the central government to play the pivot role in designing and enforcing institutional rules. Through its action on agenda setting and rule setting,

the central government is able to pursue its own economic and political interests, which have impacts on the dynamics of local policy practices. Based on the discussion on housing reform process discussed in previous section, we can see that the central government took an active role in institutional design to build a housing market and free *danwei* from public housing provision.

Although the housing reform significantly shed the burden of the central government, the skyrocketing housing prices are increasingly become a serious problem. Since 2003, the central government started to tighten both land and credit supply to real estate companies, hoping to control the rising housing price. The central government required the termination of direct land transfers to users and that all land for construction be obtained through tendered bids in 2004 (Tang, 2011). In addition, the down payment was increased from 20% to 35% for developers and for potential homeowners was increased to 30% for the first home and 40% for second homes (Qi, 2011). Preferential interest rates of all sorts for home buyers were forbidden. In 2005, the State Council issued another policy document to control the skyrocketing price of housing³³. Soon after that, seven ministries issued a document providing implementation details³⁴. However, due to the imbedded interests of both local governments and developers in developing luxury housing, the regulation did not efficiently control the rising housing prices. In May, 2006, the State Council announced a policy document jointly issued by nine ministries: *Opinions about Adjusting the Structure of Housing Provision and Controlling Housing Prices*³⁵. In this document, the central government required local governments to ensure that the local supply of affordable housing (Economic and Comfortable housing) under 90 square meters be more than 70% of total commercial housing provided. Through setting the proportion of affordable housing constructed, this document tried to urge local governments to change the behavior of developers

³³ Announcement about Stabilizing Housing Prices (Guanyu qieshi wending zhufang jiage de tongzhi), which is also called *National Eight Point (Guoliutiao)*. It was issued by the State Council on March 26, 2005 URL: <http://finance.sina.com.cn/chanjing/b/20050420/09341533481.shtml>

³⁴ Opinion about the Work on Stabilizing Housing Prices (Guanyu zuohao wending zhufang jiage gongzuo de yijian), which is also called *New National Eight Point (Xin Guobatiao)*. It was jointly issued by the Construction Ministry, the National Development and Reform Commission, the Financial Ministry, the Land and Resources Ministry, the People's Bank, the State Administration of Taxation, and the China Bank Regulatory Commission on May, 2005. URL: <http://news.soufun.com/2005-05-12/415597.htm>

³⁵ This document was jointly issued by the Ministry of Construction, the State Development and Reform Commission, the Ministry of Supervision, the Ministry of Finance, the Ministry of Land and Resources, People's Bank of China, the State Administration of Taxation, the National Statistics Bureau, and the China Banking Regulatory Commission, which provided implementation details of a previous document issued by State Council: *State Council Six Points about Regulating Current Real Estate Industry*. URL: <http://www.realestate.gov.cn/file.asp?recordno=46793&teamno=261&line=2>

who tend to over-supply large, luxury housing units. This document also tried to check investors through imposing a high transaction tax on housing purchased less than 5 years, an increase from the 3 years of previous regulation. In addition, six ministries of the State Council issued a document to increase the cost of foreign investment in real estate industry³⁶, which is apparently at odd with the Washington Consensus. Furthermore, from 2004 to 2008, interest rates were increased several times. Not satisfied with indirect policies, the central government issued a policy which required all newly developed housing projects to have units smaller than 90 square meters of 70% of their apartments in 2006. However, contrary to the goal of these policies, housing prices kept going up due to the fact that these policies increased the cost of real estate development and decreased the supply of large apartment units.

Thanks to the recession caused by the subprime crisis in America in 2008, housing prices decreased slightly in major Chinese cities. Afraid that the declining housing prices would have negative effect on the macroeconomic growth since real estate industry had been decided as pillar industry in China, the central government immediately issued several policy documents to respond to this trend³⁷. With all these preferential policies, the trend of decreasing housing prices was reversed very soon. From 2009 onward, housing prices skyrocketed. The affordability problems is getting worse in many Chinese cities, especially in large cities as Beijing.

In addition to its constant involvement in the nascent housing market, the central government also proposed a subsidized commercial housing, "Economical and Comfortable housing". While the term "Economical and Comfortable housing (*jingji shiyong fang*)" was mentioned in central government policy documents in the 1980s as well as some later documents, its definition and implementation details were never described in any policy document prior to 1995³⁸. It was first

³⁶ Opinion about regulating FDI approval and management in the housing market (guanyu fangdichan shichang waizi zhunru he guanli de yijian), issued by Ministry of Construction, Ministry of Commerce, State Development and Reform Commission, People's Bank of China, State Administration of Industry & Commerce on July 2006, URL: <http://www.realestate.gov.cn/file.asp?recordno=44770&teamno=103&line=100>

³⁷ Interest rates for home buyers were decreased to 30% and down payments for both developers and home buyers were decreased to 20%. New policies also decreased the property tax for purchasing new apartments and eliminated the housing transfer tax for second-hand apartments.

³⁸ In document "Policy Key Points of Constructing Urban and Rural Housing" drafted by National Science Bureau, it says "by 2000, every urban household should have an economical and comfortable housing unit". In policy document "Notice on Actively and Smoothly Reforming the Urban Housing System" issued in 1991, the State Council proposes that local governments should put more effort on developing economical and comfortable commodity housing. In policy document "Notice on Further Deepening Housing Reform in Cities and Towns", the

clearly defined in the 1995 policy document “Implementation Schema of National Comfortable Housing Project (*anju gongcheng*).” In this scheme, those constructing “comfortable housing” can obtain free administrative allocated land from the local government or *danwei*. In addition, the central government contributes to 40% of the construction funding and local governments or *danwei* contribute to 60%. Furthermore, the local governments are required to pay half of relocation and infrastructure cost. It is not hard to imagine that local governments have little interest in this project due to their disproportionately large contribution. Since this scheme involves *danwei* as an important participant, instead of transforming the essence of the *danwei*-based welfare housing system, it justifies the continued involvement of *danwei* in the new era, complicating the overall transition toward a market-oriented system of housing development as well as a clearly defined property rights (Zhu, 2000).

The affordable housing project can be viewed as the precursor of the economical housing project. In 1998, the state council launched the nationwide economical housing program. This policy document proposed building a three tier housing system: commercial housing sold at market prices to high-income households, economical housing sold at government-regulated prices to medium and low-income groups, and cheap social rental housing targeted at the lowest income families (State Council, 1998). In order to make sure that the prices of economical housing is lower than the market price, the schema stipulates: (1) Administrative land allocation exempting from land transfer fee; (2) Tax and fee waivers or reductions; and (3) Government regulated prices through negotiation between local governments and developers. These prices are usually calculated according to estimated cost of development, tax and fees, and a restricted profit level (typically less than 3%)³⁹. This policy document states that developing economical housing is “to build a housing system suitable to a socialist market economy, to expedite housing reform, to cultivate real estate industry as new economic growth point, and to satisfy the housing need of urban residents” (Construction Ministry, 1998), which is consistent with the goal of housing reform. Based on the order of the goals, it is not hard to see that cultivating the real estate industry is the foremost goal, while satisfying the needs of urban residents is the least

State Council requires local governments of all levels to pay more attention on constructing economical and comfortable housing.

³⁹ Later, price mechanism was slightly modified to allow both price cap and average standard price negotiated between governments and developments. The latter let developers to set different pricing levels for different housing units (such as with different styles, in different floors of the building, etc), as long as the calculated average price conformed to the standard price and that all prices are within 3% floating range.

important, if not a just a welcome byproduct. As Premire Jiabao Wen's speech in National Housing Reform and Housing Construction Meeting states:

*“In order keep an 8% economic growth rate, it is very important to promote domestic demands.... The key of building a new housing system is to promote constructing of economical housing.... On the one hand, middle and low income households are the main social group in cities, and developing economical housing can satisfy their needs; on the other hand, developing economical housing can increase effective domestic demands to drive the economic growth...”*⁴⁰

Although the role of central government has changed from direct provision to influence financial institutions, the role of the central government was much stronger than that in the Western countries since most large banks were owned by the state and subject to centralized government control (Wang et. al., 2013). In addition, it is clear that the government used administrative ways to involve itself in the housing system under the name of macroeconomic means (Zhao and Tan, 2006).

3.4.2 The local government

Municipal governments are responsible for both local public good-related programs and revenue generation activities during the reform era. As national capital city, Beijing is both archetypical and exceptional with regard to the development of its housing (Leaf, 1995). In the new housing system, the local government is playing a central role. It is important for them to achieve a balance of the double roles. It is not only responsible for providing subsidized housing to low income residents, but managing the commercial housing as well. However, local governments are more likely to cooperate with developers to develop commercial housing, and especially to provide luxury commercial housing, instead of providing affordable housing. The high reward for selling land use rights provides great incentive for local government to develop the real estate industry. As explained earlier in this chapter, the municipalities are acting as agents of the state to expropriate land and sell the acquired land to commercial users (Lin, 2005). The revenue generated through expropriating agriculture land cheaply and converting it to high-value commercial uses accounted for 30 percent of municipal revenue, and 70 percent in some extreme cases (Lin, 2005). Some municipal governments used preferential policies such as tax return and granting local *hukou* to attract developers and investors to invest in housing. Generally, the price of commercial housing is very high; out of the reach of most urban residents.

⁴⁰ <http://sjs.bjgtj.gov.cn/tabid/3937/InfoID/69382/frtid/3943/Default.aspx>

However, it is argued that as long as local governments want to snatch profit from commercial housing, they would not let the price of commercial housing fall if they can prevent it⁴¹. In addition, because it is highly profitable to expropriate farm land and convert it into commercial land, local governments are actively involved in expropriating agricultural land and allocating it to commercial users. For example, more than 80% of legal cases filed by peasants against governments in Zhejiang in 2002 were related to land acquisition (Ding, 2005). Tsui (2011) estimates that the share of land premiums in local aggregate fiscal revenue was over 25 percent⁴².

Whereas regulatory decentralization contributes to explaining local governments' cooperative role with developers and investors, it can only partially do so. Some other institutional factors have affected local governments' motivations and interests with respect to local policy practice of economical housing development. As mentioned earlier in this chapter, the decentralization of regulatory power also accompanies decentralization of more responsibilities to local governments. Therefore, it is also important to examine the behavior of local government with the opportunities and constraints defined by the central government. In terms of housing provision, Wu (2004) argues that with the decentralization, local governments attempt to use a more market-oriented approach such as property-led development. However, there is a contradiction between housing provision as the process of providing basic shelter for labor reproduction and housing production as major commodity production, which is used as a vehicle to promote urban development (Wu, 2001). It has been observed that local governments relaxed the implement of central government's unfavorable policies on housing market as soon as the pressure from the central government eased off (Wang, et. al., 2013). In the following sections, I will explain how the local government is involved in the provision of different types of housing in more details.

⁴¹As long as real estate is a pillar industry, the governments will not truly hope the price to all? (Zhiyao dichan shi zhizhu, zhengfu jiu buhui zhen pan jiangjia). Obtained through: http://news.xinhuanet.com/house/2005-04/05/content_2788543.htm

⁴² Some media even reported that the percentage was as high as 60 percent.

3.5 Managing the New Housing System

3.5.1 Affordable housing

From its beginning, government subsidized affordable housing is riddled with problems such as units too big to be affordable, selling to insiders, and so on. Some scholars view the result as the outcome of a game between the central government and the local government. I would argue that the main purpose of both is the same. However, since the local governments need to come up with the resources to promote the affordable housing program (i.e. Economical and Comfortable housing), they are more pragmatic. With the emphasis on affordable housing supply, the investment in it went up since 1998. In order to get the interest of developers to involve in providing affordable housing, local government initially tacitly allowed them to construct large economical housing units to cater to high income residents since ordinary residents were not willing to purchase housing on the market at the beginning of housing reform. Therefore, many affordable housing units constructed at this time period were more than 100 sq meters (about 1000 square feet). In Tiantongyuan, one of the biggest affordable housing neighborhoods, many housing units are even larger than 120 sq meters. While the price per sq meter was lower than the market price, the total prices were far beyond the reach of the ordinary residents. In fact, the goal of constructing economical housing was not to increase housing affordability for ordinary urban residents, but to attract enough buyers. As a government official said: “At that time, not too many people wanted to buy housing on the market and we worried whether they could be sold at all” (from interview). When this policy was implemented in Beijing, affordable housing was not only defined as cheap commodity housing constructed by private or public developers with government subsidies, but housing constructed by *danwei* as well as *danwei*-employee cooperative housing⁴³. In addition, the latter two types of *danwei* related affordable housing are required to sell to *danwei* employees. This seemingly small added detail not only legitimized housing constructed by *danwei*, which the housing reform tried hard to abolish. In addition, the regulation forbidding selling *danwei* constructed affordable housing to people who do not belong to the *danwei* in essence guarantees that the benefits from *danwei* would not be seized by any outsider: as a Chinese saying goes, “do not allow the nutritious water flow to others’ farmland” (*Feishui bu liu wairen tian*). Through adding other sources to

⁴³ Notice on Various Regulations to Expedite the Construction of Economical Housing, Beijing People’s Government, 1998 No. 54

economical housing, the Beijing government not only relieved itself of the burden of funding the expensive project, but added more housing to the affordable housing stock as a governmental achievement.

Despite the great emphasis on its important and preferential policy on land use, and despite the local government tacitly allowed developers to construct larger units to cater to high income households and explicitly welcome *danwei* to participate affordable housing construction, affordable housing is not the favorite type of housing developers would like to provide due to the profit cap. From the beginning of this program, economical housing never took a significant share of the total urban housing supply, and dropped to a marginal fraction (about 5% in terms of investment and floor space constructed in 2010). It is apparently a lose-lose game. For developers, the price cap significantly constrained profit margins. For local governments, it required them to provide both free land and free infrastructure. Furthermore, public rental housing remained the main type of housing for ordinary urban residents at the early stage of housing reform, and economical housing had to cater to the small proportion of high income households.

With the persistent urbanization process together with the stimulated need to improve living conditions, prices of commodity housing kept rising. Economical housing gradually gained popularity. It was not unheard of for people to line up for days to get permits to buy economical housing⁴⁴. From time to time, the news disclosed scandals on reselling economical housing permits at handsome prices by people with connections in various cities. For example, a permit for a housing unit in Tiantongyuan, a large economical housing community in Beijing, was sold for 180,000 *yuan* (about than 30,000 dollars)⁴⁵. In Wuhan, selling economical housing permits has become a mature business⁴⁶. Due to these problems with economical housing, the Ministry of Construction issued a policy document that tightly controls the unit size of affordable housing. In

⁴⁴ “More than a thousand people were lining for the release of purchase permit for the Economical and Affordable housing” (Jingji shiyongfang fanghao, qianyuren paidui) <http://www.baijuyi.com.cn/news/htm/2608.html>; “More than one thousand people were lining for purchasing permit for the Economical and Affordable housing in Tiantongyuan” (Tiantongyuan jingjishiyongfang fanghao, qianyuren paidui) <http://ido.3mt.com.cn/pc/200512/20051229314116.shtm>

⁴⁵ “A purchase permit for affordable housing in Tiantongyuan was sold for 135,000 RMB” (Tiantongyuan jingji shiyongfang, yige fanghao shou 13.5 wan), obtained through: http://news.xinhuanet.com/house/2007-02/05/content_5696398.htm

⁴⁶ “Economical and Affordable housing in Wuhan: a streamlined black market” <http://view.news.qq.com/a/20090715/000010.htm>

addition, the policy document also unambiguously forbade collaborative housing between *danwei* and employees in 2003 (Ministry of Construction, No. 18, 2003)⁴⁷. This policy not only made affordable housing less attractive to developers, but deprived housing provided by *danwei* of its benefits as well. Table 3.1 shows that there was a big drop in affordable housing investment and supply in both share and absolute sense in 2004. Probably due to the cash-cow effects of the booming housing market, the local government followed the central policy on affordable housing. From the behavior of central government and local government on economical housing we can see that both central government and local government were constantly involved in the affordable housing supply in order to achieve their goals. While the main goal is the same, to promote affordable housing development, the central government needs to pay more attention to the social effects, while local government needs to concern itself more about cost and benefit. I would argue that the 2004 policy indicates the changed attitude of central government towards economical housing because, for the central government, economical housing was no longer needed to generate effective domestic demands; rather, it required more control to avoid corruption and rent-seeking. It was more in line with the attitude of local government as a duty than an economic engine. In other words, the central government and the local government came to a consensus that affordable housing as pioneer of the housing market had finished. This change of attitude can be further demonstrated by later policy documents. For example, in policy document *Notice on Managing Economical and Comfortable Housing* jointly issued by the Ministry of Construction, the National Development and Reform Commission and other ministries, the importance of economical housing in generating domestic demands and thus promoting affordable growth is totally absent (Ministry of Construction, No. 258, 2007)⁴⁸. Only affordable housing policy as an integrated part of the welfare system for urban low-income households was mentioned. While affordable housing is subsidized housing targeting urban residents at particular income levels, it is categorized as special commodity housing. However, the ups and downs of affordable housing supply had little to do with the change of demand and supply in the market, or the change of social structure, but because of the change of policy priority.

⁴⁷ “A notice from the State Council about promoting sustained and healthy development of real estate” (Guowuyuan guanyu cujin fangdichan chixu jiankang fazhan de tongzhi), obtained through: http://www.gov.cn/zwzk/2005-08/13/content_22259.htm

⁴⁸ “A notice about releasing ‘Methods of Managing Economical and Affordable Housing’” (Guanyu yinfa ‘jingji shiyongfang guanli banfa’ de tongzhi), Obtained through: http://www.gov.cn/zwzk/2007-12/01/content_822414.htm

Table 3.1 Affordable housing development and its share in residential housing development, nationwide, 1997-2009

Year	Investment completed in affordable housing development (billion yuan, 1978=100)	Affordable housing share in total investment completed in residential housing development (%)	Floor space of affordable housing constructed (million sq.meters)	affordable housing in total floor space of residential housing constructed (%)
1997	4.87	12.05	17.21	15.65
1998	7.30	13.01	34.66	20.83
1999	12.15	16.56	39.70	21.12
2000	15.30	16.38	53.13	21.77
2001	17.05	14.22	57.96	18.98
2002	16.97	11.27	52.80	15.21
2003	17.94	9.18	53.31	12.16
2004	17.01	6.86	42.57	8.88
2005	14.45	4.78	35.13	6.37
2006	19.20	5.11	43.79	6.80
2007	21.79	4.56	48.10	6.10
2008	24.34	4.33	56.22	6.72
2009	28.78	4.43	53.55	5.74

Data source: National Bureau of Statistics of China, various years.

Two special subsets of affordable housing are cooperative housing and private fund-raising housing by *danwei* constructed housing. Although there are no official data to indicate the percentage of these types of affordable housing, I expect that while decreasing in their share over time, they took up a large share at the beginning of the housing reform. Another reason that the percentage of Economical and Comfortable housing decreased quickly with the deepening of housing reform is that fewer and fewer *danwei* participated in constructing their own housing, which is categorized as Economical and Comfortable housing. It is generally agreed that with the 1998 policy document, which is considered as the starting point of housing reform, the central government determined to break the welfare housing system and construct a housing market. However, clause No. 17 explicitly encourages cooperative housing and private housing

fund-raising in order to increase of the supply of Economical and Comfortable housing. This clause kept the opening for *danwei* to construct and allocate housing to their employees under the umbrella of affordable housing. Beijing issued another policy document in the next year, making it even clearer. In the document *Deepening Housing Reform in National Government Organizations in Beijing*, it stated that *danwei* with land that was subjected to redevelopment could apply to construct housing and sell it as Economical and Comfortable housing to their employees if the construction was in accordance with urban planning. Based on this policy, it was still allowed to construct housing for employees as long as the housing units were sold to them as Economical and Comfortable housing. But the prerequisite is that the *danwei* had to have its own land. The *danwei*-owned land was all allocated by government before the housing reform. Normally, big and high level *danwei* tended to obtain more land. This policy, in essence, granted employees working in big and high administrative *danwei* the opportunity to obtain subsidized *danwei*-constructed affordable housing, while leaving those working for small *danwei* on their own to get housing from the market. In the face of the skyrocketing housing prices, this cooperative housing construction initiated by government organizations and big SOE (state owned enterprise) aroused public resentment. In 2006, the central government released a policy document, *Notice on Stopping all Out-of-line Cooperative Housing*, forbidding the approval of any cooperative housing by government organizations. At the same time, it also required projects satisfying regulations and approved by the local government to follow the regulations of affordable housing. There was no further description specifically explaining what regulations cooperative housing should follow or how to get the local government's approval. While the tone of this policy document seemed quite determined, this clause made it very flexible for local governments to handle in a case-by-case manner. Therefore, it is not hard to see that several years after this document was issued, the news regularly discloses scandals of luxury housing constructed by government departments being sold to their employees at deeply discounted prices, sometimes only about half of the market price or even lower⁴⁹. For example, even an official mainstream newspaper, *Xinhua News* estimates that sometimes *danwei*-constructed Economical and Comfortable housing consists of about one third of the total Economical and

⁴⁹ “State ministries and the central state owned enterprises still indirectly allocate welfare housing” (Buwei yangqi reng zai bianxiang fen fulifang), obtained through http://www.360doc.com/content/10/0424/07/649455_24605493.shtml; “A survey on civil servants' welfare housing” (gongwuyuan fuli fenfang diaocha), obtained through http://www.360doc.com/content/10/0424/12/72265_24636935.shtml

Comfortable housing supply⁵⁰. Since the central government's strict censorship, it is reasonable to expect that the real number could be even higher. In addition, the area of these economical housing units was much larger than the economical housing criteria of 60 to 80 square meters. Housing for officials at ministry director level was 180 square meters, for example (Ji, 2007). In a sense, urban residents with the strongest purchasing power enjoyed the lowest prices. Therefore, in essence, housing reform policy only applied to urban residents working in the private sector and small public organizations/companies, while urban residents working for government departments or monopoly sectors could enjoy both the reformed salary and the un-reformed housing benefit.

According to the policy, self fund-raised housing (*si ren ji zi jian fang*) should be treated as Economical and Comfortable housing similar to *danwei* initiated fund-raising housing. But before 2000, the majority of cooperative housing was initiated by *danwei*. There were also semi-public housing cooperative groups. But they never gained popularity. In 2004, an "individual cooperated construction" program was initiated by an ordinary Beijing resident who tried to organize a housing cooperative group to construct their own housing (Wu, 2005). The initiator expected that this housing would be at least 20% cheaper than the market price since they did not need to pay for advertisement or administrative fees and they did not need to generate profits. In the face of the high housing prices, this advocacy soon gained more than 500 followers within a short period of time. However, after participating in several land auctions, this group could not obtain a piece of land within their budget through bidding. After two years of prolonged effort, the organizer had to give up. In fact, the private initiated housing cooperated group in Beijing was not unique. Similar groups were also organized in other major cities such as Shanghai, Nanjing and Chengdu in the same period. For instance, a Shanghai self-initiated cooperative group that consisted of many well educated professionals from accountants to financiers to architecture designers almost covered the main areas that real estate development requires. However, with very few exceptions, these groups all had the same fate as the Beijing housing cooperative group (Yan, 2005; Ye, 2006). The only exception so far in the news was a private cooperative group in Wenzhou that successfully bid for a piece of land in 2006 which drew a lot of media attention. However, the director of Wenzhou Housing Bureau soon announced that this

⁵⁰ "Examining the odd phenomena of *danwei*-fundraising housing: who increased the gap of policies? (*Toushi danwei jizi jianfang guai xianxiang: shui jiang zhengce fengxi yue la yue da?*)", retrieved from: http://news.xinhuanet.com/politics/2007-04/18/content_5993782.htm

cooperative housing project was not totally obedient to all the regulations (Sun, 2006). Further, in the Fifth Session of the Tenth National People's Congress held in early 2007, Mr. Wang, director of the Ministry of Construction, made the government's attitude towards *danwei* constructed housing and private cooperative housing even clearer: if companies had their own land and obey the urban planning, they can construct housing to solve their housing problem. At the same time, it is important to watch illegal private cooperative housing (Xin, 2007).

According to policy documents, the government should support affordable housing construction. In "Notice on Promoting Healthy Development of Housing Market" issued by the State Council in 2003 (State Council, No. 18, 2003), self-fund-raising and cooperative housing are parts of the economical housing and should be treated with Economical and Comfortable housing policies. *Danwei* should not participate in self-fund-raising and cooperative housing for allocation housing or real estate development. It seems that the central government has a more preferential attitude towards private cooperative housing development. In reality, privately-initiated cooperative groups have to compete with large real estate companies to get land, which is generally fatal to these groups. In addition, without any preferential attitude towards them by the government, banks are very unlikely to lend money to them. Without any clear guidance from the central government, the Beijing Construction Bureau ignored the application from Yu, the initiator to form the cooperative, because there was no law explicitly stating this advocacy to be legal (Chen, 2005). Although the Beijing government could not find enough evidence to outlaw the attempt, they certainly did not want to recognize it officially either. In 2005, the Ministry of Construction disclosed that they would decisively stop "illegal" private housing cooperative groups. In fact, there was yet any existing law or regulation to outlaw this type of group. And due to their limited size, the government may not have had any real intention to deal with them. But the signal from the central government was very clear: they would not support this private initiative. In addition, Mr. Meisheng Lie, the director of the Chamber Of Commerce, charged it as a retrogression of the whole society to the pre-reformed era (Fan, 2005). Lacking any preferential policy or opinion support from the local government, almost all private housing cooperative groups were stuck in the same mire of not being able to obtain affordable land or borrow money from the bank. Despite wide media attention to cooperative housing initiatives, it remained to be a "loud thunder but small rain (*leisheng da yudian xiao*)" movement overall because successful cases are so few and far between.

3.5.2 "Small property right" (*xiao chan quan*) housing

In contrast to the fate of the privately initiated cooperative housing, "small property" housing gained popularity even though government tried to curb its development from the beginning. In fact, "small property right" housing is not a legal or official term. It is a unique category of housing "with Chinese characteristics". According to the definition of property right, there is no such difference as "big property right" or "small property right." Therefore, it is only reasonable to say "have" or "have no" property rights. In the Chinese case, this "small property right" housing refers to housing built on collective land and sold to individuals outside the collective with limited property rights or uncompleted property right housing, because it is not supported by a housing certificate issued by the local government. According to Yan, the chair of the Land Planning Center at Renmin University, small property right housing projects are usually based on contracts between the village committee and developers to build housing on collective land (Wang, 2009). Most of the small property right housing projects were developed under the umbrellas, such as "new countryside construction," "old village redevelopment," "agricultural tourist garden construction," and so on. Regular commodity housing developers should have five permissions: planning permission, design permission, construct permission, land use permission and sale permission, based on which home buyers can get their housing certificate. Since small property right housing developers do not pay land transfer fees, they do not have land use permission to grant home buyer legal housing certificates issued by the city government. Instead, they grant housing certificates issued by the village committees which are not recognized by the city government. Compared to commodity housing projects, small property right housing projects can save on four types of costs: (1) they do not need to pay fees to the village committee for using collective land; (2) they do not need to pay city government land transfer fees; (3) they do not need to pay the city government for constructing infrastructure; and (4) they do not need to pay the city government various taxes. Of all these fees, the land transfer fee consists of the lion's share of the costs. Unlike housing constructed by individual peasants with poor quality and sanitation, small property right housing is developed by developers with all modern facilities. Some housing is even better than that in the city on a cost basis due to the low land price. According to a survey by Lianjian, a national chain real estate agency, "small property right" housing was consisted of some 20% of the housing stock in Beijing in 2007. In some other cities such as Shenzhen, the percentage was even higher (Zhang, 2011). Nationally, the percentage of

small property right housing reached 40% and involves roughly 71 million households and more than 200 million people (Wang and Sun, 2011). According to a survey of the Beijing statistical Bureau, the average housing price within the fourth ring road was 19,750 *yuan* per square meter (about \$330 USD per square foot) and the average price between the fifth and sixth ring road was 10,314 *yuan* per square meter (about \$176 USD per sq. foot) in 2009 (Zhang and Li, 2010). In contrast, in the small property housing area in Tongzhou district, Tiyuyuan, units were sold for 4,000 *yuan* per sq. meter, less than half of the price of housing between fifth and sixth ring road (Liu, et al, 2010).

For urban residents, housing is certainly a type of wealth. But for peasants, housing built on their housing sites will only lose value through use. They cannot generate any gain for peasants because peasants cannot alienate the allocated land. In a sense, peasants are excluded from accumulation of housing wealth under the dual regime. According to the Constitution, the government can only expropriate land for the public interest. However, statistics show that there were more than 1,500 government officials punished for involvement in illegal land transfers from Oct. 2006 to early 2007 (Hou, 2008). A State Council investigator disclosed that illegal land transfers by local government consisted of 80% of total illegal land transfers (Zhang, 2008). I expect that this estimation does not include land transfers under the name of public interest to develop real estate or business.

There was a hot debate whether or not “small property right” housing was actually illegal. According to clause 62 in the *Land Management Law*, peasants are not forbidden from selling their housing sites, but are forbidden from applying for other housing sites. In addition, clause 155 says that peasants should register if housing sites are transferred or their building permits expire. In a sense, this law implies that it is legal to sell allocated housing sites because the outcome is not breaking the law, but doing so means losing the right to apply again. The only thing that is not allowed in this law is to transfer the land use right⁵¹. What explicitly bans the behavior of selling housing on peasants’ housing sites is the policy document, *Notice about Strengthening Management on Land Transfer and Forbidding Land Speculation*, which forbids peasants from selling housing to urban residents. However, according to Contract Law, the basis to invalidate a contract is according to relevant laws. Therefore, the contracts between peasants

⁵¹ Land Management Law of People’s Republic of China (*zhong hua ren min gong he guo tu di guan li fa*), retrieved from: http://www.gov.cn/banshi/2005-05/26/content_989_2.htm

and urban residents on selling housing on the collective land are valid even if the government does not allow them explicitly. According to Land Law, the country can expropriate land for "public interest". However, there is no clear definition of what "public interest" is. Deciding whether or not urban residents buying "small property right" housing is legal is beyond the scope of this research. What interesting is the behavior of the government at various levels.

The underlying reason for the emergence of "small property right" housing is the dual land regime. The *Land Management Law* in essence deprived collective land owners of the rights to dispose and gain from their property. As Wang (2009) argued, the dual land regime is iniquitous because government as owner of urban land enjoys the right to transfer land, while peasants as owner of collective land have no right to alienate their land. Local governments totally monopolize the first land market, transferring collective land to urban land and selling to developers. On the other hand peasants, the real owners of collective land, are excluded from exerting their property rights and benefit from economic gains of land transfer and the process of urbanization. Of the bundle of property rights, they can only enjoy the right of use, which actually tie them to their land. Peasants are only nominal owners of collective land. While in principle the government can only obtain land through the use of eminent domain, due to the lack of definitions of what "public interests" are, the limits on when this can be done are unclear.

The attitude of the central government is quite ambiguous and capricious towards this type of housing in the grey area. On the one hand, this cheap housing solved the housing problem of middle and low income urban residents. On the other hand, they are concerned about the loss of farmland and thus of the social safety net peasants rely on. In addition, the central government also worry they will lose the monopoly of rural land. The Ministry of Construction further issued a policy document in 2008, *Notice on Risks of Purchasing New Commodity Housing*, forbidding urban residents from purchasing housing built on collective land (Xu, 2011). According to Wang (2009), the prolonged process of drafting the Property Law shows the central government's hesitation to open the collective land market and let peasants to fully enjoy the property rights of their collective land (Wang, 2009). As a result, *Property Law* stipulates that the transfer of peasants' housing sites should not only be in accordance to laws, but also other governmental policies, instead of clearly allowing or forbidding this behavior. Since policies are constantly issued and changed, it is unclear which law and policies should be followed. Further examining this dual system, it is obviously an unfair system that urban residents can dispose of their social

security at will, while peasants cannot transfer their land to enjoy the economic gains. The central government claimed that "small property right" housing was not protected by law and they would provide a solution for it in the face of rampant use all over the country ever since 2007 (Hou, 2008; Long, 2008). The Shenzhen city council issued a policy in 2008, *Decision on Illegal Construction as the Legacy of Rural Urbanization*, to legalize already-constructed small property right housing, which was interpreted by the media as the first step to legalize small property right housing and drew great attention throughout society, expecting this policy to spread out nationally. Ten days later, the Ministry of Land Resources held a conference to listen to a report of the Guangdong Provincial government and the Shenzhen city government about the problem of the legacy of rural urbanization (Zhang, 2009). In essence, it was a conference to blame the Shenzhen government and tried to find an explanation of the policy for the public. In this conference, speakers from the Ministry of Land Resources told media that legalizing small property right housing was a misunderstanding, and further emphasized that small property right housing was illegal because it disobeyed urban planning, construction management and related law. This officially denied the public rumors that small property right housing would be legalized. The Ministry of Land Resources issued a policy to urge local governments to firmly control unused land and small property right housing in 2009 (Lu, 2009). In the National Land Resources Conference held in 2010, the Minister of Ministry of Land Resources said that clearing up small property right housing is the most important job to do for the year (Xi, 2010). It was argued by the government that the development of small property right housing broke the law of protecting farm land, thus endangering the public interest of national food security (Zhang, 2011). It seems that the central government was determined to terminate the development of small property right housing. However, the vice minister of the Ministry of Land Resources said that since the situation of small property right housing was quite complicated, the State Council and the Ministry of Land Resources would not come up with national policies to deal with it (Xin, 2009). At the beginning of 2010, the Ministry of Land Resources formed an investigation team to understand the situation of small property right housing and find ways to solve the problem of illegality. However, as of the end of the year, no policy was issued on small property right housing (Zhou, 2010). Instead, officials from the Ministry of Land Resources stated that there would not be a general policy to deal with small property right housing nationally. Rather,

they would authorize local governments to solve the problem (Chen, 2010). Through the decentralization of power, the central government kicked the knotty ball to the local governments.

It indicates that small property right housing is a rather complicated problem to solve. In contrast to the attitude of the central government, the position of municipal government is much less ambiguous. It is argued that small property right housing was seen similarly as the "capitalist tail"⁵² during the Cultural Revolution which was doomed to be cut off (Chen, 2010). The municipal government blames "small property right" housing for disturbing the proper function of the housing market and endangering precious farmland. However, the emergence of "small property right" housing is exactly the outcome of supply and demand in the market. What more at odd with market tenants is the monopoly of the local government over the transfer of land. In addition, most of the "small property right" housing was constructed on housing sites and construction land in the countryside. Statistics show that the land transfers in 2007 nationally was 23.5 ha, accounting for 23.8% of local fiscal revenues. The sale of commodity housing consisted of 8.7% of national GDP (Liu, et. al., 2010). Compared to the expropriation of farmland by the local government for real estate development, "small property right" housing is less harmful to farmland than the eminent domain of the local government. Pushing it even further, an article from a "mainstream" journal argues that it is unfair that not only peasants cannot enjoy all the urban benefits, but that they have to assure the food security of urban residents. It is argued that "small property right" housing disobeys the constitution in that individuals must not occupy, buy and sell, lease or otherwise engage in any form of land transfer. In addition, it also breaks the Land Law which forbids the transfer of collective land to non-agriculture use. Furthermore, small property housing was claimed to harm the interest of both farmers, home buyers, low-income urban residents, real estate developers and society as a whole because near-sighted farmers might sell their housing sites for short-term gains; home buyers' right cannot be protected by law; in addition, most purchasers of small property right housing are rich people; furthermore, developers selling housing with full rights cannot compete with those selling cheap property right housing. More important, the development of luxury small property right housing wastes precious land (Jiang and Tian, 2010).

⁵² During the Culture Revolution period, any private business was considered as "capitalist tail". The government crackdown all private business activities and appropriated asset involved in the business property in order to guarantee everybody to be true 'proletariat'.

The most famous case is the *Song village Artist Case* in Beijing in 2007 in which a peasant, Mr. Ma, sued an artist, Ms. Li, to whom Mr. Ma sold his house on the allocated housing site at the urban fringe of Beijing in 2002. Over the next five years, many artists bought peasant housing and changed this village into an art business area. Concomitantly, housing prices also took off. Mr. Ma tried to break their contract and take back his house. In this case, the municipal court adjudicated the contract between Mr. Ma and artist Li invalid and required artist Li to return the house with some compensation even though they signed the contract with full knowledge of laws and policies on housing on collective land. There were more than 10 similar cases between artists and peasants in that village (Tan, 2011). The loss of artist Li fully indicates the attitude of the municipal government towards “small property right” housing.

Based on the discussion above, one might wonder why “small property right” housing is persistent and its fate is so different from the individual cooperative housing even though neither the central government nor the city government welcomes it. In fact, village committees supported the development of small property housing whole-heartedly. Transferring collective land into urban land for real estate is not popular for both the village committee and peasants. After collective land is transferred to urban land, the municipal government can gain 60% to 70% percent of the economic gain and the village can enjoy 25% to 30% of economic gain. Peasants, the real owners of collective land, can only get 5% to 10% of the increased value (Wang, 2009). In addition, according to *Land Management Law*, the compensation for land expropriated is 6 to 10 times the average annual output of the previous three years and the relocation compensation is 4 to 6 times of the average annual output of the previous three years. For relocation compensation, there is a cap of fifteen times the annual average output of the land of the previous three years⁵³. The majority of people purchasing small property rights are seeking to satisfy their housing needs, instead of making a profit. Therefore, not having legal documents recognized by municipal government is not a risk as long as they do not try to resell their housing units. The real risk is that when the land where small property right housing they purchased is subject to expropriation and demolition; without local agricultural *hukou*, the home buyers of small property right housing will not be eligible to have any compensation. Realizing the problems, village governments tried various ways to evade the risk for the home buyers. For example, a

⁵³ Land Management Law of the People's Republic of China (*zhong hua ren min gong he guo tu di guan li fa*), retrieved from: http://www.gov.cn/banshi/2005-05/26/content_989_2.htm

small property right project in Chaoyang district in Beijing pretended to be cheap rental housing without *hukou* requirement. This project provided housing units with long term leases of 10 to 50 years. In contrast, the use right of regular commodity housing units is 70 years (2009, Pan). Another small property right housing project under the umbrella of "old village redevelopment" in Huairou district in Beijing promised home buyers to grant them "honor villager" title so that they would have the same compensation as the villagers if there were a demolition (Geng, 2011). It is clear that while neither recognized nor outlawed by governments of higher levels, small property right housing is supported by the lowest government, the village committee, instead of being a totally private initiative as individual cooperative housing. It is a very important factor in accounting for its success. Without any governmental support, the grassroots movement tends to be fragile.

3.5.3 Commercial housing: from "buy apartments and get hukou for free" to "no hukou no apartment"

If the affordable housing as a type of public subsidized housing is doomed to be greatly influenced by governmental policies, commodity housing, as government always claimed, should be influenced by the demand and supply of the housing market. However, it is not that simple and straight-forward. The housing market, if it fair to call it so, has never been independent of local government. In 1996, Shenzhen and Shanghai issued a policy to grant local urban *hukou* for citizens who bought housing units in tandem (Liu, 2009). One year later, in order to promote the selling of commodity housing, the Beijing government tentatively issued a similar *hukou* reform policy according to which a household of four people can be granted Beijing local *hukou* of a designated suburban town if they invest 500,000 *yuan* (about 60,000 USD then) and purchase a two-bedroom plus apartment plus 20,000 *yuan* (2,500 USD) per person. The 500,000 *yuan* investment would be returned in full after 5 years (Beijing People's government, 1997)⁵⁴. In 2001, this policy was institutionalized in a policy document, *Management of Obtaining Hukou through Investment in Housing in Designated Small Towns in Beijing*. This officially designated 16 suburban towns to implement this policy, all of which were later incorporated in the city boundary of Beijing. This special policy was not confined to the suburban towns; it was also opened to eight urban districts by another policy document in the

⁵⁴ Urban *hukou* trial managemeng methods on suburban towns of Beijing (*Beijing shi jiaoqu shidian chengzhen huji guanli shixing banfa*), retrived from: <http://www.law-lib.com/lawhtm/1997/29819.htm>

same year, *Regulation on Granting Permanent Hukou to Investors in Beijing*. This policy was proved to be quite successful in bringing investment for local governments due to the great benefits attached to Beijing urban *hukou*, especially the unusually low college admission scores for students with Beijing local *hukou*, making it very attractive to households who could afford it⁵⁵. In addition to the advantage for children to get better education, local urban *hukou* holders are eligible for subsidized economical housing, discounts on car purchases, and minimum subsistence allowances. Furthermore, many jobs require a local urban *hukou* (Lu and Qu, 2009). The justification of this policy is that it can attract investment to promote urban development, improve the "human quality" of neighborhoods through attracting the right people, and decrease urban-rural differences. While it is quite controversial whether the government actually achieved the latter goals, they certainly achieved the first. Statistics shows that till 2002, Beijing government gained 5.9 billion *yuan* (about 0.73 billion USD then) (Liu, 2009). Although this number might not be very reliable, it does show that local government obtained a handsome amount of money through the policy of granting *hukou* with housing purchase. Because of its efficiency in bringing in investors and promoting commodity housing sales, this policy soon gained popularity and was imitated by other coastal cities, such as Shanghai, Hangzho, Nanjing, Zhuhai and Ningbo, as well as some inland provincial capital cities such as Wuhan and Changsha. *Hukou* symbolizing local citizenship was put up for sale with housing by local government in order to promote housing sales and fill its local coffer.

However, this policy soon showed its drawbacks. Since this policy mainly aimed at attracting people outside the cities, the newcomers put a lot of pressure on urban infrastructure and education and medical systems due to the attached benefit with local urban *hukou*. In addition, due to the big increase of housing sales and housing prices for local residents after the housing reform, local governments also realized this policy was inflating the local housing market. In 2001, Shanghai first invalidated this policy, which was followed by other cities. In 2005, Beijing also stopped its reform on *hukou* in surrounding towns. In essence, Beijing also terminated the

⁵⁵ In China, different provinces have different college admission scores due to the differentiated provincial admission quota. Study shows that the developed costal region with better education resources have more quota and thus lower admission scores, while less developed central and western regions with relatively poorer education resources have higher scores (Wang and Chan, 2005). This unequal admission system has generated a special group of migration, generally called "college entrance exam migration". According to *Financial Times*, about 80% of investors obtained Beijing *hukou* in order for their children to have better education (Financial Times, Nov. 14th, 2001).

policy of "granting local urban *hukou* through purchasing housing units." It is very clear that the ultimate goal of city governments is to promote the selling of housing units and attract investors. When there were enough home buyers, there was apparently no need to grant the expensive citizenship to outside home buyers. But this did not mean that this policy is outdated. Instead, it was viewed as an effective policy to influence the housing market even though it was criticized from the beginning. In 2008, because of the international financial crisis, housing prices went down in most of the major cities in China. A provincial capital city, Xiamen, first implemented the "granting local urban *hukou* through buying a housing unit" at the end of 2008. Soon, this policy was back in the attention of city governments. In just two years, this policy was either reinstated or revised to lower the required total prices in 11 major cities throughout China⁵⁶. In this new round of policy support by the government, Beijing is relatively conservative and has not yet followed other cities. But a professor from Peking University also tried to persuade the government to implement similar policy.

Due to rising housing prices, governments were under pressure to regulate the qualification in order to curb the speculation of the rich from other cities. The Beijing government allowed only residents with local *hukou* to purchase commodity housing. According to the policy document "*Notice about firmly following policies issued by the General Office of the State Council and further strengthen housing market regulation and control*" (also called "*the Beijing Fifteen Clauses*") issued in early 2011, residents without local *hukou* are not allowed to buy commodity housing, except if they have paid income tax for five years⁵⁷. There are similar regulations in other cities as well. Though the regulation did not decrease the prices of commodity housing due to the ongoing urbanization process and increasing demands, it narrowed the price difference with "small property right" housing which did not have a *hukou* requirement. The difference decreased from one half to one third in Shenzhen (Tan, 2011).

3.6 Conclusion

With the introduction of commercial housing in the public housing-dominant housing system and the rise of homeownership rates in various cities, it is easy for people to think that

⁵⁶ Many places issued "granting *hukou* through purchasing housing units" policies, a new round of saving the housing market is about to issued, Feb. 17th, 2009sina news, obtained through <http://www.sina.com.cn>

⁵⁷ <http://sqjt.beijing.cn/zf/spf/spfzcjx/n214107528.shtml>

China is moving towards a neoliberal urban governance similar to its Western counterparts. It is true that the urban housing reform toward privatization and marketization has certainly brought profound changes in Chinese cities economically, socially, and spatially. Local governments are becoming more “entrepreneurial” and trying their best to promote the development of the housing industry to generate revenue. Based on the discussion in this chapter, we can also see that while the rules of the game have been changed a lot since the reform to pave a way for marketization and privatization, the housing system of China is still deeply embedded in the socialist institutions and largely controlled by the state, especially the local state. Neoliberalism as an ideology was not dominant the housing system and neoliberalism as practice was not used by the government. Rather, the socialist institutions such as *danwei* and *hukou* continue to be important in determining housing consumption in China (Logan, et al., 1999; Huang, 2003b). The housing reform in China is a top-down process with both the central government and different tiers of local governments actively involved in. While the central government has retreated itself to a large extent, the local government has taken the initiative to involve itself in the housing system to achieve its own goals. This chapter shows that rather than establishing a housing market for actors to achieve their own economic goals, the municipal governments use the highly distorted market to achieve their own political and economic goals at the expense of ordinary citizens.

Chapter Four A “Snail Shell” Home of One’s Own

One of the most popular and influential TV shows in China in 2009 should be *Snail Shell Residence (wo ju)*⁵⁸, a story about two migrant sisters trying to purchase housing to settle in a big city. Due to the high housing prices, the elder sister could only afford to rent a tiny apartment and had to send her infant baby to stay with her parents back in her hometown. After several years of hard working and being frugal, she and her husband still could not save enough to buy a bigger apartment to get their daughter back. Finally, the younger sister decided to sacrifice herself to be mistress of a high-position government official in order to borrow money for her elder sister to purchase an apartment. In the end of this TV show, this government official was killed in a car accident when he tried to escape from being investigated, which left the two sisters with incurable trauma in their lives. The only winner, if there was one in this show, seems to be an old lady’s family who was local residents and owned a small apartment in an old neighborhood under redevelopment. Because of old lady’s resolute resistance to eviction, the developer eventually gave a new apartment to her son’s family as compensation. However, the cost was very high: the old lady died due to the physical confrontation and prolonged threat by the government-backed developer. In this sense, no ordinary citizen won in this game with government and developers.

This TV show seems dramatic in that ordinary urbanites’ daily lives are centered on apartments they are trying hard to own. Their happiness and grievance, their fights and negotiation are all related with what the rich might think as just tiny snail shell-like homes. The fight of the ‘unruly’ citizens for compensation for their homes, the only property they owned, cost a life. Even for hard-working and self-reliant model citizens, the road to be a homeowner was covered with thorns and pitfalls. However, it is not hard to find many real examples. Although the strategies they use to obtain their homes might differ, one thing in common is that Chinese urban citizens have learnt to be self-dependent and responsible for their own homes. The first part of this chapter is based on second-hand material such as government documents, journal articles and newspapers. The second part is based on my work conducted in Beijing from September 2008 to March 2009.

⁵⁸ Snail residence is used as an analogy of tiny apartments which are so small that can just hold the residents as the shells of snails.

4.1 Transforming the socialist subjects to neoliberal consumers

As it discussed earlier in this dissertation, during the socialist period, it was the norm that housing was part of the compensation package for the majority of urban residents who worked in the public sector. They did not need to pay for it. However, during the reform era, to fulfill one's housing need and improve one's living condition was viewed as one's own responsibility and had nothing to do with the states. Ordinary urban residents had to be responsible for their own housing like in the TV show: people are sacrificing their living standard, selling their bodies, or even risking their lives in order to fulfill their dream of becoming homeowners. One would wonder how this norm was replaced by market mentality and how the socialist subjects are turned into the self-reliant neoliberal subjects. According to Kemeny's (1991) definition, hegemony refers to "the ability of a social group to impose their definition of reality upon other members of a society, such that their definition constitutes the taken-for-granted assumptions that underlie everyday action, and, most importantly, informs the manner in which social life is organized. In this section, I will borrow from Foucault's work on biopower and governmentality to illustrate how the state successfully use the rhetoric of neoliberalism ideology to form a hegemony to transform the socialist subjects through public media and helped by real estate developers, in order to shed its own responsibility as a social goods provider.

For Foucault, the word 'subject' has two meanings: subject to someone else by control and dependence; and tied to his own identity by a conscience or self-knowledge. Both meanings suggest a form of power which subjugates and makes subject to. Biopower, according to Foucault, represents the secularized rendition of pastoral power which has 'the right to life and the right to rediscover what one is and what one can be' (Foucault, 1990: 139). It is seen as an effective way for a modern capitalist society to control its population. Governmentality, according to Foucault, is a whole range of techniques and knowledge regulating the everyday life of both the individual subject, and the conduct of others. In other words, it is the 'encounter between the technologies of domination of others, and those of the self' (Foucault, 1990: 147). Therefore, governmentality takes place when power is decentralized and the members of the society actively engage in self-government, regulating themselves from within. Through the incorporation of new pastoral power techniques over life, Foucault contends that the modern

capitalist state has been able to exert its reach into the body and soul of the individual at the smallest levels of the social body. Power, therefore, is a technique that creates subjects:

'This form of power applies itself to immediate everyday life which categorizes the individual, marks him by his own individuality, attaches him to his own identity, imposes a law of truth on him which he must recognize and which others have to recognize in him. It is a form of power which makes individuals subjects.'

(Foucault, 1982: 781)

Along this line, Ong (2006) argues that neoliberalism is a type of governmentality 'that relies on market knowledge and calculations for a politics of subjection and subject-making'. In other words, neoliberalism operates as 'a discourse of market or quasi-market relationships... in innumerable contexts' (Bondi, 2005: 498). The result is to create the neoliberal subject which is self-motivated and self-reliant in the reproduction of his or her well-being through applying market values and principles in the various spheres of everyday life (Ong, 2006; Hoffman, 2008). The successful creation of the neoliberal subject depends on the extent to which the individual's power of self-actualization mirrors the neoliberal ethos.

In the context of the post-socialist urban China, the techniques of governmentality have been successfully used by the state to create the self-responsible, self-enterprising and self-governing neoliberal subjects (Ong and Zhang, 2008). Realizing the danger of depending too much on international markets during the Asian Financial Crisis, the state made the promoting domestic consumption a national policy goal in order to ensure healthy economic development. Among the ten measures to increase domestic consumption, promoting housing consumption was number one⁵⁹. Instead of criticizing spending as bad a habit from capitalism as during the socialist period, media and public discourse actually praised it as not only good, but patriotic. At the same time, many educational slogans and songs popular during the socialist period to promote the spirit of frugality disappeared from the public domain. For example, there was a song in the elementary school textbook called *Frugality is our Hereditary Treasure* (*qinjian shi zanmen de chuanjiabao*) written during the Great Leap Forward in the 1960s and was taught until the reform era. The lyrics advocate the behavior of saving every possible penny as a necessary quality for constructing socialist China. When I checked the background information

⁵⁹ Jiabao Wen Held the Standing Committee Meeting of the State Council and Decided the Ten Approaches to Increase Domestic Demand (Wen Jiabao zhuchi guowuyuan changwu hui, queding kuoda neixu shixiang cuoshi), Obtained through http://news.xinhuanet.com/newscenter/2008-11/09/content_10331258_1.htm

for this song, the website also provides a more updated lyrics for this song, calling expensive imported goods as new treasure of current society⁶⁰. While the new lyric are more a sarcasm of consumerism, songs like *Frugality is our Hereditary* were removed from national textbooks as part of the state effort to change the socialist mentality into neoliberalism subjects. At the same time, the idea of obtaining allocated public rental housing was criticized as a backward idea of “waiting, depending and asking” and needed to be changed.

At the beginning of housing reform, public media repeatedly mentioned the story of an American old lady and a Chinese old lady⁶¹. In this story, a Chinese old lady met an American old lady in heaven and proudly told the American old lady that after working hard and living frugally for thirty years, she finally saved enough money to buy a big house before she died. The American old lady said that she had been living in a big house for thirty years. And she was also very happy because she had finally paid off the bank loan before she died. This story was very persuasive in teaching the Chinese citizens who valued “adjusting expense to the income” that it is wiser to spend and enjoy now than save and spend later. Together with the termination of the socialist public-housing-dominant regime and the rework on the public discourse, the government also provided easy credit to make it possible for the middle class to become active consumers. Thanks to the efforts of the government and public media, urbanites with stable incomes were thrilled with the newly granted ‘power of freedom’ to make their own choice without grunting on being disprivileged. As Davis (2000) depicts in her book, the upsurge of spending on variety of consumer goods in urban China is by no means a consumer revolution in which Chinese consumers enjoy their freedom for the first time to consume. With the tacit work of the governmentality techniques to prepare urban residents emotionally and materially, the socialist citizens are subjugated into neoliberal consumers.

The desire of the in-the-making neoliberal consumers is further aroused by the real estate consumers. Having the same goal of promoting the establishment of a housing market as the government, developers also make efforts to attract more home buyers. They are trying hard to convince the middle class potential home buyers that they are not just selling living space, but

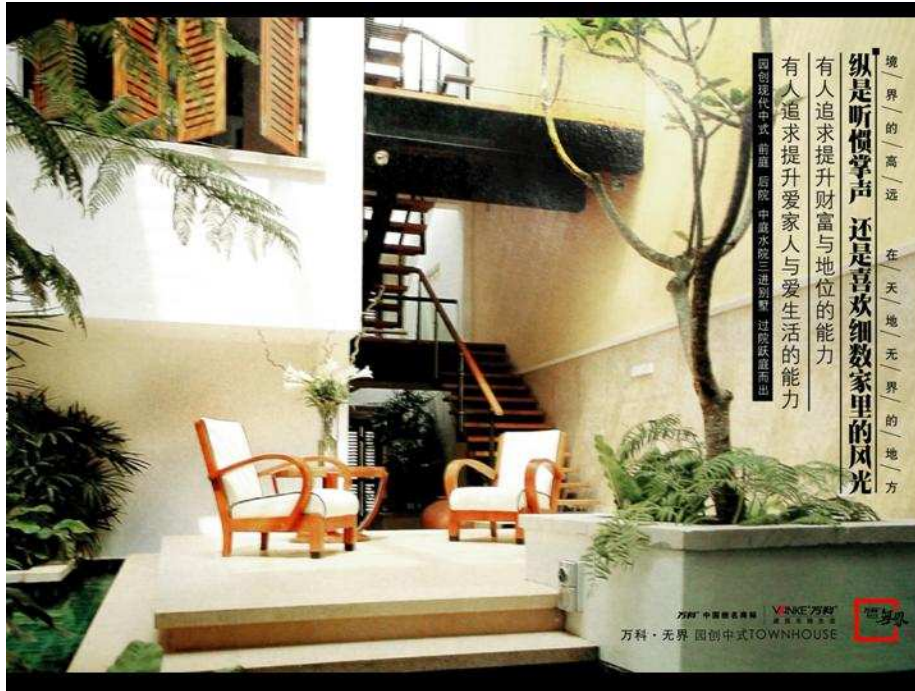
⁶⁰ Frugality is Our Hereditary Treasure (qingjian shi zanmen de chuanjiabao), Obtained through <http://baike.baidu.com/view/2797613.htm>

⁶¹ For example: Influenced by the “Old American Lady”, the Attitude of Chinese Home Buyers Changed a Lot (Shou meiguo laotaitai yingxiang, zhongguo ren maifang guannian zhuanbian de zhenda), obtained through: <http://0537.fccs.com/news/201308/3970318.shtml>

homes to enjoy with family (figure 4.1). No matter whether they are traditional Chinese style or western styles, developers try to convince the potential home buyers that buying a home means buying a lifestyle. Just as Zhang (2008) argues, being a homeowner in different type of neighborhoods not only express different social status through living different lifestyles, but forms class-specific subjects. It is a place one can withdraw from the city life of never-ending pursuit of quick success to enjoy one's simple family life. In many cases, real estate developers use a western lifestyle as a selling point to attract potential home buyers (first image). Buying a home promises them a respectable Western lifestyle in gated communities, which cannot be obtained in those dull *danwei* housing. Especially, advertisements like the second image showing the traditional courtyard house: this reminds those middle class a romanticized past when citizens lived in privately owned courtyard houses before the Communist revolution and arouses the nostalgia and yearn for privately owned homes. It totally neglects the half century practice of allocating public rental housing to urban residents before the housing reform in 1998.



(Xincheng Beauty Garden community, respectable life style: it is on the market. It will create the new experience of a respectable lifestyle. Modern buildings are blooming like flowers and integrated into the city, just like pearls decorating the city. Your respectable life starts now)



(Even if you are used to receiving applause, you may still enjoy the travails at home. Some people like to increase their ability to pursue wealth and higher positions; some people like to increase their ability to appreciate family and life)

Figure 4.1 Online advertisements of commodity housing in a newly developed community

4.2 Why owning a home

As discussed in the previous section, to be homeowners becomes a hegemony which is not only recommended by the government as a modern idea fitting better with the new era of open and reform, but also promoted by the developers as a one-shot move to enjoy the same lifestyle as in the Western countries. It is true that the government and the developers certainly play an important role in creating the Chinese consumers. However, it would be simplistic say that residents purchased their homes because the government and developers told them to do so. The first reason, for people who migrated to a city to work, becoming homeowners meant settling down in the host city physically and, more importantly, emotionally. Just as Sanders (1984) claims, “the desire for home ownership is primarily an expression of this need for ontological security” (p. 223). In other words, if they do not buy a home, they feel that they are still guests in the host city.

Miss Wu was a software engineer in her late 20s who went to a university in Beijing after she graduated from high school in her hometown in Jiangsu province. She successfully found a job in Beijing after graduation and moved her *hukou* to Beijing. When I asked her why she decided to purchase a condominium since she was young and a single, she said that “you have to buy a condominium if you want to stay in Beijing”. For Miss Wu, even having a local Beijing *hukou* offered by her work did not necessarily mean that she had settled in Beijing. Only by purchasing a condominium could she feel that she had roots in Beijing. Ms. Shen, a teacher of a public high school in Beijing, had the same reason to buy a condominium. Her husband and she purchased their home in Tongzhou district, a suburban district east of Beijing, because they could not afford one in the more convenient inner city, but still wanted to ‘settle’ (*luo hu*) in the city after obtaining their degrees in Beijing. For them, the sense of belonging to the host city could not be gained through day-to-day living: they needed to own the ‘roof’ over their heads.

For young home buyers, another common reason to purchase a home is because of marriage. A piece of news in the New York Times in 2011 vividly describes the dilemma facing young men without enough income to afford condominiums in China nowadays⁶². If they are not homeowners, they will be losers in the marriage market. It is no exaggeration. A real estate developer also told me half sportively that they were counting on young ladies to sell more condominiums because young ladies put pressure on men to purchase condominiums (interview, 2008). Not being able to count on their *danwei* to allocate an apartment when getting married, young men nowadays have to be self-reliant for providing a home for their brides. A young informant borrowed a lot from the bank to buy a condominium in 2007, almost at the highest point of housing prices, because he had to get married that year. For him, renting an apartment from *danwei* as his parents’ generation did was simply not an option, even though it was a big financial burden for him. Mr. Chen, an employee working for a private company, did the same thing. He was relatively lucky because he bought his home in Tiantongyuan, one of the biggest Economical and Comfortable housing neighborhood several years ago when the cheap economical and comfortable housing was easy to access. The cost for Mr. Chen came later when his son needed to go to kindergarten. Because the newly developed suburban neighborhood was not close to any good schools, Mr. Chen’s family had to move to live with in-laws in order to be

62 For Many Chinese Men, No Deed Means No Dates, New York Times, 2011, obtained through: http://www.nytimes.com/2011/04/15/world/asia/15bachelors.html?_r=2&hp

close to a good kindergarten. Even though purchasing homes did not turn out to be good investments or ensure a western lifestyle in the suburb, it is apparent that being homeowners has been a powerful ideology rooting in the hearts of this young generation of urbanites.

In fact, the idea of purchasing an apartment to get married is more persuasive to parents with children who are at marriage ages. But the work of the neoliberal idea is rather indirect on the older generation which has been living in public rental housing for most of their lives. When this idea is welded to the traditional Chinese culture, it becomes very powerful in transforming the rather stubborn socialist subjects who have been immersed in the socialist ideology for most of their lives. Traditionally, old parents keep close family ties with children and try their best to help their adult children, from taking care of grandchildren to giving money when needed. Because of the Chinese tradition, the older generation is also willing to deplete their lifelong savings to buy their children homes to get married.

Aunt Shi is a retired worker from a state owned factory and continued to work as a contract surveyor after her early retirement⁶³. She and her husband lived in a public rental house of 24 square meters (about 240 square feet) in a dilapidated inner city neighborhood. She planned to continue living in the rental house because she could not afford to buy a condominium. However, when talking about her son, she said that she helped him to purchase a condominium to get married:

“My son was married in 2006. The bride’s parents and we paid the 200,000 *yuan* down payment to buy them a condominium in Shijingshan district. The monthly payment is 3000 *yuan*. But my son is just a contract worker. How can he afford it on his own? And, we three families are paying for the down payment together now... My son and daughter in-law had to have a condominium to get married. How could we stand by without helping them? My social welfare is way too low. That’s why I’m working as a contact surveyor to earn some extra money.”

Even though Aunt Shi rented her house from the municipal housing bureau, she fully embraced the idea that her family should assume the responsibility to provide housing for her son’s family. Ms. Shi is definitely not alone. Of the parents with unmarried adult children I interviewed, most of them expressed the intention of helping their children obtain condominiums

⁶³ In China, the official retirement age for women is 55 and 60 for men. During the enterprise reform in late 1990s, a lot of workers were paid lump sum money and required to have an early requirement. In that case, their retirement ages are much younger than the official retirement ages. During that period, a lot of workers in their 40s whose education was interrupted by the turmoil of culture revolution from late 1960s to the late 1970s were required to have early retirement.

before they got married or had already done so. In order to earn enough money to pay his son's condominium when he planned to get married, Mr. Ye went to Beijing to work for a private urban planning consulting firm after he retired as an architect in his hometown in Jiangsu province. His son was working for a public institution and living in a rental apartment from his *danwei*. For Mr. Ye, it was necessary that his son should own a condominium when he got married. Therefore, he had to work hard to earn more money for the dream of his son becoming a homeowner since his son's salary was too low.

However, not all parents have the ability to help their children buy condominiums on the market. Those parents thought about other ways to help their children to have condominiums for marriage. For example Mr. Zhang, a retired staff member of a university in Beijing, planned to move to live with his parents and gave his condominium purchased from his *danwei* to his son when he finished his military service and got married. Aunt Kang's family luckily bought a piece of rural residential land through relatives in Yanqing district and decided to build their own house there. They planned to move to the countryside and let their daughter live in their current condominium purchased through her *danwei* in Xuanwu district, a central district of Beijing, to get married. Regardless of their own experience of obtaining allocated rental housing from the government, these neoliberal parents re-adapted themselves in the new era with neoliberal mentality. For them, their old experience is outdated and they should be the straw that their children can hold on to so that their children can be normal citizens in the city.

Of course, the neoliberal mentality of being self-responsible for purchasing homes at the market is not without material reasoning. Investing in real estate has long been considered as a good way to counteract inflation and have financial gains in the long run. The savings of Chinese residents have been rising quickly. The savings of residents reached 22 trillion *yuan* at the end of 2008 and it hit 30 trillion *yuan* in 2010 (NBS, 2011). After the reform of bank system, commercial banks have to be responsible for their gains and losses to some extent and thus they have great incentive to find profitable places to put their funds. Therefore, it is not hard to understand why banks usually provide preferential policies for urban residents to invest in housing, a highly profitable industry in China (Fang, 2006). At the same time, there are strict constraints to enter many high-return sectors for investors. Unlike in a free market economy where capital can move freely into most sectors, China has not opened all industries to private

investors. SOEs remain their controlling role in many high-return industries. According to Huang (2006), private firms are excluded from many industries. For example, investors were excluded from investing in eight out of eleven machinery products. At the end of 2006, the State Council issued a policy document, explicitly emphasizing the national control in seven industries, all of which are capital intensive high-return ones⁶⁴. Without enough investment options, a huge amount of money is channelled into the housing market which seems to be the only profitable sector open to private investors. The medias have reported widely the disreputable speculative home buyers group from Wenzhou who invested a large amount of capital into the housing market and drove up the housing prices in many cities⁶⁵. These real estate speculators usually purchase a large number of condominium units and resell at a much higher price after a period of speculation. For the wage earners, they normally do not have that high financial capacity to purchase condominiums in large quantities. But with the help of the bank, it is quite common for middle to high income wage earners to invest a large share of their income into the booming housing market in the hope of gaining high rewards in the future.

Ms. Huang and her husband migrated to Beijing from their hometown in Northeastern China due to the depressed economy there in 2005 after graduating from college. She worked as a contract nurse in a hospital, while her husband worked as a medical appliance salesman. Although they were not able to obtain local Beijing *hukou*, their income was equivalent to middle class in Beijing. They bought a studio in Changping district because she thought if they did not used the money to pay the mortgage, they would spend it elsewhere randomly. For Ms. Huang, purchasing a real estate property was a good way to save money. It is true that for those who do have extra money, buying a condominium has been not only a good way to save money but a great investment opportunity to have economic gains. Mr. Jiang, a young professional cosmetician, bought a 90 square meters condominium in Tongzhou district in 2003 for 3000 *yuan* per square meter and then rented it out. As a local resident of Beijing, Mr. Jiang expressed that he had never experienced any pressure on housing. He was living in his father's condominium which was a compensation for the demolishing of his previous *danwei* allocated

⁶⁴ These seven industries include military, electric power, petroleum and petrochemistry, telecommunication, coal, civil aviation and shipping. Xinhua News Agency. Obtained through: http://news.xinhuanet.com/fortune/2006-12/19/content_5504591.htm

⁶⁵ For example, 'The army of Wenzhou speculative homebuyers fought from South to North (Wenzhou Chaofang Dajun Nanzheng Beizhan)', Obtained through <http://finance.sina.com.cn/nz/wzchaofang/>

apartment. Also working for a governmental agency, his mother was also allocated a big apartment by her *danwei*, which was also demolished due to redevelopment and then got two units of condominiums as compensation. In addition to the investment in the condominium in Tongzhou district, he bought two other condominiums in a secondary city in Shandong province with the help of his mother. It turned out that Mr. Jiang's investment was quite successful. The condominium he bought in Tongzhou district almost tripled in 5 years and the other condominiums in Shandong also increased in value quite a lot. Mr. Zhao, a professor in a university in Beijing who 'jumped into the sea' in the late 1990s to start his own business on construction material, had similar successful experience in investing in housing. In addition to buying the apartment his university allocated to him, he purchased three other condominiums, one in a business center of Haidian district to serve as his office for his business, one in Tongzhou district where his son could go to school, and one in Changping district. The condominium he bought in Changping district for 390,000 *yuan* in 2001 was a pure investment because he expected a great appreciation by the time the Olympic Games was held in Beijing in 2008.

“Since the Olympic Games had been decided to be held in Beijing in 2001, I told my friend that the price of the condominium I bought would increase to at least 600,000. In fact, it was worth more than a million last year. Although the price went down a bit this year after the Olympic Games, it's still worth more than 700,000.”

For Mr. Jiang and Mr. Zhao, investment in real estate property not only realized the dream of being homeowners, but guaranteed a profitable return.

In addition to economic gains, some home buyers also tried to take advantage of other resources in Beijing. As mentioned in the previous chapter, Beijing is very attractive to people all over China because it not only has better educational resources since schools in Beijing are more likely to recruit better teachers, but has lower admission score requirements for colleges than that of most of other Chinese cities if one has local Beijing *hukou* (Wang and Chan, 2005). Mr. Ma, a business owner in his 40s from Inner Mongolia, bought several condominiums in Beijing because his three children went to Beijing for better schools and he also had business in Beijing. While he still maintained his company in Inner Mongolia, his family of five moved to live in Beijing so that his children could go to school in Beijing. For Mr. Ma, putting money in real estate property was certainly a good investment not only because it ensures that his children

could enjoy the educational resources in Beijing; it also guaranteed that he left valuable property to his children in the future.

Mr. Zhou, a construction project manager, considered good educational resources for his child even earlier. Being single, he had already bought a condominium within the second ring road in Dongcheng district in the hope that his child could go to school there in the future. While others needed to take some risk for the investment, Mr. Zhou's gain was more secure because his sister was working for a state owned real estate development company which developed the commodity housing neighborhood where the condominium he bought was located. According to Mr. Zhou, that unit was initially reserved for a government official. He was lucky because the government official did not want it after all due to a small problem with that unit. Through his sister's connection, Mr. Zhou bought the unit for 7,000 *yuan* per square meter, the same price agreed for the sale to that official, which was a big discount of the market price of over 10,000 then. And the market price was over 20,000 *yuan* per square meters in 2008 when the housing prices went down somewhat after the Olympic Games. Mr. Zhou was very happy about his investment:

“Do you know what kind of location my condominium is in? The China National Offshore Oil Corporation and some other big state owned enterprises are located there. The Military General Hospital of Beijing is located there. There are also good schools in that area. How can others compete with my resources?When I have a Beijing local *hukou*, my child can go to school there. I don't have a local Beijing *hukou* yet. A lot of people are not able to obtain one. But, I'm working on it and I think I'll have one soon.”

With the rising housing market, putting money into purchasing homes has proved to be a good deal for many Chinese urban residents who can afford, not only because appreciate quickly, but also because it can possibly ensure access to good education if the condominiums are located in good school districts. If the purchase can be made at a discount based on some sort of connections, the investment will guarantee even higher return. Like the example of Mr. Zhou, through the right *guanxi* (connection), he was able to purchase a home in good location at about half of the market price and enjoyed three-fold increase in value in less than five years. In fact, with the help of his sister, he also purchased another condominium in a relocation neighborhood which was not open to the public in Chaoyang district near a subway transit for 5000 *yuan* per square meter in 2006, 3000 *yuan* lower than the market price of the surrounding areas then.

As Nonini (2008) argues, *guanxi* can blur the distinction of “what is state and public, and what is market and private”, and privileged those who can connect “those in the sphere of state and those in the sphere of market”. Unlike Mr. Zhou who had a stable and reliable connections, Mr. Yao, an ordinary employee in a state owned enterprise, had a windfall in purchasing a home unexpectedly. When he planned to buy a home to get married at the end of 2006, he asked almost all his friends whether they had any information of commodity housing for sell at a good price because he was ‘desperate’ to know: the average housing price was almost beyond his ability to afford. Luckily, one of his friends happened to know a developer who was developing a residential neighborhood. According to his friend, this neighborhood was constructed for government officials of Fengtai district and was not open to the public. Through his friend’s friend, Mr. Yao was able to buy a condominium in that neighborhood below the market prices of the surrounding areas:

“My friend told me that the sale of housing units in that neighborhood was not open to the outsiders. And the choice of the facing directions and floor levels was totally based on connections. Whose connection is ‘stronger/ (*ying*)’, who chooses first. When I went to buy mine, there were only three units left in the whole neighborhood of hundreds of new apartment units. There weren’t many choices for me. But my thought was that ‘it’s not easy to be able to find an affordable condominium already. How can I be picky?’”

The price Mr. Yao paid for this condominium was 5000 *yuan* per square meter while the market price for housing in that area was more than 8000 *yuan* per square meter. For his 84 square meters home, Mr. Yao easily saved more than 250,000 *yuan*, not to mention the appreciation later when the housing prices skyrocketed. Mr. Yao’s story is rather unusual and does not happen very often. In fact, having the right position almost means the right connections. Although I was not able to interview any government officials who purchased homes in Mr. Yao’s neighborhood, Mr. Luo’s experience somewhat proved this point. Mr. Luo was a provincial government official and was transferred to a national ministry after he got his Ph.D. three years ago. He did a wide search for suitable housing and found the neighborhood which was right by the Third Ring road. He purchased a condominium in that neighborhood at a discounted price because he “knew” the developer. Although Mr. Luo did not give too much detail about how he happened to know the developer who happened to develop the neighborhood he was interested in, it is reasonable to speculate that working as a national level government official helped him to get a good deal in purchasing his home.

In contrast, for ordinary home buyers without any connection, investing all their savings into the real estate might not guarantee of economic gains as public discourse suggests. That was the case for the previous owner, Sister Su, of the condominium that Mr. Zhao purchased in Tiantongyuan mentioned earlier in this section. Sister Su got her fortune through developing an oil field in the middle 1990s and then invested in four big condominiums in Changping district in 1996. Three years later, the municipal government developed an eight-square-kilometers Economical and Comfortable housing neighborhood, Tiantongyuan, one of the earliest and largest economical housing neighborhood not far from where she purchased her condominiums. The Economic and Comfortable housing had governmentally set low price while lacking regulations on sizes of units for developers and qualifications for home buyers to purchase. As a result, the newly developed neighborhood with thousands of cheap and spacious condominiums significantly depressed the housing prices in surrounding areas. What made things worse was that Sister Su's oil field was expropriated by the government and she decided to sue the government. The prolonged lawsuit siphoned most of her savings and thus she had to cash the condominiums she invested in in order to let the lawsuit proceeded. The 170-square-meters condominium was sold to Mr. Zhao in 2001 for only 390,000 *yuan*, 210,000 *yuan* lower than the price she bought in 1996.

For Sister Su, the road to become an entrepreneurial neoliberal citizen was certainly not easy because she had to follow all the market rules while the government did not. In addition, ordinary home investors also have to bear the loss due to the rapid fluctuations of housing prices caused by the constant involvement of the government trying to balance between promoting the housing market and increasing the affordability and thus stabilizing the society as discussed in the previous chapter. Mr. Peng, a manager in a real estate company with high salary, had invested in three condominiums and one house (*bieshu*) since 2002. As a home investor, what impacted him greatly was a policy document issued the People's Bank of China in September 2009. According to this policy document, the percentage of down payment for the first homes was increased to 20 percent and that for the second home to 30 percent. In addition, the percentage of money real estate developers could borrow over the total value of the land under

development was constrained to less than 70 percent⁶⁶. This harsh policy significantly dampened the inflated housing market. As a result, Mr. Peng experienced a big economic loss in his investment due to the depreciation of his property:

“I had a big loss last year, especially for the house I bought, because the price I paid was almost at the peak. It’s mainly due to the governmental regulation and control, the stock market was also dampened by the government.... Once the Chinese ordinary citizens (*lao bai xing*) invest, they are doomed. If you are the super rich, you’ll not be influenced because you can wait till the market is better. But for middle class people like me, when the market goes bad, all my hard-earned money is gone.”

It is normal for investors to bear the loss for their bad investments in market. However, when the market is subject to continuous regulations, it is very hard for investors to make wise investment decisions. For those ordinary investors like Sister Su and Mr. Peng, the devaluation of their property was related with government regulatory policies. In contrast, for those who have the connections to access housing at low prices, the drop of housing prices might only mean less economic gain. While the outcomes of those investors are quite different, one thing is sure: the government has successfully implanted the idea of investing homes and becoming homeowners into the hearts of many urbanites in the reform era.

4.3 Paying for the homes

For most ordinary households, homes are the biggest purchase of their life. In the western countries, it is very common to take mortgage to pay for a home. How do Chinese urban residents pay for this big purchase? Have they fully accepted the idea of “using tomorrow’s money to pay for today’s spending”? For younger home buyers, they are better equipped with the market mentality and are willing to use more market means to finance their home. As mentioned previously in this chapter, the Chinese government has made a great effort to prepare the neoliberal consumers through open, easy credit for them to purchase their homes. Similar to their Western counterparts, for most of the young people who purchased commodity housing, a bank loan is the most importance source of funds. For those with high salary, like Miss Wu, the young software engineer mentioned earlier, the 2000 *yuan* monthly payment which consists of about one-quarter of her monthly salary was not a burden at all. For others, if they can have some help from their *danwei*, the burden will also be significantly minimized. Mr. Wu, who worked for a

⁶⁶ “The People’s Bank of China and The China Banking Regulatory Commission’s Notice on Strengthen Commodity Housing Credit Regulation (No. 359, 2007)”, Obtained through: http://www.law-lib.com/law/law_view.asp?id=217460.

state owned enterprise as a middle-level leader in his *danwei* told me that his salary was reasonable and the housing provision fund provided by his *danwei* was also quite high and covered most of his monthly payment. Mr. Shi, a young employee from a state institute, had similar experience. Since both his wife and he work for state *danwei*, their housing provision fund can cover their monthly payment. In addition, their *danwei* even reimbursed them for the property management fee and heating expenses which, according to Mr. Shi, was very common for state *danwei*. In contrast, the monthly payment is a burden for residents with moderate income. For example, Mr. Zhong, a factory worker, felt that the over 1000 *yuan* monthly payment for his small one-bedroom apartment was quite a burden since his wife had no formal job and he also needed to pay a sponsor fee for his daughter to go to kindergarten.

No matter how homeowners feel about the burden of the monthly payment, it is quite interesting that they choose a payment package that resulted in about 2000 *yuan* per month. What differed most among them was how soon they eventually paid back their loans. Ms. Chen was a doctor and her husband was working for a large state-owned enterprise. They took a 20-year-pay bank loan for their 168-square-meter home in Dongcheng District bought for 7000 *yuan* per square meter in 2005. In fact, they paid back their loan in only 2 years. Many of the homeowners who chose to pay back their loan earlier indicated that they did not like the feeling of owing somebody money, as being in debt was not a Chinese tradition. In fact, the benefits were more than that. It also has economic benefit for those who can afford it. Aunt Li's husband was a successful entrepreneur and they bought their home in 2002 when "the majority of people dared not to take bank loan to buy housing". In reality, they paid the mortgage back in only two years. In a market with very limited investment opportunities for ordinary investors, paying back the home loan is one of the best ways to invest their money and potentially generate a great deal of housing wealth when the prices go up. For Aunt Li's family, their luck was more than that. After they paid back their bank loan, the government released a new policy requiring home buyers to pay transaction fee of certain percentage of the housing price. In addition, the government also increased the interest rate. By paying back their loan earlier, Aunt Li's family fortunately avoided all the extra cost that later policies engendered.

However, merely being able to pay the monthly payment cannot guarantee that one successfully becomes a homeowner. What finally determines whether or not one can become a

homeowner is whether he/she can pay the lump sum down payment. For a condominium between 500,000 to 1,000,000 *yuan* which is quite common in Beijing, the down payment of 20% will be 100,000 to 200,000 *yuan*. According to Statistics Bureau of Beijing, the per capita average annual income of Beijing residents was only 10,349 *yuan* in 2000 and the median annual income was 21,888 *yuan* in 2008 (NBS, 2002, 2009). Coming up with such a large sum of money is a big burden for many households, especially young couples who have not been working for long and middle-aged and old ones who were paid poorly during the socialist period. If one wants to buy a preowned condominium or try to borrow less from the bank to pay less interest, the needs to pay an even larger down payment. Therefore, whether or not a household can come up with enough down payment is vital. According to my interviewees the most common way for young couples is to borrow from relatives, especially parents. Mr. Gao had a bitter experience trying to collect enough down payment. Right after getting married while he was still a graduate student, Mr. Gao decided to buy a condominium. Since his wife just found a job as a high school teacher, they had almost no savings then. Mr. Gao's in-law gave them some money to buy their home. However, it was not enough. Then, they turned to a relative of his wife in Beijing to lend them more money. After a prolonged house hunting, they finally found a pre-owned 70 square meter condominium near his wife's school for about 7000 *yuan* per square meter in 2004. When they asked the relative to borrow money, she felt that it was worth buying only if the price could be 30,000 *yuan* cheaper. However, even though it was not a big discount, Mr. Gao was not able to persuade the previous owner to agree on it and eventually missed this condominium since the relative was not willing to lend him the money for the 'bad' purchase. One year later, a good friend of Mr. Gao came back from abroad and agreed to lend him 100,000 *yuan* to buy a home and he finally bought a 40-some-square-meter condominium for a rather higher price since the housing prices went up quite a bit over the year. Mr. Gao had felt very bad for missing the previous deal ever since. Mr. Gao also felt big pressure because he had not yet paid back his friend while his friend took a bank loan himself to buy his home. Whenever the government increased the interest rate, he "felt a sword thrust into my heart".

Ms. Xiao had similar pressure due to getting big loans from her relatives. Ms. Xiao and her husband bought a rather big condominium of 147 square meters in 2005. In China, parents and relatives are usually very supportive and do not ask for interest for borrowing. Since the interest rate was too high then, Ms. Xiao decided to borrow from parents and relatives to pay back most

of her mortgage as down payment. Even though they paid back the entire mortgage in 2008, they did not feel relieved because of the big debt they owed to their relatives. Paying the down payment through borrowing from relatives, especially parents, is very common. It drains most parents' life-long savings. For young adults who want to become homeowners, they are less likely to 'wait, depend and ask' from the government, or the *danwei* they are working for, since it is a backwards mentality and it might turn out to be fruitless. Facing the skyrocketing housing prices, the "wait, depend and ask" mentality has naturally shifted to the parents who would almost never turn down the requests. Miss Wu, the young software engineer mentioned earlier, was like most other home owners who only paid the 20% down payment and her parents generously paid it for her.

"I really admire those who can make a down payment by themselves. But I think that most people have their parents to pay for their down payment. My parents paid all my down payment of 200,000 *yuan*. I want to pay it back in the future because it's their life-long saving."

Abandoning the mentality that the government should provide help for housing, many neoliberal home buyers take the help from parents. As Mr. Chang, a teacher of a college stated:

"Nowadays, the down payment is easily up to 200,000 to 300,000 *yuan*. I've only worked for one year. My girlfriend has worked for two years. We don't have that much money to make the down payment. When we get married, my parents should certainly pay some and my girlfriend's parents should also pay some."

If the parents cannot make the down payment, being a homeowner can only become a distant dream for many young adults. Miss Hu, a young clerk working in a state owned enterprise, was not lucky as most others of her cohort to be the only child at home so that the parents can full-heartedly support them for their housing needs.

"Judging by my financial situation, I don't have such extravagant hopes of owning a condominium. When I graduated from college, the housing prices were at the peak. I also had an elder brother who got married not long ago and my parents paid for his down payment."

Since her parents had already given all their savings to her brother, she had no choice, but to remain as a renter. However, except for saying that housing agency cheated her when she rented her previous apartment, she felt that there was nothing to complain about based on her situation. For Miss Hu, if she could not depend on her parents, the only person she could rely on is herself.

For middle age or old residents who want to purchase commodity housing on the market, they need to find other ways to finance their homes because it is less likely for them depend on their parents, either because their parents' had too little saving due to the long period of low wages in socialist period, or their parents had already passed away. Mr. Wu was quite lucky because he had a windfall in the stock market and then used it to pay the down payment of his second home in 2007, which was much larger than the privatized *danwei* apartment he bought in 2001. The good stock market in 2007 did realize some homeowners' dreams like Mr. Wu. But it was not a dependable way that home buyers could count on. In fact, there was a significant downturn in stock market in 2008 which caused big losses for a lot of ordinary investors. Most middle-age homeowners I interviewed were successful businessmen or employees of monopolized enterprises like Mr. Ma's and Ms. Wu's family mentioned earlier.

Ever since the 1990s, the urban core of Chinese big cities has experienced unprecedented redevelopment (Hsing, 2008). For old local Beijing residents who are very likely to be involuntary movers, the most common way to become homeowners is to use the relocation compensation to purchase a apartment on the market. There are two main factors causing the massive spatial restructuring of inner cities. The first is the SOE reform to move those money-losing enterprises from the urban core, location of many heavy industries during the socialist period, to the urban fringe in order to sell the high-value land in central location to generate fund for those money-losing enterprises (Feng, 2008). Together with the move of factories, a lot of employees who used to live inside the *danwei* compounds also moved to the suburbs. The second factor was the urban redevelopment projects mushroomed all over Chinese cities (Hsing, 2008). Through hollowing industry out and demolishing old neighborhoods in the center of the cities, a large number of households needed to find new homes. The relocation compensation helped those evicted to purchase new homes.

According to a policy issued in 2000 by the municipal government of Beijing, residents of redevelopment areas should be relocated with increased living space⁶⁷. However, relocation back to the original location is quite rare since the premier location is far more expensive than the suburban areas. Due to the fact that the central location is very expensive after redevelopment,

⁶⁷ "Implementation methods on speeding up redeveloping dangerous and dilapidated housing in Beijing (trial) (No. 19, 2000)", obtained through <http://www.law110.com/law/32/beijing/202128.htm>

there is strong incentive for developers not to provide relocation accommodation at the original location. As a compromise between the government and the developer to redevelop the dilapidated inner city, governments usually tacitly agree that the developers relocate the original residents to suburban neighborhoods as long as the developers can make them move. For some of the relocated households, the relocation apartments in the suburb provide the initial money for them to upgrade their home later. Ms. Chu was working for a property management company earlier and her husband worked for a private company. Her family owned a housing unit in a one-story building in the current CBD in Chaoyang district. That area was under redevelopment in 1996 and they were relocated to a neighborhood near the southern Third Ring road, which was very far away from the place she worked then in Haidian district, northeast of Beijing. In 2001, they finally decided to sell their relocation housing for a relatively good price and then purchased their current condominium with the money they got from the sale of the previous condominium. While Ms. Chu suffered through long-distant commuting for several years and had to rent an apartment while the condominium they purchased was under construction, she was lucky to sell the old condominium to purchase another condominium with a better location.

In 2001, the State council issued another policy document to provide two compensation choices for residents subjected by redevelopment: 1) monetary compensation or 2) property right exchange elsewhere. According to this policy document, residents seem to have more than one choices for their compensation. However, relocating back to the original premier location is simply removed as an option. Even being relocated to remote suburban areas is less welcome by developers. In practice, monetary compensation is increasingly becoming the primary way, which is claimed to provide relocated households with more freedom to choose where to live instead of passively accepting the relocation neighborhoods⁶⁸.

Usually, residents living in redeveloped areas are poor and very unlikely to purchase homes from the market. However, the redevelopment projects forced those residents to become home buyers in the housing market. Mr. Liu was a taxi driver in his 40s. He started to be a taxi driver after he was laid off from his *danwei*. Luckily, Mr. Liu was allocated two rooms in a one-story building from his *danwei* before he was laid off and his wife was allocated one room from her

⁶⁸ “Seven benefits of the new policy of monetary compensation”, retrived from: <http://news.lfang.com/09/1119/0/20110042451.html>

danwei nearby. Since both housing units were located in city center, they finally negotiated for 1.2 million compensation overall when that area was under redevelopment in 2005. With the rather large amount of compensation, Mr. Liu purchased a condominium in a suburban district for 7000 *yuan* per square meter:

“You think a taxi driver can afford a condominium in Beijing? Don’t be silly! People like me cannot earn 5000 *yuan* per month. With 5000 per month, even if you don’t eat and drink, you still cannot afford a condominium.... The drop in housing prices has nothing to do with ordinary people (*lao baixing*). If it’s 50,000 per square meter, I cannot afford it. If it’s 2,000 less per square meter, I still cannot afford.”

The price Mr. Liu mentioned was the inner district of Beijing, where he used to live. Even with a handsome compensation, moving back to his old home location is beyond Mr. Liu’s reach, not to mention based on his salary. With the relocation compensation, Mr. Liu was in a slightly better position in the housing market than a lot of sole wage-earners. The new policy certainly pushed those evicted households further into market with generous promise of ‘freedom’. However, the very freedom is more a deprivation of their former right to move back to their premier home location than a granted privilege; it is more a shrewd trick to generate more business for the developers and more tax for the government, than more choices for the evictees to choose.

Due to their experience with allocated housing in central location during the socialist period, old residents often feel resentful at being forced to enter the market where they can only afford housing in the suburbs. Similar to Mr. Liu, Aunt Wang’s family was also subject to relocation. Aunt Wang was a local Beijing resident who retired from a textile factory several years ago. Her family lived in her in-laws’ apartment which was allocated by the housing bureau in Xuanwu district, an inner district of Beijing. Because she changed work from one *danwei* to another, she was not in the housing queue of the *danwei* she left, and had not been in the queue of the *danwei* she changed to long enough to receive compensation. The apartment allocated from her husband’s *danwei* was only a little more than 10 square meters, which was too small to house the whole family. In 2006, the neighborhood they lived in in Xuanwu district was under redevelopment. Aunt Wang was told that her only choice was to take the compensation money and leave. The initial compensation offered was 300,000 for their apartment. Aunt Wang’s family did not accept the initial compensation since they could not afford a condominium at the market without more money. Just like Granny Li in the TV show *Snail home*, Aunt Wang’s

family had a prolonged negotiation with the developers. Finally they accepted compensation of 600,000 *yuan*. This was enough to buy a pre-owned privatized *danwei* apartment in Fengtai district, an outer district in the south of Beijing. Quite contrary to what the compensation policy claimed to grant, for Aunt Wang's family, it was merely a struggle with the government and the developer, which they were doomed to lose since they had insufficient time and resources:

“If I refused to accept the compensation and negotiated for one more year, the developer might have offered slightly more. But housing prices are rising quickly; I might still not be able to afford anything with a little more money We are underclass of the society. We don't have the time and capacity to fight.”

In fact, both Mr. Liu and Aunt Wang were lucky since they eventually purchased condominiums with the relocation compensation, although not in central locations. Not all residents could successfully become homeowners with the relocation compensation. Granny Zhang, a retired public kindergarten teacher, had experienced two relocations in her life. Her first apartment allocated by her *danwei* was located in Chongwen district within the Second Ring Road south of the Forbidden City. In 1956, that area was occupied by another *danwei* and all teachers were relocated another apartment building further south of the city center while still within the second ring road. The second apartment was in fact only one room of 16 square meters. Granny Zhang's family of four lived there till 2000 when that building was demolished by the municipal government to widen the road. This time, Granny Zhang's family did not have the choice of relocating to another apartment. Instead, they got 210,000 *yuan* as relocation compensation. Granny Zhang searched in the market and sadly found that the smallest apartment she could find was 40 square meters and with a price of over 6,000 *yuan* per square meters, the total price would be far beyond the compensation she got -- not to mention the cost for interior decoration and more furniture. Eventually, Granny Zhang gave up the idea of buying another apartment and moved to live with her son. Instead of having more choice in the market to choose where to live, Granny Zhang had no choice but to depend on her son. The first relocation during the socialist period provided Granny Zhang with an accommodation of her own. However, when her family was pushed into the market with limited money during the reform era, what they had was not free choices, but deprivation of any choice at all. In fact, Granny Zhang's experience is not alone: a lot of residents were allocated tiny apartments by their *danwei* during the socialist period. When there was redevelopment, as the compensation was based on the square meters of residents' previous apartments, the total compensation usually was not high even the previous

apartments were located in central locations. This is another reason for the increasing “nail households (dingzi hu)” who refused to take the compensation and move. For those “nail households”, if they agree to move, it is not merely a loss of their premier location, but it might be a loss of a place to live at all.

4.4 Purchasing Privatized *Danwei* Housing

According to the population census in 2000, most homeowners obtained their homes through purchasing privatized *danwei* housing by 2000. A statistic shows that purchasing privatized *danwei* housing still consisted of the largest share (35.2%) in 2007 nationally (Zheng, 2008). In Beijing, I would expect this percentage of purchasing privatized *danwei* housing to be even higher since the affordability of commodity housing in Beijing is lower than in most other Chinese cities. This is substantiated by my interviews. Strictly speaking, the privatized *danwei* housing only refers to the existing housing stock which was constructed during the socialist period and has already been occupied by residents. As discussed in Chapter Two, many *danwei* also either purchased housing at the market and then sold to their employees at deeply discounted prices or constructed housing units and sold to employees under the name of ‘fund-raising housing (jizi jianfang)’ at the beginning of the housing reform. Since these housing units were directly related with *danwei* and were sold at much lower than market prices of the surrounding areas, I also consider them as part of *danwei* housing. Therefore, both buying the sitting apartments and newly-constructed *danwei* subsidized housing are considered as purchasing privatized *danwei* housing here.

Purchasing the privatized *danwei* housing has been voluntary ever since the beginning. In order to provide enough incentive to carry the policy out, the discounted sales were accompanied with a significant rent increase if residents choose not to purchase. Therefore, the majority of urban residents who have enough means choose to purchase their sitting public housing units. As Granny Zheng, a retired doctor, said “since everybody purchased it and it’s cheap anyway, I purchased my apartment, too”. This mentality is quite common among residents who lived in public housing. After discount, Granny Zheng’s 60-or-so-square-meter apartment only cost her about 10,000 *yuan*, a much lower price than the market price. It is believed that the discounted sale of public housing is compensation to the long contribution with low salary during the socialist period. It is true that privatized public housing provides a cheap route to become

homeowners for those who do not have enough means to purchase on the market. It is also the reason why the housing situations are not as bad as the high prices suggest in terms of housing tenure. Aunt Zhao was a retired worker from a small state owned enterprise. Due to the economic difficulty of her *danwei*, nobody working there was allocated housing from that *danwei*. Luckily, her husband's *danwei*, a small public institution, allocated a 45-square-meter apartment to them in 1986. They had been living in a 9-square-meter single room from the housing bureau for 14 years. They borrowed money to purchase that apartment when her husband's *danwei* started to privatize its housing stock. Even though one of her adult sons still lived with her because he did not have a job, Aunt Zhao felt life was quite secure because they had at least a roof to shelter her family. Without the privatized apartment, her family might need to rent apartment at a much higher rent, with the additional worry of being evicted at any time.

While privatization of previously public housing does guarantee the middle and low income household residence, it also extends housing inequality of the socialist period and brings disproportionate economic gains to those who gained more in the old regime. Employees of governmental institutions or monopoly state enterprises had access to more and better housing resources. In the socialist period, their benefit might be having better living conditions. In the reform period, the housing advantage can be easily transferred into pecuniary benefit in the market. According to the housing reform policies in Beijing, the fixed base privatized price is adjusted by the period of time worked for the *danwei* and positions in their *danwei*. In other words, employees with more seniority and higher position can purchase the privatized public housing more cheaply than others. In addition, what the employees can buy depends on what housing they have already had or what the *danwei* can offer. Different types of *danwei* might have different housing resources available to their employees. Mr. Zhao, an entrepreneur who used to work as a university faculty mentioned earlier, bought a 97-square-meter condominium from the university he worked for about 1000 *yuan* per square meter in 1998. According to Mr. Zhao, the university purchased many condominiums for about 5000 *yuan* per square meter on the market in 1998 and then sold them to its employees. This good deal was possible due to the fact that the university Mr. Zhao worked was funded and directly under the administration of Northern China Electric Corporation, a big monopoly state-owned enterprise which had very good benefits for its employees and affiliated personnel. Working for this university ensured Mr. Zhao good welfare during the socialist period and also provided the big windfall after the

housing reform. After the regulation on selling privatized *danwei* housing was relaxed around 2008, Mr. Zhao decided to sell that condominium which he rented out currently when the price went up to more than 1 million. Since there was no property tax in China and Mr. Zhao's condominium was rented for a good price due to the fact there was no property management and heating fee as a *danwei* affiliated housing, the future economic gain for Mr. Zhao was quite secure.

In contrast to Mr. Zhao, Aunt Kang was a retired worker from a state owned enterprise. Her *danwei* never allocated any housing to her until 1997. When she got married in 1982, her in-laws helped her family to build a single room on the public land outside their two rooms in a bungalow which were replacements for the two private rooms demolished by the government previously. Since it was almost at the urban fringe then, nobody really cared about that small piece of land. In 1997, Aunt Kang's *danwei* constructed new housing for employees. In order to be able to be allocated an apartment, Aunt Kang returned their own room together with her in-laws' two rooms. Finally, she was allocated to a 60-square-meter apartment and bought it one year later. In order to be eligible for the allocation she gave up her in-laws' private housing. In this sense, the apartment Aunt Kang purchased was not so much a discount. Aunt Kang's experience is not unique for employees working for *danwei* with inadequate housing. Aunt Chen also gave up three privately owned rooms of her in-laws' to the housing bureau in order to get an apartment from her *danwei*.

The emerging housing market has generated substantial economic gains for those who have enough to invest and make smart decisions like in other market economies. Those who can ride the two horses well at the same time can enjoy even safer and bigger gains with lower risk than those who bet in the market with its constantly changing government regulations. Ms. Zhang was a middle-level leader of a big government enterprise. Her husband was allocated an apartment by his *danwei* in 1994 and later bought it for 20,000 yuan. As an official in her own *danwei*, Ms. Zhang was also allocated a condominium by her *danwei* even though her husband had already been allocated housing by his *danwei*. Then they decided to sell the apartment obtained from her husband's *danwei*. Being able to access housing from both *danwei*, Ms. Zhang's family was able to benefit from the difference of privatized price and the market price. In fact, Ms. Zhang's story

was not alone. When I interviewed Mr. Chang, a young college teacher, he talked about his parents' experience of having big economic gain through the privatized *danwei* housing:

“Don't think that I'm too young to talk about the privatization of *danwei* housing. Although I never had *danwei* allocated housing, my parents made a fortune through that. My parents' bought their first apartment for only about 20,000 *yuan*. The housing prices increased a lot right after my parents bought it. Then they sold it for 100,000. In the 1990s, it was quite a lot of money. My parents used that money to buy another larger condominium through the *danwei* initiated fund-raising construction for about 2,000 per square meter and then sold it for a much higher price. Both of my parents are civil servants in different *danwei*. They later bought and sold condominiums from one of their *danwei* several times and earned quite a lot of money. Some of my parents' colleagues did it even more than ten times and became millionaires.”

It might not be common for ordinary citizens to have opportunities to “catch the white wolf with empty hands” as Mr. Chang's parents did. For couples who can access housing from *danwei* on both sides, another advantage is locational because they can live and have their *hukou* registered at either location, depending on where they can access either better facilities or better education resources. Grandpa Wang went all the way from his hometown Anhui province to live in Huilongguan, the largest Economical and Comfortable housing neighborhood in Beijing, to take care of his grandson who was in kindergarten then. His son's family currently lived in a 300-square-meter condominium bought through group purchase organized by his daughter's *danwei*, a university in Beijing. At the same time, his son-in-law was allocated another 140-square-meter condominium by his *danwei*, a research institute in Haidian district near Peking University, a top university in China. They decided to move to the condominium in Haidian district when his grandson went to primary school since schools were better in Haidian district. Currently, they enjoy the spacious living space and quiet neighborhood in Huilongguan in the suburban area of Beijing. Having two condominiums at two different locations, Grandpa Wang's family can benefit from the advantages of different locations.

For many other transitional economies which took the ‘shock therapy’, the benefit might be one time when the privatization started. In China, continuous state intervention in the market perpetuated and magnified the inequality of the socialist period. Some young employees who came to the job market late could still enjoy the benefits of the socialist period by working for public agencies. Mr. Yao, an ordinary employee in a state owned enterprise mentioned earlier, was jealous of his friend who graduated at the same time as he and worked for a state ministry after graduation. While he paid a lot of effort to find his affordable condominium, his friend

purchased a condominium near the Diaoyutai State Guesthouse in Xicheng district allocated by the ministry he worked for for 3000 *yuan* per square meter. At that time, the market price was 20,000 *yuan* per square meter in that area. Although most young people are trained as neoliberal market subjects who must be fully responsible for themselves, those who can find jobs in state ministry are favored by fate.

In fact, not everybody was so lucky as to be allocated an apartment during the social period. Due to the lack of investment in housing under the ideology of ‘production first, livelihood second’, the supply of public housing was extremely insufficient. Those who did not have access to public housing from either their *danwei* or the housing bureau were very likely to be workers of small enterprises. For them, not only did they have to be responsible for their own housing during the socialist period when the majority of urbanites had public housing of some sort; they were also deprived the opportunities to purchase the cheap privatized public housing during the reform era. Aunt Zhou and her husband worked for the same factory. Since they lived in her in-law’s apartment after they got married, the factory decided not to allocate any apartment to Aunt Zhou’s family due to the limited housing resources. Therefore, Aunt Zhou was not able to purchase anything from the factory when it started to sell apartments to their occupants after the housing reform. Now, Aunt Zhou, her husband and her daughter’s family of three all lived in her in-law’s apartment. Aunt Zhou’s family did not get any housing benefit from their *danwei* before the reform, and therefor they were continued excluded from any housing benefit from *danwei* because they did not have rental apartments from *danwei* to purchase. The only hope for Aunt Zhou was that her in-law’s apartment would be eventually given her family. Facing the high housing prices, Aunt Zhou lamented that there was no way for her family to afford an apartment in the market with their meager retirement salary:

“We all work our whole lives for the Communist Party. But why can people in government institutions get housing subsidies and other housing benefits, while we ordinary residents cannot? Why do our salaries need to be based on the profit from the market but theirs do not?”

At the same time, Aunt Zhou also agreed that her family was not the worst off since they still had a place to stay. Many of Aunt Zhou’s colleagues had to rent rooms from nearby peasants. Some of her friends even lived in temporary tents for years. Due to the comparison with people in her circles who had even worse housing, Aunt Zhou thought that life was at least stable and

tolerable. Ms. Lin, a full-time mom whose husband was working for a small state owned enterprise, shared a similar feeling with Aunt Zhou. Although her husband and she did not have their own apartment and lived with her in-law, she felt quite satisfied with her current life since she did not need to assume a large debt to buy a condominium on the market like many other young people. For her, “the current life was good because there was no worry for the future” Although feeling slightly unprivileged, though comparing themselves to others whose situation was even worse and had to assume even more responsibilities for their housing, these neoliberal urban residents do not have strong feelings of unfairness. Instead, they assume it is normal for a market economy. As Uncle Dai, a retired factory worker said “Now we have transformed from the planned economy to a market economy. Everybody needs to buy their own housing on the market in a market economy.”

4.5 Who are the renters?

Although the homeownership rates in Chinese cities are much higher than those in most developed countries, there are also a large number of urban residents who cannot successfully become homeowners to benefit from the booming housing market. There are several groups of renters. The first group is the young generation in their 20s and 30s. They who enter the job market after the housing reform. Except for a small number of young people who are lucky enough to work for state agencies as mentioned in the previous section, the majority have to find their own accommodation in the market. In most cases, being a renter is the only solution since they do not have enough means to afford purchasing condominiums in the market. Mr. Zeng, a young professional who had just worked for a year, rented a room in a 2-bedroom, 2-livingroom apartment in Shijingshan district about an hour’s subway ride from his work for 900 *yuan* per month. Not only all the bedrooms, but all the living room as well as the kitchen were rented out. Therefore, instead of sharing the apartment with one other person in the two bedroom apartment, he had to live with four other roommates. In addition, he could not cook at home since the kitchen was also transformed into a bedroom. However, he told me that he had to tolerate it because his monthly salary was only 6,000 *yuan* and he planned to let his wife who was working in their hometown Anhui province to come join him when he had saved enough. Well equipped with all the market logic, Mr. Zeng never thought of getting an apartment from the company he was working for since the norm nowadays was to be responsible for one’s own home. Mr. Chang,

the young college teacher mentioned earlier, had similar idea: “everybody needs to be responsible for their own housing now.” With his limited salary, he could only share an apartment with several others. Slightly better off than Mr. Zeng, Mr. Chang was counting on his parents and in-laws to pay for the down payment when he get married. For Mr. Chang, parents are the only life-saving straw he could clutch at in the market economy.

As a renter, Miss Hu, a young clerk in a state owned enterprise had an even worse experience. Since she worked for a state owned enterprise as a low level employee, her salary was even lower than Mr. Zeng who worked for a private company. However, it seems that the market is never on the side of those who do not have money. Miss Hu found her first rental apartment through an agency and they cheated her since she had no experience in the housing market. She was not able to get her deposit back when the lease was over and she was required to pay various fees which were not in the lease. After a prolonged search, the second apartment Miss Hu found seemed to be rented by its owner. However, after she moved in, she found that the so-called owner was merely a renter who leased the whole apartment and then rented out individual rooms. As had happened to Mr. Zeng’s rental apartment, every possible space was rented out. What was even worse was other people living in the apartment also invited their significant others or relatives visiting Beijing to stay over. At its height, this 3-bedroom apartment housed about ten people. Miss Hu’s stay in this apartment was ended when her belongings were stolen by one of those stay-overs. She finally moved out without her deposit. After several unhappy renting experiences, Miss Hu finally found a two-bedroom apartment online sharing with another single woman. When talking about her experiences of trying to rent an apartment, Miss Hu thought it was too hard to find a nice and affordable rental apartment. But she immediately added that it was only because she did not have enough money:

“I have high requirements for the rental apartment. I want it to have internet, refrigerator and washing machine. I also want it to have a shower in the bathroom. It’s very hard to find a suitable rental apartment.... It’s true if I could pay more than 1,000 *yuan* per month, the apartment would surely equipped with everything I want. But how can I live if I pay 1,000 *yuan* for housing? I only graduated for a little over a year. I should not ask for too much in terms of housing....”

Like Mr. Zeng, Miss Hu fully understood her own economic situation and adjusted her expectation for housing. Both of them assumed it as the market logic what they can get is what

they can pay for and everybody needs to follow the logic. Even though their living environment was not pleasant, for them it was the best they could get and there was nothing to complain about.

For most of these young white collar workers, being in the rental market is temporary. Eventually, many will become homeowners. Mr. Gao delayed his plan to be a homeowner for two years due to the difficulty in collecting enough to make the down payment. He eventually realized his dream of becoming a homeowner by borrowing from relatives and friends. For Mr. Zhong, a young factory worker, the wait to become a homeowner was even longer. He rented a 9-square meter apartment near his work in Haidian district in 1996. When his son was born, his mother in-law came to take care of the baby. Mr. Zhong started to think about buying an apartment. However, he was not able to collect enough money and the family of five had to live in the 9-square meter apartment for another five years. By the time his son needed to go to elementary school in 2004, he had finally saved some money and borrowed more from relatives to pay the down payment to buy a 43-square-meter studio for 290,000 *yuan* near the school his son went to. This group of young renters are model neoliberal subjects as what the governments promoted. It is a common trajectory for them to come to Beijing to work with no parents or *danwei* to depend on. While they might suffer from bad living situations in their rental apartments, they are determined to work hard and to support themselves. Eventually, most of them can move up to become homeowners through either long period of saving or borrowing from relatives and friends.

The second group, quite different from the first group, consists of the local urban poor who are either laid off by their *danwei* or retired a long time ago. They are the group who are lack of resources to form *guanxi* and therefore are shut out from crossing the divides between state, market and everyday social life as Nonini (2008) observed for the vast majority of the powerless. They became permanent renters trapped in dilapidated housing neighborhoods and have no means to buy commercial housing on the market. The only possibility for them to move out the poor neighborhoods and possibly purchase an apartment on the market is when their neighborhood is under redevelopment and they are lucky enough to get good relocation compensations. This group is likely to live in one of two types of neighborhood. The first is the *hutong* neighborhood in the center of Beijing. The center of Beijing used to accommodate the royal family and high government officials. Each family had their own courtyard house. After

the communist reform in the 1950s, those courtyard houses were confiscated and redistributed to ordinary citizens. In order to house more families, the government subdivided the courtyard houses and allocated only one or two rooms of the houses to each family. Due to the lack of space for living and other usages, such as kitchen and storage, families in the courtyard houses started to build tents or other attachments in the shared central courtyard. Soon, the prestige *hutong* neighborhood was transformed into over-crowded and "zang, luan, cha" (dirty, disordered and poor) space for the ordinary working class. A survey shows that about 25% of municipal and private housing in the inner city of Beijing has informal constructions to provide kitchens and storage space which are often time in very low quality (Wu, 2002). People living there were local Beijing residents who worked as factory workers or did small business. After the economic reform, due to emerging land market and the premier location of those old *hutong* neighborhoods, redeveloping and commercializing the old *hutong* neighborhoods suddenly became profitable and in accordance with the interests of both the municipal government and real estate developers. By 1993, the Beijing municipal government had planned 221 Old and Dilapidated Housing Programs, involving 20.9 square kilometers in old Beijing. A survey in 1994 shows that more than 100 parcels were under renewal (Figure 4.2). And it is estimated that 1/3 of the inner city of Beijing was redeveloped by 2000 (Goldman, 2003).

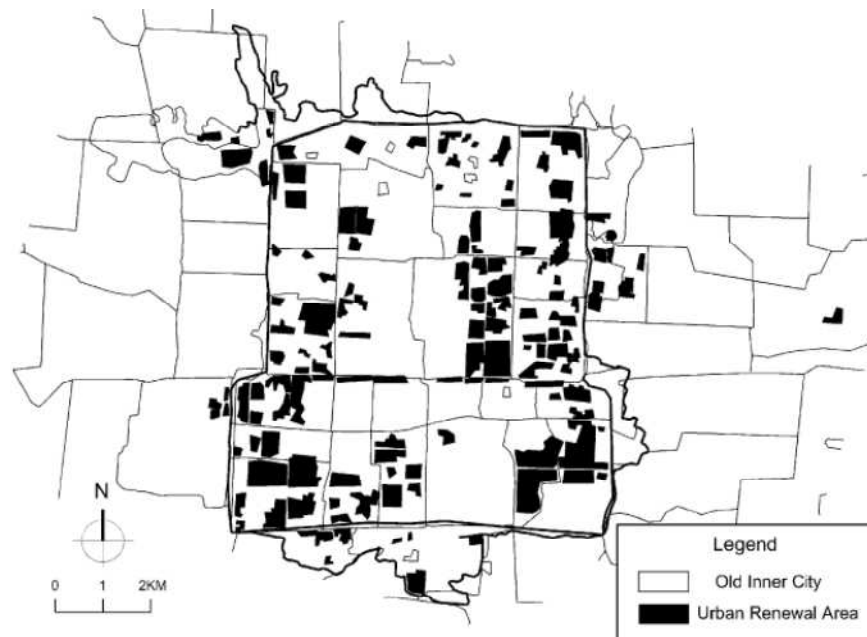


Figure 4.2 Urban Renewal of the Inner City of Beijing, 1994

(Source: Gu, et al., 2006)

Due to the cultural and aesthetic value of the courtyard houses, some of the *hutong* neighborhoods were subjected to government-led restoration and beautification such as the case of Nanluoguxiang in central Beijing described by Shin (2010). In either case, these inner city neighborhoods are experiencing gentrification which results in the dislocation of the original residents who have been renters in these houses for decades. At the same time, with increasing compensation costs, it is harder and harder for either the government or the developers to redevelop the central city due to its high population density. As a result, there remains some old *hutong* neighborhoods occupied by the old residents, which have remained dilapidated. Figure 4.3 is the old residence of Youwei Kang, a high government official in Qing dynasty. Once a prestige home, it has been changed into a so-called "*da za yuan*" ("big disordered yard") when it was subdivided and allocated to many families during the socialist period. In this picture we can vaguely see that the backdrop is some high-rise buildings. While physically adjacent to each other, these different neighborhoods provide dramatically different living environment and life qualities.



Figure 4.3 A typical dilapidated courtyard house⁶⁹

Aunt Shi, a contract market surveyor mentioned earlier, lived in Gongjian *Hutong* in Xicheng district. Her two rooms in a courtyard house were allocated by housing bureau so (me thirty years ago). For Aunt Shi, the 40 *yuan* per month rent was acceptable, but there was no way she could afford a condominium on the market. Due to the central location and high value of the traditional

⁶⁹ One Quarter Former Homes of Celebrities in Beijing had been Changed into "Big Disordered Yard" (Beijing ¼ mingren guju cheng 'dazayuan'), Obtained through: <http://city.finance.sina.com.cn/city/2009-07-14/113868.html>

architecture, the government did not plan to privatize these rental housing -- probably in order to pay less to the renters when it decided to evict them and redevelop the area. Therefore, Aunt Shi could neither purchase her current dwelling nor take a lump-sum of compensation money and leave. Instead, her family had to remain as a public renter and await their fate in the dilapidated neighborhood. Grandpa Huang, a retired factory worker, had an even worse situation. Because Grandpa Huang's adult son was working as a contract worker for a private company with relatively low salary, he could not afford to rent an apartment by himself. Therefore, he stayed with Grandpa Huang and his wife in their single room in a courtyard house in Miliangku *Hutong*. While feeling life was livable with his social security of roughly 2000 *yuan* per month, Grandpa Huang was very worried that one day the area he lived in would be redeveloped. Since he only had one room, the compensation would not be enough to buy a condominium on the market to house his family. This concern is very common among these old renters in *hutong* neighborhood. Grandma Qian, a retired contract worker, worried that if the neighborhood was redeveloped, she would have to move to the suburbs:

“I'm in my 50s and the bank will not lend to old people. There's no way for me to buy an apartment in the city. But the facilities in the suburb are poor. I don't want to move there. Have you heard that 'I'd rather have a bed in the city than a house in the suburb (ning yao shiqu yi zhang chuang, buyao jiaoqu yi zhuang fang)' ?”

Unlike the perception of the middle class in the developed countries that the suburb is a place with the blessing of “a whole way of life in which the best of rural and urban living are combined without their defects” (Tuan, 1974), suburbs for poor Chinese citizens are no more than a curse to live in a ‘concrete forest’ in the middle of nowhere, away from any modern civilization and amenities. However, not having enough means to help themselves in the market as the middle class benefit from the economic reform, it seems that those old residents in *hutong* neighborhoods in the inner city are mired in lose-lose situations: either move to the suburb far away from all urban amenities when there are redevelopments and gentrification, or be trapped in the dilapidated neighborhoods left out of the progress of globalization and modernization.

The other areas that might be concentrated with renters are old *danwei* compounds. After the housing reform, residents who could afford to move out to live in newly developed commercial neighborhoods and either sold or rented out their *danwei* allocated housing. At the same time, there were also many others who were either laid off or retired a long time ago who still had not

purchased their *danwei* allocated apartments and remained as renters in the *danwei* compound. Quite similar to those residents in the dilapidated city center, these poor residents in old *danwei* compounds are also immobile 'residual' population and trapped in dilapidated neighborhoods.

Uncle Ren was a factory worker in his 50s who worked as a parking lot attendant near his home by the second ring road in Xuanwu district after he was laid off five years ago. He was still living with his wife in a two-bedroom apartment allocated by his *danwei* before he was laid off. Due to the good location, his previous *danwei* decided not to privatize the *danwei* housing in order to pay less compensation when it sold the land use rights to a developer. Rumors about demolishing and redeveloping this area had been around for a while and they bothered Uncle Ren:

“I heard that this whole area will be demolished. People keep talking about it. But I haven't seen any action yet. If they do demolish this area, I will not be able to afford anything on the market. My apartment is very small and they won't pay much for it. If they pay something like eighty or one hundred thousand, what can I buy on the market? I might have to move to the countryside outside the Fifth Ring Road. ”

If that does happen, Uncle Ren might even lose his temporary job as a parking lot attendant because there has not been much business in the suburban area and he will be unable to commute and still work more than ten hours per day at the current parking lot. Life was not easy for Uncle Ren. He had to stay outside watching vehicles going in and out of the parking lot even though the temperature was below freezing when I interviewed him. But he had to work as long as he was still healthy in order to earn a little more money to supplement his limited social security and support his family. People who retired very early faced the same situation as laid-off employees since their retirement stipend was extremely low. Grandpa Dai was a retired employee of a state owned industrial enterprise constructed during the “Third Front” period. He had been retired for about 20 years and lived on his meager retirement stipend. His *danwei* allocated him a 29-square-meter apartment in the 1960s and he has lived there ever since. Grandpa Dai was paid an extremely low salary before he retired since the state was practicing the principle of "production first, livelihood second" then. As with Uncle Ren, there are two fates waiting for Grandpa Dai in the future: either he must stay in the tiny dilapidated apartment for the rest of his life, or be forced to move to the remote suburban area if his neighborhood is redeveloped. Neither seems to be a blessing.

It is not hard to see that the second group of renters did poorly during the reform era. Not coincidentally, they were also in a disadvantageous position during the socialist period. They contributed most of their life with meager rewards during the socialist period as low-skilled workers, many of whose education was interrupted by the chaotic Cultural Revolution⁷⁰. The socialist practice was deeply engrained into their lives, changing them into typical socialist subjects, totally dependent on the state for welfare. The reform era did not put them on an equal starting point with other urbanites who were either well-educated or who had political power; rather, it magnified their disadvantages through pushing them to the market. At the beginning of the reform of State Owned Enterprises (SOE), the state urged unemployed urban workers to “learn from rural migrants” to be on their own (Zhang, 2001). Instead of offering opportunities to have an upward convergence with the middle class, the government points to a downward road to live like migrant labors who have never had any state support but fight on their own to survive in cities as outsiders or second-class citizens.

The migrant laborers consist of the third group of renters. A survey shows that those migrant labors mostly engaged in four types of jobs in Beijing: (1) High labor intensity, low-paid but formal jobs; (2) Stable, contractual but temporary jobs; etc. (3) Unstable, temporary and insecure jobs and (4) household-owned small firms (Gu, et al., 2006). They are the most disfranchised residents in Beijing because they do not have local hukou and thus lack citizenship rights in their host cities. According to Marshall (1950), full members of a community should enjoy social rights which ensure an adequate level of personal welfare and political rights granting the ability to participate in the community. However, while the migrants physically reside in the city, they cannot enjoy any of the welfare that urbanites have. Zhang (2002, p315) argues that *hukou* system in China serves as “a badge of citizenship with profound social, culture and political implication for the lives of Chinese people”. According to the city statistics, there were 537,000 migrants living in the thirteen urban districts of Beijing by 2008 (NBS, 2009). While there was a changing discourse on non-*hukou* migrants recently as part of the project to construct a harmonious society, and the attitude of the urban residents towards migrant labor became better, real changes in treatment to this disadvantaged group remain modest. Without local *hukou*, they are denied citizenship in the host cities. In terms of housing, non-*hukou* migrants are not eligible

⁷⁰ When I did my interview in Wuhan, I met some laid-off workers who successfully changed themselves into entrepreneurs. However, those are still minority. Most of the laid-off workers have a hard time after they are laid-off.

for any subsidized housing such as the Economical and Comfortable Housing or the Double-controlled Housing. They have to be fully responsible for their own accommodation on the market. While a very small number of migrants might be able to access institutionally-provided or government-provided rental housing, due to the low income of most of them, they are more likely to end up as renters (Wu, 2002). As shown in many studies, “villages in the city”, normally at the urban fringe, is one type of area where migrants concentrate. Due to the high demand for more urban construction land, local governments are busy converting rural land at the urban fringe into urban land. At the same time, reserved housing sites and reserved construction land continue to be owned by individual villages or collectives (Hsing, 2010). Because there is no cost for this land and it is adjacent or even inside the urban boundary, rental housing in “villages in the city” serves as ideal affordable accommodation for migrants. In addition, migrants from the same origins can share job information and mutual support, assistance and friendship. When studying “villages in the city”, especially the entrepreneurial Zhejiang village in Beijing, Ma and Xiang (1998) are quite optimistic about migrants as active actors to successfully incorporate themselves socially and economically into the urban society despite the constraints of *hukou*. While I agree with Ma and Xiang (1998) that migrants should not be viewed as a consistent group who are perpetual victims, I argue that the *hukou* system remains as a significant barrier, preventing migrants from permanently settling down in their destination cities. Due to the lack of institutional protection, migrant enclaves are quite vulnerable to governmental demolition. For example, when the most successful migrant enclave, Zhejiang village in Ma and Xiang’s study, was cleared by the Fengtai District government in 1995, many of the illegal buildings were demolished during that movement (Zhang, 2002; Gu and Shen, 2003). Although migrants moved back in the following year, this incident does show the insecure living situation of rural migrants.

In this research, I investigated a migrant village: Qinghe Zhufang neighborhood which is not far from China’s “Silicon Valley”, Zhongguancun in Haidian District. Despite the physical proximity to the high-tech area, this neighborhood seemed to be untouched by the recent modernity. Figures 4.4 and 4.5 show the public space outside the rental apartments and a business street in this neighborhood. The scenery looked more like a small town in the 1970s before the economic reform. Unlike some other “villages in the city” in which individual peasants rented out their own reserved housing, the residential buildings with only single rooms

for rent were developed by the village brigade and rented out to migrants. The residents in this neighborhood were mostly from Anhui. Men in this neighborhood almost all worked as contractors doing interior architecture decoration. Women worked as housekeepers. While the mass construction of migrant rental housing did not last long (residents were all moved within 5 years), this area has long been found to be an Anhui migrant enclave (Ma and Xiang, 1998). An informant told me that it is because Anhui migrants specialize in interior architecture decoration and this area is adjacent to a construction material market. There were more than 100 single rooms like Sister Jiang's home in this neighborhood with no kitchen, restroom or shower inside. Almost all households set their stoves in the corridor right outside their rooms to cook. And they need to go to public restrooms and pay 6 *yuan* to use bathhouse each time. As Ms. Gu, a 25 year-old full time mom who migrated from Anhui said, if you wanted to save 2 *yuan*, you had to go to another even simpler and dirtier bathhouse which was hard to bear.



Figure 4.4 Public space outside the rental apartments Figure 4.5 Business street in Qinghe Zhufang

Sister Jiang and her husband had migrated to Beijing more than 20 years ago. But their *hukou* were still in their hometown. Sister Jiang's husband came from Anhui with six other hometown fellows. They had all worked as carpenters and interior architecture decoration contractors since they migrated to Beijing. Sister Jiang came from Sichuan two years after. She first sold garments for several years. Then she met her husband and eventually followed other Anhui migrants' wives to be a housekeeper. Sister Jiang and her husband had moved three times in the Zhongguancun area since they moved to Beijing. The first two moves were due to the redevelopment of those neighborhoods; the last one was because the room was too humid to bear.

They finally moved to Zhufang neighborhood last year. Many other of their hometown fellows living in this neighborhood had experiences similar to Sister Jiang's family's due to frequent development in the urban-rural transitional zone. When demolition happened, they moved together. Sister Jiang, her husband and her twin sons were living in a room about 10 square meters for 320 *yuan* per month, plus 140 *yuan* monthly heating fee in winter months. There was no lease for rental housing there. But if they tried to leave before the landlord could find new tenants, they might not be able to get their 100 *yuan* deposit back. In many cases, they chose to stay longer because they did not want to lose the deposit which was not a small amount for them. The only contract they needed to sign, according to Mr. Liu, a hometown fellow of Sister Jiang's husband, was that the residents should be fully responsible for their lives and belongings if any accident happened, such as fire or gas poisoning. Despite the hardship in these migrants' lives, they had strong sense to be self-responsible, probably due to the fact that they used to be self-reliant peasants in the countryside. Thus, they embraced the market mentality even faster than a lot of urban residents. For any difficulties they meet, they blame their own mistakes and their extremely low *wenhua* (education) level, which often times refers to human quality and is directly related with education level:

“I shouldn't complain about the government. I have three children. The government did not ask me to have a second birth. I decided to have a second one and it turned out to be twins. The government never asked me to give birth to so many children. It's not too bad since I can work as an hourly cleaning lady. I have a low “*wenhua*”. People have different lives based on their situations. I can only lead a life based on my situation”

(Interview with Sister Jiang, 2008)

The Chinese government has promoted *suzhi* education to promote the population's *wenhua* level ever since the implementation of the one-child policy in the late 1970s. *Wenhua* and *Suzi* therefore have the same connotation which is directly linked to one's education level. With increasing competition between cities, various cities also implemented all sorts of preference policies to attract people with high *suzhi* level. Through government promotion and practices, *wenhua* and *suzhi* became a powerful discourse relating with, linking one's market success to self-improvement through hard work. As Murphy (2004) argues that *suzhi* legitimizes a modernization agenda requiring people to take responsibility for their own welfare in a competitive market economy regardless of their ability to do so. Through the working of this powerful discourse, these rural migrants attribute the discrimination and unequal treatment to

their low *suzhi*. In this sense, the discourse of *wenhua/suzhi* functions as what Foucault (1978) called *biopower* to discipline the subjects to be responsible for their own failure and success in the market. Therefore, their low-end jobs and poor living conditions can only be attributed to their own low *wenhua/suzhi*. Through powerful discourses like the *wenhua/suzhi*, the mechanisms of controlling these neoliberal subjects are throughout the brains and bodies of the citizens, rather than through the direct operation of specific disciplinary technologies (Deleuze, 1992).



Figure 4.6 A typical Rental Home in Zhufang Migrant Community

Due to the importance of obtaining a high “*wenhua*” level to achieve life success, these rural migrants give a lot of importance to their children’s education. Sister Jiang always encouraged her daughter that “if you work hard in school, you don’t need to be a cleaning lady like your mom in the future.” In fact, even though she does work very hard, the chances of her being successful in the future is much slimmer than that of other Beijing kids. Due to their identity as outsiders determined by their *hukou* registration cards, it is hard if not totally impossible for migrant children to have regular education in Beijing as other Beijing kids do. Sister Jiang’s daughter finished elementary school in Beijing and went back to Sichuan province for high school because public high school was too expensive. Sister Jiang’s sons were currently in private elementary school for migrants and they planned to send the twin boys back to her hometown when they finish. This practice was quite common to residents in this neighborhood.

While public schools are open to migrants' children according to the official policies, good high schools very rarely accept children without local *hukou*. Even if children without local *hukou* are admitted by ordinary public high schools, they need to pay various fees such as school selection fee, sponsor fee, miscellaneous fee and so on. It can go up easily to more than one thousand *yuan* per semester. By contrast, Sister Jiang only paid a couple of hundred per semester for her sons in private school for migrant kids. Even though Sister Jiang worked for six households, she could only earn about 1000 per month. While Sister Jiang's husband could earn about 4000 *yuan* per month if he had work to do, his work was quite unstable. A more important reason that migrant children cannot finish high school in Beijing is that they are simply not allowed to take college entrance exam in Beijing. Even though they could enroll in a senior high school in Beijing, their education would be inadequate because the college Entrance Examination for Beijing students is different and usually easier than that of the national one, and students must take the entrance exam in the province their parents' *hukou* are registered.

The *hukou* system has been functioning as an invisible wall to separate Chinese society into an urban high class and rural low class (Chan, 1994). While the physical barrier is no longer impenetrable, the institutional obstacles remain to prevent them from real settlement in the host city. Not only does it significantly constrain migrant workers' life chances in the host cities, the *hukou* system also prevents their children from permanently settling down in the destination cities and deprives them from having equal citizenship right to have education there. It is just as Foucault (1984) states, "there are others... that seem to be pure and simple openings, but that generally hide curious exclusions. Everyone can enter into these heterotopic sites, but in fact that is only an illusion- we think we enter where we are, by the very fact that we enter, excluded." While physically they enter the city, these migrant laborers are not an integral part of the urban society, but a supplementary component that is easily replaced. Although they feel unhappy about their unequal treatment, they take their outsider status with fewer citizenship rights and lower priority for granted:

"Beijing is so large. It cannot even solve the problems of its own citizens. How can it pay attention to our nonlocal people (*waidi ren*)? They cannot even solve their own aging problem, poverty of their residents, their environmental problems. Who will care for us nonlocal people?... If they think nonlocal kids shouldn't be treated the same as Beijing kids, they can set a higher admission scores for outside kids to go to universities. At least, they should allow our children to go to schools and take exams here."

(Interview with Ms Gu, 2008)

For Ms. Gu, equal treatment was almost out of the question since she and her family are outsiders. What she was looking for was simply a little improvement of their treatment, especially for her little daughter so that she could improve her *wenhua* and therefore be more successful in the future. Also due to their strong sense as outsiders, a little improvement in treatment can make them thrilled. Mr. Liu was quite happy that he did not need to hold down his voice when talking to Beijing local residents and did not need to hide like escaped criminals whenever police came to check for temporary residency permits which were very hard to get. Most migrants simply did not have them in the 1990s.

When asked whether they planned to return to their hometowns, none of my informants in this neighborhood indicated that was the plan. However, if they choose to stay, they have to separate from their children since nonlocal children cannot go to public school or take the college entrance exam in Beijing. At the same time, it was almost hopeless for them to get a Beijing *hukou* to become real Beijing residents, either. As Mr. Liu said, “My *hukou* absolutely can’t be moved to Beijing. I only worked for 20 years in Beijing, but even if you work your whole life in Beijing, it’s still out of the question.” On the other hand, life is not promising in the countryside, either. Many informants mentioned that there was a big loss in cotton farming that year, the main agriculture activity back in their hometown Anhui, because the good harvest significantly depreciated the cotton prices. These migrant workers are trapped in the urban-rural transitional zone where they can find suitable rental housing, although this is getting harder due to the rapid development at the urban fringe. They live in the place in between; not in their home villages, but not really in the city, geographically or socially, either. It is fair to say that the *hukou* institution, a legacy from the socialist period, functions as a powerful biopower technique in the reform era to marginalize migrant laborers in urban society. Through praising them as a necessary part of the urban society and role models for the laid-off workers, the urban state successfully transformed these disfranchised citizens into neoliberal subjects who voluntarily accept their inferior position to be physically in the “villages in the city” but socially at the margin.

According to Ma and Xiang (1998), migrants from Xinjiang, Zhejiang, Anhui, and Henan are very likely to live with hometown fellows together in urban villages and to provide help and

share employment information in Beijing. Migrants from other parts of China, as it turns out, are more spread out in all sorts of cheap housing in the city. While physically closer to local residents, these migrants are no closer socially to them than migrants in urban villages. Mr. Pang, a small restaurant owner in his 30s came to Beijing from his hometown Shanxi in 1996. After working as a waiter in several different restaurants for years, he finally decided to start his own restaurant. Introduced by his friend, he opened his restaurant in a big neighborhood with more than 10,000 people between West Third and Fourth Ring Road in 2007. This neighborhood was directly under the administrative of the same community committee but physically divided into three compounds separated by iron fences. As with many *danwei* compounds in Beijing accommodating employees from several different *danwei*, because many governmental institutes and small enterprises in Beijing do not have as many employees as big enterprises, these compounds in this neighborhood also have employees from various *danwei*. All of the three compounds have several commercial residential buildings developed by real estate developers and sold at market to the public as a cooperative program between developers and the state *danwei* which provided free land for developers in return for some free new buildings for the employees, a common practice after the housing reform. Employees living in this neighborhood were mostly from several state ministries including the Ministry of Construction, the Ministry of Finance and so on. The residents in one of the three compounds were rather different: they were workers from several small factories. The factories had already been relocated to the urban fringe, while some of the workers chose to move back to live in the relocation housing. Probably realizing there was a good rental market for migrants, the developer built a lot of single rooms in the basement of the relocation buildings and rented them to migrants. Due to the more heterogeneous population in this neighborhood, there were a lot of small business in this compound. Mr. Pang rented one of the rooms in the basement for 580 *yuan* per month. Although physically living in that compound, Mr. Pang had no direct interaction with any of the residents, except for serving food to them. Mr. Pang had some friends outside this neighborhood who were also migrants, and they helped him to find his rental places every time he needed to move. Staying in Beijing for more than ten years, Mr. Pang still could not afford to have his wife and son move to Beijing to live with him.

As a small business owner, there was chance for him to improve his living situation and reunite with his family if his business eventually went well. For others who are working in less

rewarding areas, the chances to improve their living situations are even smaller. Ms. Bai migrated to Beijing from her hometown in Hunan province eleven years ago. She and her husband shared a one-bedroom apartment with two other families for 1,100 *yuan* per month in the same building with Mr. Pang. Because the quality of the relocation buildings was not good, many of the original employees who could afford better housing had left and rented the relatively inferior apartment to migrants. The other two families living with Ms. Bai's family were their relatives. They migrated to Beijing together and shared the cost of housing. Ms. Bai and her husband rented a vegetable stand in an open space in the basement which was turned into a farmer's market. Ms. Bai and her husband had been selling vegetables ever since they moved to Beijing. Based on selling vegetables, their monthly income was 2,000 *yuan* at most. Due to the meager income and the extremely crowded living situation, Ms. Bai had to leave her child back in her hometown. For Ms. Bai, even renting an apartment without sharing with anybody was only a good dream; she did not know when it would come true.

In Western countries, when a nice neighborhood is invaded by low-income residents, it might eventually degradate to a low-income neighborhood (e.g. Burgess, 1925; Rosenbaum and Argeros, 2005). In China, although low-income residents have difficulty penetrating those high-end neighborhoods, many migrants actually live very close to the local urban residents. However, while the physical gates of those compounds are rather symbolic and easy to get through, the barrier between society of local residents and that of migrants is very hard to cross. Since the living conditions are even more crowded in the city, these migrants are more likely to separate from their family members. Compared to their counterparts in urban villages, these migrant workers living in rental apartments with local Beijing residents are no higher on the urban social ladder because they do not have much financial or human capital they can tap in the market.

It is also important to realize that migrants are not a consistent group. There are also migrants who have higher education; most of these are college graduates who failed to find jobs that can grant them local registration cards (like the two sisters in the TV show mentioned in the beginning). Since most of them are working in the private sector which does not provide housing, it is also very likely that they end up in rental housing in the early years of their careers. Since this group of migrants has higher education, they usually are doing much better economically than those low-skilled migrant laborers. Some of them have successfully become homeowners

like Haiping in the TV show, who works and saves hard in order to buy a condominium to stay. Mr. Ao, a young employee of a foreign company in his 30s currently enrolled in a weekend master program at a top university in Beijing in order to have higher degree to compensate his bachelor degree in a rather unknown university in his hometown Guizhou Province. He understood how important it was to improve his *suzhi* to increase his chances of success in this competitive city. While sharing a rental apartment with his cousin, he was quite optimistic that he would be able to purchase a home in Beijing in the future.

However, lacking a local *hukou* not only put them totally in the market to be self-dependent, but significantly hindered them from settling down socially and emotionally. Miss Zeng was a young department manager in her 20s working for a software company in Beijing. She went to Beijing right after she graduated from college in Guizhou Province in 2006 because she had a relative in Beijing. She stayed with her relative for a couple of months. After changing jobs and residences several times, she finally found a shared apartment not too far from her current company for 1,200 *yuan* per month. Working as a department manager, Miss Zeng had an income of 10,000 *yuan* per month, even higher than many local residents. However, she showed no interest in purchasing an apartment and settle down in Beijing permanently. Since her *hukou* was still back in her hometown, it was hard for her to have emotional attachments to Beijing. In addition, even with her salary, she could only afford an apartment outside the Fifth Ring Road, which was too far away from her friends.

While economically better-off and socially higher up in the social ladder than migrant labors taking up the "dirty, difficult and demanding" jobs, this group of migrants face the same constraint on their children's education, which also prevents them from settling in the destination cities. With the establishment of a market which rewards higher education, this migrant group seems to be able to play at the leveling playground with local residents and move further up in the urban society. However, the socialist institutions make the seeming leveling of the playground never as flat as it looks. Mr. Jin was a project manager in a real estate development company with an annual salary of about 150,000 *yuan*, much higher than the average salary of Beijing residents. He moved to Beijing five years ago after graduating from college in his hometown in Anhui Province. He had been renting private apartment ever since he moved to Beijing. Because the rental apartment he found was close to his company and the price was quite

good for its location within the Third Ring Road, he did not think much about buying a home until he got married with another migrant woman one year before. Then, Mr. Jin realized that his child would not be able to go to public school in Beijing since neither he nor his wife had a local Beijing *hukou* and it was too expensive to purchase a Beijing *hukou* for his whole family. Therefore, Mr. decided to move to back to his home province when he had a child so that his child could go to a good public school there. For the same reason, Mr. Peng, a financial manager of a private interior design company, did not plan to buy a condominium in Beijing even though he had stayed in Beijing for several years. Instead, he invested in two condominiums and a house back in his hometown Wuhan, the capital city of Hubei Province. As a young man from the generation of those who had to be fully responsible for themselves, Beijing was too expensive to for him to permanently stay without a local *hukou*. For migrants like Mr. Peng with relatively high salaries, it is not just the high housing price that prevents them from being homeowners and settling down in Beijing, but also other high costs generated by the institutional barrier. Like Mr. Peng, many migrants with relatively high income do not want to spend all their savings simply because they do not have equal citizenship rights to access government-subsidized housing and other welfare in Beijing. Therefore, Beijing could only be a host city where they stay for a while to earn money and then leave.

4.6 The Mystery of Policy-supported housing

Ever since the onset of housing reform, the government has emphasized the importance of developing the policy-supported housing. It includes cheap rental housing which is constructed and managed by government, Economical and Comfortable housing which is constructed by developers with government provided free land, and Double-Control housing which is in fact commercial housing but with government controlled unit size and prices based on the prices of surrounding area. The supply of cheap rental housing is very small with strict requirements. The Double-Control housing is only slightly cheaper than the market prices of the area, but normally has lower quality than commercial housing and has an income cap for applicants; it has never been popular. Due to the fluctuation of market prices and the inelasticity of the Double-Control housing prices, sometimes Double-Control housing is even more expensive than the surrounding commercial housing, which makes it even less attractive. Therefore, I only focus on Economical and Comfortable housing which has been emphasized many times by the government and is in

great demand by the public. In the milestone policy document marking the official start of housing reform in 1998, it was proposed to construct a housing system with Economical and Comfortable housing as the main housing supply so that housing on the market could be affordable for most of the urban households⁷¹. While this goal has never been achieved, Economical and Comfortable housing and other policy-supported housing remain the focus of governmental speeches. Every year, it is important to address the supply of the policy-supported housing in the governmental report as a political achievement of the city mayors. In 2007 at a speech in Singapore, Prime Minister Jiabao Wen indicated that the policy-supported Economical and Comfortable housing should aim at the middle class of Chinese citizens in order to increase the housing affordability for the majority of urban residents. In 2008, the Minister of the Ministry of Urban and Rural Construction Bureau emphasized that the first of the five duties was to increase the cheap rental housing and Economical and Comfortable housing⁷². Later in 2009, the mayor of Beijing announced that Beijing was constructing cheap rental housing, Economical and Comfortable housing and Double-Control housing of totally 8 million square meters to solve the housing problems of low income households⁷³. Despite its importance being addressed in policy documents and speeches of government officials over and over again, Economical and Comfortable housing never became the main supply of housing as happened in Singapore (which China tries to imitate), and there is no sign that the problem of affordability is being alleviated. For most of my informants, the policy-supported housing was never an option. In fact, the total of Economical and Comfortable housing completed decreased from 1,760,000 square meters in 2000 to 982,000 square meters in 2009 (NBS, 2001, 2010). Burrows (1999) finds that there is a great difference between the characteristics of households entering social housing and those leaving, which results in social residualisation in England. However, even though the target group for Economical and Comfortable housing in China is middle and low income households, this type of housing never experienced residualisation and remains desirable to all income groups. It is a myth that Economical and Comfortable housing was always promoted by the government but seems not the choice of most urban residents, even the poor who are in need.

⁷¹ “Notice on Further Deepening Reform of Urban and Rural Housing System and Speeding up Housing Construction”, retrieved from: <http://www.jxgjj.gov.cn/zcfg/zcwj/2010-07-16-249.html>

⁷² Jiang Weixin: Increase the Economical and Affordable Housing Stock (Jiang Weixin: jiada jingji shiyongfang guimo), retrieved from: <http://www.chinagb.net/news/fugle/20081117/41759.shtml>

⁷³ A Note of the mayor of Beijing’s talk on Real Estate Industry at Meeting of National People’s Congress (Beijing shizhang zai renda huiyi shang guanyu fangdichan de jianghua shilu), retrieved from <http://house.china.com.cn/newscenter/view/29643.htm>

Miss Lin, the young professional mentioned earlier, purchased her commodity housing with the help of her parents. She never bothered to even check how to apply for Economical and Comfortable housing because she thought it was impossible for her to access it:

“Nobody in need can purchase Economical and Comfortable housing. I think I am not able to buy it either. Even a lot of relocated households cannot purchase the Economical and Comfortable housing, not to mention me. People in need will not be qualified. Only people with connections will....”

Negative images such as low construction quality, unreasonable floor plans, bad ventilation, little greenery in the community and so on related with this policy-supported housing makes it very unattractive. In addition, the large Economical and Comfortable Housing communities are all located in the urban fringe with poor transportation and facilities. Ms. Xia and her husband were both high school teachers in the same public school. They had lived in three tiny rental rooms in a bungalow allocated by their school with in-laws and their son for ten years. Their annual family income was only a little over 40,000 *yuan*. Ms. Xia thought that they “cannot afford commodity housing unless the housing prices drop to below 5,000 *yuan* per square meter,” which was about half of the current average price within the Forth Ring Road. However, Ms. Xia did not consider Economical and Comfortable Housing because they are far away from work and hard for children to go to school. For Ms. Xia, no family with school kids could live in places like Huilongguan. Only rich people bought big Economical and Comfortable Housing as weekend homes or rented to young people there. A similar dilemma also faced Granny Zhang, a retired kindergarten teacher who lived in her son’s apartment:

“If I purchase Economical and Comfortable housing, I have to move to place outside the Fifth Ring Road where far away from everything. But if I want to buy an apartment in the city, they are too expensive and not economical any more. So, I will just stay with my son.”

If the negative image prevents residents who are looking for good living conditions from purchasing, the strict constraints on incomes, on the other hand, prevents those who have a little means but not enough to realize their homeowner dream through the market. Facing the high housing prices, many informants felt that commercial housing is beyond their reach based on their salary. On the other hand, they found out that their salary was too high to qualify to purchase Economical and Comfortable Housing in most cases. Mr. Zeng, a young professional mentioned earlier, thought he could only afford a studio or one-bedroom apartment in the future

based on his annual salary of 60,000 *yuan*. However, this salary was already twice the annual household income ceiling of 30,000 for Economical and Comfortable housing. Mr. Ye's son, an employee of a public organization with salary of only 2,000 per month, had no luck either. Since he was single, he was only qualified to purchase an Economical and Comfortable Housing unit of less than 30 square meters, which would be too small once he got married. Another strict restriction of all policy-supported housing is that applicants have to have local urban *hukou*. Therefore migrants, most of whom need affordable housing desperately, are excluded regardless of their income. Due to these strict constraints, the Economical and Comfortable Housing seems to be a nice choice but never an option for many urban residents.

Because of the strict income requirement, those who are qualified to purchase Economical and Comfortable housing can simply not afford it. Mr. Wei, a retired factory worker, had to continue to provide accommodation for his adult son because his son was laid off. He really hoped that his son could buy an apartment and move out. However, the total monthly retirement stipend for him and his wife was only 2,000 *yuan* and they could barely make ends meet, not to mention save for a big purchase like buying an apartment for their son. In addition, they could not get a bank loan because he was too old and his income was too low. Mr. Liu, a retired soldier in his 30s, faced a similar situation. Mr. Liu worked for a small publicly owned enterprise after he retired from the army. His wife continued to work as a waitress for an army hotel. They continued to live in the apartment allocated by the army since housing at the market was too expensive for them. After paying some 1,000 *yuan* kindergarten tuition for his son every month, they only had about 2,000 *yuan* for other expenses, which was far from enough to pay for even the Economical and Comfortable housing they were eligible for, which was more than 7,000 *yuan* per square meter then.

The mystery of the Economical and Comfortable Housing remains so far is who purchased this type of housing then? According to an officer working for the Ministry of Construction, the main goal at the beginning was to sell the Economical and Comfortable housing units and promote the development of the housing market. In other words, the Economical and Comfortable housing was open to anyone who could afford it at the beginning. The experience of Mr. Xu, an owner of a small real estate development company in his 40s, proved it. He had purchased two Economical and Comfortable housing units. He "jumped into the sea" and started

his own business after he was laid off in 2000. With the money for selling his *danwei* privatized apartment and what he earned through his business, he was able to purchase two Economical and Comfortable housing units for a little more than 2,000 *yuan* per square meter in 2004. He was not worried at all that he was in fact not qualified:

“What is the benefit for the government to check how many Economical and Comfortable housing units I purchased? The more housing units people buy, the more profit the government earns. You just need to know how to play the ball on the edge with policies. “

It was true that with enough money, a little detour to avoid regulations could allow people to purchase Economical and Comfortable Housing units at the early stage of the Economical and Comfortable housing program. Since Aunt Li’s husband was a successful business owner and their income exceeded the required cap to purchase Economical and Comfortable housing, they purchased their Economical and Comfortable Housing unit in 2002 under their son’s name, whose income was quite low then.

At first the public housing was offered on the market with very little in the way of public control; this mostly benefited the rich who could afford to buy the units, rather than those for whom the units were intended. Thus, those who had money could benefit more from the policy. With increasing media exposure and public criticism on the Economical and Comfortable Housing program, the government started the strict inspection procedure on qualification for it. Increasingly, only evicted residents from redevelopment neighborhoods had priority to purchase Economical and Comfortable housing in order to reduce the conflict between the government and evicted residents. As a consequence, Economical and Comfortable Housing became an even more expensive commodity for the rest since people needed to pay a lot to buy the qualification from those who did qualify. At the same time, for a small number of people who had the right connections, they could still access this rather tightly controlled resource. Mr. Yao, a young employee in a public enterprise, paid 7,000 *yuan* just for a qualification for Economical and Comfortable housing in 2006. However, it turned out to be a waste since he could not come up with enough money to pay for an Economical and Comfortable housing unit even though his salary was slightly higher than the income cap. It seems that fortune is on the side of those who have the right connections. Mr. Zhou, a project manager mentioned earlier, was able to purchase an Economical and Comfortable housing unit since his sister was working for the public real

estate development company which developed that neighborhood. He did not exactly know whether it was Economical and Comfortable housing. As he said, "I don't care what its name was as long as it's cheap." With the right connections, Mr. Zhao was able to access to this subsidized housing while others needed to pay much more or were simply are excluded.

4.7 Why Do Families Move?

With the emergence of a housing market, Chinese urban citizens can also enjoy more freedom to move and to choose where to live. In western countries, families usually move from the city to the suburb and from small houses to large ones when they have children to enjoy larger and better living environment (Rossi, 1980). Similar to families in developed countries, some families move to the suburb to improve their living conditions. Mr. Zhao, the business owner mentioned earlier, purchased two other condominiums after purchasing the privatized *danwei* housing. He used his 200 some square meter condominium in a north suburb of Beijing as a weekend home to enjoy the good community environment and spacious living space. However, the trend for Chinese urban residents who move does not follow exactly the classic western model. In order to reduce commuting time, some other families move back to the city to be close to their work. As a metropolis with a large population, Beijing is notorious for long commutes and traffic jams. Ms. Huang, who rented a room in her rental apartment to me when I conducted fieldwork in Beijing, purchased a small studio on the north edge of Haidian district outside the Fifth Ring Road. She soon moved back with her husband to a rental apartment near her work by the Fourth Ring Road. Ms. Huang did not realize that it would take more than an hour to commute from her studio to work at peak hour because it only took her 20 minutes when she went to see the studio during the non-peak hour. She then decided to rent out her studio and move to a rental apartment near her work. With better financial resources Ms. Zhang, an official of a governmental organization, planned to purchase another condominium because neither the condominium her *danwei* purchased and resold to her nor the house she bought in a northern suburb of Beijing were close enough to her work. In order to reduce the pain of commuting more than an hour each way every day, she decided to purchase a third condominium.

Of all the reasons families move, the most common one is for the education of children. Residents with local Beijing *hukou* can move their *hukou* to the locations of the apartments they buy, which will determine where their kids can go to school. Due to the big disparity in

education quality in different districts, where to live makes a big difference to what kind of schools children can attend. Ms. Han, a government official in her 40s, and her husband, a regional representative of a large international corporation, bought a 200-some-square-meter condominium in an expensive area in Haidian district for more than 10,000 *yuan* per square meter in 2006. Although the condominium purchased through her husband's company was big enough for the family of three, Ms. Han thought it worth the money to purchase another one since "my daughter can go to a high school affiliated with Peking University. It's only ten minutes' drive from here, so my daughter can sleep longer in the morning." With enough financial capacity, the market certainly provides a good way for families like Ms. Han's to get better educational resources for their kids through purchasing condominiums in a good school district.

However, purchasing a large home for children to go to school as well as to improve living conditions is far too expensive for most ordinary families. Normally, housing in good school districts is much more expensive. Therefore, for families who do purchase another condominium for the kids to go to school, the sacrifice is normally to move to much smaller housing units. Mr. Zhao, an entrepreneur mentioned earlier, purchased his second condominium in order for his son to go to a nice high school. He changed his large condominium in a northern suburb into a weekend home while he moved with his family to a small condominium near his son's school. In fact, it is quite common for families with school age kids to move from the suburbs to a good school district in the city. As a result, the suburban neighborhoods are transformed largely into a weekend neighborhoods or rental neighborhoods for young people. When I visited Huilongguan, the largest Economical and Comfortable Housing neighborhood in Beijing, several young mothers with babies told me almost the same story: they were renters and their landlords moved because they bought small apartments in the city so that their kids could go to schools there. Since the rent was quite cheap, they plan to stay there for several years until their kids were old enough to go to elementary school. They planned to follow their landlords and purchase small apartments near the schools their kids plan to go to.

If either side of the young couple is from Beijing, another rather cheaper choice is to move to live with parents or in-laws since old residents tend to live in inner city with good schools. Mr. Zhu, an employee of a private company, bought a condominium in Tiantongyuan, a large Economical and Comfortable Housing neighborhood in northern Beijing, to get married in 2003.

The 100-some-square-meter condominium provided a comfortable living environment for his family for several years although commuting to the inner city to work was a bit far. In 2007, when his little son needed to go to kindergarten, his family finally decided to move out of their big condominium to live in with his in-laws in their 80 square-meter apartment so that his son could go to a good kindergarten nearby. The quality of living by no means decreased after their move, but Mr. Zhu thought it was a correct decision because his son could have better education there. He did not want his son “to lose at the starting point”.

Due to the high housing prices, there are also a lot of households who cannot afford to own even small homes close to a good school. Also, because of the premier location, landlords often do not want to sell their apartments near good schools. Therefore, another strategy for families with school age kids is to purchase a home in a good district like Haidian, but not necessarily close to a good school, in order to move their *hukou* to that particular district. When the time comes that kids need to go to school, they rent a small apartment close to the school and move to live in the rental apartment. Ms. Huang, my intermediate landlord, told me that many of her colleagues were renting apartments near Tsinghua University, while their purchased homes were somewhere in Haidian district far away from the school. Due to the bad commuting, they would rather packing into a tiny rental apartment than waking up the kids extremely early to send them to school every day. Mr. Gao, a graduate student who borrowed quite a lot of money to purchase his apartment, had to pay rent for another apartment three years later so that his son could go to a kindergarten affiliated with Beijing Normal University. Although he rented out his apartment, it could not cover his current rent due to its good location. However, the cost seemed to Mr. Gao as a necessary expense since nothing is more important than providing his son a good education and thus preparing him to win in the competitive market in the future.

While purchasing a condominium can also be a good investment in children’s future, it is certainly very expensive and a big burden for many families. For some other households, the solution is relatively simple and cheaper if their *danwei* is willing to keep the kid’s *hukou* in the collective *hukou* of the *danwei*. Ms. Xiao’s husband was an official in a state ministry located in Xicheng district. His *danwei* agreed to register both Ms. Xiao and their son’s *hukou* in the collective *hukou* in Xicheng District. Since their son was guaranteed to go to school in Xicheng District, they had more choices to decide where to live. Eventually, they bought their

condominium at the outer edge of Chaoyang District, which was much cheaper than housing in an inner district and also not far from Ms. Xiao's work. As a legacy of the socialist urban planning, large state institutions and state owned companies in Beijing are almost all located in inner districts where good schools are located. Those who are able to register their kids to their *danwei*'s collective *hukou* in districts where good schools are located are certainly lucky to enjoy the benefit others have to pay a high price for. Mr. Shi had similar luck as Ms. Xiao. Not long after he started to work, he bought his condominium in Chaoyang District outside the Fifth Ring Road with his fiancé to get married in 2005. Since his fiancé worked for a big state company, they were able to register his son's *hukou* in his wife's *danwei* after his son was born in 2006:

“The local police station doesn't care whether you register your kids in household *hukou* or collective *hukou* as long as your *danwei* has no objection to doing so. Normally, all large state *danwei* allow employees to do so as a benefit for employees. My wife's *danwei* has good benefits for employees.”

When the market is grafted onto the Leninist socialist system in China, we certainly see a new door opened for those with economic capacity to enjoy precious resources such as good education, which is especially valuable since most urban households only have one child. Still, the door opened during the socialist period remains opened for a small number of privileged citizens. In a sense, the introduction of the market only put those without political power into the market to be self-reliant; those who have little economic capacity are hit the hardest.

4.8 Fighting for One's “Snail Shell” Home

In order to have a living space in the city, different groups use various strategies to find their own niches. Some groups were in an advantageous position to access better living conditions during the reform era, while others groups can only reside in marginalized housing with inferior quality. In most cases, the negotiation of their living space is rather peaceful as described in previous sections. However in some cases, when a group has no resource to negotiate their living space, they might take group action to protect their right to housing in the city. It is nothing new in capitalist society where evictees and the homeless fight for their living spaces (e.g. Corr, 1999; Pruijt, 2003). Compared to the organized protests and confrontations of rural residents facing land appropriation and eviction, the confrontations of urban residents of their living space is much less radical and smaller in scale (Huerlin, 2011). Some scholars view the establishment of homeowner associations in middle class neighborhoods and occasional

organized protests as a hope of the emergence of a civil society (Zhang, 2004). I would argue that the protests of middle class homeowners are not qualitatively different from their law-abiding middle class counterparts in capitalist society who are burdened with housing debt. The fights of Chinese middle-class homeowners mostly target developers for failing to provide the quality as the contract promised, or property management companies for their poor service. In essence, their confrontations only show that the middle class are law-abiding citizens who try to enforce laws to protect their rights. Their actions are mostly sporadic and have limited influence outside their neighborhoods. In middle-class neighborhoods, the social networks are quite weak. In some cases, it is even hard to establish a homeowner association in large neighborhoods because “Nobody would like to sacrifice too much personal time for the public,” (interview, 2008). What is new and unique about the confrontations for one’s right to housing in transitional China is that instead of resorting to any market logic, renters use the socialist legacy to justify their right to housing. I will use the case below to illustrate this point further.

Jiuxianqiao is one of the twelve new industrial areas launched in the inner suburbs during the 1950s (Gu, et al., 2006) (figure 4.7). During that period, China adopted a rapid industrialization strategy with the help of the Soviet Union. Jiuxianqiao neighborhood includes several factories established during that period. Residents in this community are mostly employees of factories located in this area. Similar to many *danwei* communities, there was a significant lack of investment in housing maintenance and the quality of buildings in this area continues to decline during the reform era. After housing reform, many residents, mostly young people who could afford commercial condominium elsewhere moved out, leaving old residents in dilapidated apartments in this area. Due to the low salary in the socialist period, the majority of the remaining residents could not even afford to buy the apartments they lived in at subsidized prices. Therefore, the majority of them continue to pay rent to their employers to live there.

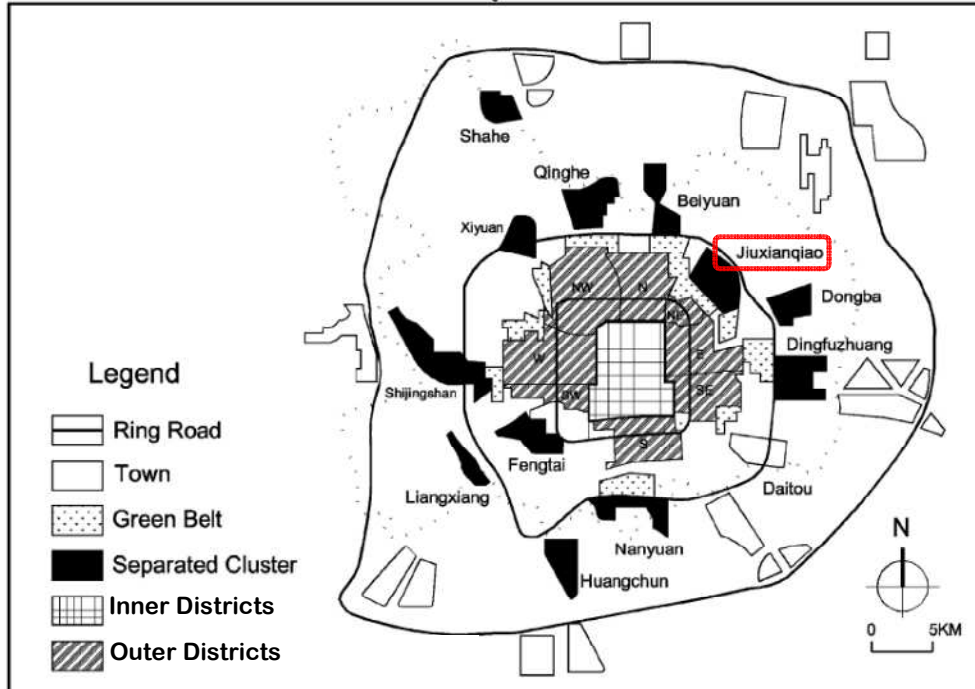


Figure 4.7. New Industrial-residential Area in Beijing during 1950s- 1970s

(Adapted from Gu, et al., 2006)



Figure 4.8. A typical building in Jiuxianqiao neighborhood

In 2003, there were so many dilapidated residential buildings in this area that the Beijing municipal government designated part of the Jiuxianqiao neighborhood as a redevelopment area.

It was the biggest redevelopment of dilapidated areas in Beijing. The total area in the redevelopment project was 420,000 square meters. The planned construction area was 1,010,000 square meters, among which 630,000 was for the relocation of current residents. There were total 6,690 households and 20,000 people affected by this project. Eighty percent of the affected people were retired or laid-off workers from the factories located there. Only 700 households, about ten percent, had bought the ownership right to their apartments. In order to carry out this project, a project-specific development company was co-organized by the enterprises in this redevelopment area to work along with a real estate company. About one-third of the area will be used for relocation, another one-third will be used for widening the city streets, and the rest of the area will be used to develop commercial housing to generate redevelopment capital. After redevelopment, the residents would either get a lump sum of money as compensation or move back by paying a discounted price based on the areas of their previous housing units and their job seniority. However, most residents did not agree with the planned floor space of resettlement apartments and the way in which compensation was calculated. More importantly, they thought of the land as theirs and thus believed that the developer had no right to reap any economic gain from commercial housing development. Therefore, they organized and selected resident representatives to negotiate for better compensation. Due to their organized resistance, the redevelopment project was delayed for more than two years. Finally, the developer agreed to increase the compensation: if a household wants lump-sum compensation, they can get more than 30,000 *yuan* per household, a great increase from the initial 5000 *yuan*, or if they want to be relocated back, they can choose a larger apartment through paying the price differences of their old apartments and the relocation apartments. However, most residents still did not accept the compensation and refused to move out. In 2007, after another two years of stalemate, the developer made a further compromise to organize residents in the redevelopment area to have a poll. However, the resident representatives challenged the validity of the democratic process for making this decision:

“The developer organized residents in the redevelopment area to have a poll to decide whether or not to continue the project. But you don’t have the right to organize a poll at all.... It is our land. It is an undemocratic way under the banner of democracy....”

(interview with resident representatives, 2007)

As renters, most residents in the Jiuxianqiao community only have limited rights over the apartments in which they reside; they only have the right to live in the apartments through paying rents. During my conversations with resident representatives, they kept mentioning different policy documents to legitimize their demands. However, when suggested that they hire a lawyer, they did not express their opinion on the matter, but rather emphasized that “It is important to have a ‘kouzi’ (opening) from above. If the ‘above’ says something, the issue will be settled very easily.” For them, their right to housing cannot be solved through hiring a lawyer to address their legal rights, although what they asked for was “according to the policy documents.” This once privileged group in the pre-reform regime strongly felt that they were betrayed and discarded (Solinger, 1999). As a result, they thought the problem was more a moral or historical than a legal issue. This is made clear in an article by resident representatives to the local government indicating the unique situation of the Jiuxianqiao redevelopment project:

“Eighty percent of residents in the redevelopment area are retired or laid-off workers. They contributed their youth and life-long efforts to the development of the electronic industry in the past....They produced the national primitive accumulation. It is the government’s responsibility to help them to overcome their housing difficulties....”

(Resident representative group, 2008)

As Harloe (1996) argues, the socialist transition is path-dependent and cannot be changed overnight. The process of the transformation of China’s property regime with regards to the housing system is a process of re-institutionalization of property rights. While those old residents did not have legal rights to the apartments they were residing in, they had strong feelings of entitlement. They repeatedly mentioned that the land used for commercial housing was “their” land and that the developer had no right to use it. For them, except for the land used for widening public streets, the rest of the land should all be used for improving their housing standards because it was theirs. The tool they used was not any market logic or the newly released Property Law, but the practice of low wages during the socialist period. The “low-salary-for-cheap-social goods” regime became a tacit promise between them and the employers/the state to justify their low salaries. Once the government broke the “social contract” and stopped providing social welfare as promised, they simply did not have the ability to play in the market as their young professional counterparts. In this case, property rights are not just a bundle of rights, but a whole system embedded in local contexts with their own histories and cultural meanings. The renters’

struggle over their housing in Jiuxianqiao community was quite different from those protecting renters' rights in Western countries. While not having ownership rights over their housing, the renters felt entitled to better living conditions due to the tacit "social contract" in which welfare housing is a way to fulfill their right to housing. Citizens like those in Jiuxianqiao who challenged the newly established institutions which are at odds with the traditional informal institution. However, this group is rather weak to have their voice to be heard. On the other hand, the urban migrants who are secondary citizens in the city without social citizenship rights cannot even find grounds to fight for their rights to housing in the cities. I would be less optimistic that a civil society in which citizens can strive for equal rights to housing will not come any time soon.

4.9 Conclusion

Housing need is considered to be of fundamental importance to human flourishing and a universal right to individuals (King, 2003). Based on the discussion in this chapter, this universal right is not easy to achieve for many Chinese urban residents, just as in the TV show "*Snail Shell Home*". Responsible for one's own home is a hegemonic discourse in China during the reform. However, it is not totally right that China is moving to a neoliberal society in which its citizens have to behave as neoliberal subjects and be responsible for themselves. Neoliberalism as governmentality was only applied to those who are outside the socialist institution as the old lady and the two migrant sisters in the TV show who are not working in state sector and do not even have a local *hukou* to gain full citizenship. Those who are working in the public sector or have connections do not always have to follow the logic of market. Obtaining housing for them is not only easy, but is also a good way to generate wealth through cashing in their benefits in the market. As Uncle Ji, a low-level government official said: "there is only a door-opening of the country, no reform. If you want to say that there is a reform, it only applies to people below *Chu* level (department chief level)."⁷⁴ At the same time, this chapter also showed that those neoliberal subjects who do need to be responsible for themselves are not passive victims. Instead, they are actively using strategies to negotiate the urban space in order to realize their homeowner dreams and have a snail home of their own. As in the developed countries, the emergence of the housing market does provide more opportunities for some citizens. However, citizens such as laid-off

⁷⁴ The bureaucratic levels in Chinese public sector from low to high roughly is: *Banshiyuan* (Clerk), *Ke ji* (section chief level), *Chu ji* (department chief level), *Si ji* (sub-ministry chief level), *Bu ji* (ministry chief level) and *Zongli ji* (minister level).

workers and migrants are just “market spectators” (Wang et. al., 2013) since they have neither financial resources nor rights to be homeowners. In some cases, they organize to have direct confrontation in order to protect their rights to housing. Through grafting a market on top of the socialist system, inequality during the socialist period continues to be in place in the reform era, which makes the situation of the disadvantaged groups even worse since they are forced to become neoliberal subjects stripped of most of the welfare state's protection.

This chapter also shows that the socialist history also matters in the reform era. It is relatively easier and faster to change the formal institutions by issuing new laws and policies. However, informal institutions are highly path-dependent, as we see in the case of the renters' fighting. Therefore, even if the formal institutions have been transformed, those informal ones may persist in practice. Therefore, the clarification of property rights cannot be the only important means to address these problems.

In America, home ownership represents not only an integral part of the American dream but also the largest component in most Americans' wealth portfolios. It signifies the command over financial resources a family has accumulated over its lifetime along with those resources that have been inherited across generations. Families with modest to average wealth hold most of that wealth in their home (Oliver and Shapiro, 1995, pp. 108). In the case of the transformation of housing system, it is hard to say whether being homeowners will necessarily generate relatively secure wealth for households since Chinese urban residents only have seventy years' ownership rights to the housing unit they purchased. We have to wait and see how this policy will be implemented when some homeowners reach that stage. What can be said here is that the mixed housing market certainly benefits those who have enough financial resources to earn quick money by constantly buying and selling. It especially benefits those who can access housing cheaply in the public sector and sell it at the market.

Chapter Five Housing Inequality in Metropolitan Beijing

The existing literature on inequality focuses more on income opportunities and income inequality. However, studies in America reveal wealth is more stable within family and across generations than other socioeconomic status such as income, occupation and education (Conley 1999: 14). Housing consists of a significant part of ordinary households' wealth portfolio (Oliver and Shapiro, 1995). In addition, housing is a basic need for any individual, directly affecting their quality of life. This chapter aims at exploring housing inequality in the Beijing metropolitan area with aggregate data. First, I will identify urban residents within the metropolitan area boundary delineated by Chan and Forstall (2013), which can yield meaningful and reliable knowledge of housing inequality in urban Beijing than previous studies using population within the administrative boundary or the old urban districts of Beijing (e.g. Huang, 2005; Huang and Jiang, 2009). Then, this chapter will explore housing inequality in metropolitan Beijing based on the 2000 Population Census data.

5.1 Identifying Urban Residents in the Beijing Metropolitan Area

As explained in Chapter 2, in order to be self-reliance before the economic reform, the administrative boundaries of Chinese cities were overbounded entities with not only the urbanized areas, but scattered towns nearby, as well as large stretches of rural areas in between. Therefore, Chan (2007) argued that administrative areas of prefecture-cities in China should be viewed as "regions" rather than "cities" as defined in other countries. Beijing is no exception. However, many previous studies used either population of all the administrative districts (16,808 km² in 2000), or the eight old urban districts of Beijing (1,370 km²) (e.g. Feng, 2004; Huang and Jiang, 2009). The former boundary is too broad and thus includes a lot of agricultural population, while the latter is too narrow and excluded people living at the rapid-growing urban fringe of Beijing.

In the Western countries, metropolitan areas are functional units based on daily-labor-market concept. It is usually defined by the commuting zones. Unfortunately, there is no systematic commuting data for Beijing to delineate the metropolitan area. This dissertation uses a Beijing metropolitan area boundary based on Chan and Forstall (2013), who use several criteria: 1) urbanized areas, which is defined by contiguous sub-districts with population density 2,000 per

square meter or greater, plus sub-districts contiguous to the above group, with density of 1,000-1,999 per square meter and less than 25% of workers engaged in agriculture; and 2) contiguous sub-districts (the suburbs) with density of 500 per square meter or greater, less than 25% of workers engaged in agriculture, and population growth during 1990-2000 period was 15% or greater (Figure 5.1). Without using a functionally meaningful metropolitan boundary, previous studies either excluded of real urban residents or the inclusion of too many rural residents, which led to erroneous conclusions. For example, using only the four inner city districts and the inner suburban districts of Beijing, Huang and Jiang (2009) came up with a rather low homeownership rate because homeowners in the newly developed communities at the urban fringe of Beijing were excluded from their studies. In a study of Beijing's social areas, Feng and his colleagues (2008) used the 14 administrative districts of Beijing as proximity of Beijing metropolitan area to study of the social areas of Beijing metropolitan area and found that agricultural population was an important factor. It is erroneous because it was based on an overbounded boundary which included a lot of rural population.

The analysis on housing inequality is based on 2000 Population Census in Beijing. Specifically, I use microdata (0.1% sample) from the long-form questionnaire of the 2000 population census. It includes all information of each resident in the sample, except for the geographic information of *jiedao*. Due to the constraint of this dataset, it is impossible to directly select residents within the metropolitan boundary delineated by Chan and Forstall to conduct analysis. Instead, this study resorts to an indirect way to define urban residents within the metropolitan area.

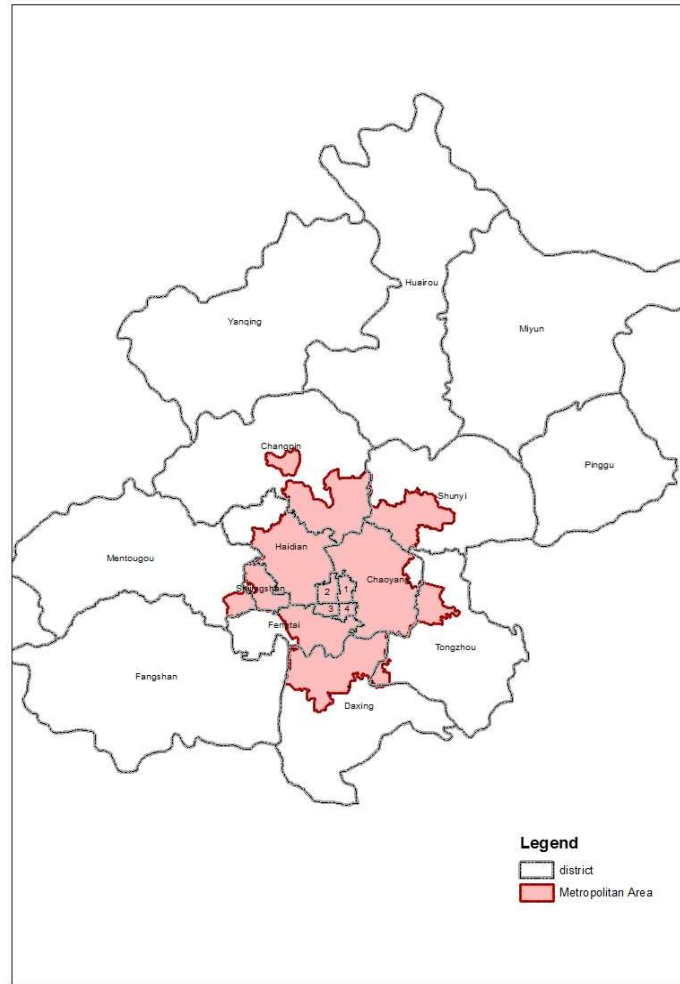


Figure 5.1 Beijing Metropolitan Area in 2000 delineated by Chan and Forstall

Figure 5.1 shows that the eight old urban districts⁷⁵ are mostly included in the metropolitan area, except a few *jiedao* in Haidian and Fengtai districts. Therefore, it is reasonable to include all residents in these eight old urban districts in the Beijing metropolitan dataset. The real challenge is to come up with reasonable criteria to select residents in the four outer suburban districts (Changping, Shunyi, Tongzhou and Daxing) which are within the Beijing metropolitan area shown in Figure 5.1.

Due to the overbounding problem explained earlier, a lot of Beijing *hukou* residents outside the real urbanized area are rural *hukou* holders who are subjected to a different land regime. They can build their own housing on the allocated land slots from the collective. Therefore, I

⁷⁵ They include Dongcheng district, Xicheng district, Xuanwu district, Chongwen district, Haidian district, Chaoyang district, Fengtai district and Shijingshan district. In 2010, Xuanwu district was merged into Dongcheng district and Chongwen district is merged into Xicheng district.

expect that the housing tenure type of residents living outside of the Beijing metropolitan area is primarily self-built. The examination of the percentages of residents with self-built housing based aggregate data with *jiedao* information confirm to my expectations (Table 5.1). We can see that areas outside of the Beijing metropolitan area have more than 80% of residents living in self-built housing. In Daxing and Tongzhou district, the percentages of residents living in self-built housing are even higher than 90%. In addition, the relatively small standard deviations suggest that that the high percentage of self-built housing is consistent across *jiedao* in those areas. Therefore, it is reasonable to use the percentage of residents in self-built housing as a primary criterion to distinguish those living within and outside Beijing metropolitan area.

Table 5.1 Residents in Self-built Housing in *Jiedao* within and outside Beijing Metropolitan Area (%)

	Metropolitan	Average	Maximum	Minimum	Standard Deviation
Changping	within	35.25	56.60	9.89	16.96
	outside	79.94	94.66	34.69	17.74
Daxing	within	47.60	81.76	24.26	23.36
	outside	97.12	99.34	94.23	1.83
Shunyi	within	45.61	74.16	6.54	28.69
	outside	88.80	95.23	68.80	6.56
Tongzhou	within	18.89	34.64	2.36	13.13
	outside	92.89	99.12	86.48	4.53

However, there are also a small percentage of residents living in self-built housing within the metropolitan area. If I used housing tenure type which is not self-built as the only criterion, I would risk excluding some residents who actually lived in the metropolitan area. Therefore, I use a second criterion: if residents were living *jiedao* categorized as *city (shi)*⁷⁶, no matter whether or not they were living in self-built housing, they are included in the Beijing metropolitan dataset.

5.2 Descriptive Analysis on Housing Inequality

Based the dataset I derived with the two criteria explained in the previous section, 8,346,000 observations are extracted for the analysis in this chapter, about 82% of the population in the

⁷⁶ There are three types of *jiedao* in the 2000 population census data. The other two types are township (*zhen*) and village (*cun*).

Beijing metropolitan area based on Chan and Forstall's work. It is because the criteria used in this chapter are rather strict to exclude most of residents living in self-built housing in the four outer suburban districts. In addition, because collective households (*jiti hu*) usually face different housing situations, I also exclude them from my dataset. There are in total 30,165 households in metropolitan Beijing and 30,013 family households whose household head is 18 or older. Of them, 6,036 (20.2%) hold agricultural *hukou* and 23,919 (79.7%) of household heads hold non-agricultural *hukou*.

Usually, per capita living space is used as an indication of a crowded living situation (e.g. Huang, 2003). However, this index cannot reflect whether or not a household has enough rooms. For example, it does not show whether generations are sharing rooms. In this study, besides per capita living space, I use another measurement, "room ratio," to examine households' living situation. The room ratio is defined as the number of rooms a household actually has over the number of rooms a household needs. The basic idea to calculate the number of necessary rooms is that each married couple needs a room and single adults of opposite sex need separate rooms. In addition, children older than 6 years old need a separate room from their parents⁷⁷. If the room ratio is at least 1, it means that the household has enough rooms. If the room ratio is smaller than 1, it indicates that the household does not have enough number of rooms. While the room ratio is largely consistent with the index of living space per person, it is not always the case. For example, a big apartment may only have one bedroom which several generations have to share. On the other hand, a small multiple-room apartment may better serve the needs of a big family.

Figure 5.2 shows that the average per capita living space in metropolitan Beijing is 23.01 square meters. Based on the 2000 population census, the median per capita living space is about 19 square meters in Beijing metropolitan. Examining the average living space consumption among twelve districts in metropolitan Beijing, residents in the four central districts (Dongcheng, Xicheng, Xuanwu and Chongwen) had average per capita living space smaller than that of the whole Beijing metropolitan area. In order to show the unequal distribution of housing consumption, I

⁷⁷ Room ratio is calculated as: of the nuclear family the household heads, they and their couples (if married) need separate rooms. If the household heads have children, children older than 6 years old need separate rooms. And two adult children of opposite sex need separate rooms (but if they are the same sex, they can live in the same room). If there is a third adult child of different sex from the previous two, one more room is needed. In addition, each adult or couple (if married) from extended family need a separate room. For example, if household head lives with his/her parents, the household needs one more room. If the parent in-law also lives in the household head, one more room is needed. This measurement considers multiple children younger than 18 living in the same room as acceptable, regardless of their sex.

also calculate the percentage of households with inadequate living space. I use living areas of 12 square meters per household, about 60% of the median, as a dividing point of inadequate housing consumption.

Table 5.2 Living Space of family households within Beijing Metropolitan Area by Districts

	District	Per Capita Living Space				Room Ratio			
		Average (m ²)	Median (m ²)	Standard Deviation	Below 12 sq (%)	Average Ratio	Median Ratio	Standard Deviation	Below 1 (%)
Central Districts	Dongcheng	18.42	14.00	16.49	40.60	0.70	0.50	0.63	63.4
	Xicheng	20.02	16.00	20.02	34.70	0.70	0.50	0.58	57.6
	Chongwen	15.68	11.00	14.50	53.30	0.63	0.50	0.50	65.4
	Xuanwu	18.53	15.00	13.19	36.00	0.64	0.50	0.50	63.4
Inner Suburbs	Chaoyang	24.60	20.00	18.42	20.90	0.74	0.50	0.63	54.4
	Fengtai	22.96	20.00	17.24	22.30	0.73	0.50	0.59	53.3
	Shijingshan	19.93	18.00	14.03	27.40	0.63	0.50	0.47	57.2
	Haidian	24.93	20.00	18.84	20.90	0.77	0.50	0.67	51.1
Outer Suburbs	Tongzhou	24.55	21.29	15.23	15.20	0.86	0.67	0.68	34.8
	Shunyi	26.94	23.33	18.61	12.40	0.93	0.67	0.76	37.8
	Changping	26.67	22.67	19.58	18.10	0.94	0.67	0.82	32.4
	Daxing	26.24	21.00	19.59	19.90	0.83	0.67	0.67	41.1
	total	23.01	19.33	17.72	25.00	0.75	0.50	0.63	52.9

Note: Because the Beijing metropolitan area does not include all the four outer districts (Tongzhou, Shunyi, Changping and Daxing), only data of family households within the metropolitan area in the outer four districts are shown in this table. Collective households (*jiti hu*) were not included in this analysis. Most of the collective households were very crowded. Therefore, the living space of households in urban suburbs where a lot of collective migrant households lived should be smaller than what shown in this table.

Table 5.2 shows that the percentage of households with inadequate living space declines with distance from the central districts, suggesting that the crowded living problem was less severe farther away from the city center. The crowding problem was especially serious in Chongwen district where the average and median per capita living space was the smallest and more than half of the households lived in inadequate residences. In contrast, outer suburban district: Shunyi had the largest average per capita living space (26.94 square meters) and the percentage of households in crowded living situation was also low. The standard deviation of per capita living space suggests that the per capita living spaces varied most in the outer suburban districts, with the exception of Tongzhou districts. In contrast, the variations of living space were smallest in

the central districts. It is probably because the housing units in the central districts were mostly small.

Examining the room ratios shows that, the crowded living problem was quite serious in metropolitan Beijing. No district had an average room ratio greater than 1 and on average households in Beijing metropolitan area had only 75% of rooms they need. The spatial pattern shown by room ratio is consistent with that of the per capita living space. While inadequate living space exists throughout the metropolitan area, it is residents in the central districts (Dongcheng, Xicheng, Xuanwu and Chongwen) who had the smallest room ratio, with an exception of Shijingshan district. It is probably due to the fact that a large SOE is located in that district which provided relatively larger housing for its employees. Away from the central districts, the crowding problem is less acute, but there are more variations how residents' housing needs is met. Overall, the two indexes are quite consistent in terms of spatial pattern of crowded living across metropolitan Beijing.

Besides living space and the number of rooms, private facilities are also an important index showing households' housing quality. Table 5.3 summarizes the percentage of households with shared or no private kitchen, lack of tap water, shared or no bath, and shared or no lavatory across all the districts within metropolitan Beijing. It is surprising that except for tap water, there were relatively high percentages of households sharing or having no kitchen, bath or lavatory at home. The spatial pattern is similar to that of inadequate living space. Households in inner districts have the worst living situations. More than half of households in Dongcheng district lacked private kitchen, bath or lavatory. In Chongwen district, more than 60 percent of households have to use public baths and restrooms. It is understandable that these old urban districts generally had much housing built during the pre-reform period or even earlier without modern facilities. Districts farther away from the urban center generally have better living situations in terms of housing facilities. Shunyi district, one of the outer suburban districts, had the best living conditions in terms of the percentages of households with independent kitchens, tap water and bathroom.

Table 5.3 Family Households Lacking Necessary Facilities (%)

	Shared/no kitchen	no tap water	Shared/no bath	shared/no lavatory
Dongcheng	50.80	0.37	52.34	59.06
Xicheng	25.45	0.13	43.81	45.62
Chongwen	39.31	0.43	64.57	68.02
Xuanwu	35.93	0.35	48.97	49.03
Chaoyang	18.35	0.70	31.46	32.18
Fengtai	18.33	0.98	37.94	30.10
Shijingshan	22.27	0.33	42.35	33.91
Haidian	17.49	0.73	28.01	26.18
Tongzhou	11.94	2.13	46.40	22.53
Shunyi	10.83	0.35	32.21	26.35
Changping	12.70	1.18	33.51	19.90
Daxing	19.78	0.61	43.49	31.18
total	21.88	0.69	37.74	34.66

There is a perception that *hukou* has lost its effect in the new era. However, Chapter 4 has shown that *hukou* has remained to be important in determining urban residents' housing in Beijing. In addition, mobility is generally agreed to be a way for households to achieve better living environment (William and Huang, 2004; Huang and Deng, 2006). Previous studies usually only differentiate residents with either agriculture or non-agriculture *hukou*, or those with either local or non-local *hukou*. In addition to the usual categorization of urban residents, this section further divides household heads with various *hukou* statuses according to their mobility status to get a better understanding of the jointly effect *hukou* status and mobility status in a systematic way (Figure 5.4). Household heads with local *hukou* are further divided into non-movers with urban *hukou*, non-movers with rural *hukou*, urban lifetime migrants⁷⁸, intra-urban migrants with urban *hukou* and intra-urban migrants with rural *hukou*. Intra-urban migrants refer to those who held Beijing *hukou* of other *jiedao* or counties different from the *jiedao* they lived. Non-local

⁷⁸ Based on the population census, it is impossible to directly derive permanent migrants who officially moved their household registration places from their birthplace to their destination. I use the local lifetime migrants as a proxy of permanent migrants. Local inter-provincial lifetime migrants are not exactly the same as permanent migrants who managed to move their *hukou* registration places after moving. Local inter-provincial lifetime migrants also include those who were born outside Beijing without actually moved their households registration places. However, I expect the number of local residents born elsewhere is very small. Therefore, it is reasonable to consider the local inter-provincial lifetime migrants as permanent migrants.

hukou holders are further divided into urban intra-urban migrants, rural intra-urban migrants, urban inter-provincial non-*hukou* migrants and rural inter-provincial non-*hukou* migrants.

Table 5.4 Divisions of Family Households Based on *Hukou* and Mobility Status

Hukou Status	Mobility Status	Family Households
Local <i>hukou</i>	Non-movers	Non-movers with urban <i>hukou</i>
		Non-movers with rural <i>hukou</i>
	Movers	Lifetime migrants with urban <i>hukou</i>
		Intra-urban migrants with urban <i>hukou</i>
		Intra-urban migrants with rural <i>hukou</i>
Non-local <i>hukou</i>	Movers	Inter-provincial migrants with urban <i>hukou</i>
		Inter-provincial migrants with rural <i>hukou</i>

Table 5.5 Housing Difference among Household Heads of Different *Hukou* Status

		Living space (m ² /person)	Room ratio	Number of facilities	With full facilities(%)
Local <i>hukou</i>	Non-movers with urban <i>hukou</i>	21.00	0.88	3	53.90
	Lifetime migrants with urban <i>hukou</i>	23.65	0.91	3	70.70
	Non-movers with rural <i>hukou</i>	31.72	1.52	3	32.10
	Intra-urban migrants with urban <i>hukou</i>	28.21	0.94	4	79.70
	Intra-urban migrants with rural <i>hukou</i>	21.15	1.02	3	47.40
Non-local <i>hukou</i>	Inter-provincial migrants with urban <i>hukou</i>	25.79	1.04	3	47.40
	Inter-provincial migrants with rural <i>hukou</i>	10.06	0.73	1	5.60
Agricultural		20.00	1.07	2	19.60
Non-agricultural		23.75	0.91	3	56.70
Local		23.66	0.97	3	59.30
Non-local		21.54	0.88	3	51.30
total		23.01	0.75	3	56.90
ANOVA (F value)		530.66***	193.25***	1447.21***	

*** significant at 0.001 level

Table 5.5 shows that, non-movers with local rural *hukou* had the largest living space and highest room ratios. It is because that the limitation on the area of allocated land for housing in

the countryside is much larger than the average living space in the cities⁷⁹. Because the land has no cost and is usually large enough to build a big house, rural households usually have larger living spaces than their urban counterparts. But it does not mean that households with rural *hukou* have an advantage over other social groups. In terms of the quality of housing, there were fewer modern facilities in their homes. In addition, there were a lower percentage of households living in better equipped housing than both other local groups and groups with urban *hukou*. Table 5.5 shows that only a little more than 30% of households with local rural *hukou* had all the four facilities. Households with non-local non-agricultural *hukou* had the poorest living situations. Among the local *hukou* households, intra-urban migrants with urban *hukou* have the best living environments. They have living spaces smaller only than those of local rural groups. However, a far greater proportion of them lived in housing units with all the four facilities.

While the difference between agricultural and non-agricultural *hukou* remains the primary factor in determining households' living situations, new inequality has emerged based on local or non-local *hukou* status. As discussed in Chapter 3, after the economic reform the *hukou* system is no longer a mobility control mechanism. Rather, it has become an important entitlement institution determining individuals' and families' citizenship in the localities in which they live. Table 5.4 shows that households with local *hukou* generally have more spacious and better housing than households without local *hukou*. Households with non-local *hukou* are more likely to live in crowded housing and have fewer necessary home facilities.

Usually, *hukou* migrants who officially move their *hukou* registration place are doing as well as, if not better than the local groups since *hukou* migrants are eligible for the same welfare as the local group. Table 5.5 shows that lifetime migrants had better living conditions than non-movers with local urban *hukou*. Of the households with local *hukou*, local urban non-mover households have smaller living spaces than other local groups. I expect that most of urban non-mover households were urban poor, who were mired in poor living environments and cannot afford to move up the housing ladder. In contrast, intra-urban migrant households with local urban *hukou* had the best living situations among groups with local *hukou*. This is consistent with previous studies that households tend to move up the housing ladder to improve their living

⁷⁹ For example, the limit of allocated land for housing in the countryside outside Beijing is about 167 square meters per household (<http://www.law95.com/htm/20101123/10254.htm>). A household of five people will still have more than 30 square meters per person of living space. Considering many households may not have more than five people because young people have migrated to the city, the living space per person may be even bigger.

situation. Table 5.5 also shows that migrant households with rural *hukou* from outside of Beijing were in the most disadvantageous position in terms of living environments. Their living spaces were less than half that of all other groups. On average, their families only have one of the four facilities, most likely to be tap water.

Table 5.6 Purchase and Rent Cost of Housing among Various *Hukou* Status Groups

		Purchase Price ⁸⁰ (yuan/m ²)	Rent (yuan/m ²)
Local <i>hukou</i>	Non-movers with urban <i>hukou</i>	540	2
	Lifetime migrants with urban <i>hukou</i>	456	2
	Non-movers with rural <i>hukou</i>	436	5
	Intra-urban migrants with urban <i>hukou</i>	1099	4
	Intra-urban migrants with rural <i>hukou</i>	1026	9
Non-local <i>hukou</i>	Non-Beijing migrants with urban <i>hukou</i>	1365	15
	Non-Beijing migrants with rural <i>hukou</i>	975	17
Agricultural		486	17
Non-agricultural		625	3
Local		482	2
Non-local		1117	11
total		602	6
ANOVA (F value)		276.58***	1083.68***

*** significant at 0.001 level

Bear in mind that difference in living environment among different *hukou* groups discussed earlier, the different cost each group paid for their residence was astonishing: households with better living conditions paid less for their residence while those living in poor living environments paid more (table 5.6). As homeowners, inter-provincial migrants with non-local urban *hukou* paid the highest price per square meter for their home; local rural households paid the lowest price for their home. Based on the discussion earlier in this chapter, it is because local

⁸⁰ The purchase prices are current prices when they made their purchase. Since the housing reform started in the late 1990s, only a few years before the population census, I expect that they are not too much different from those based on constant prices.

rural households usually live in self-built housing with free allocated residential land. The prices non-agricultural *hukou* holders paid for their homes are higher than those for agricultural *hukou* holders. Non-movers with local urban *hukou* paid the price only higher than the rural households with local *hukou*. As to renters, the pattern is quite similar to that of the homeowners: the two non-local *hukou* groups paid the highest rent per square meter. On the other hand, lifetime migrants with local urban *hukou* paid the lowest rent for their homes, which are followed by non-movers with local urban *hukou* households. It is probably because these two groups are more likely to get subsidized public rental housing which only requires token rents. Overall, non-agricultural *hukou* households paid less for both purchasing and renting housing. The rent agricultural *hukou* holder households paid was more than five times of that non-agricultural *hukou* holder households. The difference in housing cost was even larger between local and non-local *hukou* holder households: non-local *hukou* holder households on average paid 635 yuan more per square meter for their home, more than twice the price local *hukou* holder households paid. For renters, non-local *hukou* holder households also paid more than five times of that local *hukou* holder households paid.

Table 5.7 Housing Tenure among Various *Hukou* Group (%)

	Self-built	Market purchase	Economical purchase	Public Purchase	Public rental	Market rental	Other	Home ownership
Non-movers with local urban hukou	17.82	2.57	2.35	34.57	39.91	0.95	1.84	0.57
Lifetime migrants with urban hukou	3.20	0.77	1.37	56.17	36.53	0.47	1.50	0.62
Non-mover with local rural hukou	87.72	4.88	2.42	1.17	1.36	0.94	1.51	0.96
Intra-urban migrants with urban hukou	2.18	7.27	4.27	40.87	38.74	2.98	3.69	0.55
Intra-urban migrants with rural hukou	11.48	19.62	7.18	11.00	16.75	21.53	12.44	0.49
Non-Beijing migrants with urban hukou	2.43	7.65	1.74	15.03	30.32	27.98	14.86	0.27
Non-Beijing migrants with rural hukou	3.35	1.12	0.11	0.61	20.56	57.92	16.34	0.05
Total	14.66	3.09	2.12	35.78	32.74	7.68	3.94	0.56

Housing tenure is another indication of housing difference. Different tenure types are usually related with different security. Studies in western countries show that rental houses are less

secure. Tenants are often risk forced eviction. In China, it is less common to have forced eviction of tenants⁸¹. However, the public preference is to have one's own home. Normally, privately owned housing is more secure than rental housing. Public rental housing units are more secure than private rental. In addition, different types of tenure are associated with different housing quality (Logan, 2009). Of privately owned housing units, housing purchased on the market is usually better in terms of facilities and quality, which is followed by economic purchase. In contrast, public purchased housing units are predominantly old housing stock. The quality of self-built housing has the poorest quality and is normally lack of the modern facilities.

Table 5.7 shows that the overall home ownership rate is 0.56 (last column), which is higher than the home ownership rate in Huang and her colleague's (2009) study. It is because Huang and her colleagues's study does not include the fringe area of the Beijing metropolitan area outside the eight old urban districts and therefore, excludes homeowners there. Table 5.6 also shows that non-movers with local rural *hukou* had the highest homeownership rate (0.96), which was not a complete surprise because they were subjected to a different housing system from the urban one. The other three groups with local urban *hukou* all had quite high homeownership rate. Lifetime urban migrants had the second highest homeownership rate, which is followed by non-movers with local urban *hukou* and intra-urban migrant households with urban *hukou*. On the other end of the spectrum, migrant households with non-local rural *hukou* had the lowest home ownership rate.

Examining the various housing tenures among different *hukou* groups, the majority of non-mover with local rural *hukou* lived in self-built housing, because they are farmers living in "villages in the city" or in rural areas. Non-mover households with local urban *hukou* were the most likely to live in public rental housing, followed by public purchase. This group had a very low percentage in market rental housing. The percentage in market purchase was also quite low (2.57%). As local residents, they were more likely than other groups to access government subsidized housing. This contrasts sharply with rural migrant households holding non-local *hukou* who predominantly resided in market rental housing (57.92%). On the other hand, government subsidized Economical and Comfortable housing and discounted privatized public housing were almost inaccessible to those "outsiders." While the percentages of households in

⁸¹ Ironically, forced eviction happened more often to homeowners. Those who live in urban development and redevelopment areas are more likely to experience forced eviction in order to make room for the urban development or redevelopment project.

market purchase housing were relatively low for all groups, it is a little surprising that intra-urban movers with rural *hukou* had the highest percentage. In addition, this group also had the highest percentage purchasing Economical and Comfortable housing. As explained in Chapter 4, it was because the relocation housing for rural residents subjected land expropriation was classified as Economical and Comfortable housing in Beijing. Lifetime migrants with local urban *hukou* were the most likely to live in public housing (either purchase or public rental). Different from non-*hukou* migrants, they had the same access to urban welfare as local Beijing residents. The pattern shown in Table 5.7 is generally consistent with that of Logan and his colleagues' study (Logan, et al., 2009). Since they do not differentiate households with local and non-local *hukou*, it is impossible to know the housing tenure differences among them.

Table 5.8 Housing Inequality among Education Groups

Education	Living space (m ² /person)	Room ratio	Quality score	Full facilities (%)	Purchase Price (yuan/m ²)	Rent Price (yuan/ m ²)
No schooling/ literacy class	22.92	1.06	3	38.20	470.76	3.62
Elementary/ junior high	20.49	0.91	3	44.00	486.50	7.34
Senior high	21.59	0.89	3	58.70	617.25	4.47
College	28.58	1.02	4	80.80	739.16	4.66
Graduate school	32.16	1.13	4	86.30	1110.07	5.69
Total	23.01	0.94	3	56.90	601.50	5.80
ANOVA (F value)	305.56***	74.47***	642.14***		108.08***	58.82***

*** significant at 0.001 level

Table 5.8 shows the different housing situations of different education groups. Housing situations among various groups follows our expectations: household heads with higher education had better living situations. Households with household heads having graduate school education had 57% more living space per person than households with household heads only having elementary or junior high school education. The difference was even bigger between these two groups in terms of percentage of having all four necessary facilities at home. Except for groups with no formal education, low educated groups generally had less than the necessary living space judging from room ratio. Households with high education were more than twice as likely to have all the facilities at home as were households with elementary or junior high school education only.

The exception was the group with no schooling or only literacy class training. Their per capita living space was greater than households with senior high school education. They also had the highest room ratio among all educational groups. However, in terms of facilities, households with low education had the lowest facility percentage among all groups. This is consistent with findings earlier that local rural households who normally had low education level lived in larger but poorly equipped housing comparing with other groups.

Among homeowners, groups with higher education paid a higher price per square meter for their homes. Presumably, it was because the higher the education one had, the more likely to buy better quality housing. Among renters, the rent households paid was not exactly according to the education level. The group with elementary or junior high school education paid the highest rent for their rental home, while the group with no formal education paid the lowest rent. The reason was that those from the group with no formal education were very likely to be native who had access to cheap public rental housing or who built their own home. Those with little education were more likely to be migrant workers who could not access subsidized public housing. Therefore, they were most likely to rent housing on the market.

Table 5.9 Tenure Difference among Different Education Groups (%)

	Self-built	Market purchase	Economical purchase	Public Purchase	Public rental	Market rental	Other	Homeownership rate
No schooling/literacy school	24.51	1.34	0.89	24.63	39.40	5.41	3.82	0.51
Elementary school/junior high	22.87	2.58	1.80	25.53	30.52	11.92	4.79	0.53
Senior high	10.29	3.09	2.50	35.80	39.24	5.45	3.63	0.52
College	2.92	4.31	2.57	55.87	28.53	3.02	2.77	0.66
Post-graduate	0.61	4.45	2.30	55.21	30.83	3.37	3.22	0.63
Total	14.63	3.09	2.12	35.82	32.74	7.67	3.94	0.56

Table 5.9 shows that college graduates had the highest home ownership rate, slightly higher than people with post-graduate diplomas. Group with no formal schooling had the lowest homeownership rate. As expected, for the group with no formal education, the percentages of those living in both public rental housing and self-built housing were quite high (Table 5.9). Examination of the housing tenure between these two groups shows that the biggest difference lies in the percentages of public purchase: the percentage of households with college education

which purchased privatized public housing was more than twice that of households with no formal schooling. Quite different from that in mature market economy, Table 5.9 shows that the higher a household head's education is, the more likely a household was to purchase public housing. We can see that it is not the different market returns to different education level, but who can access the subsidized housing that determined the different homeownership rate, which is different from what "market transition hypothesis" suggests: the higher the education level is, the higher the market return is. The probability of living in self-built housing dropped significantly with increasing levels of education.

On the other hand, the percentage of households purchasing homes on the market increased with the increase of household heads' education level, suggesting higher financial capacity of the higher educated group. However, the overall percentage of market purchase was quite low for all education groups, indicating the housing market in China was still quite rudimentary. As to the market rental housing, it was not the lowest education group that had the highest percentage as in a market economy. As explained earlier, those without formal education may be either formal rural households with self-built housing or state owned enterprise workers who had access to public housing. Households with elementary or junior high school education had the highest percentage living in market rental housing. I expect those households living in market rental housing are mostly non-*hukou* migrants who had no access to public housing in Beijing. Overall, instead of ensuring higher educated groups a higher capacity to participate in the market, China's transition actually provided better educated groups more access to public housing with significant reductions in price.

After two decades of economic reform, the debate between "market transition hypothesis" and "persistent power" remains ongoing. In this study, I examine whether households which were closer to the market had better housing situations compared to other households. Although I cannot separate those working in state-owned enterprises from those who work in private enterprises, the 2000 population census does allow me to differentiate managers and workers in enterprises in monopoly sectors and those in non-monopoly sectors thanks to the individual level dataset⁸². No previous studies on housing in China separated them which lead to misleading

⁸² With the reforming of SOEs in the 1990s, small and medium sized state-owned enterprises were privatized or became semi-private enterprises. The labor practices in small and medium state-owned enterprises in non-monopoly industries are becoming similar to those in private enterprises (Gallagher, 2007). In addition, after the enterprise reform during the 1990s, most of the small SOEs were privatized. Since enterprises in monopoly sectors are all

conclusions. For example, in Huang and Jiang's (2009) study on housing inequality of Beijing, the housing advantages of the combined cadre and manager group were quite small. More importantly, they found that managerial and clerical groups were not significant in their regression, which led to their conclusion that political status no longer provided housing benefits in the reform era.

Table 5.10 Housing Differences among Various Occupation Groups

	Living space (m ² /person)	Room ratio	Quality score	Full facilities (%)	Purchase Price (yuan/m ²)	Rent Price (yuan/ m ²)
Chiefs of governmental organizations or enterprises in monopoly sectors	30.10	0.99	4	84.30	902.19	3.46
Managers of enterprises in non-monopoly sectors	27.67	1.00	3	71.10	1090.47	8.11
Professionals	27.53	1.00	3	77.00	998.36	4.17
Researchers	25.65	0.99	3	74.80	878.89	3.15
Clerk in public sector	24.61	0.91	3	69.70	854.53	4.26
Commercial or service workers	17.66	0.84	2	36.70	800.01	11.98
Ordinary workers in monopoly sector	20.74	0.93	3	44.90	672.89	5.32
Ordinary workers in non-monopoly sector	19.00	0.85	3	45.00	671.16	5.61
Other ⁸³	24.23	1.00	3	57.30	601.52	3.16
Total	23.01	0.94	3	56.90	742.16	5.80
ANOVA (F value)	145.53***	37.08***	300.144***		73.34***	168.13***

*** significant at 0.001 level

Table 5.10 show that in terms of living space, household heads working as Chiefs in governmental organizations or SOEs in monopoly sectors had much larger per capita living space than other groups. It was 58% larger than that of ordinary workers in non-state sectors. Except for room ratio (which was slightly smaller than that of managers in private sectors and professionals), the living conditions of chiefs of governmental organizations or enterprises in monopoly sectors were consistently better than that of other groups. Not only did they had larger per capita living space; their dwellings were better equipped with modern facilities. As market elites with control power in the market, managers in enterprises in non-monopoly sectors also had relatively large per capita living spaces. However, they did not do as well as their

state-owner enterprises, and private enterprises in non-monopoly sectors outnumbered state-owned ones, the real difference exists between monopoly and non-monopoly (including private) enterprises. Due to the fact that the number of household heads in governmental institutions is quite small, I combine them with the group of managers in monopoly sectors.

⁸³ The group "other," includes farmers, retired and unemployed people, and students and house workers who are hard to combine with other groups. Since it is a rather heterogeneous group, I will not compare the numbers of this group with other groups.

counterparts in the public sector. Professionals can also be seen as market elite since their expertise has been valued much higher after the economic reform and they can sell their expertise at relatively higher prices than manual workers in the market. Professionals had per capita living spaces slightly smaller than that of managers in private enterprises. While researchers' incomes and benefits increasingly depend on activities they participate in in the market, they still get more assistance from the government than people working for the private sector. But the benefit they get from the state is much lower than chiefs in organizations or SOEs, and their market power is also lower than managers of enterprises and professionals. Consistent with our expectation, Table 5.10 shows that researchers' per capita living space were smaller than chiefs in public sectors. In terms of household facilities, the percentage of researcher households with all the four necessary facilities was even higher than that of managers in private enterprises.

Going down the career ladder in both public and private sectors, clerks in the public sector had larger per capita living spaces and better equipped housing than ordinary worker households. It was commercial and service worker households which had the poorest living conditions: they were at the bottom of the career ladder and had to be fully responsible for their housing on the market. Their living spaces, room ratios, facility scores and the percentages of households with all facilities were consistently the lowest. This group consisted of mostly migrants working in informal sectors. Their jobs were insecure and they had no assistance from the urban state as citizens. Comparing the two worker groups in monopoly sectors and non-monopolize sectors, it is clear that those who worked in monopoly sectors had relatively larger living space than their counterparts in the private sector, although the facilities in their homes were quite similar.

Although Chiefs in governmental organizations or SOEs in monopoly sectors had the best living situations among all the occupation groups, they did not pay the highest prices for their homes. The prices this group paid were lower than the market elite groups: managers in private sectors and professionals. Commercial and service workers had the poorest living conditions, but the prices they paid for their homes were not the cheapest. They paid even higher prices than ordinary workers, indicating that they paid the full market prices without any subsidy. Among renters, commercial and service workers paid the highest rent among all groups despite their poor living conditions. On the other hand, leaders in monopoly sectors paid less than one-third of

the rent for their homes than commercial and service workers paid for their inferior apartments. Researchers paid the lowest rent due to their ability to get public subsidies and the relatively poorer quality of their housing compared to that of leaders in monopoly sectors.

Overall, those who had political power were still better-off than other groups in terms of living conditions, similar to the situation during the pre-reform era. Those with certain market power were doing better with the emergence of the market than they did during the pre-reform period. Service workers with neither political nor market power were at the bottom of the urban society. Judging by the housing disparities we can see that instead of reorganizing the urban society, market created a new urban middle class and underclass without fundamentally changing the urban social structure: social groups with political power are still at the top, having advantages other groups have no access to in terms of public resources. On the other hand, groups dependent on the market with no political power or expertise but their labor to sell at the market are at the bottom of the society. They must be fully self-reliant.

Table 5.11 Tenure Differences among Various Occupation Groups (%)

	Self-built	Market purchase	Economic purchase	Public Purchase	Public rental	Market rental	Other	Home ownership
Chiefs in governmental organizations or monopoly sectors	6.92	4.19	2.91	56.65	25.50	2.00	1.82	70.67
Managers in non-monopoly sectors	10.53	7.38	2.40	40.63	28.36	6.88	3.81	60.95
Researchers	5.90	4.05	2.31	46.64	37.27	1.16	2.66	58.91
Professionals	4.75	4.54	2.99	47.30	33.36	3.68	3.37	59.59
Clerks in public sector	9.98	3.52	2.65	45.34	31.32	3.19	3.99	61.49
Commercial or service workers	12.71	2.91	1.59	17.38	32.68	25.04	7.69	34.58
Workers in monopoly sector	27.04	2.87	4.38	22.81	28.40	11.03	3.47	57.10
workers in non-monopoly sector	19.18	2.68	1.87	25.51	34.41	10.90	5.45	49.24
Other	17.77	2.30	1.86	39.71	32.99	2.97	2.39	61.65
total	14.63	3.09	2.12	35.82	32.74	7.67	3.94	55.65

Table 5.11 shows that Chiefs in government organizations and monopoly sectors had the highest home ownership rate (last column). Home ownership rate of ordinary workers in monopoly sectors was also higher than their counterparts in non-monopoly sectors. The order of

homeownership rate was quite consistent with that of housing conditions. Again, commercial and service workers remained on the bottom rung of the housing ladder. It is a little surprising that the home ownership rate of clerks in public sector was slightly higher than that of managers in private sector who have more market resources than other groups. It was probably due to the fact that they had access to cheap subsidized public housing, which managers in the private sector lacked.

Further examining the different tenures among various groups, it is a little surprising that the percentage of self-built housing among workers in monopoly sectors was the highest. Most likely, many workers in monopoly sectors were native Beijing residents who had private housing passed from their parents. The percentage of market purchase was low among all occupation groups. As expected, managers in the private sector who had strong economic capacity but less political power had the highest percentage of market purchase housing. Public purchase housing was the main housing tenure type of all occupation groups except for commercial and service workers and factory workers in both monopoly and non-monopoly sectors. This suggests that privatization of public housing contributed most to the high homeownership rate in China.

Of the groups with public purchase as the main tenure type, Chiefs in government organizations and monopoly sectors had the highest percentage. With policies of privatizing public housing favoring high ranking groups, it is not hard to understand that this group had the highest fraction purchasing privatized housing. The percentage of commercial and service workers living in market rental housing is the highest. Usually, the quality of private rental housing is not very high but the price is much higher than for public rentals. With less protection from the state, this group is more likely to support themselves with their housing. However, due to the constraint of their income, they are very unlikely to purchase housing units from the market.

Overall, among groups of all occupations, many households purchased or rented public housing. This is because in the transition from a predominantly public system to a market economy, the previous system continues to provide some advantages to citizens previously in that system. But the difference in terms of market housing tenure and public related housing tenure can explain the gains from the public system to some extent. It further suggests that gains from the public system was the main source of benefits.

5.3 Regression Analysis on Housing Inequality

The descriptive analysis above shows that both households' socioeconomic characteristics and their "citizenship status" are related closely with their family housing situation. It begs the questions: how do these factors influence a family's living space and housing quality together? Which factors are more important in determining households' living conditions? In order to answer these questions, I conduct Ordinary Least Square (OLS) regressions.

Observations based on western countries with market economies suggest that living space is the outcome of purchasing power and needs. Therefore, household income, which is directly related with the purchasing power, and family cycle which determines the need of a household are the most important factors. Urban housing allocation in China before the economic reform was based more on entitlement than on need. Somebody who worked in a large state-owned company or was senior in the work-unit was entitled to have a relatively larger and better housing unit. In that context, household income and family need played a rather small role in determining families' living conditions. How was this situation changed during the reform era? Since there is no income information in the population census and it is also very hard to get accurate income data since Chinese families tend to under-report their income⁸⁴, I use household heads' occupation to indicate their purchasing power. Although it is not as accurate as using reliable income data, there are advantages of using it. With detailed occupation information, I am able to differentiate those working in the public sector from those working in the private sector by differentiating those working in monopoly sectors from those working in non-monopoly sectors.

5.3.1 Housing Conditions

The first dimension of housing inequality this chapter explores is housing conditions. For each index, I run two models, one without the *hukou* status variable and one with it (Table 5.12). As to floor space per person, female household families tend to have larger living space per person than households with male heads. After adding the *hukou* variable, the advantage of female household head decreases. One possible explanation is that only females doing significantly better than their spouses claimed to be the household head.

⁸⁴ Directly face the "grey income": how "grey" is it? (*zhi mian "huise shouru": daodi you duo "hui"*), retrieved from: http://news.xinhuanet.com/politics/2010-09/01/c_12505451.htm

Table 5.12 Regression Analysis on Floor Space, Room Ratio and Facility Score

Independent Variables	Floor Space (m ² /person)		Room Ratio		Facility Score	
	model1	model2	model1	model2	model1	Model2
(Constant)	-21.361***	-8.340***	.174***	.473***	-.481***	1.025***
Female	3.388***	2.868***	.120***	.110***	.128***	.058***
age	1.046***	.575***	.017***	.005**	.084***	.037***
age2	-.007***	-.004***	.000***	.000	-.001***	.000***
Education (reference: elementary and junior high school)						
No school	-3.044***	-3.332***	-.056***	-.077***	-.455***	-.401***
High school	1.842***	1.155***	-.022**	.004	.454***	.210***
College	6.686***	5.785***	.083***	.122***	.811***	.488***
Graduate school	11.741***	9.802***	.176***	.201***	1.091***	.606***
Occupation (reference: ordinary workers)						
Chiefs in governmental organizations or monopoly sectors	5.707***	5.428***	.139***	.132***	.297***	.310***
Managers in non-monopoly sector	4.928***	4.882***	.105***	.115***	.263***	.274***
Professionals	2.393***	1.810***	.045**	.041**	.259***	.193***
Researchers	-1.380*	-1.205*	-.002	.001	.034	.014
Clerks	2.007***	1.520***	.037**	.033*	.224***	.175***
Service workers	-2.270***	.194	-.064***	.002	-.218***	.000
Workers in monopoly sectors	2.413***	1.262*	.080***	.030	.079	.091*
Other	.484	.191	.077***	.060***	.018	.025
Spouse occupation (reference: non-managerial job)						
Heads in governmental organizations or in monopoly sector	.521	.762	-.066	-.045	.216***	.196**
Managers in non-monopoly sectors	.153	-.445	-.076**	-.086***	.259***	.208***
Family Structure (reference: couples with children below 18)						
Single	20.136***	20.999***	.596***	.639***	-.250***	-.224***
Couples alone	4.879***	6.754***	.010	.073***	-.146***	-.022
Couples with adult children	-1.121***	-.318	-.373***	-.345***	.042***	.084***
Three generations	-6.448***	-6.099***	-.324***	-.322***	.091***	.154***
Other	11.873***	13.577***	.366***	.422***	-.185***	-.083***
Region (reference: Inner city)						
North Inner Suburb	7.477***	6.715***	.169***	.136***	.718***	.777***
South Inner Suburb	6.436***	5.582***	.161***	.135***	.700***	.737***
North Outer Suburb	12.651***	9.245***	.489***	.320***	1.066***	1.199***
South Outer Suburb	10.814***	8.546***	.405***	.287***	.821***	.903***

Hukou status (reference: urban local hukou)						
Lifetime migrants		.370		-.013		.252***
Local rural hukou		11.730***		.631***		-.279***
Intra-urban migrants with urban hukou		3.865***		-.022*		.371***
Intra-urban migrants with rural hukou		-1.140		-.006		-.269***
Inter-provincial non-hukou migrants with urban hukou		-1.076*		-.075***		-.302***
Inter-provincial nonhukou migrants with rural hukou		-11.142***		-.259***		-1.285***
R2	0.224	0.294	0.228	0.312	0.270	0.356

N= 83,460

* Significant at 0.05 level

** significant at 0.01 level

*** significant at 0.001 level

The odds of living in larger housing increased with age. It was significant in both the model with and without the *hukou* status variable. As explained earlier, both the market and the public system reward seniority. Being older might ensure more savings and thus higher purchasing power. The socialist system also rewarded seniority. Therefore, it is hard to say whether larger living spaces for the older residents is due to the market mechanism or the socialist system. In addition, both models suggest that the increase of living space with age is not linear.

Based on the market transition hypothesis, with the society moving to market economy, there will be increasing returns to higher education. The models seem to support the “market transition hypothesis” that there is an increasing return to higher education. Since China has nine years’ compulsory education and it is in fact the norm to have at least nine years’ education, I consider those with nine years of education as a reference group. We can see that household heads with no formal education had 3 square meters’ less living space per person according to the first model. Based on the second model including the *hukou* status, people with no formal education have even less living space compared to those with nine years of education (through junior high school). Living space per person increases rapidly with education. People with graduate school education have living spaces of 14 square meters per person larger than those with no school. It is worth noting that when controlling for *hukou* status in model 2, the group with no education had even smaller living spaces, but the returns to higher education is not as high as the first model predicted. It means that while highly educated groups have less crowded living environments, the *hukou* institute moderates the effect of education in such a way that the advantage of higher education was smaller as the “market transition hypothesis” suggests.

In terms of different occupation groups, elites in the socialist system had significantly more living space per person than market elites. It is generally agreed that private sector jobs pay better than governmental jobs. However in terms of housing, usually the biggest purchase of one's life, elites in the private sector were not in an advantageous position when compared to their counterparts in the public sector. Instead, their living space was smaller than that of the elite in the public sector. This is probably one of the reasons that working for the government is getting more attractive recently. According to the market transition theory, professionals will get increasing benefits from the market during the socialist transition. This study shows that professionals had living space smaller than that of managers, but bigger than everyone else's in monopoly sectors and private sectors. However, this advantage was not much greater than that of clerks and ordinary workers in monopoly sectors, who were almost at the bottom of the socialist system. At the bottom of the formal occupation ladder, ordinary workers in monopoly sectors have 2 square meters more living space per person than workers in private and non-monopoly sectors. Even when controlled for *hukou* status, workers in monopoly sectors remained to have more than 1 square meter more living space than workers in non-monopoly sectors. Service workers had the worst housing situation; their living space was smaller than ordinary workers in non-monopoly sectors. It is a little surprising that the living space of researchers⁸⁵ was even smaller than that of ordinary workers. Some studies view researchers as part of the professional group. As explained earlier, researchers are in between the public system and private system since they are considered as civil servants and at the same time, they can earn money from the market with their expertise. My assumption is that they can take advantage of both systems. However, the models suggest the opposite. A possible explanation is that while getting a salary similar to other civil servants', they did not have the same benefits as those working in government institutions or monopoly sectors. In addition, because of the imperfect market, the market rewards for their expertise is not very high. The study assumes that a spouse having a managerial job will have a similar effect as household heads. However, the result does not prove this since the two related variables are not significant in both of the models.

Family structure determines how much living space a family needs. The bigger a family is, the more living space it requires. However, the study result shows that the real living space was not in accordance with needs. Single person households had the largest living spaces. Living

⁸⁵ Researchers here include researchers in research institute, professors in universities and teachers in other schools.

space actually decreased quickly with increasing family size. Since housing was expensive in big cities like Beijing, a lot of adult children could not afford to move out and still lived with their parents. In 2000, 23.6% of families had adult children at home. Here I also examine whether having adult children exacerbates the living situation. The result shows that as expected, those families were living in more crowded dwellings than families with couples and young children. Families with three generations living together, which account for 11.5% of the families in Beijing, had the most crowded living situations. Everything else being equal, those families had more than 6 square meters per person less than core families. Having more people at home increased the need for living space. However, the models suggest that it was not easy improve the living situation when the need increased. The living space in different areas of the city was in accordance with the general perception that households living closer to the city center have more crowded living environments. The situation was even worse in the southern inner suburbs where a lot migrant workers concentrated.

Hukou is an unique institution in China and a few other socialist countries. After the economic reform, the original goal of *hukou* -- to control mobility -- was both undesirable and impractical due to the emerging market and surging need for cheap labor in cities. Ironically, the means to the goal, granting different entitlements attaching to different citizenship rights, has never ceased to function. In terms of housing, urban local citizens are eligible to privatized public housing and subsidized affordable housing, while the temporary migrants have to be fully on their own to access housing through the market. This study shows that controlling other variables, local rural residents had the largest living space. As explained earlier, rural residents are subject to a different land system from their urban counterparts. Except for this group, intra-urban migrant households with urban *hukou* had the largest living space. The study does not observe a reliable pattern for lifetime migrants. Among local *hukou* holders, intra-urban migrants with rural *hukou* had the least living space per person. Without urban *hukou*, they were not entitled to privatized public housing or subsidized economic housing. Their living spaces were slightly smaller even than that of the inter-provincial non-*hukou* migrants from other cities. Not only could their poor families which stayed in the countryside not help them to access better housing in the cities, they even needed their remittances to improve their quality of life in the countryside (Cai, 2003). At the bottom of the housing ladder were the non-*hukou* migrants from rural areas outside Beijing. This group included mostly migrant workers in construction sites and

service sectors. Even though excluded households with local rural *hukou* who obtained housing through a different housing system, the difference in living space between the rural non-*hukou* migrants and intra-urban migrants with local urban *hukou* was twice as large as that between the groups with the largest and smallest living space caused by occupation differences. It is quite apparent that *hukou* remains important in determining residents' social well-being.

Room ratio is another index used in this study to show the situation of crowded living. The general pattern is very similar to that of living space. Age played a positive role in easing the situation of crowded living. Having higher education level also increased ones chances of having more rooms to satisfy family needs. Again, working in the socialist system provided an advantage in having more living rooms. In terms of the gap of the number of rooms families had and what they needed, researchers did not have a reliable pattern when controlled for *hukou* status. Similar to per capita living space, spouses working as leaders in governmental institutions or managers in monopoly sectors did not have a significant influence in their families' living situation. It was a little surprising that having the spouse working as a manager in a non-monopoly sector even had a slight negative influence in room ratio. The situation of families with adult children was even worse than that of families with three generations together. Probably old parents would financially support their children in purchasing housing while adult children living with parents normally did not do that to their parents. Examining room ratio among various *hukou* groups, all groups but rural local *hukou* holders have lower ratio than group with urban local *hukou*. Based on the room ratio we can see that households with urban local *hukou* were in a more advantageous position. By contrast, rural inter-provincial non-*hukou* migrants' had more unsatisfied needs.

The facility score shows how many facilities out of the four necessary ones a home has: tap water, independent kitchen, bath and lavatory. I also did two regressions with this variable: one with no *hukou* status and the other one with *hukou* status. Adding the *hukou* status variable to model 2 increased the goodness of fit from 0.270 to 0.356, suggesting that *hukou* status was very important in determining the quality of housing. The general trend was consistent with that of living space and room ratio described above. What is worth mentioning is that at the top rung of the non-public system, managers in private sectors not only had less living space than the elites in public system, but had lower housing quality. When the *hukou* status was not controlled for, service workers had the poorest living environment among various occupation groups. But after

controlling for *hukou* status, service workers failed to be significant. It meant that it was not the occupation itself that put this group on a disadvantageous position. Rather, it was the *hukou* status that excluded those without legal local citizenship from formal labor market with more benefits and thus had to live in poor housing. While not significantly influencing living space, a spouse with a managerial job, especially in private sector, increased the chances of living in housing of better quality. Similar to the situation of living space, rural inter-provincial migrants without local *hukou* had housing of the worst housing quality. The trend of facility score among different family structures was also different from that of living space. With the increase of family members, the quality of living increased. With the increase of family size, families would have more incentive to improve their living conditions. However, in the face of high housing prices in Beijing, improving the living space was much more expensive and thus less practical than improving the quality of housing conditions. Among the various *hukou* groups, local rural residents had lower facility score than other local groups. Although this group had the advantage of being able to build large homes on their allocated housing plots, the quality of their accommodation was generally poor.

5.3.2 Housing Tenure

This section examines the factors influencing households' housing tenure types. I described six tenure types in the descriptive section: self-built housing, commodity housing, economical housing, own privatized housing, public rental housing and private rental housing. Since it is quite clear that the majority of those living in self-built housing are farmers at urban fringe or recently urbanized area, I do not report the result table 5.13.

Table 5.13 Logistic Regression on Housing Tenure

Independent Variables	Market Purchase		Affordable Housing		Privatized Housing		Public Rental		Private Rental	
	Coef.	Odds Ratio	Coef.	Odds Ratio	Coef.	Odds Ratio	Coef.	Odds Ratio	Coef.	Odds Ratio
Gender (reference: male)										
Female	-.128	.880	-.137	.872	.115	1.121***	-.209	.811***	-.088	.915
age	-.063	.939***	.046	1.048	.130	1.139***	-.030	.970***	-.051	.950***
age2	.001	1.001***	.000	1.000	-.001	.999***	.000	1.000	.000	1.000
Occupation (reference: ordinary workers)										
Leaders in governmental organizations or monopoly sectors	.612	1.844*	.331	1.392	.114	1.120	-.378	.685***	-.166	.847
Managers in non-monopoly	.992	2.697***	.211	1.234	.099	1.104	-.345	.708***	-.375	.687*

sector										
Professionals	.309	1.362	.083	1.087	-.326	.722***	.236	1.266**	-1.077	.340**
Researchers	.405	1.499**	.341	1.406*	.112	1.118	-.128	.880*	-.348	.706*
Clerks	.274	1.315	.194	1.214	.193	1.212***	-.219	.803***	-.519	.595***
Service workers	.225	1.253	.110	1.116	-.195	.823**	-.111	.895*	.084	1.087
Workers in monopoly sectors	-.088	.916	.825	2.283***	.026	1.026	-.067	.935	.281	1.324
Other	.259	1.296	.140	1.151	-.200	.818***	-.027	.973	-.132	.876
Spouse occupation (reference: non-managerial job)										
Leaders in governmental organizations or in monopoly sector	-.825	.438	-.084	.920	.511	1.667	-.517	.596***	.071	1.074
Managers in non-monopoly sectors	.995	2.705***	.214	1.238	.322	1.380**	-.348	.706***	-.780	.458**
Education (reference: elementary and junior high school)										
No school	-.623	.536*	-.663	.515*	-.640	.527***	.520	1.682**	.702	2.018**
Senior high school	.188	1.206	.267	1.306*	.518	1.679***	-.194	.824***	-.174	.841*
College	.592	1.808***	.330	1.391**	1.143	3.137***	-.748	.473***	-.171	.843
Graduate school	.743	2.103**	.416	1.516	1.355	3.878*	-.903	.405***	.229	1.258
Family Structure (reference: couples with children under 18)										
Single	-.273	.761	-.475	.622	-.386	.680***	-.129	.879	-.029	.972
Couples alone	.144	1.155	.051	1.052	.021	1.021	-.211	.810***	.261	1.299**
Couples with adult children	-.053	.948	.004	1.004	.063	1.065	-.289	.749***	-.154	.857
Three generations	.057	1.058	.075	1.078	.021	1.021	-.251	.778***	-.193	.825
Other	.025	1.025	-.177	.838	-.295	.745***	.006	1.006	.091	1.095
Hukou status (reference: urban local hukou)										
Lifetime migrants	-.892	.410***	-.422	.656***	.628	1.874***	.064	1.066	-.463	.629*
Local rural hukou	.102	1.107	-.350	.705*	-3.863	.021***	-3.676	.025***	-.230	.794
Intra-urban migrants with urban hukou	1.126	3.082***	.531	1.701***	-.017	.983	.226	1.254**	1.088	2.968**
Intra-urban migrants with rural hukou	1.230	3.421***	.640	1.896*	-1.281	.278***	-1.061	.346***	2.820	16.776**
Inter-provincial non-hukou migrants with urban hukou	.799	2.224***	-.400	.671	-1.108	.330***	-.470	.625***	3.244	25.628**
Inter-provincial non-hukou migrants with rural hukou	-1.007	.365***	-2.965	.052***	-3.677	.025***	-1.499	.223***	3.888	48.836**
Region (reference: Inner city)										
North Inner Suburb	.736	2.087***	.532	1.703***	.870	2.387***	-.795	.451***	.472	1.603**
South Inner Suburb	.639	1.894***	.977	2.657***	.805	2.236***	-.826	.438***	.370	1.447**
North Outer Suburb	3.187	24.218***	2.045	7.729***	1.059	2.884***	-2.092	.123***	.294	1.342*

South Outer Suburb	2.724	15.240***	1.381	3.979***	1.294	3.648***	-1.514	.220***	.421	1.523** *
Constant	-3.929		-6.002		-5.919		2.070		-2.759	

* Significant at 0.05 level
** significant at 0.01 level
*** significant at 0.001 level

Housing reform is intended to create a market for urban residents to purchase their homes. However, only 3% of households purchased their homes from the housing market by 2000. Based on the multinomial logistic regression (table 5.13), female household heads were not different from males in terms of buying homes from the housing market. It is understandable that home purchase is usually a family decision. Similarly, age did not influence the possibility of purchasing homes from market, either.

Among various occupation groups, managers in the private sector were most likely to purchase housing on the market compared to ordinary workers in non-monopoly sectors. This was followed by leaders of the governmental organizations and managers of monopoly industries. One reason is that managers in the private sector were more likely to purchase their homes on the market was that they had higher salaries than other social groups. Another reason may be because that they were less likely to have public subsidized housing than people working in public sectors. Researchers are 1.5 times more likely to buy their home in the market than ordinary workers. Other occupation groups do not have any significant trend as compared to ordinary workers. For most ordinary urban residents, the expensive commodity housing is beyond their reach.

While having spouses working in a governmental organization or monopoly sector did not significantly influence the chances of purchasing home on the market, having spouses working as managers in private companies increased the probability of buying commodity housing by 2.7 times compared to spouses with non-managerial jobs, a similar increase as having the household heads working as managers in private sectors. The speculation is that having a managerial job significantly increased households' financial ability to improve their living environment. With little chance of getting subsidized public housing, these households were more likely to improve their home through the market. Based on the analysis earlier, families with members working as managers are more likely to be living in larger housing with better facilities.

The chances of purchasing homes on the market also increased with the education level of the household head. Those with no formal schooling were only 50 percent as likely to purchase commodity housing as people with junior high school educations. Those with graduate school

education were twice as likely to purchase housing on the market as those with only junior high school education. It is in accordance with the market assumption that people with higher education can have higher income and therefore stronger ability to improve their living environment. However, the trend was not significant for those with senior high school education. It is probably because this group consisted of a lot of rural migrants who took up low-paid jobs in Beijing.

Family structure did not significantly increase or decrease the chances of purchasing a home on the market, no matter how big the household was. Judging by the odds ratio (noting they are not significant), the fluctuation was also quite small, indicating little difference in terms of the probability of purchasing a home on the market with differing household size. It is understandable that the market serves citizens with more ability to pay than with more needs. However, this did not mean that the market functioned as the main redistribution means. In fact, the socialist system did not redistribute resources according to needs but seniority and entitlement.

Hukou status was the largest single factor in determining housing purchases. Compared to local urban residents, inter-provincial rural non-*hukou* migrants had only a thirty percent chance of purchasing housing on the market. It was beyond the reach of most rural inter-provincial non-*hukou* migrant families, most of which took up demanding and low-paid jobs in Beijing. Since it is almost impossible for rural inter-provincial non-*hukou* migrants to access public subsidized housing, it is understandable that their living environments are very poor. On the other hand, intra-urban migrants with local urban *hukou* were more than 3 times more likely to purchase home on the market than urban local residents. This suggests that the market does provide those with a way to move out of public housing.

Where a household was located significantly influenced the chances of living in commodity housing. It was least likely to live in commodity housing in the central districts. Having a home in the north outer suburb increased the chances of living in commodity housing by 24 times compared to living in the inner city. Those in the south outer suburb were 15 times more likely to purchase commodity housing than those in the inner city. This pattern shows the spatial pattern of the urban sprawl in Beijing with large scale of commodity housing in the suburbs, especially the north outer suburb.

Similar to commodity housing, neither gender, nor age, nor family had any significant influence in the probability of households living in affordable housing. Among various occupation groups, all groups were more likely to live in affordable housing than ordinary workers. However the trend was not significant except for researchers and workers in monopoly sectors. Researchers were twice as likely to purchase affordable housing as ordinary workers. As explained earlier, researchers form a special group of people who could benefit from both the market and the socialist system. Workers in monopoly sectors were certainly a group working within the socialist institute and thus better positioned to benefit from the socialist system to get subsidized housing. It was apparent here that the public subsidized housing was not more likely to be distributed to those who were in need such as big households or the service workers in poor living conditions, but to those who were in the center of socialist system. It was also true for education groups. Based on the discussion about commodity housing purchase earlier in this section, groups with higher education were more likely to live in commodity housing. Even though they had better purchasing power to buy on the market, they were also more likely to have access to the subsidized affordable housing.

Compared to local urban *hukou* holders, only intra-urban migrants with local *hukou* were more likely to purchase affordable housing. Other groups without local *hukou* were significantly less likely to access affordable housing. Among the local *hukou* groups, intra-urban migrants with rural *hukou* were most likely to buy affordable housing. My speculation is that the most common reason for local rural residents to move was due to the urban development in the suburb of Beijing in which they lived; they were very likely to move to relocation housing which was categorized as affordable housing. For those intra-urban migrants with urban *hukou*, the local *hukou* holder status ensured their eligibility to purchase affordable housing. In contrast, inter-provincial migrants with rural *hukou* outside Beijing were the least likely to live in affordable housing. The spatial pattern of households living in affordable housing was quite similar to that of commodity housing: households were more likely to live in affordable housing in the outer suburbs of Beijing, especially the north outer suburb. As described earlier, the big Economical and Comfortable housing projects were located in the northern suburban district, Changping district.

It is believed that privatized public housing is a compensation for people to have low salaries during the socialist period. Therefore, it is reasonable for those paid low wages during socialist

period to have a big discount. Table 5.13 shows that older people were more likely to purchase privatized public housing. Among various occupation groups, both professionals and service workers were less likely than ordinary workers to purchase privatized public housing. It is understandable that service workers working in informal sectors were less likely to be able to purchase privatized public housing. For professionals, it was probably because they were working in the private sector and were unlikely to access privatized housing related with the public sector. In contrast, clerks were more likely to purchase privatized public housing than ordinary workers. Even though clerks were at the low end of the job ladder in governmental organizations, they still had more advantageous access to discounted privatized housing than ordinary workers. Although the quality of public housing was not very high, it was generally known that its price was much lower than the market price. Therefore, for those at the top of the society such as managers in the private sector, privatized housing may not be attractive. For those working in non-public sectors with relatively low salary, such as service workers, it would be a very desirable housing source. However, based on the analysis we can see that only residents associated with public sectors were likely to access privatized public housing.

The more education the household heads had, the more likely for the households to purchase privatized public housing. I expect that the reason is similar to that of purchasing affordable housing: those with higher education were more likely to work in the public sector in the past and thus to benefit from the discounted privatized public housing during the housing reform.

Among various family structure groups, singles were much less likely to purchase privatized public housing compared to married couples with children. A possible reason is that the majority of them were young people who entered the labor force after the privatization program started. In addition, singles were also less likely to be allocated public housing during the socialist period and thus less likely to purchase the occupied ones during the reform period. Households with more than three generations and households living with non-family members were also less likely to buy privatized public housing. It is reasonable to speculate that those households were either poor and thus could not afford to own their home even at a discounted price or were not working in public sectors.

The difference among *hukou* groups in terms of purchasing privatized public housing was also significant. Only lifetime migrants with local *hukou* were more likely to purchase privatized public housing compared to local urban *hukou* holders. Lifetime migrants were very likely to

work in the public sector which could transfer their *hukou* and allocate them housing. Local rural *hukou* holders and rural inter-provincial migrants were the least likely to purchase privatized housing. For local rural *hukou*, it was probably due to the fact that they had neither need nor entitlement to buy public housing since most of them lived in privately built housing in the countryside. As to rural inter-provincial migrants, their low probability of purchasing privatized public housing was due to the fact that they were very unlikely to be allocated public housing before the housing reform. Intra-urban migrants with local rural *hukou* were less than one-third chances of living in privatized public housing compared to local urban non-mover. Even though having local *hukou*, once they moved outside of the countryside intra-urban migrants with rural *hukou* were also very unlikely to access privatized public housing in the city, which was sold to the sitting urban tenants. Urban inter-provincial non-*hukou* migrants also had lower probability of purchasing privatized housing than local urban non-movers. Without local *hukou*, public subsidized housing is not open to them even through many of them wanted to settle down in the host city.

After several years of housing reform, urban residents who could afford to tended to purchase their sitting public housing in order to avoid the rent increase and achieve more secure homeownership. However, there was some poor households living in public rental housing who could not afford to buy the privatized public housing during the reform era. In accordance with the common perception, residents were less likely to live in public rental housing as they got older. Among various occupation groups, almost all groups were less likely to live in public rental housing compared to ordinary workers, except for professionals. Chiefs in governmental organizations or monopoly sectors at the top of occupation ladder in public sector were the least likely to live in public rental housing compared to ordinary workers, followed by those in the market elite group. Based on the analysis on privatized public housing, the low probability of living in public rental housing was due to the fact that they had already purchased the public housing they lived in. For elites in the private sector, the reason might be because that they had no access to public rental housing, which was based on the entitlement and needs. While most of the occupation groups were less likely to live in public rental housing, the caveat here was that for those working in the public sector, the reason was that they could access better housing. For those who worked in private sector, one important reason was that they were not eligible for it.

Spouses working as leaders or managers significantly decreased households' probability of living in public rental housing, compared to spouses working with non-managerial jobs. As explained earlier in this section, having spouses working as managers increased the probability of purchasing commodity housing, which usually had better quality compared to public rental housing. More education also decreased the probability of living in public rental housing. Families with household heads having no formal education were much more likely to live in public rental housing than those with elementary or junior high school education. The probability of living in public rental housing decreased with increasing education. Similarly, the probability of living in public rental housing decreased with increasing family size compared to core families, except that the trend was not significant for single person households. Families with either adult children or three generations were less likely to live in public rental housing than households with children younger than 18. Probably public rental housing units tend to be too small to satisfy housing needs of large families and therefore they were more likely to find other type of housing to solve their housing needs. The pattern of living in public rental housing among various *hukou* groups was quite similar to that of purchasing privatized public housing: local rural residents and rural inter-provincial migrant families were least likely to live in public rental housing. In terms of spatial patterns of living in public rental housing, the inner city had the highest percentage of people living in public rental housing. It is understandable that those old *danwei* housing stock were mostly built in inner city inside the *danwei* compounds during the socialist period.

Private rental housing is generally the least desirable type of tenure: the rent is much higher than public rental housing and, as described in the previous chapter, it is not a secure tenure either. Based on the analysis shown in table 5.13, gender has no influence in the probability of households living in private rental housing. Age decreased the probability of living in private rental housing marginally. There were big differences among various occupation groups in terms of the probability of living in private rental housing. Almost all occupation groups were less likely to live in private rental housing compared to ordinary workers, except for service workers and workers in monopoly sectors; there is no significant pattern for these latter two groups. Having a managerial job decreased the probability of living in private rental housing by more than 30 percent compared to ordinary workers. Professionals were even less likely to be living in private rental housing. As shown earlier, they were more likely to live in public rental housing.

Increasing education decreased the probability of households living in private rental housing. Those with no formal education were twice as likely to live in private rental housing compared to those who had junior high school education. On the other hand, those with senior high school education had only 80 percent of the probability of living in private housing as junior high school graduates. It is understandable that higher education groups are more likely to become homeowners than to live in private rental housing. In terms of households with different family structure, couples without children were more likely to live in private rental housing. It may be because many of these were young couples in the early years of their career who could not yet afford to become homeowners⁸⁶. Other types of family structures have no significant influence on the probability of living in private rental housing.

The influence of *hukou* status in the probability of households living in private rental housing was enormous. Rural inter-provincial non-*hukou* migrant families were almost 49 times more likely than urban local residents to end up living in private rental housing. In fact, for those rural non-*hukou* migrants, the housing choices were very limited. Without local urban citizen status, public housing is unavailable; with low incomes, private purchase is outside their reach. Since most of them could not afford to become homeowners, the only alternative was to stay in private rental housing. Inter-provincial migrants with urban *hukou* were also very likely to live in private rental housing. However, the chances were much lower compared to that of rural migrants. Probably because urban migrants were more likely to get financial support from their family back in their hometowns to purchase apartments in the market than their rural counterpart who, in contrast, had to support their family back in the countryside. Again, intra-urban migrants were more likely to depend on private rental housing than were urban local households. Finally, lifetime migrants were least likely to live in private rental housing.

3.3 Housing Costs

In almost all societies, housing is one of the biggest purchases of ordinary citizens. It takes a big share of a household's lifetime savings. At the same time, it is also the main part of ordinary families' wealth. As for renters, rents usually accounts for a big chunk of ordinary households' monthly salaries, except those who could stay in public rental housing. Therefore, the different housing costs of purchasing or renting greatly influence the purchasing power households for

⁸⁶ Due to the data constraints, it is impossible to separate newly married couples from those whose children have grown up and left home.

other commodities as well as the accumulation of family wealth. In this section, I examine factors influencing the different prices various social groups pay for their housing. In the market economy, it is agreed that the housing difference is mainly due to the location of housing and the quality of individual housing units. I will show in this section that there are other factors that significantly influenced how much a family paid for their housing in the China case. Similar to the regressions on housing conditions, the first model does not consider *hukou* status and the second model includes *hukou* status.

Table 5.14 Regression Analysis on Purchase Price and Rental Cost

	Purchase Price (yuan/m ²)		Rent (yuan/month. m ²)	
	Model 1	Model 2	Model 1	Model 2
Constant	1691.956***	1571.749***	24.113***	5.017***
Female	9.082	12.427	-.649***	-.150
age	-46.805***	-39.986***	-.623***	-.098**
age2	.332***	.291***	.004***	.001*
Education (reference: elementary and junior high school)				
No school	112.424**	83.831*	.291	.065
High school	27.301	-8.425	-2.633***	-.239
College	92.992***	26.250	-2.348***	.223
Graduate school	269.614***	226.533***	-2.403***	1.438*
Occupation (reference: ordinary workers)				
Chiefs in governmental organizations or monopoly sectors	131.836*	96.267	2.927***	1.455*
Managers in non-monopoly sector	276.189***	210.615***	4.056***	2.181***
Researchers	30.481	41.833	.038	.275
Professionals	142.593***	100.930***	.803*	.699*
Clerks	98.835***	61.559*	.949**	.938**
Service workers	85.789**	53.500	4.920***	2.311***
Workers in monopoly sectors	-5.266	-6.357	-.010	-.502
Other	39.984	30.805	.664*	.493
Family Structure (spouse with children below 18)				
Single	220.639***	144.039*	2.088***	1.669***
Couples alone	137.209***	98.349***	2.756***	1.197***
Couples with adult children	22.157	17.395	.722**	.430
Three generations	25.921	53.192*	.867*	.455
Other	113.677***	102.457***	1.734***	.691**
Spouse occupation (non-managerial job)				
Managers in non-monopoly sector	-69.382	-81.254	-.582	-.562

Chiefs in governmental organizations or monopoly sectors	327.748***	270.647***	.826	1.236
Facility	95.872***	70.023***	-1.397***	-.462***
Region (reference: Inner city)				
North Inner Suburb	34.363	14.198	3.328***	.830***
South Inner Suburb	25.431	-33.197	2.720***	.197
North Outer Suburb	-88.374**	-145.454***	-1.551**	-5.588***
South Outer Suburb	-162.977***	-168.111***	-1.747***	-4.142***
<i>Hukou</i> status (reference: urban local <i>hukou</i>)				
Lifetime migrants		-75.085***		-.207
Local rural <i>hukou</i>		-77.642***		5.070***
Intra-urban migrants with urban <i>hukou</i>		460.018***		1.217***
Intra-urban migrants with rural <i>hukou</i>		459.104***		7.265***
Inter-provincial nonhukou migrants with urban <i>hukou</i>		773.513***		11.608***
Inter-provincial nonhukou migrants with rural <i>hukou</i>		258.028***		13.428***

* Significant at 0.05 level
** significant at 0.01 level
*** significant at 0.001 level

Table 5.14 shows that among homeowners, gender of household heads did not make a difference in how much a family paid for their housing. Families with older household heads were more likely to pay less; the older the head, the less the family paid. It may be because that the majority of homeowners obtained their homes through purchasing privatized public housing and the amount that privatized public housing was discounted was directly related with the years of employment. When adding *hukou* status to the model, the influence of age decreased, which means some of the savings for housing was due to *hukou* status. The influence of education on housing was not straightforward. Those who had no formal education paid more than those with only elementary or junior high school. Among household heads with education higher than the compulsory junior high school, the higher the education level, the more they paid for their housing. However, when controlling for *hukou* status, this was only significant for the no education group and for those with a graduate school education. Household heads with graduate school education paid much more per square meter than those with no formal education. Since I only controlled the basic quality of housing (the number of necessary facilities) and the rough location in the model, this model probably does not show the full difference in quality or location of the housing purchased.

Controlling the basic housing quality, it is surprising that managers in the private sector paid more than 100 *yuan* more per square meter for their homes than government chiefs and managers in monopoly sectors. My speculation is that leaders in governmental organizations and monopoly sectors were more likely to access discounted public housing than their counterparts in the private sector. Chiefs in governmental organizations and managers in monopoly sectors paid even less than professionals. There are too few chiefs in government organizations and monopoly sectors to control for *hukou* status (no statistical significance). But judging from the coefficient, the price they pay for their housing was much cheaper. After controlling *hukou* status, managers in the private sector still paid the most per square meter for their homes. It is probably due to the fact that they tend to purchase housing with good quality and in good location. It is understandable that other social groups on the lower end of the social ladder are not significant because very few of them could afford to be homeowners.

The analysis shows that single-person households generally paid higher prices for housing than married couples. As discussed in Chapter 4, singles were less likely to get publicly subsidized housing due to the strict policies. While not statistically significant, having spouses working as Chiefs in public sectors decreased the purchase price. In contrast, having spouses working as managers in the private sector significantly increased the price paid for their homes.

Similar to the differences of housing conditions and housing tenure, the biggest differences of housing purchase prices came from different citizenship rights. Among homeowners, urban inter-provincial non-*hukou* migrants paid more than 700 *yuan* per square meter more than the local urban residents. Intra-urban migrants also paid more for their housing. Based on the analysis in the previous sections, it might be because they were more likely to move out of *danwei* housing and purchase homes on the market to improve their living environment. However, with local status, they still paid 300 *yuan* less per square meter than what the inter-provincial migrants from other cities paid. As to the rural inter-provincial migrants, I expect the number of homeowners to be very small and they usually could not afford housing in very good neighborhoods. Urban lifetime migrants and local rural residents paid the lowest prices for their homes. For lifetime migrants, they were the group that was most likely to live in public *danwei* housing with heavy subsidies. For local rural households, they lived in their self-built housing with low quality, which accounted for the low price they paid.

Among renters, households with female household heads paid slightly less than male-head households. Households with older household heads also paid slightly less rent. It is probably for the same reason as for homeowners: young people are less likely to have access to public rental housing and the discount of rent is based on the years of employment (which favors older employees). Compared to groups with elementary school or high school education, increasing education decreased the monthly rent. However, when controlled for *hukou* status, education does not make too much difference. Those with graduate school educations paid more than those who only got through elementary or junior high school. It is probably due to the fact that the high education group tended to rent housing in better neighborhoods when they were not homeowners. Differences among other education groups were due to the different *hukou* status.

Among various occupation groups, it is worth noting that service workers, who are on the lowest rung of the income ladder, actually paid the highest rent per square meter for their rental homes. Their monthly rent is even higher than what the managerial groups paid. It is very unlikely that service workers' living conditions are improved by paying more. If the elite groups happened to be in rental housing, those working for public sectors paid less for their rental housing, although both groups tend to pay more than ordinary workers. I expect that their living conditions are also better than ordinary workers. When controlled for *hukou* status, the differences among various occupation groups were smaller, but the general pattern did not change.

Singles and households without children paid higher rent per square meter for their homes. Probably singles and households with no children tended to live in more central location to be closer to their jobs and they might also have a higher budget for renting better housing. When controlled for *hukou* status, the pattern remains. It is surprising that the rent decreases with the improvement of housing quality. A possible explanation is that public *danwei* housing normally had the basic facilities and the rent was quite low. In contrast, those poor housing in “village in the cities” is more likely to charge market prices.

When examining the rent paid by various *hukou* groups, the most disadvantaged group paid the highest rents. Inter-provincial migrants with rural *hukou* paid 13 *yuan* more per square meter than local urban residents, which was the biggest different among various social groups. Inter-provincial migrants with urban *hukou* paid 11 *yuan* more per square meter. Normally, people would expect that migrants tend to live in dilapidated neighborhoods and thus pay less for their

temporary rental homes. This analysis shows that contrary to the conventional wisdom, non-*hukou* migrants paid much higher rent per square meter than residents with *de jure* right to live in Beijing metropolitan area. For intra-urban migrants with rural *hukou*, even though they had local Beijing *hukou*, they paid more than 7 *yuan* per square meter more for their rental homes compared to local urban residents because they had no access to public rental housing and had to pay market rents. In contrast, intra-urban migrants with urban *hukou* only paid a little more than one *yuan* more per square meter for their rental housing compared to local urban non-movers who were very likely to live in subsidized public housing.

Due to the data constraints, it is impossible for me to estimate the real price at the housing market in order to calculate their pecuniary gain. Based on the preliminary analysis, it is clear homeowners who acquired privatized public housing had a significant financial gain because they paid much less for their housing. For more than half of the Beijing citizens, being homeowners was still beyond their reach. However, for those who did not have a *de jure* citizenship, or have a second class rural citizenship, they had to bear more cost to live in the city even though they needed cheap rental housing more than other social groups.

5.4 Conclusion and Discussion

The analysis in this chapter has shown that China's transition to a market-oriented society is not a straightforward replacement of the socialist system with market institutions as happened in the socialist transition of Eastern European countries and the former Soviet Union. Instead, it has preserved social benefits for the elite group within the "socialist" system, while putting the disadvantaged social groups into the market to rely on themselves. This chapter partially supports the "market transition hypothesis" that there is an increasing return to higher education. However, the *hukou* status offsets the effect of education. This dissertation divides urban residents working in monopoly sectors from those working outside those sectors for the first time and convincingly supports the "persistent power" hypothesis. By using ordinary workers working outside monopoly sectors as a reference group, this dissertation found that the managerial group and clerical workers in monopoly sector all had significantly better housing, while paid less for it. The analysis on housing difference among various occupation groups has shown that those working in monopoly sectors had better housing while paying less for it. Even when controlled for *hukou* status, their advantage was still significant. While market elites can

gain access to reasonable housing through paying more for it, social groups at the bottom rung of the market system suffered poor living conditions while pay higher prices at the same time.

Through examination of various *hukou* groups, this chapter has shown that *hukou* still significantly influenced residents' housing situations. The difference in living space between the non-*hukou* migrants with rural *hukou* and migrants with local urban *hukou* was huge, much larger than that between occupation groups. Rural non-*hukou* migrants had the worst housing quality and were least likely to buy housing on the market, due to the poor economic capacity. In addition, they were also the least likely to live in affordable housing, privatized public housing, or subsidized public rental housing. Without local *hukou*, public subsidized housing is not open to them even though many of them need affordable housing more than other *hukou* groups. Moreover, despite their poor living conditions, non-*hukou* homeowners paid much more per square meter for their housing than did local urban residents. Among renters, it was also rural non-*hukou* migrants with rural *hukou* paid the highest rents. In contrast, local urban residents paid the lowest rents, probably because they could access public rental housing.

Overall, while the emerging market provides residents with strong economic capacity opportunity to pay for better housing on the market, those who benefited a lot during the socialist pre-reform period continued to be on the advantaged position in terms of housing. On the other hand, non-*hukou* migrants, while being granted the right to move to Beijing were deprived of local citizenship and excluded from government subsidies. Therefore, they had to pay high market prices for their housing which was in poorer conditions compared with that of the advantaged groups. Next chapter will show that the housing advantages of the groups favored by the "socialist" system are beyond sizes of living space, tenure types and housing costs, but spatial as well.

Chapter Six Spaces of Inequality

Different from other commodities, housing is immobile. Therefore, housing inequality is not only social and economic, but also spatial. As shown in Chapter 4, households living in different neighborhoods have different accessibility to different schools and other public facilities. In addition, concentration of social groups with poor housing can lead to residential segregation. Studies on Western cities have shown that residential segregation of disadvantageous groups has caused high unemployment rate, high crime rate in poor neighborhoods and low social integration. It also has significant implications to individual and group social mobility (Bell, 1954; Duncan & Duncan, 1955; Massey and Denton, 1988; Charles, 2003). As explained earlier, the majority of urban residents lived in *danwei* compounds where they worked during the socialist period. As a result, the urban social space was divided by various *danwei*, instead of divided by socioeconomic status of various social groups as that in Western cities. As an extension of Chapter 5 which focuses on individual-level housing inequality, this chapter aims at exploring the spatial dimension of housing inequality as well as the residential spatial differentiation/segregation of disadvantageous groups.

The data used for spatial analysis in this chapter is also based on 2000 population census. Different from the dataset used for Chapter 5, the dataset used for this chapter is aggregated data at the *jiedao* level (sub-district) with spatial information⁸⁷. Using the boundary of metropolitan area delineated by Chan and Forstall (2013), this chapter first examines the spatial pattern of households with crowded living situation as well as in spacious living situation. Further, this chapter will explore factors influencing the spatial concentration of households in either crowded or spacious living conditions with factor analysis. The second section of this chapter examines the degree of social segregation in Beijing metropolitan area. Finally, this chapter examines the spatial pattern of residential differentiation/segregation of disadvantageous groups.

⁸⁷ The spatial units in this dataset do not match the map exactly because this map was made before 2000 and some *jiedao* are divided while others were merged. In order to make the spatial units in the population census dataset match the base map, I made adjustment in both the census dataset the geographical units in the base map (see Appdx 1 for details).

6.1 Spatial Pattern of Housing Inequality

6.1.1 Descriptive Analysis of Spatial Patterns of Housing Situation in Metropolitan Beijing

Housing inequality can exist in many forms, such as living space, the quality of housing and so on. Due to the data constraints, this section only examine the spatial patterns of housing inequality in households' living space. In accordance with Chapter 5, I use 12 square meter per person as cut-off point of crowded living. Figure 6.1 shows the spatial pattern of households in crowded living situation in the Beijing metropolitan area. The spatial autocorrelation analysis shows that the distribution of households living in crowded housing in metropolitan Beijing is clustered spatially⁸⁸.

⁸⁸ The spatial autocorrelation analysis shows that Moran's I index of population living in crowded living environment is 0.21, and the associated Z score is 8.07 standard deviations. It is significant at 0.01 level.

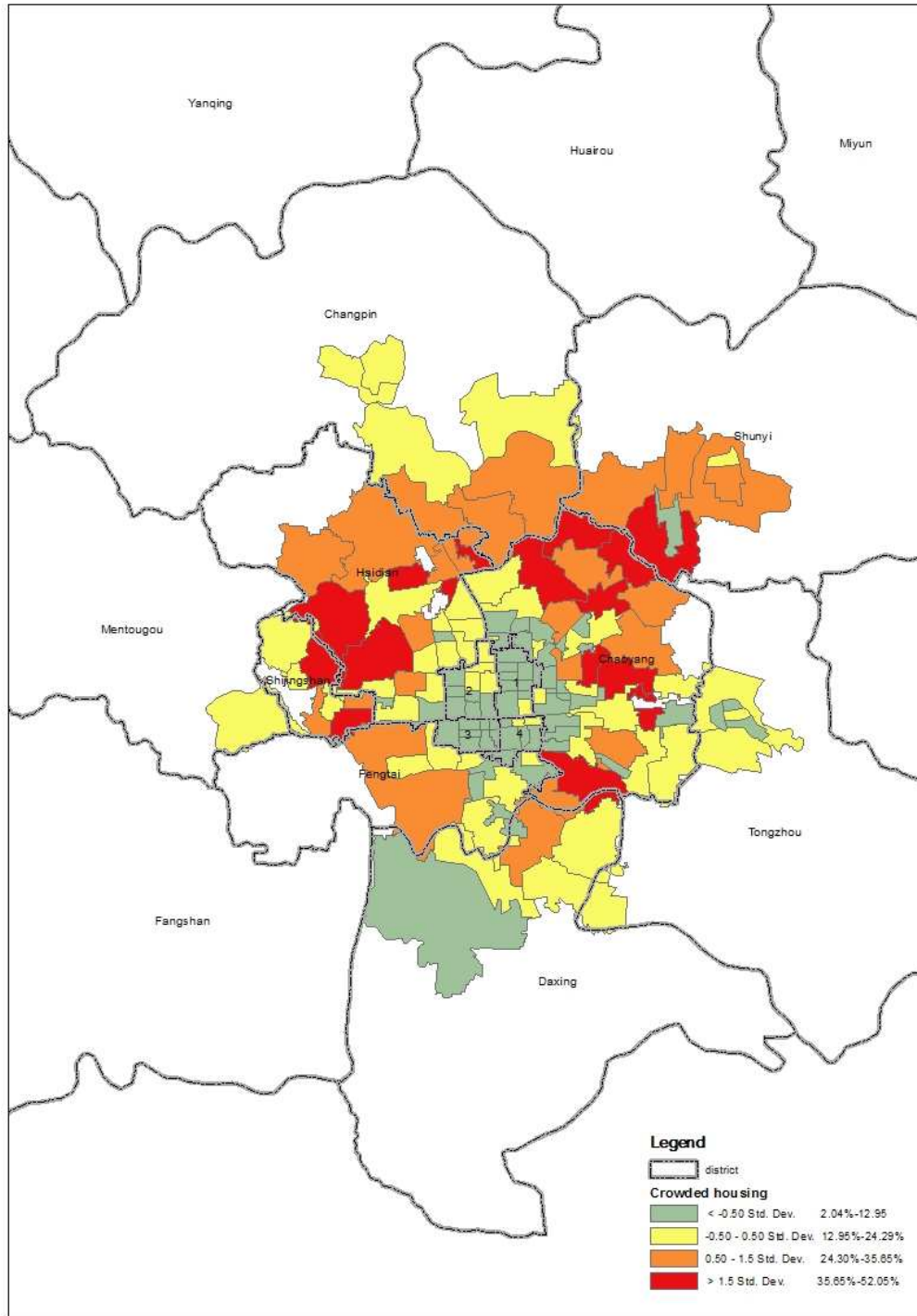


Figure 6.1 The Spatial Pattern of Households with Crowded Living Situation

We can roughly identify three concentric zones based on Figure 6.1. It is a little surprising that the concentration of households in crowded living situation in the inner concentric zone, consisting of the four central districts, was lower than that of other regions of the Beijing metropolitan area. It is probably because this is the region which has been experiencing

population loss since the 1980s (Zhou, 1997). The renovated and newly constructed housing for wealthy families are usually large units. Only households still living in public housing in the central districts were likely to have crowded living spaces. Counting the concentric zones from the central (inner) districts out, the second one had a slightly higher percentage of households living in crowded situations than the first zone but still lower than average. The third zone consisting of *jiedao* at the fringe of the Beijing metropolitan area had a large percentage of households in crowded situations. Further analysis shows that this zone was also the area with the largest proportion of non-*hukou* migrant workers in private rental housing. Due to their constrained access to public housing by their outside *hukou* status and their low income, many of them ended up living in crowded housing at the urban fringe (See Figure 6.2; there is more discussion on the distribution of non-*hukou* residents later in this chapter).

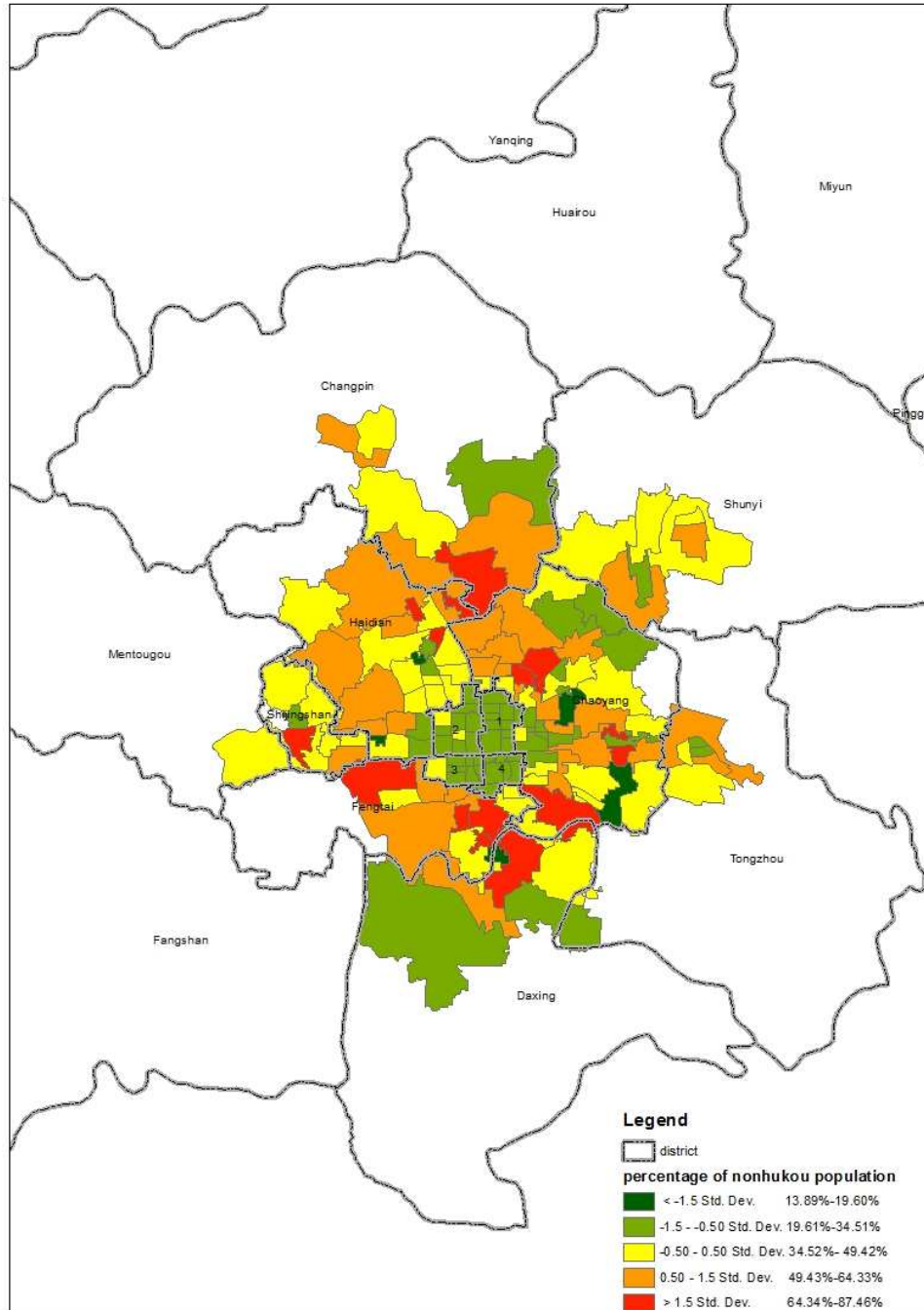


Figure 6.2 Percentage of Non-*hukou* Residents

While Gu and Shen (2003) suggest that the inner city is one region that typically has crowded living environments, this analysis does not support their argument. It was because a lot of old residents moved out of the old housing stocks in those central districts and the high housing prices prevented new residents to move in newly-constructed condominiums in large numbers.

Hotspot analysis (Appendix 2) further confirms the general spatial pattern shown in Figure 6.1. However, the southern part of the third zone is not statistically significant.

I use 40 square meters per person as the cutting point for spacious living situation since very few households had living space greater than that. Figure 6.3 shows that the inner districts had relatively lower percentages of households living in spacious living situations. Figure 6.3 illustrates the spatial pattern of households with spacious housing. We can identify four concentric zones in the map. The spatial autocorrelation analysis shows that the spatial pattern is clustered⁸⁹. The central zone consisting of most of the four central districts had lower than average percentage of households living in spacious living environments. Due to its prime location, the housing prices were quite high. It is understandable that very few households could afford spacious homes there. Further analysis of the population in this zone shows that there is a large number of old people with low education, who were either in private housing or allocated public housing. These housing units were less likely to be very spacious. The second zone outside the first zone was the one with the largest percentage of households with spacious living environments. My speculation is that there was not enough supply spacious housing in the central districts. Therefore, a lot of well-to-do families tended to live in the second zone enjoy both spacious housing and a relative central location. The third zone had a lower percentage of households in spacious homes than the second zone, probably due to the fact that the location was less desirable by the wealthy families and there were more ordinary households living there. The outer zone had the lowest percentage of households in spacious homes, because this zone had the highest percentage of households without local *hukou*, which had to pay high market prices for their housing and thus were less likely to be able to afford spacious homes (Figure 6.2). The hotspot analysis (Appendix 3) confirms the general pattern with four zones. Similar to that of the crowded housing, the southern part of Beijing metropolitan area failed to be significant.

⁸⁹ The spatial autocorrelation analysis shows that Moran's I index is 0.2 and the associated Z score is 7.64 standard deviations. It is significant at 0.01 level. In other words, we can be 99% sure that the spatial pattern of clustering is not random.

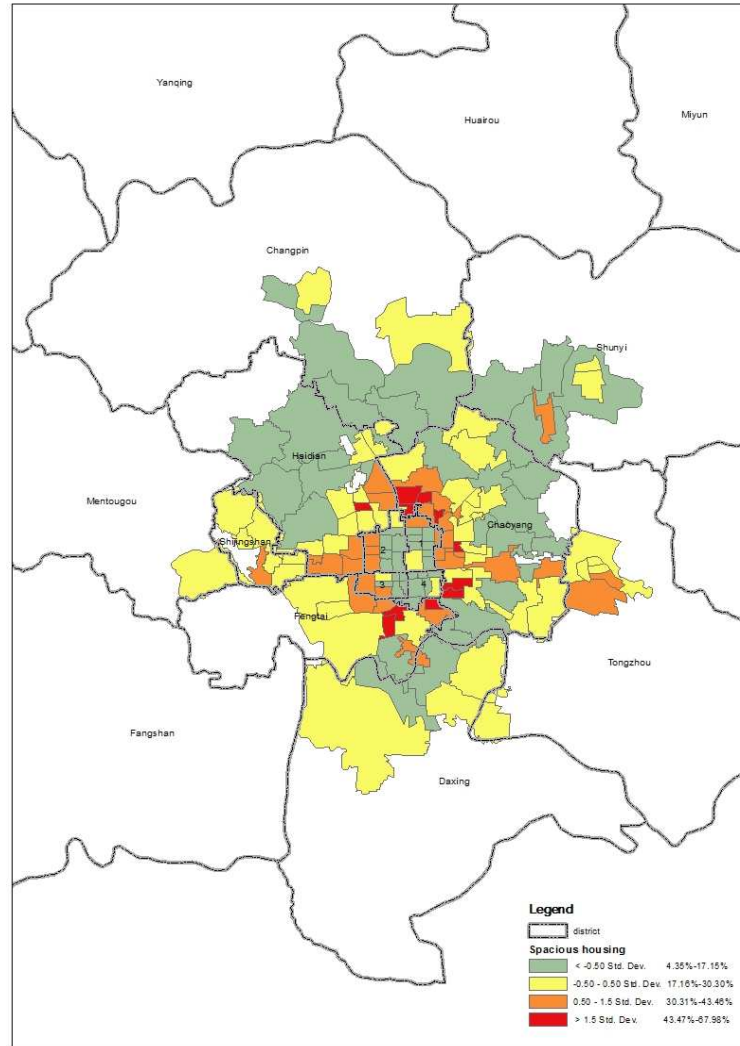


Figure 6.3 The Spatial Pattern of Households in Spacious Housing

6.1.2 Statistical Analysis of the Spatial Patterns

After the descriptive analysis, I further conduct a regression analysis (see Appendix 4 for the descriptive statistics of variables and explanations of variables). Different from the dataset used in Chapter 5, the dataset used in the statistical analysis in this chapter has geographical information (*jiedao* information). Therefore, I can directly selected *jiedao* data within Beijing metropolitan area from the full dataset with all administrative districts.

6.1.2.1 Statistical analysis on crowded living situations

Because most of the dependent variables are highly correlated with each other, a factor analysis is conducted in order to generate uncorrelated factors. In addition, the variables: total population, percent of households in economical housing and percent households in commodity

housing are not correlated with the dependent variable: crowded living; therefore, I exclude them from the factor analysis. Factor analysis shows that only the variables Percent Government Officials and Unemployment Rate have communalities score below 0.7 (see appendix 5). But they both have communalities scores greater than 0.6, which is not extremely low. I assumed that the percentage of government officials and the unemployment rate have strong influences in the percentage of population living in crowded living environments. Therefore, I kept these two variables.

When examining the factor loading of each variable, the majority of the variables have high loading in factor 1, while factor loading on other factors do not have many high loading variables, which makes it hard to interpret. Therefore, I utilize an orthogonal rotation method, Varimax, to rotate the factors. The goal is not just generating factors with simple structure, but also getting uncorrelated factors. It is easier to interpret than other orthogonal rotation methods.

After the rotation, the loading distribution is much better (see Appendix 6 for the loading table and explanation of naming the factors obtained). Based on the loading, I obtained four factors: **Social Elites**, **Senior in Public Sector**, **Local Residents** and **Urban Poor**.

After generating the uncorrelated factors, I conduct a regression analysis on the percentage of residents living in crowded environments with these four factors generated through factor analysis (Table 6.1). The model is significant and R^2 is 0.749. All independent variables are significant at 0.001 level, indicating a very good fit. Since the independent variables are synthesized variables, the regression is not very sophisticated. But we can still get a general idea of the factors causing inadequate living space. Based on the coefficient, being senior workers at public sectors had the strongest advantage of avoiding living in a crowded situation. They were not only allocated free apartments, but normally with more living space than junior workers. Being social elites in both private sectors and public sectors also lowers the probability of living in a crowded situation. The variables with high negative loading on the Local Residents factor also means a higher probability for workers and households with agricultural *hukou* to reside in crowded housing. While public discourse suggests that *hukou* is no longer important in cities, the analysis here shows that local *hukou* did provide advantages in avoiding crowded living environments. On the other hand, *jiedao* with a large percentage of urban poor were more likely to concentrate a large percentage of households in crowded living environments. Since urban

poor had little ability to access resources through either the public sector or the market, they were more likely to end up in crowded living situations.

Table 6.1 Regression Analysis on Crowded living and Concentration of Social groups

Independent variables	Crowded living
Constant	4.122***
Social Elites	-.479***
Urban Senior in Public Sector	-.882***
Local Residents	-.428***
Urban Poor	.176***

Examining the residues shows that the distribution is not random (Appendix 7). There is under-prediction in *jiedao* in the southern part of Haidian district and the northern part of Chaoyang district, and over-predict in some *jiedao* in Daxing district within the metropolitan area. Spatial autocorrelation analysis further confirms that the distribution of residue is clustered. The Moran's I is 0.07 and it is significant at 0.01 level. In other words, the spatial pattern of residue is clustered and there is less than 1% chance that this pattern is so by chance. Therefore, it is reasonable to suspect that the local variation result in the spatial cluster of residue. In Beijing, the northern part of the metropolitan area is traditionally more desirable than southern city and more residents live in northern districts of the city and therefore, the more crowded living environment in northern *jiedao*. Therefore, I conduct a geographically weighted regression. R square of regression increased from 0.749 to 0.818. The residue geographically weighted regression is randomly distributed this time. In addition, Moran's I of residue by geographically weighted regression is 0, further confirming that the standard residue is randomly distributed. In other words, the spatial pattern of crowded living space is influenced by local factors.

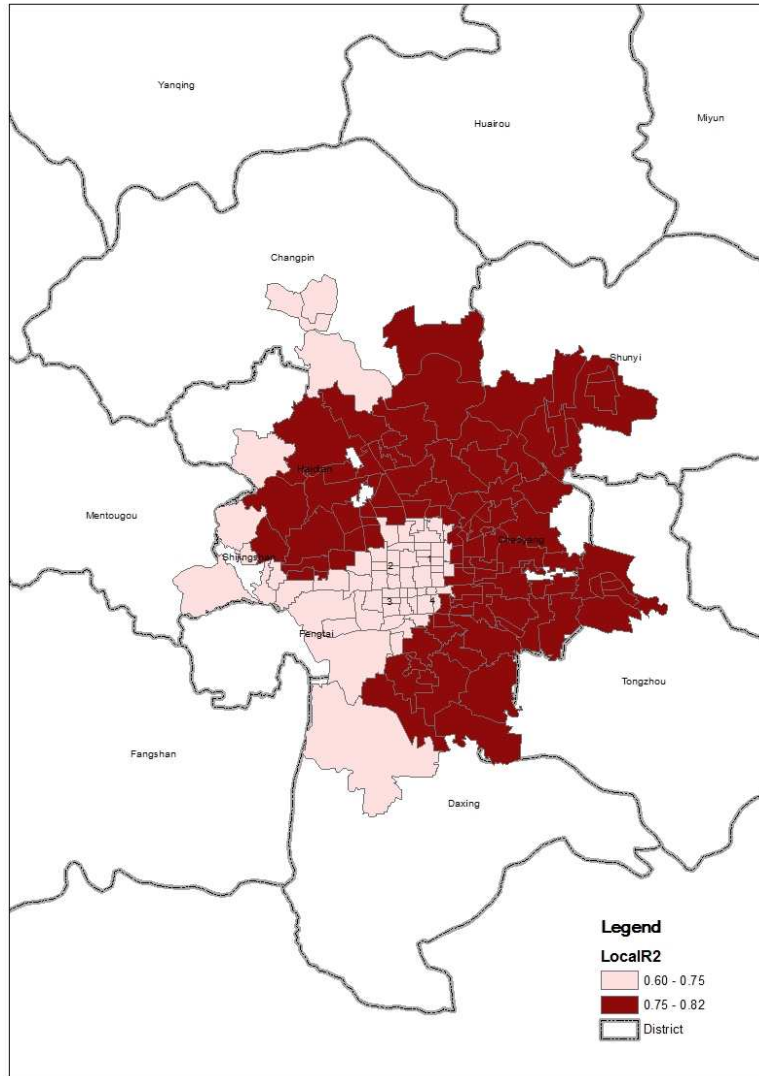


Figure 6.4 Local R² of Geographically Weighted Regression on Households in Crowded Housing

The geographically weighted regression uses each *jiedao* and its nearby neighbors to run a regression. Since the sizes of *jiedao* in Beijing metropolitan area are not even, I use a fixed number of neighbors instead of a fixed distance to conduct the geographically weighted regression. Figure 6.4 shows the local R² of the geographically weighted models. We can see that the fitness of the models varies across the metropolitan area. Using the R² based on the global model as a benchmark, we can see that the geographically weighted model explains very well in most of the metropolitan area. Even *jiedao* in the central city where the model predicts less well than the global model, it explained more than sixty percent of the crowded living situations, which is a reasonable job. For the majority of *jiedao* in metropolitan Beijing, the R² is greater than 0.75. In other words, the four factors, **Social Elites, Urban Senior in Public Sectors, Local**

Residents and Urban Poor explain more than seventy-five percent of the spatial patterns of households living in crowded environments in most of the Beijing metropolitan area. In the central city and the east fringe of the metropolitan area, more than sixty percent can be accounted to the four factors. In the four inner districts, it might be that due to the high housing prices there, even social elites lived in rather crowded living environment there. In contrast, the housing cost was much lower in southern districts such as *Fengtai* and *Daxing*. Therefore, disadvantaged groups might have relatively more living space.

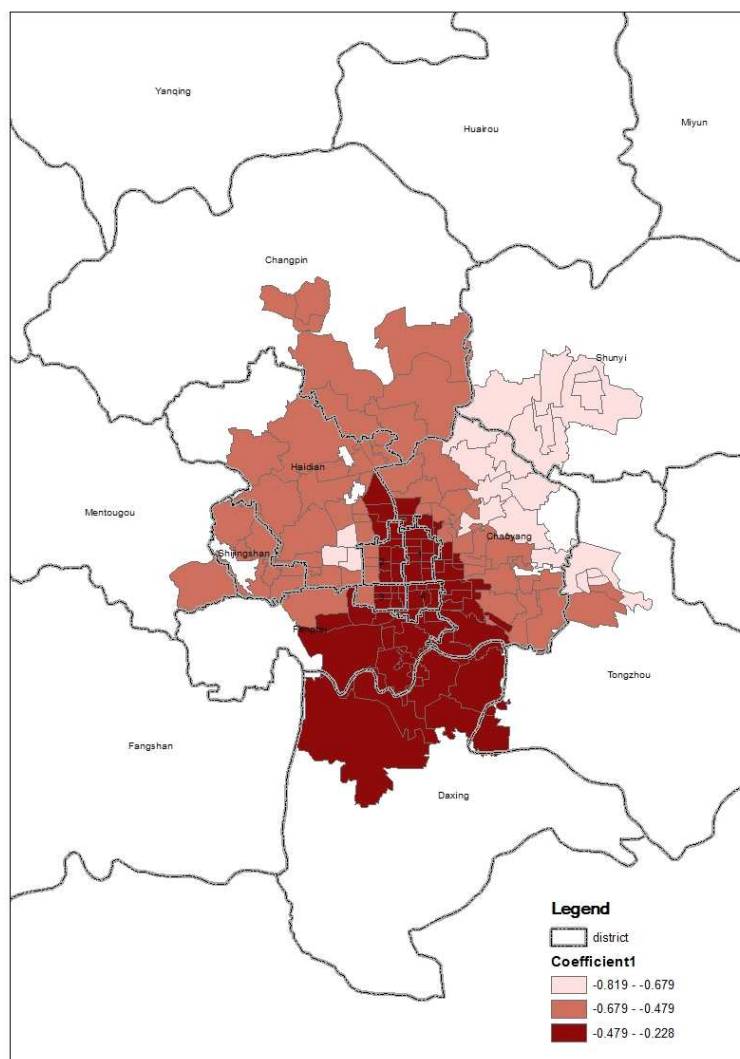


Figure 6.5 The Spatial Distribution of The Coefficient of Social Elite

In order to better understand how the four factors influence the concentration of households living in crowded dwellings in different regions of the Beijing metropolitan area, I further examine each of these factors. Overall, t values of the first factor, **Social Elites** are negative in all

jiedao in metropolitan Beijing, indicating an inverse relationship of high concentration of social elites such as well-educated government officers and professionals and a large percentage of households living in a crowded living space. Based on the Fortheringham significant test, I come up with three threshold values for the test: 1.977 (significant at 0.05 level), 2.610 (significant at 0.01 level) and 3.359 (significant at 0.001 level)⁹⁰. The **Social Elites** factor is significant at 0.001 level in almost all of the Beijing metropolitan area (see Appendix 8 for the distribution of t value)⁹¹.

Judging by the distribution of the coefficients of the **Social Elites** factor, the high concentration of social elites was even more likely to result in a low percentage of households living in crowded environments than predicted by the global model in most of the Beijing metropolitan area (figure 6.5). It suggests that when considering local variations, the high concentration of social elites is more likely to result in low concentration of households in crowded living situations. Since the Social Elite factor also includes workers and those living in self-built housing with negative loadings, the larger coefficients also mean that those residents were more likely to live in crowded living environments than predicted in global model. However, in central districts and the south part of the metropolitan area, a high concentration of social elites had less influence in the concentration of households with inadequate living than the global model predicts. In other words, the concentration of social elite households did not result in a concentration of households living in crowded housing as low as predicted by global model⁹². The northern part of Beijing metropolitan area is historically more desirable and there were a lot of employment opportunities. Therefore, the housing prices are higher in north Beijing which, constrains the worker group from accessing spacious housing. On the other hand, in the

⁹⁰ I use Fotheringham Significance Test to examine whether or not the independent variable is significant. The formula is:
 Fortheringham= $\frac{\alpha}{1 + p_e - \frac{p_e}{np}}$. Here, α is the significant level; p_e is effective number of parameters; n is the number of cases; and

$$1 + p_e - \frac{p_e}{np}$$

p is the number of parameters. Then conduct t test using Fortheringham as the threshold.

⁹¹ The significance level is relatively lower in the central city as well as Daxing district within the metropolitan area. It might be because most parts of the central city is the Forbidden City and Tiananmen Square and there were very few residents there. Similarly, the south part of the Beijing metropolitan area is traditionally less desirable. In addition, since the living situation is not very bad in Daxing district as a whole, the differences between social elites and the rest of residents there are slight. Furthermore, as *jiedao* in Daxing district which are inside the metropolitan area are relatively small, it might influence the fitness due to the small number of observations in the sample.

⁹² Since I choose the area with t value significant at 0.05 level, therefore, it is 5% probably that the comparison results between the coefficients in local regression and those in global regression is caused by chance.

central districts, the housing prices are extremely high so that only very wealthy residents can afford spacious housing there. In addition, some poor residents living in private housing obtained from their parents or residents in public rental housing may not be extremely small. Therefore, the difference between the social elite and worker group is smaller than that in north of the metropolitan area. Similarly, the advantage of avoiding crowded living environments is less strong than the global model predicted. I expect that it was because the housing prices were lower in the south of Beijing and therefore the low income worker group could afford to live in larger homes there.

Since the coefficients of the **Urban Senior in Public Sector** factor in geographically weighted regression are all significant at 0.001 level in the metropolitan area, indicating a high fitness of this variable, I do not examine the distribution of t values associated with this factor. Figure 6.6 shows that the **Urban Senior in Public Sector** factor actually has smaller influence in the concentration of households living in crowded environment than predicted in the global model in most of the metropolitan area, judging by the fact that local correlation coefficients are smaller than that in the global model (-0.882) in most of the metropolitan area. However, in the western part of metropolitan Beijing as well as south of Changping district, being an urban senior provides much advantage in avoiding living in a crowded home. This is quite reasonable, since there was a large economic housing project in the south of Changping district which was only available to those with a Beijing urban *hukou*. Outsiders have no chance to take advantage of the relatively low cost public subsidized housing to improve their living situation. In addition, there are a lot of universities and research institutes located in the west of the Beijing metropolitan area, and seniority is very important in accessing public or *danwei* subsidized housing for employees in universities and research institutes. On the other hand, the concentration of urban seniors in public sector has especially low influence on the incidence of a high concentration of households living in crowded situations in the east part of metropolitan Beijing, including Dongcheng district and the central part of Chaoyang district. It is probably because the relatively high housing prices and fewer public or *danwei* subsidized housing projects available in the east of the Beijing metropolitan constrains the advantage of urban seniority to some extent.

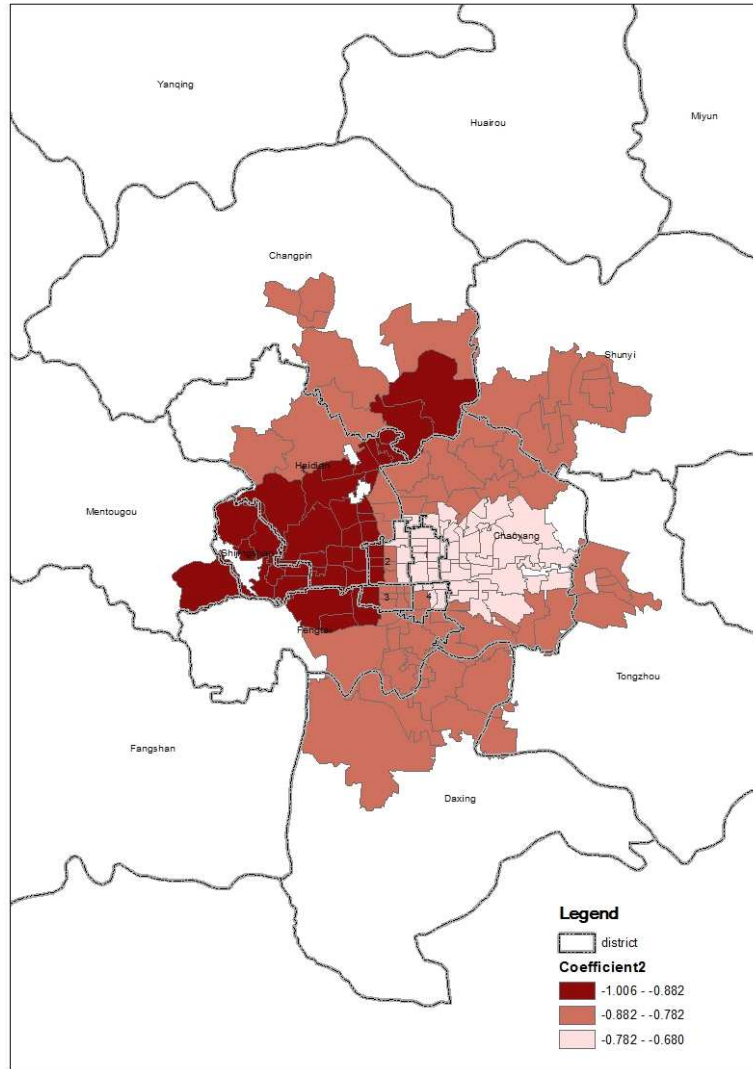


Figure 6.6 The Spatial distribution of the Coefficient Senior in Public Sector

Based on Fortheringham's significant test, the **Local Resident** factor is significant at 0.01 all across the Beijing metropolitan area. Therefore, I also only examine the distribution of coefficients associate with this factor in the whole Beijing metropolitan area (Figure 6.7). The influence of **Local Residents** factor varies a lot in Beijing metropolitan area. Using coefficients from the global model (-0.428) as the benchmark, we can see that the concentration of households with local *hukou* has an even larger influence in decreasing the concentration of households in crowded environments in most of the Beijing metropolitan area than predicted in the global model. Especially, the high concentration of households having non-local *hukou* increased the percentage of households of living in crowded dwellings even more in the part of *Shunyi* district within the metropolitan area. This area is located at the fringe of the Beijing

metropolitan area and was incorporated within the urban boundary relatively recently. A lot of local residents were agricultural *hukou*-holders who were very likely to live in spacious self-built housing. On the other hand, it was also an area with a large number of migrant workers without local *hukou*, who were very likely to rent small dwellings due to the cheap rent. Examining the map carefully, we can see that there is a small “hotspot” in the *Jiangtai diqu* in *Chaoyang* district. This area was a typical “villages in the city” with many migrant workers working in the industrial park in this area; the situation is quite similar to that in *Shunyi* district⁹³.

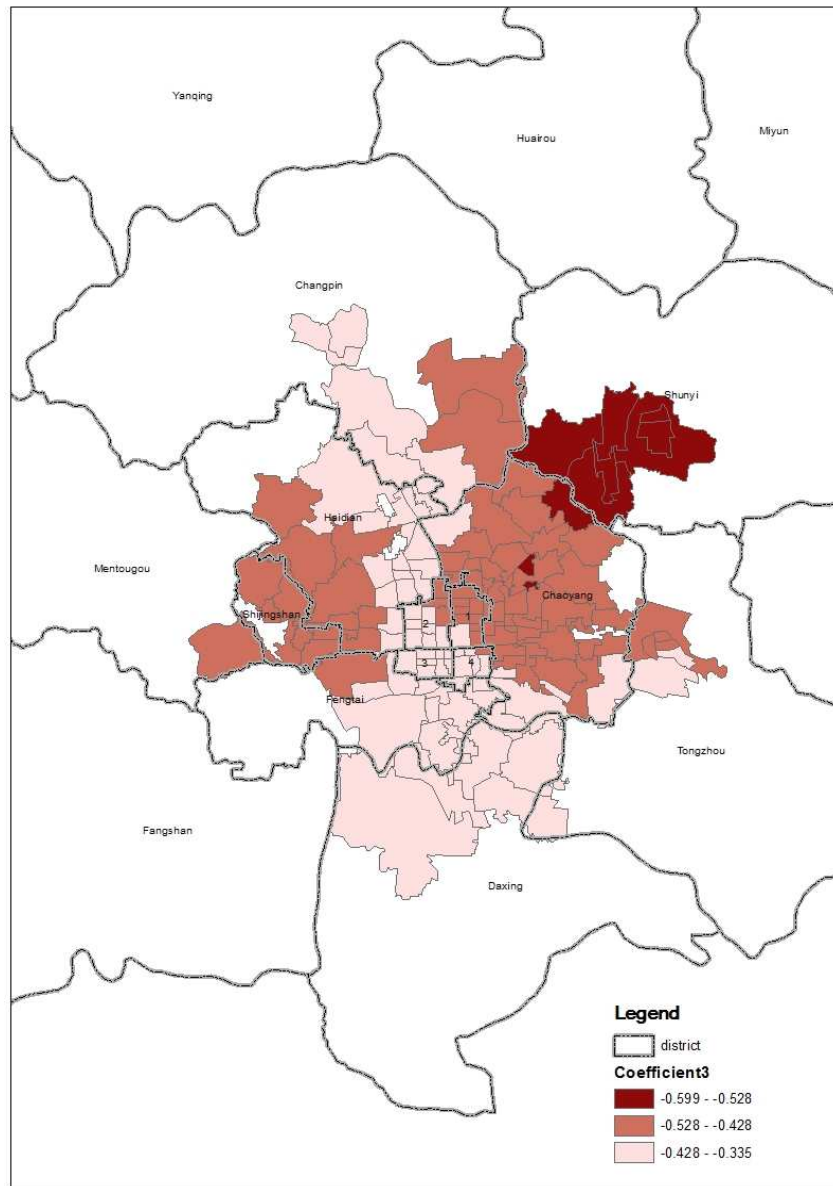


Figure 6.7 Distribution of the Coefficient of Local Residents Factor

⁹³ “jiangtai diqu”, retrieved from: <http://www.jiangtai.gov.cn/fengmao.asp>

Figure 6.8 shows the distribution of coefficients associated with the **Urban Poor** factor in the Beijing metropolitan area (The distribution of the t value associated with the **Urban Poor** factor⁹⁴ is shown in Appendix 9). Except for the outlier *jiedao* Balizhuang and Wanshoulu, not only did the concentration of urban poor in the central of Chaoyang district and Tongzhou district within the metropolitan area have a higher significance level; they had a stronger positive influence on the concentration of households living in crowded accommodations than the global model predicted (the coefficient in the global model is 0.176). This area is Beijing's CBD with a lot of companies' headquarters. In addition, foreign embassies are also located in this region. Therefore, it is a region with a large number of high income households. The housing prices were also high. This region is not confined within the administrative boundary of Chaoyang district, but extends to the adjacent area in Tongzhou district. On the other hand, this region also concentrated a lot of poor residents who used to work in heavy industry from the big-push industrialization period before the economic reform. The heavy industries had been moved out to the suburb and those old employees were either retired with low salary or laid off. An example is Jiuxianqiao *jiedao* discussed in Chapter 4. The high housing prices there made the poor households even more likely to live in crowded situation.

The northern and western part of Beijing metropolitan area had local coefficients lower than those based on the global model. Compared to the housing prices in CBD, housing prices in this region was cheaper. Changping district in the north of the Beijing metropolitan area had two large economical housing projects, Huilongguan and Tiantongyuan, which not only provided affordable housing but deflated the housing prices near the projects. They made housing more affordable to poor households. In the west of the Beijing metropolitan area, Haidian district accommodated a lot of universities, research institutes, ministries and other public institutions which provided public or semi-public housing to their employees. Even though some of the low-end employees had low income, their housing might not be very crowded. Capital Steel Company was previously located in Shijingshan district with a large number of employees. While it has moved out to the urban fringe a lot of its employees, many of whom are quite poor,

94 The t value suggests that in Balizhuang and Wanshoulu *jiedao* in Haidian district, the concentration of urban poor actually decreased the chances of living in crowded housing because the t values are negative. However, according to Fortheringham Significant Test, this factor is not significant. The Urban Poor factor is significant in the rest of the Beijing metropolitan area at 0.05 level or higher. In Dongcheng and most of Chaoyang district, it is even significant at 0.001 level. The positive t values indicate that the concentration of urban poor was positively associated with concentration of households living in crowded living situations.

still live there in the allocated public housing. Their living situation was not as bad as those with similar incomes who had to obtain housing through the market. Therefore, in these areas, the concentration of poor did not correlate with high concentration of households living in crowded environment as the global model predicted.

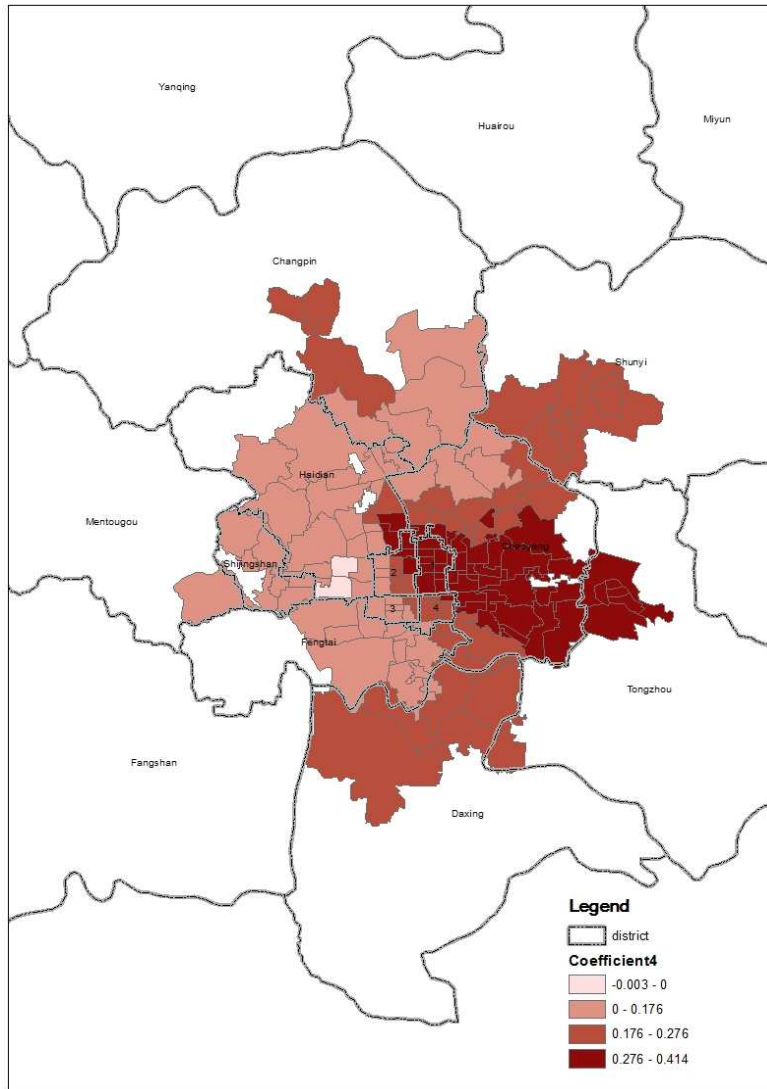


Figure 6.8 The Distribution of the Coefficient of Urban Poor Factor

6.1.2.2 Regression on Households in Spacious Housing

The analysis above tries to examine the factors that caused the concentration of households in crowded living environments in some areas of the Beijing metropolitan area. In this section, I plan to analyze what factors caused the concentration of households in spacious housing. I define spacious living space as having more than 40 square meters per person of living space. Similar to the situation of crowded housing, the majority of variables are correlated with each other.

Therefore, I again conduct factor analysis with variables correlated with the dependent variable: the percentage of households in spacious housing. Communalities of factor analysis show that the percentage of government officials and the percentage of clerk are below 0.7 (Appendix 10). Since it is interesting to see how the housing situations differ among people employed in the public and private sectors, I decided to keep them for factor analysis.

The component matrix suggests that three factors carry enough information. The scree plot (omitted here) also shows that the first three factors have Eigenvalues greater than 1, which satisfies the prerequisite of factor analysis. However, further examining the variable loading in the component matrix, I found that the majority variables have high loading on the first factor, which makes it hard to interpret. It is necessary to rotate the factors in order to get factors which are easier to interpret. Therefore, I conduct Varimax rotation which is a good compromise between easy to interpret and uncorrelated. Based on rotated component matrix (Appendix 11), I obtained three factors: **Social Elite**, **Senior in Public Sector** and **Service worker**.

After generating the three uncorrelated factors, I conducted a regression analysis of the percentage of households with spacious living space with these factors (table 6.2). The R square is 0.489 and all variables are significant at 0.001 level. As expected, **Social Elite** and **Senior in Public Sector** are positively related to the percentage of households with spacious living space. The analysis also shows that the concentration of service workers is negatively associated with the concentration of households with spacious living space. Service workers are not only low-rank employees, but mostly in the private sector. They are disadvantaged both in economic sense due to their low purchase power and also in terms of political power to access resources through public channels.

Table 6.2 Regression on Spacious living and Concentration of Social groups

Independent variables	Spacious living
Constant	23.726***
Social Elites	5.854***
Urban Senior in Public Sector	3.845***
Service workers	-6.008***

The residue of the regression shows that while the model does a fair job in predicting the outer suburban areas, there is a cluster of over-prediction in the central districts, while under-predicting the inner suburbs (Appendix 12). The spatial autocorrelation analysis of the residue

shows that the spatial pattern is clustered⁹⁵. Therefore, I conducted a geographically weighted regression. After the geographically weighted regression, the distribution of residues is no longer clustered (Appendix 13). R square is 0.706, which is a significant increase. The spatial autocorrelation analysis further confirms the visual representation. The Moran's I is -0.02 and it is not significant, indicating that the distribution is randomly distributed.

Similar to the GWR model on percentage of households in crowded housing, the distribution of R² of the model on spacious living space also varies throughout the Beijing metropolitan area. Using 0.489, the R² value from the global model as a benchmark, this model has a better fit in most parts of metropolitan Beijing. The distribution of local R square shows that the three factors, **Social Elites**, **Urban Senior in Public Sector** and **Service Worker** explain the spatial concentration of households in spacious housing especially well in the northeast of the Beijing metropolitan area, as well as north of the central city (Appendix 14). This model has a poorer fit than the global model only in a small area in southwest of the metropolis.

Next, I examined each of the factors in the GWR model. Based on Fortheringham significant test, t values associated with the first variable, **Social Elite** factor is significant at the 0.01 level or greater in areas east of the central districts and on the north of the metropolitan area (the distribution of t value, see Appendix 15). It is significant at 0.001 level in the north of Chaoyang district and almost all *jiedao* in Changping district on the north of metropolitan area⁹⁶.

Figure 6.9 shows the distribution of coefficients of the **Social Elites** factor. We can see that for *jiedao* significant at 0.05 level or above, only two have coefficients smaller than 5.854, the coefficient from the global model. In most of the metropolitan area where the **Social Elite** factor is significant, the concentration of the social elite group was even more likely to be associated with a high percentage of households in spacious housing than predicted in the global model. There are two hotspots with especially large coefficients, both of which are located in Chaoyang district. One is Nanmofang diqu and the surrounding area. The second one is Taiyanggong, Maizidian diqu and the surrounding area. Both of the two areas were “villages in the city” accommodating a lot of migrants. The large coefficients associate with **Social Elite** factor means

⁹⁵ The Moran's I index is 0.19 and it is significant at 0.01 level.

⁹⁶ Social Elite factor is inversely related with living in spacious housing in east, west and south of the metropolitan area as well as in the central districts. However, the relationship is not significant based on Fortheringham significant test.

that the advantage of being government officials or professionals there was especially significant in obtaining spacious homes.

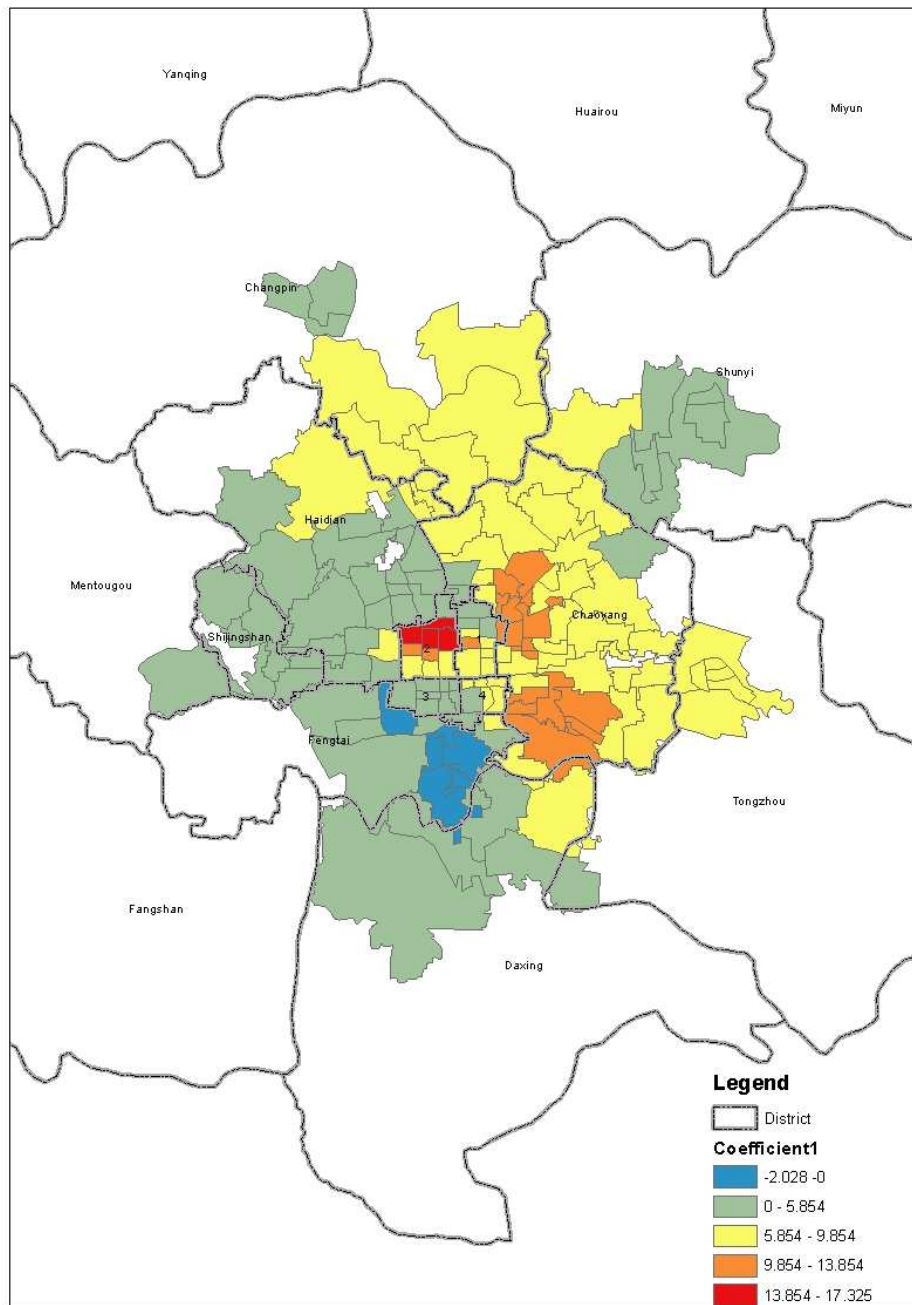


Figure 6.9 The Distribution of Coefficient of the Social Elites Factor

Figure 6.10 shows that all the coefficients associated with the **Urban Senior in Public Sector** factor are greater than that in global model (3.845). Similar to the **Social Elites** factor, the relationship between the concentration of urban seniors and living in spacious housing was

complicated, some areas having negative t values while others had positive ones (for the distribution of t value, see appendix 16). However, areas with negative t values are not significant according to Fortheringham significant test. In areas where the geographically weighted regression are significant in, all coefficients of the **Urban Senior in Public Sector** factor are greater than that in global model (the coefficient is 3.845 in global model). These *jiedao* are all located at urban fringe where local residents could build their own home. In addition, seniors in the public sector were more likely to have access to more spacious publicly subsidized economic housing, the early projects of which tended to be spacious, since the length of service in the labor market is one of the factors determining one's eligibility to the different sizes of housing units. I would argue that the advantages of urban seniority in terms of access to more spacious housing are all derived from the "socialist" institutions rather than the market mechanisms.

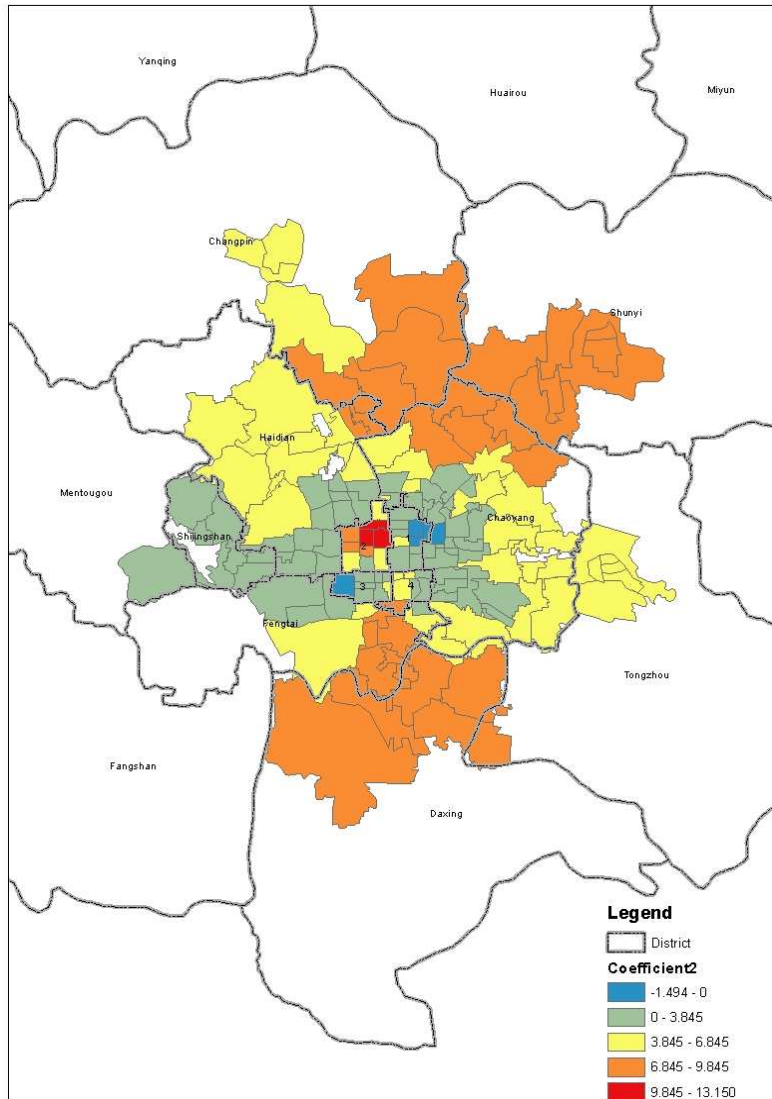


Figure 6.10 The distribution of Coefficient of the Urban Senior in Public Sector

Finally, I examine the Service Worker factor. Most of the metropolitan area has positive t values associated with this factor (Appendix 17). However, they are not statistically significant. T values associated with this factor are not significant in the central districts. It is probably because this is the area where housing prices are high and there were not many spacious housing units there. It is quite understandable that the model is not significant in the urban core because there were very few service workers living there due to the fact that housing prices were extremely high there. For the urban suburban areas, the relationship between the concentration of service workers and that of households living in spacious homes is rather complicated because this model does not control for local *hukou*. I assume that a lot of local residents with self-built

housing at the urban suburbs are service workers and their living situations were very different from migrant workers.

Figure 6.11 shows the spatial distribution of local coefficient associated with the service worker factor. The spatial pattern is quite similar to the distribution of t values. It is very unlikely for service workers to live in spacious accommodations in the area surrounding the urban core as compared to other social groups due to the high housing prices in that area. Moving outside from the center, while service workers are still less likely to live in spacious housing units the relationship becomes weaker. I expect this spatial pattern is directly related with the housing prices. The closer to the center, the less likely that those low income service workers live in spacious housing units.

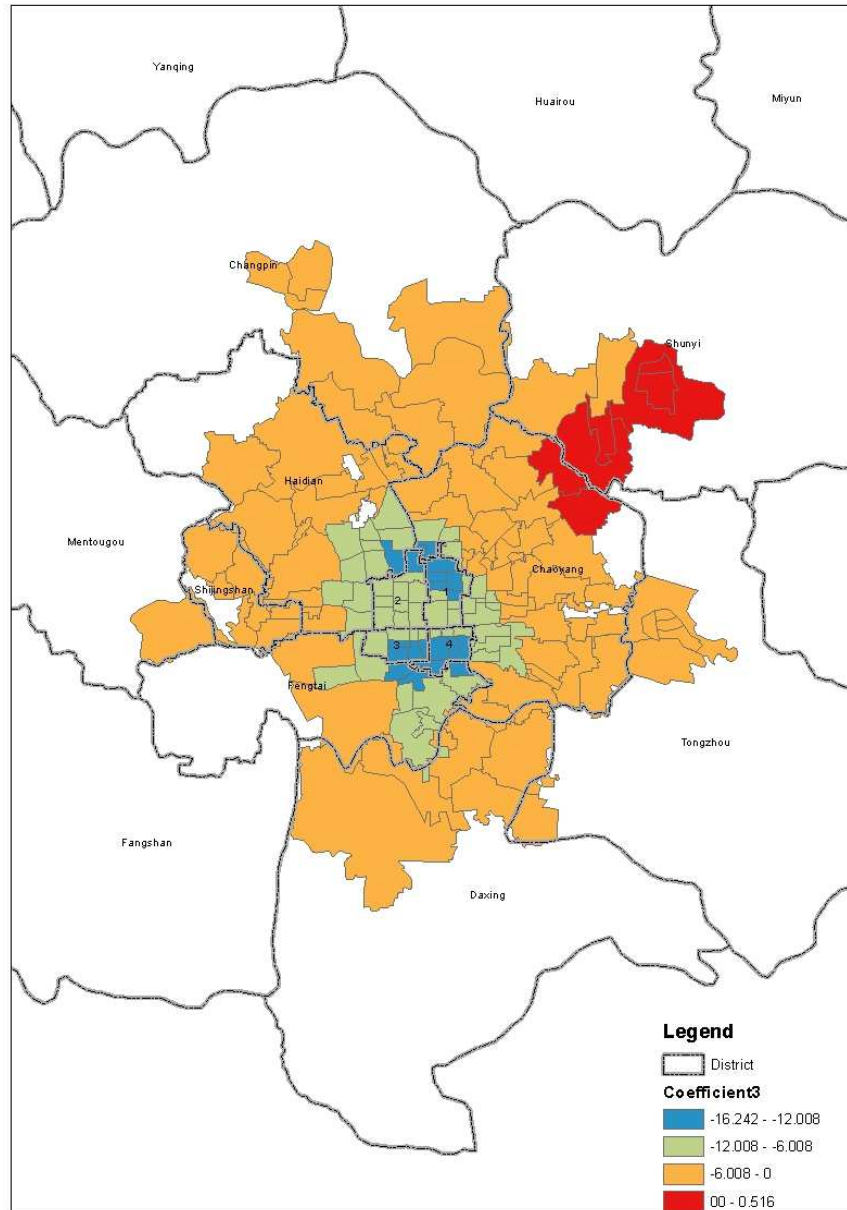


Figure 6.11 The Distribution of the Coefficient of the Service Worker Factor

6.2 Residential Segregation in Metropolitan Beijing

Residential segregation, especially segregation of the Blacks from the Whites is considered as a persistent aspect of racial inequality in Western countries (Charles, 2003; Rugh and Massey, 2010). The spatial inequality usually related to many other social inequalities in Western cities such as different job accessibilities, job-home mismatch and so on (Kain, 1968, 1992; Gordon and Kumar, 1989; Holze and Sjoquist, 1994 ; Preston and McLafferty, 1999). In contrast, the

public housing dominant system during the socialist period led to relatively homogeneous clusters of cellular *danwei* compounds in various Chinese cities, quite different from its western counterparts. In the reform era, the emerging housing market provided urban residents freedom to choose their own housing. However, residential segregation in Chinese cities has not been well studied. Using index suggested by Massey and Denton (1988), this section aims at exploring the new sociospatial landscape through examining whether residential segregation existed in metropolitan Beijing.

6.2.1 Different Dimensions of Residential Segregation in Beijing Metropolitan Area

There are various ways to measure different dimensions of residential segregation. The most widely known are the five dimensions suggested by Massey and Denton (1988). In this chapter, I calculated the evenness index, exposure index and concentration index that Massey and Denton (1988) recommended⁹⁷. The Area unit for the analysis is *jiedao* (sub-district). The evenness index measures whether minority group and majority group are distributed evenly in a given region; the exposure index measures the degree of potential contact of minority group and

97 According to Massey and Denton (1988), the best index for the evenness dimension is the dissimilarity index, calculated as:

$$D = \sum_{i=1}^n [t_i | p_i - P | / 2TP(1 - P)],$$

where t_i and p_i are the total population and minority proportion of areal unit i ; T is the population size and P is the minority proportion of the whole city, which is subdivided into n areal units. This index varies between 0 and 1. It represents the proportion of minority members that would have to change their area of residence to achieve an even distribution, with the number of minority members moving being expressed as a proportion of the number that would have to move under conditions of maximum segregation.

The index suggested to measure exposure dimension is the interactive index, calculated as:

$$xp_y^* = \sum_{i=1}^n [x_i / X] [y_i / t_i],$$

where x_i , y_i and t_i are the numbers of X members, Y members, and the total population of unit i , respectively, and X represents the minority members city-wide. It varies between 0 and 1. It can be interpreted as the probability that a randomly drawn X-member shares an area with a member of Y.

The concentration dimension is measured by relative concentration index, calculated as:

$$RCO = \left\{ \frac{\left[\sum_{i=1}^n \left(\frac{x_i a_i}{X} \right) \right]}{\left[\sum_{i=1}^n \left(\frac{y_i a_i}{Y} \right) \right]} - 1 \right\} / \left\{ \frac{\left[\sum_{i=1}^{n_1} \left(\frac{x_i a_i}{T_1} \right) \right]}{\left[\sum_{i=n_2}^n \left(\frac{y_i a_i}{T_2} \right) \right]} - 1 \right\},$$

where geographic units are ordered from smallest to largest in areal size, and n_1 and n_2 refer to different points in the rank ordering of areal units from smallest to largest; n_1 is rank of the tract where the cumulative total population of areal units equals the total minority population of the city, summing from the smallest unit up; and n_2 is the rank of the tract where the cumulative total population of units equals the minority population totaling from the largest unit down. T_1 , equals the total population of tracts from 1 to n_1 , and T_2 equals the total population of tracts from n_2 to n . t_i refers to the total population of area and X is the number of minority group X members in the city. This index takes the ratio of X members to the Y members concentration and compares it with the maximum possible ratio that would be obtained if X were maximally concentrated and Y minimally concentrated, standardizing the quotient so that the index varies between -1 and 1. A score of 0 means that the two groups are equally concentrated in urban space. A score of -1 means that Y's concentration exceeds X's to the maximum extent possible, and a score of 1 means the converse. The relative concentration index measures the share of urban space occupied by minority group X compared to majority group Y.

majority group; and the concentration index measures the degree of concentration of minority group. Different from the experiences in Western cities, central city in China is still the most desirable location. Therefore, I dropped the index of centralization they suggested, which measure the concentration of disadvantaged groups in central city. Due to the fact that I do not have an accurate base map to calculate the distances between each *jiedao*, this chapter does not calculate the index of clustering either.

Table 6.3 shows the score of the indexes. I examine how segregated the disadvantaged social groups is from the rest of the population in metropolitan Beijing. *Hukou* is an important institution discriminating groups without local urban *hukou* from accessing social welfare in localities in stay. I also examine whether low educated group, a disadvantaged group suggested by the market transition theory, is spatially isolated from the rest of population. In addition, with the emergence of housing market, we gradually saw a concentration of the elderly in old housing stock. I aim at showing whether there is residential segregation of urban elderly. Finally, studies in Western cities found that unemployed residents, most of whom were Blacks, tend to be trapped in dilapidated neighborhoods in central city. This section also tries to see whether unemployed residents were segregated from other social groups in metropolitan Beijing. I divided metropolitan Beijing into three regions: inner city, inner suburb and outer suburb. Inner city refers to the four central districts: Dongcheng, Xichang, Xuanwu and Chongwen districts; Inner suburb refers to the four districts just outside the inner city in the metropolitan area, including Chaoyang, Haidian, Fengtai and Shijingshan district; Outer suburb refers to districts outside the inner suburb within the metropolitan area, including part of Daxing, Tongzhou, Shunyi and Changping district.

Table 6.3 Residential Segregation indices for Residents in Beijing Metropolitan Area

Segregation Dimensions		whole city	inner city	inner suburb	outer suburb
Evenness	Non-local	0.244	0.076	0.234	0.211
	Low educated	0.222	0.003	0.240	0.202
	Elderly	0.159	0.003	0.151	0.107
	Unemployed	0.251	0.165	0.195	0.394
Exposure	Non-local	0.524	0.150	0.489	0.507
	Low educated	0.506	0.587	0.513	0.390
	Elderly	0.865	0.837	0.873	0.890
	Unemployed	0.009	0.031	0.014	0.093
Concentration	Non-local	-0.138	-0.043	-0.273	0.239

	Low educated	-0.587	0.054	-0.555	-0.091
	Elderly	0.200	0.177	-0.008	0.007
	Unemployed	0.045	0.059	0.016	0.095

Previous studies suggest that the scores above 0.6 are considered high, scores between 0.3 and 0.6 indicate a moderate level of residential segregation, while those under 0.3 are low (Denton and Massey, 1988; Alba, et al., 1995). The scores of evenness index show that the disadvantaged groups were generally evenly distributed. The distribution of unemployed residents was slightly unevenly distributed than other disadvantaged groups in metropolitan Beijing. Especially, the evenness score of unemployed residents is 0.394 in outer suburban districts, suggesting that we have to move 39.4% of unemployed residents in outer suburb in order to reach an even distribution of this group. Although the previous section showed that the percentages of unemployed residents were low, those who were unemployed tend to live together.

In terms of the exposure of disadvantageous groups to the rest of the population, unemployed residents actually had good contact with other residents, compared to other disadvantaged groups. The elderly had the extremely bad situation, especially in outer suburbs. Although the absolute percentages of elderly were not very high in outer suburb, they were quite isolated from other groups. It is probably because young people moved out of the old housing stocks, leaving old residents behind. There was moderate exposure problem facing low educated residents, especially in inner city. The high exposure score suggests that the small number of low-educated residents in inner city were quite isolated from the rest of residents, most likely in those old *hutong* neighborhoods. It was due to what McCarthy (1983) called “accumulation process” in that residents aged locally without young people moving in. The exposure index of non-*hukou* residents was moderate high overall. The degree of isolation was higher in outer suburb than that in either inner city or inner suburbs, because non-*hukou* migrants were very likely to live in group separating from other social groups in “villages in the city” at urban fringe where cheap housing was available.

The residential concentration of disadvantaged groups was low in metropolitan Beijing. The concentration scores for low educated groups were moderately high but negative, except that in inner city, suggesting that other education groups were more concentrated than the low educated group. Non-*hukou* residents concentrated slightly high in outer suburb, probably also due to the supply of cheap informal housing in “villages in the city”. In contrast, the concentration score of

non-*hukou* residents was negative elsewhere in Beijing metropolitan area, suggesting less concentrated supply of housing for non-*hukou* migrants outside the urban fringe. There was also moderate concentration of the elderly in inner city, which is consistent with the result shown in previous section.

Overall, based on the segregation indexes we can see that social segregation does exist in Beijing metropolitan area, since many segregation scores are greater than 0.3 (Table 6.4). Especially, the disadvantaged groups had poor contact with other social groups, particularly in outer suburbs. In the next section, I will further explore spatial patterns of the residential differentiation/segregation of disadvantaged groups in metropolitan Beijing.

6.2.2 Spatial Patterns of Residential Differentiation/Segregation

As explained in the Chapter 5, *hukou* is one of the most important institutions determining urban residents' welfare in their localities. They are not eligible to social welfare in localities they stay without local *hukou* status. Figure 6.2 in the first section in this chapter shows that the percentages of non-*hukou* residents were low in all *jiedao* in the four central districts, while *jiedao* with the percentage of non-*hukou* residents higher than average were located at the fringe of the metropolitan area. Especially, *Jiedao* with higher than 1.5 standard deviation (greater than 64.36%) were mostly “villages in the city” at the fringe of the metropolitan area.

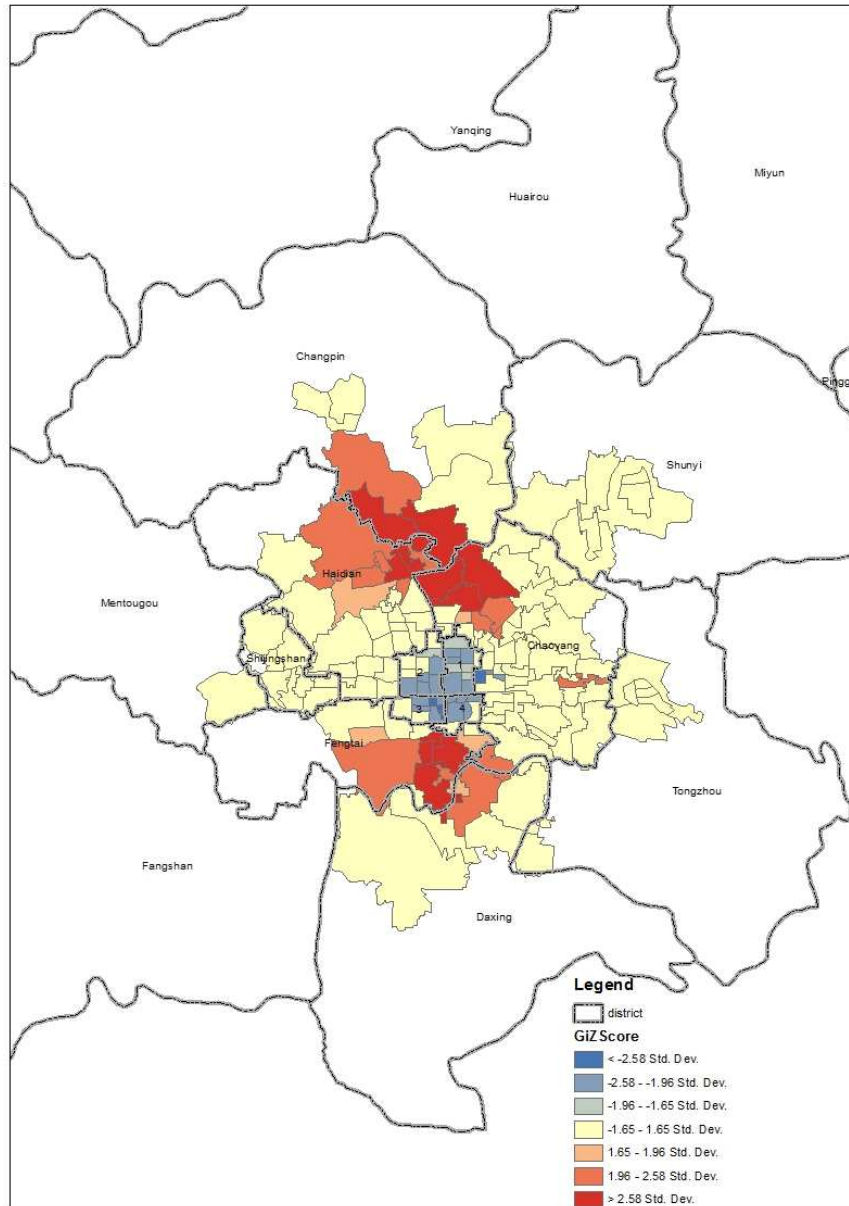


Figure 6.12 Hotspots of Non-*hukou* Residents in Beijing Metropolitan Area

Figure 6.12 shows hotspots of non-local residents in Beijing metropolitan area. Spatial autocorrelation analysis suggests that the spatial pattern of non-*hukou* residents is not by chance⁹⁸. Central districts were cold spots with lower than average percentages of non-*hukou* residents living there. It is because the majority residents were either local residents living in private housing built before the communist China and returned to owners after the economic reform, or old workers in allocated housing which used to be private and confiscated during the

⁹⁸ Moran's I is significant at 0.01 level, suggesting that there is only 1% chances that the spatial pattern of non-*hukou* residents is by chance.

socialist period. There are two hotspots: one in north of Beijing metropolitan area and the other one in south of the metropolitan area. The first hotspot in the north is a job center with a lot of high tech companies there. I expect that this is a hotspot with relatively high educated people working in private companies which were not able to provide them local *hukou*. The second hotspot is located in southern part of the Beijing metropolitan area which was traditional market place with low-class citizens during imperial period. After an interruption of the socialist period, this area again concentrated a lot of small private business and service jobs in the reform era, which attracted a lot of migrants. It is the location of the famous Zhejiang village with a large number of migrants from Zhejiang province doing business there. I expect that this hotspot is one with rather low educated migrants which were quite different from those in the first hotspot.

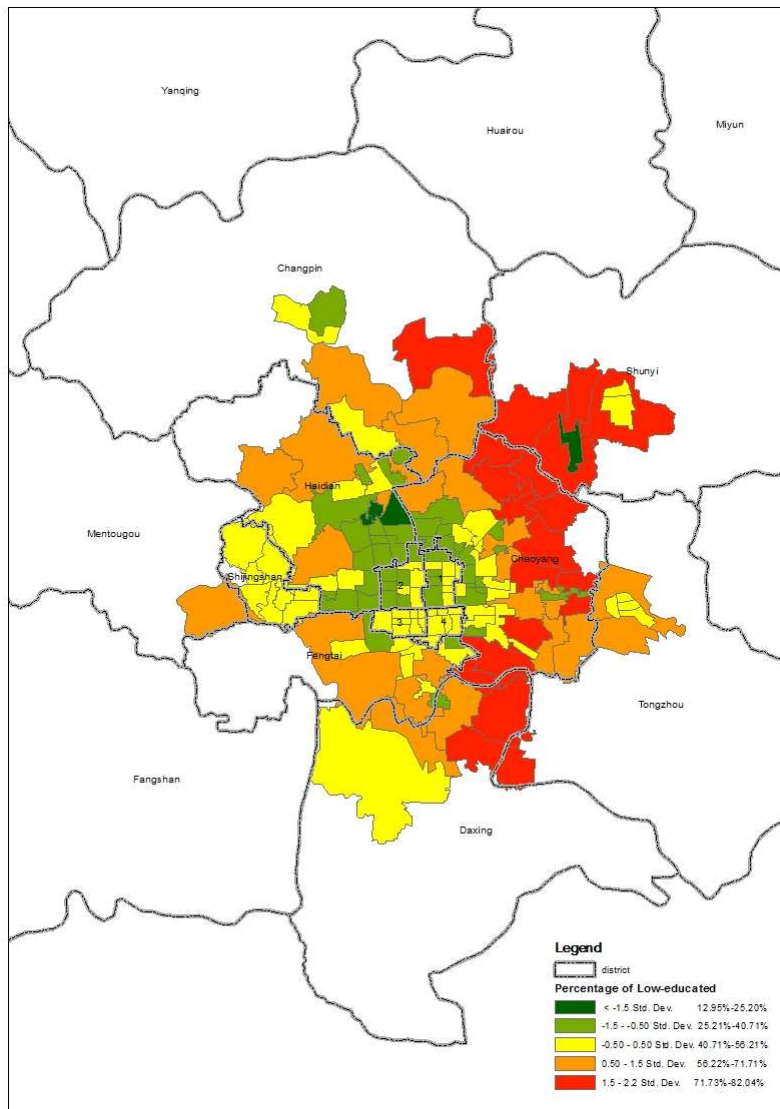


Figure 6.13 Percentages of Residents with Low Education Level

Education levels have long been believed to relate to the ability of individuals to access resources in the market economy. It is reasonable to expect low-educated residents are concentrated in they may be confined into less desirable areas due to their low purchase power. Figure 6.13 substantiate my expectation: low educated residents were concentrated at the fringe of Beijing metropolitan area where existed a lot of informal housing provided by “villages in the city”. The percentages were especially high in the east side of metropolitan area. On the other hand, the central city had low percentage of residents with low education level. The percentages of low-educated population in Qinghuayuan, Yuanyuan and Yueyuanlu *jiedao* in Haidian district were especially low because those *jiedao* concentrated a lot of universities and research institutes. Shoudujichang *jiedao* in Chaoyang districts was also an outlier with low percentage of population with low education level. Since it is the location of the capital airport, the population was rather unusual.

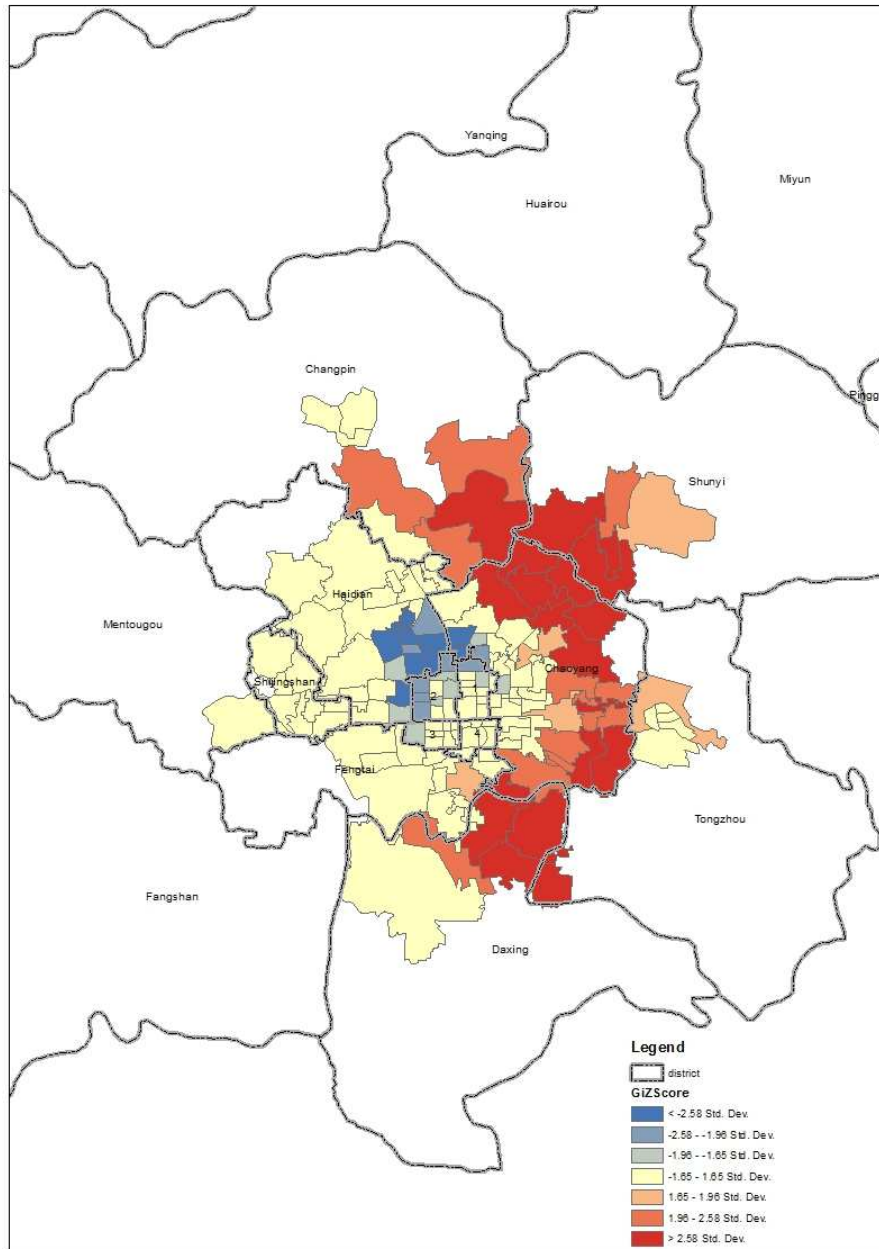


Figure 6.14 Hotspots of Low-educated Residents in Beijing Metropolitan Area

Hotspot Analysis (Figure 6.14) shows that the spatial pattern is consistent with that shown in Figure 6.3: there is a cold spot northwest of the central districts. It is quite understandable that this area concentrates a lot of universities and research institutes. The hotspot is a long strip on the east side of Beijing metropolitan area. Spatial autocorrelation analysis suggests that this spatial pattern is not by Chance⁹⁹.

⁹⁹ Moran's I index is 0.36 and it is significant at 0.01 level. It means that there is only 1% chances that this spatial pattern is by chance.

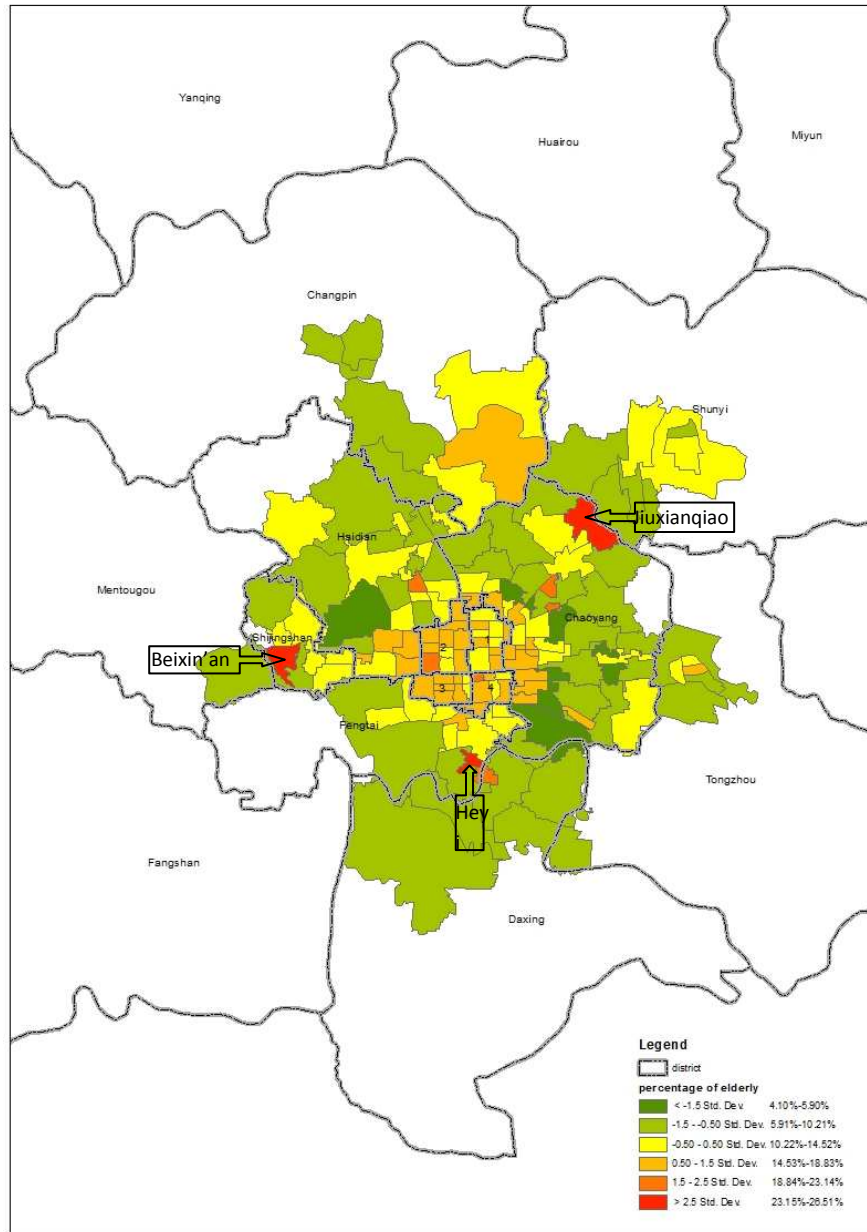


Figure 6.15 Percentages of Elderly in Beijing metropolitan Area

Studies on spatial pattern of urban elderly shows that elderly tends to concentrated in certain region of the cities (Golant, 1992; Allon-Smith,1982; McCarthy,1983). Recently, the aging issue in Chinese cities has drawn increasing attention. Some claims that the Chinese society is “becoming aging before getting rich (*wei fu xian lao*)”. Although the overall concentration of urban elderly is not very high, Figure 6.15 shows that there is a relatively higher concentration of population older than 60 in central districts. The percentages are between 14.53%- 18.83% in most *jiedao* in central districts. Outside the central districts, the percentages of old residents were

quite low. There were a few exceptions in some old *jiedao* outside the central districts with high percentages of old residents, such as Beixin'an *jiedao* in Shijingshan district, Jiuxianqiao *jiedao* in Chaoyang district and Heyi *jiedao* in Fengtai district. Beixin'an used to accommodate Capital Steel Company which was moved to the outskirts, leaving behind a lot of old employees in the old *danwei* housing. Similarly, Jiuxianqiao used to be an industry center with many factories during the socialist period. Most of the factories went bankruptcy during the reform era, leaving behind a lot of old employees in old housing stock there. The situation of Heyi is different. It is a receiving neighborhood for relocated residents from Chongwen district, one of the inner districts, when it was under revitalization since 1996¹⁰⁰.

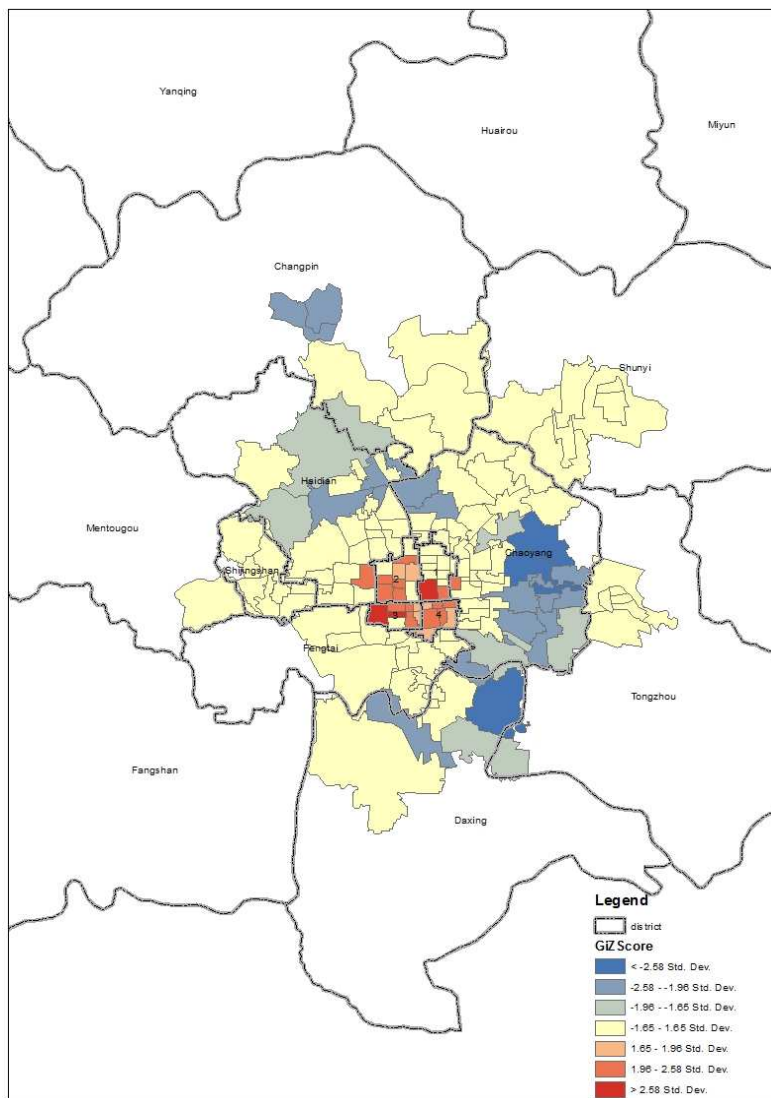


Figure 6.16 Hotspots of Urban Elderly in Metropolitan Beijing

¹⁰⁰ “Heyi *jiedao*”, retrieved from: <http://baike.baidu.com/view/2051236.htm>

Hot spot analysis (Figure 6.16) shows the spatial pattern of the elderly in metropolitan Beijing. The spatial autocorrelation analysis suggests that there is only 1% chances that this pattern is by chance. We can see that there is a concentration of the elderly in the central districts. Studies show that the high concentration of elderly in the U.S. cities in the past was due to the fact that young people left the central city for better housing and more job opportunities, leaving the elderly behind (e.g. Hiltner and Smith, 1974; McCarthy, 1983). In the Chinese context, the reasons are more complicated. Some poor elderly are similar as their counterparts in Western cities. They were trapped in old neighborhood, as the example of old residents in Jiuxianqiao neighborhood discussed in Chapter 4. On the other hand, due to the prime location of many old *danwei* housing, some other elderly preferred the good accessibility to all sorts of facilities. In addition, the high housing price excluded young people from moving in to newly developed housing due to its prime location. Figure 6.16 also shows that there are two cold spot with low percentage of elderly. Recall the hotspot of non-*hukou* residents, the cold spots of urban elderly are largely coincide with the hotspots of non-*hukou* residents, suggesting a concentration of young migrants in those areas at the urban fringe.

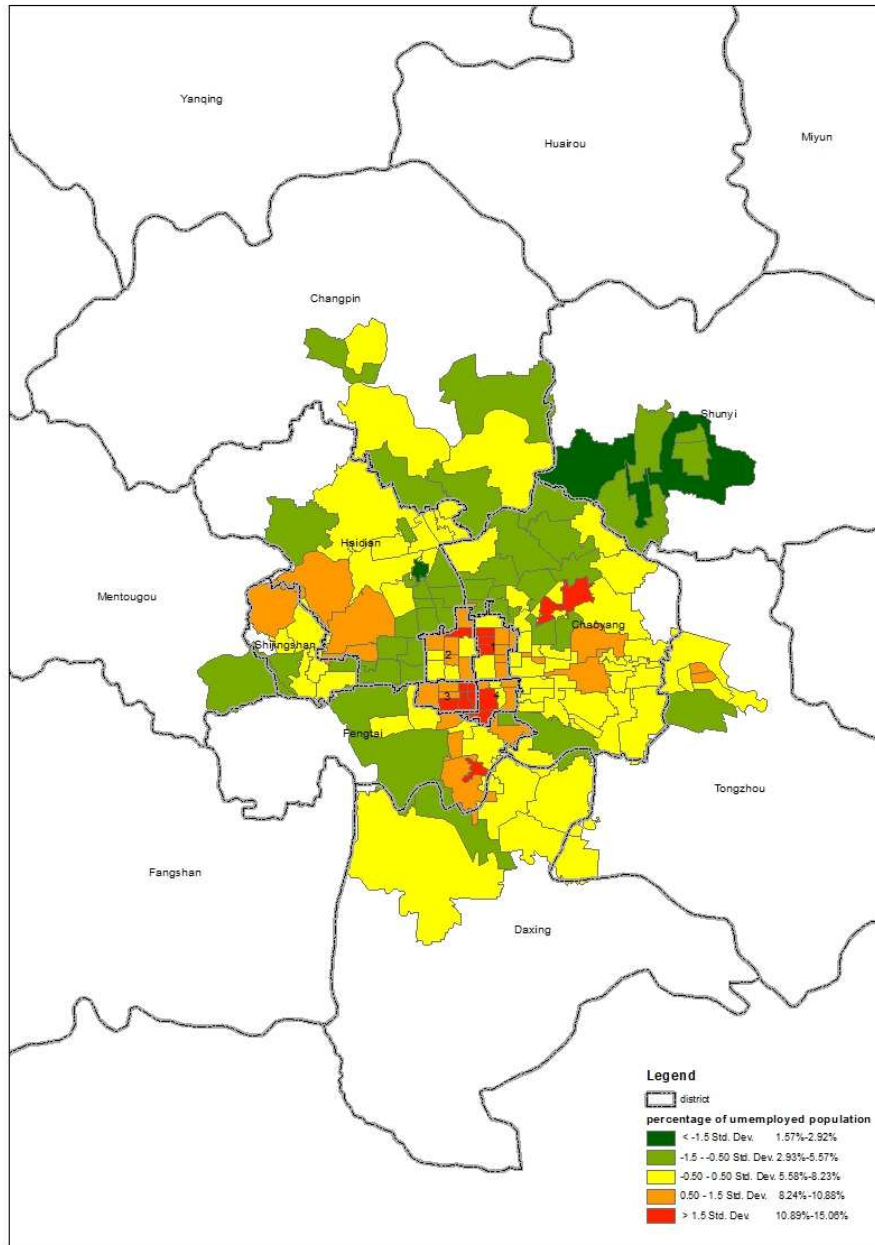


Figure 6.17 Percentages of Unemployed Residents in Metropolitan Beijing

Unemployed residents here include those older than 18 who were looking for jobs when the census was conducted. Figure 6.17 shows that the unemployment rates were quite high in the central districts, although the unemployment rates in metropolitan Beijing were not very high overall. There are two *jiedao* with higher than 1.5 standard deviation unemployment rate: Jiangtai *diqu* in Chaoyang district and Dahongmen in Fengtai district, both of which are urban villages. Since these *jiedao* had high concentration of migrant workers. Probably the migrant

enclave there attracted more and more migrants looking for jobs there. *Jiedao* outside the central districts generally had low unemployment rates, especially west and north of central districts.

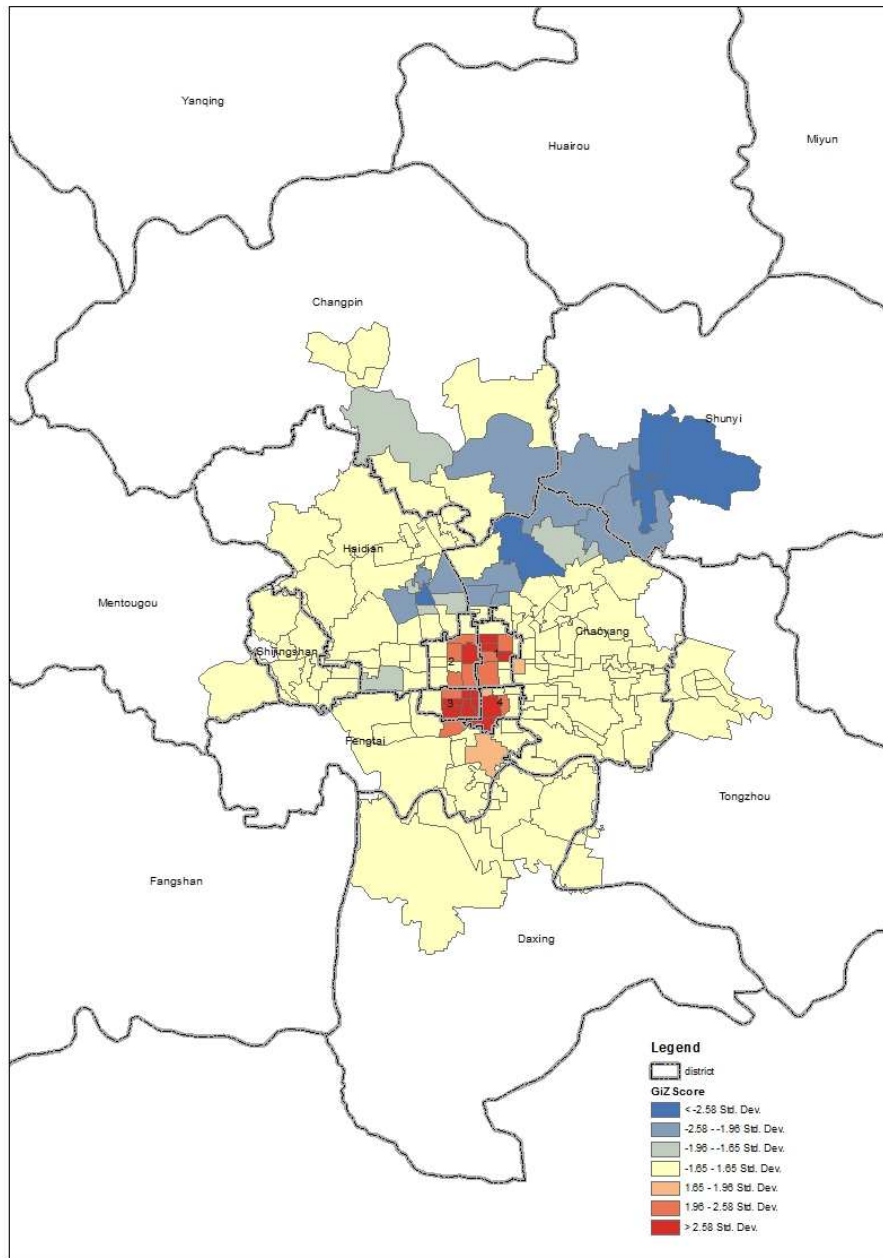


Figure 6.18 Hotspots of Unemployed Residents in Metropolitan Beijing

The hotspot analysis also shows that the central districts are a significant hotspot with high concentration of unemployed residents (Figure 6.18). In terms of cold spots, only *jiedao* north of

the central districts are significant. Most of those *jiedao* are “villages in the city” which attracted a lot of investment to develop light industry after the economic reform¹⁰¹.

6.3 Conclusion

This chapter examined the spaces of inequality in terms of the spatial patterns of housing inequality and residential segregation of disadvantageous groups. The spatial distributions show the concentration of households in crowded living was mostly at the fringe of Beijing metropolitan area where a lot of cheap rental housing was located in “villages in the cities”. I expect that many of these households have poor accessibility of good urban facilities and experience long commutes. In contrast, households with spacious housing were concentrated in more central locations, areas right outside the central districts. In the central districts, the concentration was low with both households in crowded housing and spacious housing. It is probably due to the lack of cheap rental housing for the poor and lack of spacious housing units there.

Factor analysis reveals that concentration of the social elites, seniors in the public sector, and urban poor factor account a lot for the concentration of households in both crowded housing and spacious housing, but in opposite directions. In addition, the concentration of “non-local” residents also accounts for the concentration of households with crowded housing at the periphery area of Beijing metropolitan area. However, this factor does not influence the concentration of households with spacious housing. Consistent with the findings in Chapter 4 and Chapter 5, that the factors related to the “socialist system”, such as not having *hukou* or not working in the public sector play a significant role in spatial concentration of households in crowded housing. In addition, the analysis in this chapter also shows that market plays a role to benefit both the market elite as well as the socialist elites more than other social groups. Wealthy households without local *hukou* can also access spacious housing, which explains the lack of “local residents” factor in determining the concentration of households in spacious housing. On the other hand, the urban poor, including service workers in the informal sector and unemployed residents created by the market, are in disadvantageous positions. They are much more likely to be concentrated at the fringe of Beijing metropolitan area with crowded housing units and less

¹⁰¹ “Houshayu diqu”,
<http://www.baike.com/wiki/%E5%90%8E%E6%B2%99%E5%B3%AA%E5%9C%B0%E5%8C%BA>

likely to end up in spacious housing units in more centralized locations. Geographically weighted regression further reveals that the influence of these factors on the concentration of households in either crowded or spacious housing is quite uneven across Beijing metropolitan areas. Local factors such as the concentration of cheap rental housing in “villages in the city” and concentration of certain types of jobs attributed to the local variations.

A number of studies based on western cities have shown that residential segregation is associated with many social problems. This chapter examined residential segregation in Beijing metropolitan area based on the index of evenness, exposure and concentration. The segregation indexes suggest that social segregation does exist in Beijing metropolitan area, particularly in outer suburbs. Further examining the spatial patterns of residential distribution of disadvantaged groups, this chapter showed that there is a high concentration of non-*hukou* and low-education residents at the fringe of Beijing metropolitan area, which is largely consistent with the distribution of households with crowded housing. In contrast, there is a high concentration of urban elderly and unemployed residents in the central districts. While their housing situation is not very poor, they are segregated from other social groups. Further studies are needed to explore causal factors and the social and consequences of the residential segregation of disadvantaged groups in Beijing metropolitan area.

Chapter Seven Conclusion

In a book entitled *Housing Changes China (Juzhu gaibian zhongguo)*(Xia and Yin, 2006), the authors paint a picture in which housing has become a good investment for urban residents for both capital gains and for their children's future. Villagers become landlords and earned money through renting out their houses in "villages in the city" to migrants. Municipal governments "dream big" to plan large scale new sleeping towns and lease land to developers to finance their cities, while developers make their fortune by selling condominiums in the emerging market. However, the rosy picture of a property-owning society gaining from and defending their property rights is only half of the story, The urban housing prices almost doubled nationally and the prices increased three folds in Beijing from 1998 to 2008.¹⁰² The central government has issued more than ten policy documents to curb the housing price escalation since the reform in 1998. However, except for a brief downturn in 2008 due to the global financial crisis, housing prices rose in most Chinese cities. The rapid-rising housing prices have eroded the "Chinese dream" the new leadership of China is trying to promote¹⁰³. In order to stay in big cities like Beijing, even college-educated migrants have to live like "ant tribes"¹⁰⁴, crowding together in dorm-like rental apartments. Migrant laborers need to try even harder to find affordable housing in the squeezed living spaces in cities due to the mass demolition of old neighborhoods and "villages in the city", and the replacement of affordable low-quality housing with well-equipped condominiums. At the same time, there are repeated media coverage of various Chinese cities developing "ghost towns" with mostly empty posh condos and single-family houses waiting for home buyers¹⁰⁵. Defying governments' hope, these "ghost towns" attracted neither jobs nor people, while leaving astronomical debts for municipal governments and unrealized returns for

¹⁰² Here, I use 1978 value as the baseline and converted the housing prices of other years to 1978 value because China's economic reform started in 1978. In terms of 1978 value, urban housing prices increased from 511 yuan per square meter in 1998 to 904 yuan per square meter in 2008 nationally; the urban housing prices in Beijing increased from 672 yuan per square meter in 1998 to 2,867 yuan per square meter in 2008 (derived from data from China Statistic Yearbook, 1999, 2009).

¹⁰³ Wen, Wang, Unusually high housing prices was increasing inequality and eroding Chinese dream, Retrieved August 10th, 2013, from <http://finance.sina.com.cn/zl/china/20130804/222316340202.shtml>

¹⁰⁴ Feng, Sue, China's graduates: an ant's life, The Wall Street Journal, Retrieved August 10th, 2013, 2013, from <http://blogs.wsj.com/chinarealtime/2009/11/05/chinas-graduates-an-ants-life/>. "Ant tribes" refer to well-educated migrants, mostly college graduates who live in communities in very crowded situation like ants.

¹⁰⁵ McMahon, Dinny, China's gleaming ghost cities draw neither jobs nor people, The Wall Street Journal, Retrieved August 10th, 2013, from <http://online.wsj.com/article/SB10001424127887324412604578515382905495900.html>

investors.¹⁰⁶ Many regulations on the housing market by the governments turned out to be ineffective because “where there are policies from above, there are counter-policies from below” (*Shang you zheng ce, xia you dui ce*). For example, due to the restrictive policy on purchasing second homes, couples who wanted second condominiums either in good school districts or to improve living conditions faked divorce to circumvent the strict restrictions of one apartment per household and thus qualify for a low-interest rate and low down payment. It has led to a surge of divorce cases in various big cities in China, which are called “divorces of Chinese style”¹⁰⁷.

Through examining the behavior of the government and urban residents, as well as the social and spatial inequality in Beijing metropolitan area, this dissertation explored the dynamic of the new urban housing system as a lens to unpack the inter-relationship between the government, the society and the urban development. The remainder of this chapter summarizes the main findings and contributions, as well as the limitations of this dissertation.

7.1 Main findings

The literature on neoliberalism suggests a global spread of the market and lean state. In this context, there is an ongoing debate on whether China is neoliberalizing its society and urban space following the lead of the advanced capitalist countries. This dissertation has challenged the convergence thesis that China’s transition is necessarily following the footsteps of those advanced capitalist cities. Rather, the “socialist” legacy has persisted and significantly shaped China’s transformation. Using Beijing as a case, this dissertation examined the relationship between the state, society and the urban development. This dissertation particularly focused on housing inequality and residential segregation in Beijing metropolitan area in the reform era. Like many other Chinese cities, Beijing has experienced unprecedentedly transformations in society and the urban space: new social groups were emerged, living standards had been improved for most residents while with more overt inequality and the monotony of urban space has been greatly transformed.

¹⁰⁶Huang, Jiayu, Ghost city Er Duosi had debt up to 300 billion *yuan* and millionaires became beggars (Guicheng Er Duosi fuzai siqianyi, baiwan fuweng lunwei qigai), Retrieved August 10th, 2013, from http://news.dayoo.com/china/201308/31/53868_32291809.htm

¹⁰⁷Zhao, Chengxi, Investigation on divorce of Chinese style: couples fake divorce to purchase apartments (Zhongguo shi lihun diaocha: wei maifang fuqi jia lihun), Retrieved August 10th, 2013, from <http://news.sina.com.cn/c/2013-04-17/071126849783.shtml>

With the emerging housing market, these changes have significant implications in the urban social spatial structure. During the pre-reform era, housing was a wage good allocated by the government. Tenants paid token rents under the planned allocation system. However, the urban housing system during the socialist period was not as equal as usually assumed to be. Senior employees and those with higher job ranks tended to have better housing. Due to the generally poor quality and lack of facilities, the differences for the most of working class were mainly in terms of whether one could access the public housing and the sizes and facing directions of the apartment one obtained if he/she had the access.

The housing reform in 1998 was aimed at building a housing market to promote the housing industry. While the role of central government had changed from a direct provider to a rule-maker and indirect manager of financial institutions, its influence was still much stronger than that in the Western countries since most large banks were owned by the central government and subject to government's direction.

The role of the local government in the urban housing system has experienced even more changes after the housing reform due to several institutional changes. First, the replacement of the fiscal contractual system with a sharing system not only hardened the budget constraints for local governments, decentralized responsibility of the local governments, but also shifted their incentive from cultivating industry to promoting land development. Second, the emerging land and housing markets made it possible for local governments to continue its familiar practice of extracting revenues from the rural sector during the pre-reform period with a new means: land, and allowed them to built up their coffer by selling expropriated farmland to developers. Third, *hukou*, an important institution developed in the socialist era lost the function as a means of mobility control of citizens but provided local government a useful tool to grant different citizenship rights to local urban residents and migrants without local urban *hukou*. Last, the transformation of *danwei* shed most of their social functions, such as the provision of public rental housing and medical care. Overall, The change of these institutions significantly defines the constraints and incentives of governments in the urban housing system. While the "rules of the game" have been changed a lot since the reform, paving a way for marketization and privatization, the urban housing system is still deeply embedded in institutions from the socialist period.

Based on the examination of state behavior in urban housing, several conclusions can be drawn. First, the main goal of the central state is to promote housing industry while maintaining social stability at the same time, and thus maintaining its legitimacy. In contrast, Beijing municipal government are more concerned with local GDP growth and urban finance due to the hardened budget constraint and the official evaluation system. The different goals of Beijing municipal government and the central government explain the ups and downs of the Economical and Comfortable Housing Program. The diverse interests and embedded autonomy of the state at different levels also explained the distinct fates of “small property housing” and the individual-initiated cooperative housing.

Second, instead of a black box as being argued by the growth machine thesis and regime theory in US politics, this dissertation showed that the central government of China was an important stakeholder in the urban politics and actively involved in the housing reform. This dissertation has shown that the central government not only initiated the housing reform, but played an active role in the housing market when there were fluctuations. Through its actions on agenda setting, rule making and even direct involvement, the central government was of China able to pursue its own economic and political interests.

Third, quite unique to China, the municipal government of Beijing took advantage of *hukou*, a socialist institution to achieve its goal in the market. In order to promote the sale of commodity housing, the Beijing municipal government issued policy to grant local *hukou* to home buyers. As a result, urban residents with stronger purchasing power could enjoy valuable Beijing citizenship. When it came under pressure from the central government to tackle inflating housing prices, the Beijing municipal government again used *hukou* to differentiate citizenship and banned those who did not hold a local *hukou* on purchasing commodity housing in Beijing.

Based on the analysis of various urban groups’ housing behaviors, several conclusions can be drawn, such as purchasing homes, financing their housing, changing residence, renting apartments and so on. First, although being self-reliant for one’s own housing became the hegemonic discourse during the reform, this subjugation only applied to part of the urban residents. Young urban residents working in the private sector and those holding low ranks in small public organizations had adopted the neoliberal thinking. Instead of “waiting, depending and asking” for the government as their parents’ generation did, they went to the bank for home loans and shifted their dependence on the government to their parents for a down payment. It is

reasonable to say that the expensive homeowner dream in Beijing was supported by the bank as well as the lifetime savings of parents. In addition, due to the institutional discrimination against rural residents since the socialist period and the working of the *suzi* discourse in the reform era, migrants without local *hukou* accepted their identity as outsiders and “low-quality” citizens, and thus accepted the idea of self-reliance for housing. In contrast, Beijing residents who worked in monopoly sectors or central ministries did not need to resort to the market to satisfy their housing need. Instead, they could access subsidized housing from their *danwei* as welfare or through the right connections. They are “exceptions to neoliberalism”. Neoliberalism as governmentality was not applied to them.

Second, this dissertation has shown that the economic returns from investing housing varied a lot among different social groups. Consistent with previous studies, privatization of public housing not only increased the housing wealth of Beijing residents, who were eligible to purchase the heavily subsidized public housing, but also extended the housing inequality of the socialist period and brought disproportionate gains to those who already gained more in the old regime. In addition, residents who could access subsidized housing through the right connections at much lower prices than market prices, investing in housing guaranteed good returns. In contrast, ordinary home investors from time to time suffered great loss due to the fluctuations of the housing market caused by constant involvement of the government.

Third, the socialist “legacy” served as an important factor determining the distinct actions of different disadvantageous groups in terms of their housing. While both laid-off workers and rural migrants were merely “market spectators”, excluding from any housing gains, rural migrants have accepted the neoliberal thinking due to the persistent practice of the *hukou* system which forced them to be self-supported ever since the socialist period. Therefore, they were largely silent about their poor housing condition, but depended on themselves for their own housing. In contrast, some laid-off workers from SOEs actively fought for their housing rights based on a tacit “social contract” made with their *danwei* to provide public housing as a wage good in the socialist era.

Statistical analysis based on 2000 population census of Beijing revealed that housing inequality based on individual interviews was not sporadic, but systematic. The analysis showed that employees working in “monopoly” sectors and governmental organizations consistently had better housing than their counterparts in the private sector. In addition, residents working in the

private sector paid more for their housing even though their living conditions were poorer in quality compared to their counterparts in public sector. This dissertation argues that the mixed housing system contributed to housing inequality through pushing urban residents working in the private sector to be self-reliant via market, while providing those working for “monopoly” sectors and central ministries leeway to enjoy the market salaries and similar housing benefits of the pre-reform period at the same time.

Statistical analysis in this dissertation also showed that *hukou* remains to be powerful in determining Beijing residents’ access to housing, which is consistent with other studies. Migrants deprived of local citizenship rights by the *hukou* institute paid higher prices in the market for their housing. While more educated residents had larger and better housing as the “market transition hypothesis” suggested, the difference in *hukou* status also accounted for the different housing situations among various education groups. Moreover, the difference in the sizes of living space between non-*hukou* rural migrants and those with local urban *hukou* was much larger than that caused by occupational differences.

Through examining the spatial patterns of housing inequality, this dissertation found that the outer suburban districts, especially northern suburb of Beijing metropolitan area where migrants concentrated, had the highest concentration of households in crowded living conditions. The outer suburban districts also had the lowest concentration of households in spacious housing. Factor analysis showed that four factors: social elites, senior in the public sector, local residents and the urban poor largely explained the chances of living in crowded housing in most of the metropolitan area, except the central districts, which was due to the extremely high housing prices there. Three factors, social elites, senior in public sectors and service workers accounted for the chance of living in spacious housing. While having local urban *hukou* might not be directly associated with spacious housing, it decreased the chances of living in crowded housing. Through conducting geographically weighted regressions, this dissertation also showed that the explanatory power of these factors varied a lot across spaces. Local conditions and history also played a role in determine housing situations of Beijing residents.

Finally, through calculating the evenness, exposure and concentration, this dissertation showed that social segregation of these disadvantaged groups existed in the Beijing metropolitan area. It existed more in exposure dimension, suggesting that the disadvantaged groups had poor

contact with other social groups. This dissertation also showed that not only the disadvantageous groups mostly concentrated in the outer suburbs had poor living conditions, but they had high level of segregation there. The institutionally created housing inequality is not only social and economic, but spatial as well.

7.2 Understanding the State, Society and Urban Space of China in the Reform Era

The emergence of a market in China makes many think that China is moving to a convergence of capitalist countries as the former Soviet Union and the Eastern European countries did, despite taking a different route. Focusing on the shift of capital accumulation from industry to urban land and housing, Marxist scholars contend that the “institutional fix” of the market and “spatial fix” of capital prove that Chinese cities are neoliberal, not fundamentally different from western cities, although with “Chinese characteristics”. The neoliberal turn in Western countries and China’s reform do bear some resemblance. First, there is a retreat of the state in providing “social goods”. Second, the “growth-first” mentality is advocated and market logic is promoted. However, the social goods provided by Chinese government in the pre-reform era was mostly “wage goods” which were better in quality for the favored groups of the society, while they were “welfare” in capitalist society, which benefited the disadvantageous groups disproportionately. In addition, the state of China was playing a much more active role in market-building during the reform era than their Western counterpart. Wu and Ma (2005) view the difference of China’s path as its staying in a stage of “rolling out” neoliberalism. I argue that only focus on the accumulation of capital without careful examination of the actors and institutions facilitating the accumulation will risk missing the full picture of China’s reform. Overall, this dissertation rejects the convergence thesis and argues that China’s urban development bears a lot of continuities from the socialist period and is different from that of neoliberal countries in nature. Table 7.1 provides a concise comparison of the state, the society and urban space in China during the socialist period and the reform period and those of the capitalist countries.

Table 7.1 State, Society and Urban Space in China and Capitalist Countries

		China		Capitalist Countries
		Socialist period	Reform period	
State	Goal	Modernization Economic growth	Economic growth Legitimizing the party state	Economic development after Keynesian Crisis Pervasive market
	Strategy	“Big push” industrialization Strong control over society and resources by the Leninist party-state	Market building “Land and housing-led” urbanization	Retreat of the state Market building
	Methods	Control mobility through <i>hukou</i> and <i>danwei</i> institutions and differentiate citizenship between rural and urban population and between localities Unequal exchange of agriculture products between rural and urban areas Hierarchical system for social goods allocation (better goods for favored residents)	Differentiate citizenship through <i>hukou</i> and <i>danwei</i> institutions within localities based on <i>hukou</i> status Unequal exchange of land between rural and urban areas and commodification land and housing through the market Confined the allocation of subsidized consumer goods for favored residents (elites within the public sectors)	Neoliberal practices (lean government, privatization and deregulation, workfare for welfare, social surveillance etc.)
Society	Winners	High-ranking cadres Managers in SOEs	High-ranking cadres Managers in monopoly sectors	Market elites Political elites
	Losers	Rural residents	Rural residents Migrants Laid-off workers	Minorities Urban poor

	Stratification mechanisms	Institutional discrimination	Institutional discrimination Market discrimination	Market discrimination
Space	Production mechanisms	State plans	Urban planning State plans Market	Market
	Urban structure	<i>Danwei</i> delineated urban space	Heterogeneous urban space	Segregation based on affordability and race

During the socialist period, the state played a pivotal role in industries. The main goal of the state was to modernize the country and promote economic growth after the recent history of humiliation. The strategy of the Leninist party-state was to make full use of resources to implement the “big push” industrialization strategy. In order to channel limited resources to develop industry, the state firmly controlled the society and resources, and at the same time provided comprehensive social goods to urban residents through the *danwei* system. In addition, the *hukou* institution was utilized to tie peasants down in the countryside to work on agricultural production and to be self-reliant in order to minimize the cost of urbanization. Furthermore, through obtaining agricultural products and raw material at artificially low prices, the state extracted revenue from the countryside to fund industrialization in cities. This regime resulted in slow economic development, low-level urbanization and poor living standards.

During the reform era, economic growth became even more important; not only to catch up with other newly industrialized countries, but to legitimize the party-state. However, industrial development brought by township and village enterprises lost its impetus as local economic driver due to the fiscal reform and global competition in the 1990s. As a result, converting rural land to urban land and selling it for housing development became an important revenue source for local states. During this period, land and housing itself became a means to generate wealth and promote economic development. Instead of being confined within the countryside, peasants were allowed to migrate to cities to work at construction sites as well as assembly lines. Again, *hukou* was used as an important institution to economize on the costs of development through excluding migrant laborers from accessing urban welfare. During this period, land was

expropriated from the countryside at low prices by the local government and sold to developers at much higher market prices. Developers in turn, built housing and sold them at even higher prices to ordinary residents via the market. Here, a market served as a necessary instrument to the commodification of land and housing to extract revenue from the rural sector. And the creation of a housing market is an integral part of the process of extracting revenue from the countryside, which is not different in nature from the pre-reform practice in the socialist period.

Through the lens of housing, we can clearly see many changes in the society. During the socialist period, urban residents got comprehensive social goods, including housing as part of their wages. The distribution criteria favored government officials and managers in SOEs. However, since there was no market to cash in the housing benefits and the quality of housing was generally low, the differences between the socialist elite and ordinary urban residents were non-pecuniary and in a limited scale. The losers during that period were peasants because their agriculture products were extracted by the state at low prices and they were excluded from any urban social welfare. The mechanism of social stratification during that period was the socialist institutions, especially the *hukou* system which formed the insurmountable urban-rural divide. During the reform era, this dissertation showed that socialist elites continued to benefit from the mixed system. On the other hand, migrants and laid-off workers were losers during the reform era because they either faced continued institutional discrimination or suffered by the sudden breakage of the previous “social contract” with the state. Due to the fact that socialist elites could utilize the market to cash in their non-pecuniary benefits, the social inequality was significantly widened by the market. In the reform era, the social stratification was caused by both the socialist institutions and the market. In contrast to the situation in East and Southeast Asian countries where Ong (2006) explained that disadvantaged groups were “exceptions to neoliberalism” because they were excluded from the benefit of the market, the “exceptions to neoliberalism” in China in the reform era were the socialist elite who did not need to compete in the market, while benefited from the market. In contrast, ordinary citizens are required to be responsible for themselves via the market. This dissertation argue that there is a process of “accumulation through dispossession” dispossessing the disadvantaged groups in the market to facilitate the accumulation of the state and benefit the socialist elite at the same time, which is quite different from that in capitalist society. Partial neoliberal practices are used to serve the

state goal of “economized” the costs on development, which is in essence the same goal as the socialist period, though pursued through a different strategy.

Cities were primarily production sites during the socialist period. Urban life was organized around industrial production, which resulted in an urban structure delineated by various *danwei*. Social spatial differentiation was based on *danwei* people associated with instead of market capacity or personal preferences during this period. Because the location of the *danwei* was mainly determined by state plans, it was also the primary cause of social spatial differentiation during the socialist period. During the reform period, the urban space itself became an integral part of the state’s strategy of economic growth in which the state monopolized conversion of large-scale rural land into urban land for massive housing developments. These practices not only contributed to the local coffer, but significantly transformed the urban space. The emerging housing market broke the linkage between working place and residence for most urban residents, especially those who entered the job market during the reform era. As shown in Chapter 6, residential segregation started to appear both based on affordability and institutional discrimination.

Table 7.1 shows that the reform-era China and the capitalist countries are different in nature. First, the role of the state during the reform period is not different from that in the socialist period in nature. The state is still organized as a Leninist party-state and remains to be the main stake holder, although the local state instead of the central state becomes the main actor in the new era. Just as Huang (2011, p. 4) observed, China is “in the midst of one of the most statist periods in its reform era”. The introduction of land and housing markets and re-vitalizing the exchange value of land and housing in cities signified a changed strategy to continue extracting revenue from the rural sector through land. Instead of market-building being the state goal as in capitalist countries, the so-called “market economy with Chinese characteristics” is an instrument to realize the state goal of the “land and housing-led” urbanization. Second, the new regime continues to discriminate rural citizens while preserving benefits for the elites in the public sector. In contrast, states in the west are supposed to protect the disadvantaged groups. Third, the “spatial fix” which benefits corporations and market elites in Western cities is rather a state project to realize the wealth accumulation for the local states. Overall, China is not neoliberal in nature. Neoliberalism has not been a dominant ideology in Chinese society.

Neoliberalism as policy-based practices was not implemented by either central government or local government. Neoliberalism as governmentality was not applied to those without any political power and outside the public sector.

7.3 Research Contribution

This dissertation contributes to the current literature in several ways. First, this research challenged the literature viewing China as a transitional economy with the case of China's housing system transformation. It clarifies the misunderstanding of China's reform as a convergence with neoliberal capitalist countries similar to other post-socialist countries. Based on the continued state practices and institutionally created inequality between different social groups discussed in this dissertation, I argued that the reform in China has not led to a true transition away from its socialist past. With a framework incorporating the state, the society and the urban space and paying special attention to institutions, this dissertation is able to grasp the gist of China's reform. This framework avoids the pitfall of focusing exclusively on the coalition between public and private sectors by the urban governance perspective and the over-emphasis on capital accumulation by the Marxist perspective. As shown in this dissertation, land and housing are at the center of the state's development strategy and China's social change. This dissertation has provided a useful window to understand China's reform and its sociospatial transformation.

Second, this dissertation has contributed to the literature on sociospatial patterns of Beijing by using a meaningful boundary that captures the daily labor market: the Beijing metropolitan area boundary, which is a basic unit for any city-level analysis. Through using the metropolitan area boundary, which delimits the daily commuting zone of urban residents, this dissertation has avoided the many pitfalls previous studies have. On the basis of the Beijing metropolitan area boundary, this dissertation was able to generate meaningful findings and made international comparison of housing inequality and social segregation possible.

Third, this dissertation has contributed to the theoretical debate of "persistent power" versus "market transition" through the lens of housing. This dissertation divides urban residents working in monopoly sectors from those working outside those sectors for the first time and supports the "persistent power" hypothesis. During the reform era, the practices of many small

SOEs were no different from those of private companies, while monopoly sectors continue to preserve more benefits for their employees. However, no previous studies on housing in China separated elite group in the public sector from those in the private sector. Therefore, the persistent (though diminishing) advantages of this combined group cannot convincingly support either the market transition hypothesis or the power persistent thesis. In addition, based on interview data, this dissertation found that socialist elites could transformed their housing benefits into pecuniary gains through the market.

Lastly, this dissertation links the study of social inequality with the study of spatial inequality through the study of housing. Existing studies based on Western cities usually either focus on housing inequality as one aspect of social inequality or on the patterns of residential segregation as a dimension of racial inequality. Studies on Chinese cities, on the other hand, are mostly focused on housing inequality and simply neglect the spatial dimension. This dissertation argues that the transformation of the public housing system is becoming an important way to translate social inequality into spatial inequality. It adds an important geographical dimension to existing studies by examining various residential segregation dimensions in Beijing. This dissertation argues that housing inequality and spatial inequality both the consequences of social change and as contributing to the changes of social structure. This dissertation has shown that as expected, residential segregation existed in Beijing in the reform era. In addition, with geographically weighted regression, this dissertation was able to yield a more nuanced understanding of the spatial patterns of housing inequality which are shaped by local conditions, history and culture.

7.4 Limitations of the Research

This study has several limitations. First, this dissertation suffers from the constraints of data. The year of the base map used by this dissertation does not match the year of the census data. Because of the frequent changes of administrative boundaries due to the combination or separation of sub-district units, this dissertation had to check the difference between the census data and the base map and made adjustments of census data and geographical units based on approximation (such as using the proportion of population), which was very time consuming and error prone (Appendix 1). In addition, the individual level census data used in Chapter 5 does not

have geographical information, while the other dataset used in Chapter 6 is sub-district-level aggregated data with geographical information, but has limited information about housing. Due to the incompleteness of the datasets, this dissertation has not been able to estimate the locational-based housing wealth accumulation of different social groups. In addition, the study of residential segregation with geographical units of sub-district level is bigger than community level used in studies of Western cities, and can only show a general pattern of residential segregation in Beijing. Moreover, there is a time gap between the population census data and the interview data. The statistical analysis of this dissertation is based on the 2000 population census, which provides the most detailed household information and housing data, while the interview data was collected in 2008 and 2009. The inaccessibility of more recent statistical data such as the 2010 census data constrains the ability of this study to systematically examine the more recent pattern of housing inequality and residential segregation at the time when the interviews were conducted. I expect that they have become more severe in recent years.

The second limitation is the lack of interviews with certain groups. I was not able to recruit as many of government officials and developers for interviews as desired to due to the lack of right connections. The study of government's attitudes and behavior in regard to housing in this dissertation was primarily based on the examination of secondary data such as government documents and reports, news and so on. This limits the understanding of their underlying reasoning and decision-making processes in Beijing's housing system. As real estate developers have become increasingly important actors in China's urban housing system, the absence in my sample prevents this dissertation from exploring their interactions with the government and urban residents, as well as their constraints in the market, which might shed light on China's unique housing system.

7.5 Directions for Future Research

There are several directions that deserve more research in the future. First, further study is needed to theorize China's urban changes in the reform era. This dissertation represents a small step in understanding China's urban social transition through the lens of housing. Borrowing the western theories such as the urban regime thesis and the Marxist theory sometimes leads to misunderstanding of China's transition because those theories are based on Western cities with a

different political economy. It is high time to develop China-specific theories based on the transformation of Chinese society and urban space. The debate in sociology on China's transition largely neglects the production of urban space, which has moved to the center of China's urban transition. I argue that the study of housing is an ideal subject and a good starting point for theorizing about China's transition, since it links the state, the society, and the urban space, the most important actors and elements of the transition.

Second, comparative studies are needed. The past three decades has witnessed large-scale suburbanization and urban redevelopment, not only in Beijing but in other Chinese cities as well. This dissertation showed that there were still sizable groups of urban residents purchasing privatized *danwei* housing in 2000. The micro-data of the 2005 and 2010 Census will provide a great opportunity to examine the new trends, changes, as well as continuities of households' housing outcomes and socio-spatial structure since 2000. It will be useful to compare the changes of housing inequality and residential segregation in Beijing in the last few years using more updated data. The second type of comparison is to compare the case of Beijing with other Chinese cities. To obtain better gauges of local variations embedded in local context so that more generalized conclusions can be drawn, studies of housing and related social spatial changes in different types of cities are urgently needed. In addition, the Chinese experience needs to be put in an international context by comparing Chinese cities with cities in other countries. Especially, the comparison with post-socialist cities will be fruitful since it can reveal the differences due to different transition trajectories. The international comparative studies can potentially generate theoretically illuminating results and possibly lead to a more general theory of urban and social geography.

Third, future studies should focus on the inequality of housing wealth. Due to data constraints, this dissertation was not able to systematically examine housing wealth. I only studied the difference housing costs of various groups based on census data and showed the contrasting pictures of housing wealth among different social groups with interview data. Studies find that private wealth disparity has been increasing since the reform. It is expected that housing wealth will become even more important in households' wealth portfolio with the soaring housing prices. With better data, the examination of differences in household housing wealth might reveal a significant dimension of social inequality and stratification of urban residents. The

exploration of the underlying dynamic and mechanism of housing wealth differences can contribute to the understanding of China's urban social stratification.

Finally, further studies on organized citizen movement around the use value of urban space and against the transformation of urban space as commodity for its exchange value (Castells, 1983), as well as the spatial consequences are also needed. There has been increasing attention to middle class homeowners' rightful activities in protecting their property rights (e.g. Read, 2003; Yip and Jiang, 2011; Wang et al., 2012). While attracting wide media coverage, disadvantaged groups' negotiation and confrontation in regard to their rights to live in the city have not been well examined by academics, and are especially lacking in geographical studies. I argue that while the former has significant implication for the rise of civil society, the latter, although still weak, is an important agent influencing the urban spatial transformation. This dissertation has shown that organized resistance of old SOE workers greatly delayed the redevelopment of an old industrial neighborhood. In the face of the dominant discourse of globalization and marketization, future studies should also pay attention to the local forces which are by no means missing actors in China's urban restructuring. It is possible that new forces of urban changes will emerge from the citizen movements, which arise from the conflicts between the emerging market and the deeply-rooted socialist system, such as laid-off workers' fight against the termination of collective consumption of housing provided by the government and landless peasants' contestation of their rights to and in the city.

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Appendix 1: Adjustments of Census Data and the Base Map

1. Adjustments of Census data in accordance with Geographic Units in Base Map

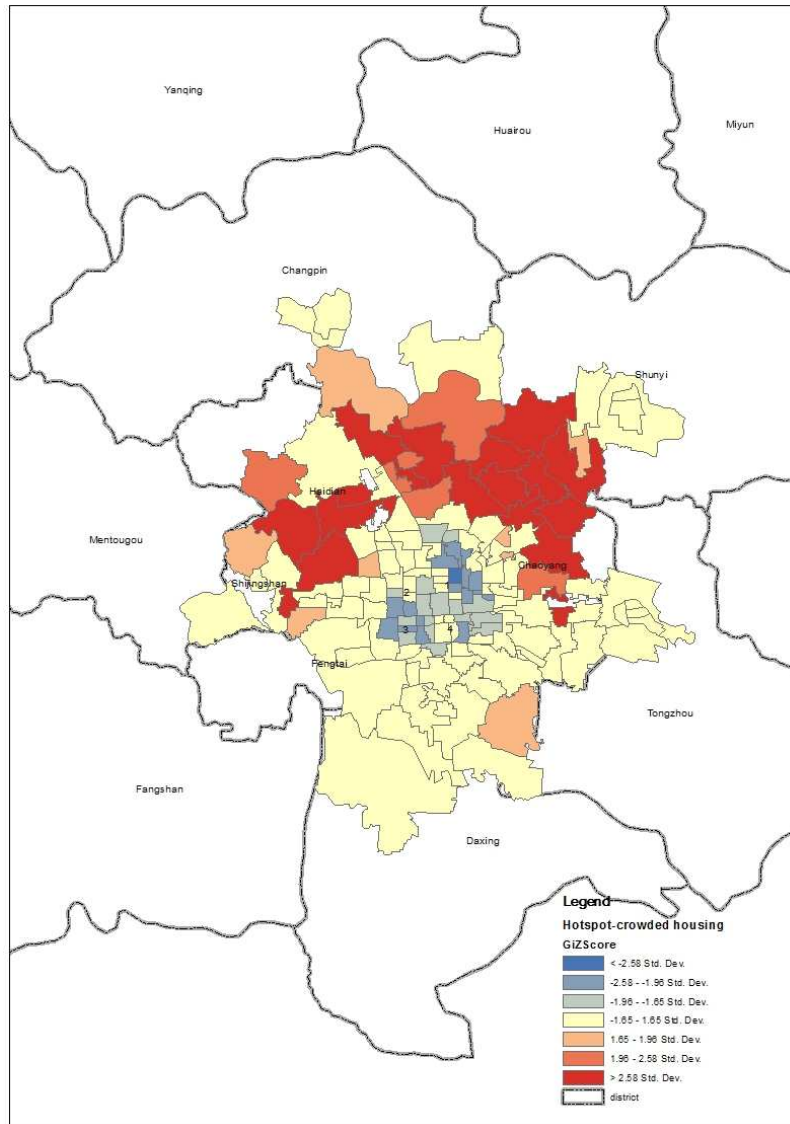
- 1). The population of “Liyuan jidao” was added to that of “Xiangyang jiedao”
- 2). The population of “Jiaodao zhen” was added to that of “Doudian zhen”
- 3). The population of “Tuoli zhen” was added to that of “Qinglonghu zhen”
- 4). “Nanshangle zhen” was changed to “Dashiwa zhen”
- 5). The population of “Liulihe diqu” was derived from adding the population of “Guandao zhen” and that of “Dongnanzhao zhen”
- 6). The population of “Yuegezhuang zhen” was added to that of “Hancunhe zhen”
- 7). The population of “Liulihe zhen”, “Jiaodao zhen” and “Huludai xiang” were added to that of “Doudian zhen”
- 8). “Yaoshang xiang” was changed to “Liangxiang diqu”
- 9). The population of “Lugouqiao xiang” was added to that of “Lugouqiao jiedao”
- 10). The population of “Nanyuan xiang” was added to that of “Dahongmen jiedao”
- 11). The population of “Changxindian xiang” was added to that of “Changxindian jiedao”
- 12). The population of “Hua xiang” was added to that of “xincun jiedao”
- 13). The population of “Laozhuangzi xiang” was added to that of “Wanping diqu”
- 14). The population of “Yuyuantan xiang” was added to that of “Balizhuang jiedao”
- 15). The population of “Haidian xiang” was added to that of “Haidian jiedao”
- 16). The population of “Dongbeiwang xiang” and “Yongfeng xiang” were added to that of “Xibeiwang zhen”
- 17). The population of “Bei’anhe xiang and “Liegezhuang xiang” to were added that of “Sujiatuo xiang”
- 18). The population of “Baoshan zhen” was derived from adding the population of “Baoshanxi xiang” and “Lianzi xiang”
- 19). The population of “Junxiang xiang” was added to that of “Zhaitang zhen”
- 20). The population of “Jinhaihu diqu” was derived from adding the population of “Hanzhuang zhen” and that of “Gaoshanji zhen”

- 21). "Shougang qian'an kuangqu jiedao" was changed to "Beixin'an jiedao"
- 22). "Renhe zhen" was changed to "Renhe diqu"
- 23). The population of "Niubaotun zhen" was added to that of "Zhangjiawan zhen"
- 24). The population of "Ciqu zhen" was added to that of "Taihu zhen"
- 25). The population of "Lucheng zhen" was derived from adding the population of "Hugezhuang zhen" and that of "Gantangzhen"
- 26). The population of "Langfu zhen" was added to that of "Xiji zhen"
- 27). The population of "Dadushe zhen" was added to that of "Majuqiao zhen"
- 28). The population of "Mizidian zhen" and that of "Chaichangtun zhen" was added to that of "Yong ledian zhen"
- 29). The population of "Qinghe jiedao" in Xuanwu district was added to that of "Guang'anmenwai jiedao"
- 30). "Guangzhuang xiang" was changed to "Guangzhuang diqu"
- 31). The population of "Panzipai xiang" was added to that of "Fengjiayu zhen"
- 32). The population of "Wanliu diquQ" was added to that of "Qinglongqiao jiedao"; The population of "Wanliu diquM" was added to that of "Malianwa jiedao"; The population of "Wanliu diqu D" was added to that of "Dongsheng diqu"
- 33). "Heyi jiedao" was shifted from under the administration of "Fangshan" district to under the administration of "Fengtai" district
- 34). "Dongfeng jiedao", "Xiangyang jiedao" and "Yingfeng jiedao" was shifted from under the administration of "Yanshan" district to under the administration of "Fangshan" district

2. The Adjustments of Geographic Units in the Base Map according to the Census Data

- 1). "Linxiaolu jiedao", "Qingyuan jiedao" and "Xingfeng jiedao" were merged to "Huangcun zhen"
- 2). "Quanhe jiedao" and "Longshan jiedao" were merged to "Huairou diqu"
- 3). "Lugu jiedao" was merged to "Babaoshan jiedao"
- 4). "Shiyuan jiedao" was merged to "Guangming jiedao"

Appendix 2 Hotspots of Households in Crowded Living Situation



Appendix 4 Descriptive Statistics of Variables in Models (%)

	Variables	Minimum	Maximum	Mean	Std. Deviation
Living space	Crowded living space ¹	1.88	52.05	18.46	11.36
	Spacious living space ¹⁰⁸	4.35	67.98	24.07	13.34
<i>Hukou</i> status	Percent non-local ³	16.12	87.46	42.39	15.07
	Percent agriculture ⁴	3.85	88.33	29.64	24.56
Tenure Type	Percent self-built ⁵	0.00	96.43	23.31	27.26
	Percent commodity ⁶	0.00	47.41	3.75	6.90
	Percent economical ⁷	0.00	16.24	2.30	2.96
	Percent privatized ⁸	0.00	82.30	30.83	21.98
	Percent public rental ⁹	1.59	73.09	30.88	19.28
	Percent private rental ¹⁰	0.00	55.10	8.61	10.01
Age group	Percent under twenty ¹¹	14.66	31.59	21.05	2.59
	Percent young ¹²	29.87	58.40	40.79	6.40

1. It represents the percentage of households with smaller than 12 square meters per person. I use square root of this variable in order to make it normally distributed.
2. It represents the percentage of households with living space between 40-49 square meters per person.
3. It represents the percentage of population living in a sub-district more than half a year but not with households registered locally. In order to make this variable normally distributed, I used square root of this variable in the regression analysis.
4. It represents the percentage of population with agriculture hukou in metropolitan Beijing. I use inverse of this variable in order to make it normally distributed.
5. It represents the percentage of households living in self-built housing. I use the square root of this variable in regression analysis in order to make it normally distributed.
6. It represents the percentage of households living in commodity housing purchased from the market. I use the exponential of this variable in order to make it normally distributed.
7. It represents the percentage of households living in public subsidized economical housing. I use the square root of this variable in regression analysis in order to make it normally distributed.
8. It represents the percentage of households living in privatized public housing.
9. It represents the percentage of households living in public rental housing.
10. It represents the percentage of households living in private rental housing. I use the square root of this variable in regression analysis in order to make it normally distributed.
11. It represents the percentage of population aged below twenty. In order to avoid the collinearity, this variable is not used in the regression analysis.
12. It represents the percentage of population aged between 20 and 40.
13. It represents the percentage of population aged between 40 and 60.
14. It represents the percentage of population aged above 60.

	Percent middle age ¹³	12.19	33.45	25.79	4.44
	Percent elderly ¹⁴	12.19	33.45	25.79	4.44
Education Level	Percent low education ¹⁵	12.92	82.04	48.46	15.56
	Percent middle edu ¹⁶	9.06	43.55	29.50	7.02
	Percent middle-high edu ¹⁷	1.53	54.22	20.31	11.43
	Percent high edu ¹⁸	0.00	28.63	1.73	3.29
Occupation	Percent government official ¹⁹	1.35	16.27	6.77	3.04
	Percent professional ²⁰	3.37	50.52	19.99	9.38
	Percent clerk ²¹	3.16	22.77	12.72	4.38
	Percent service worker ²²	13.36	49.15	27.79	6.12
	Percent worker ²¹⁰⁹	12.42	57.45	29.64	10.26
	Percent peasant ²⁴	0	26.75	3.14	4.93
Construction period	Percent before reform ²⁵	0.13	80.34	21.06	20.13
	Percent after reform ²⁶	19.66	99.87	78.94	20.13

15. It represents the percentage of population with education of secondary school or lower.

16. It represents the percentage of population with high school education.

17. It represents the percentage of population with college education.

18. It represents the percentage of population with graduate education.

19. It represents the percentage of government officials.

20. It represents the percentage of professionals.

21. It represents the percentage of clerks or similar occupations.

22. It represents the percentage of service workers.

23. It represents the percentage of other types of workers. This variable is not used in the regression analysis in order to avoid the problem of collinearity.

24. It represents the percentage of population employed in agriculture. I transform this variable with quare root in order to make it normally distributed.

25. It is the percentage of population living in housing built before the economic reform in 1978. I use exponent to transform this variable in order to make it normally distributed.

26. It is the percentage of residents living in housing built after the economic reform. This variable is not used in regression analysis in order to avoid the problem of collinearity.

Appendix 5 Communalities of Factor Analysis on crowded Living

	Initial	Extraction
Percent non-local	1.000	.894
Percent self-built	1.000	.868
Percent public purchase	1.000	.838
Percent private rental	1.000	.828
Percent public rental	1.000	.882
Percent young	1.000	.823
Percent middle age	1.000	.924
Percent elderly	1.000	.924
Percent gov officials	1.000	.599
Percent professionals	1.000	.941
Percent clerk	1.000	.728
Percent service workers	1.000	.831
Percent workers	1.000	.887
Unemployment rate	1.000	.668
Percent non-agriculture hukou	1.000	.765
Percent low education	1.000	.945
Percent middle-high education	1.000	.952
Percent high education	1.000	.861
Percent before reform	1.000	.879

Note:Extraction Method: Principal Component Analysis

Appendix 6 Loadings of the Rotated Components on Crowded Living

	Component			
	1	2	3	4
Percent of middle-high edu	0.97	0.07	0.05	-0.10
Percent of professionals	0.93	0.19	0.14	-0.14
Percent of high education	0.91	-0.16	0.00	-0.01
Percent of low education	-0.92	-0.28	-0.15	-0.01
Percent of workers	-0.85	-0.28	-0.15	-0.26
Percent of self-built	-0.79	-0.49	0.01	0.00
Percent of public purchase	0.78	0.27	-0.07	-0.39
Percent of gov officials	0.65	0.22	0.34	0.12
Percent of middle age	0.10	0.94	0.18	0.03
Percent of elderly	0.10	0.94	0.18	0.03
Percent young	-0.18	-0.80	-0.38	-0.04
Percent private rental	-0.41	-0.68	-0.32	0.31
Percent clerk	0.48	0.70	-0.11	0.06
Percent non-agriculture <i>hukou</i>	0.55	0.59	0.33	-0.06
Percent non-local	-0.15	-0.35	-0.84	0.21
Percent before reform	0.09	0.20	0.87	0.26
Percent service workers	-0.09	-0.13	-0.08	0.89
Percent public rental	0.34	0.55	0.31	0.61
Unemployment rate	-0.13	0.50	0.34	0.53

Note: Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.

Based on the loading of each factor, the first factor is named **Social Elites**. This factor has high positive loading on higher education level, professionals and governmental officials, as well as purchasing of public housing, indicating good access to public resources. In addition, this factor has high negative loading on percentage of low education level, ordinary workers, peasants and self-built housing, indicating a social group with low ability of access to public resources. The loading on agricultural *hukou* is positive only because this variable is inversely transformed in order to make it normally distributed. Thus, it should be understood as indicating the same direction as workers and low education. Examining the loading of variables on this factor, we can see that both market elites and public elites are grouped in the same factors, suggesting that their explanation capacity is quite similar. On the other hand, located in the lower end of job ladder, the effect is opposite from those with high education and on the upper end of job ladder. This factor is associated with both the market and the socialist system.

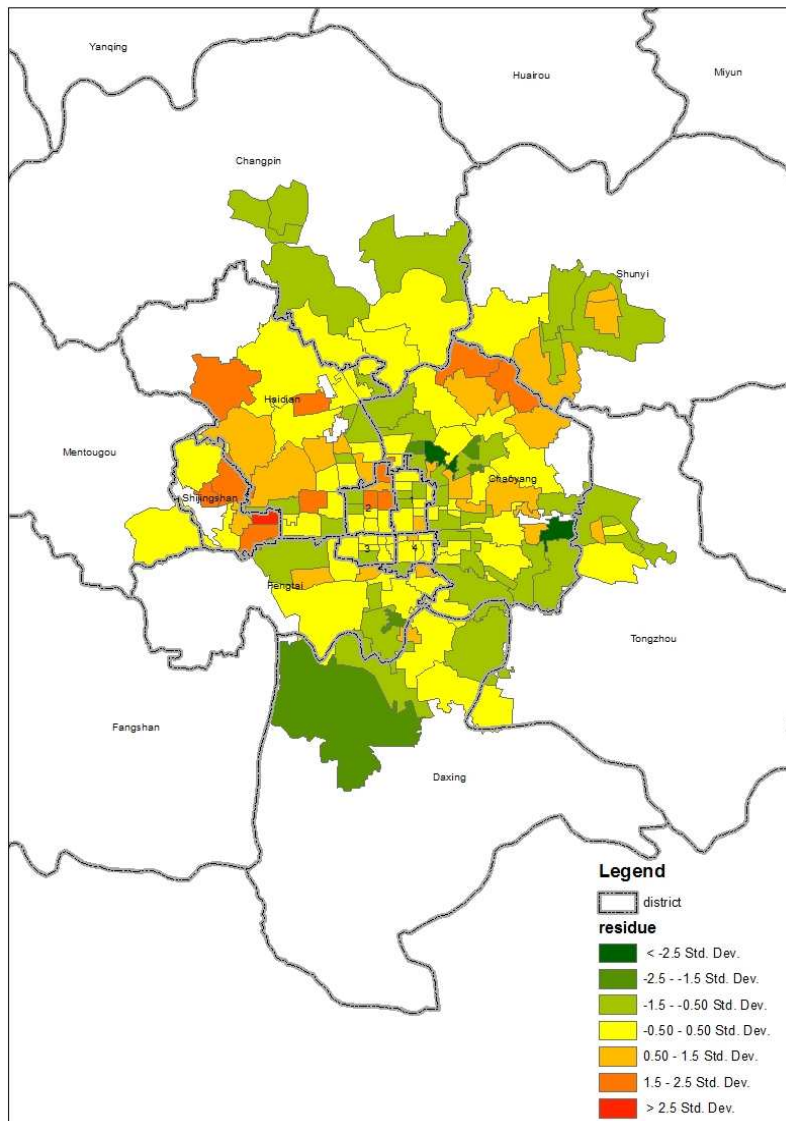
The second factor is named as **Senior in public sector**. It is a little hard to name this factor because it has high loading on both older group and on clerk. It is understandable that senior residents may be different from young residents because they accumulate more wealth over time. However, it is a little surprising that their direction is the same as clerk. When further decomposing the composition of clerk, we can see that this category includes relatively low-level jobs in the public sector¹¹⁰. Overall, this factor is one representing the public sector.

The third factor is called **Local Residents**. There are two variables which have high loading on this factor. It has high positive loading on the percentage of population living in housing built before the economic reform and high negative loading on the percentage of non-local population. It is reasonable that local residents were more likely to live in relatively older housing. Since the local *hukou* status is more important than the building year, I name this factor as local residents. This factor is also associated with the socialist system.

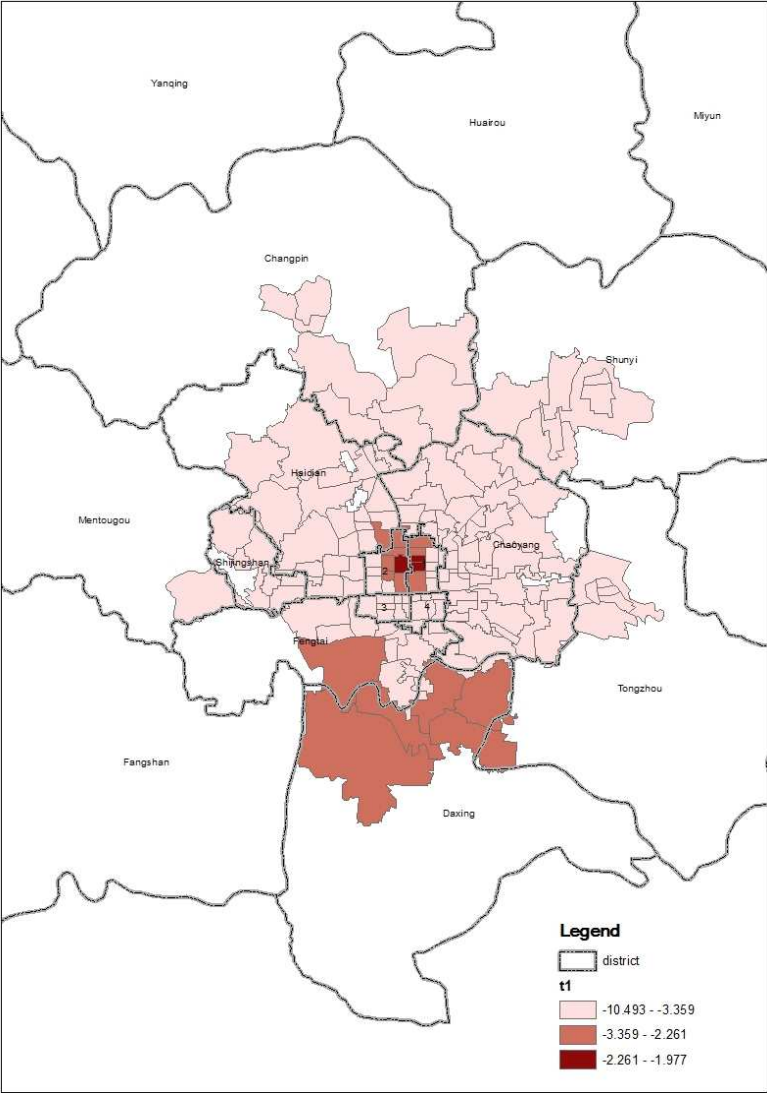
The fourth factor is called **Urban Poor**. The percentage of service workers, the percentage of public rental housing and the unemployment rate had the highest loading on this factor. This factor is more associated with the market. I will further explore the effect of these factors on the residents' housing situation through regression analysis.

¹¹⁰ <http://www.51labour.com/labour-law/show-4996.html>

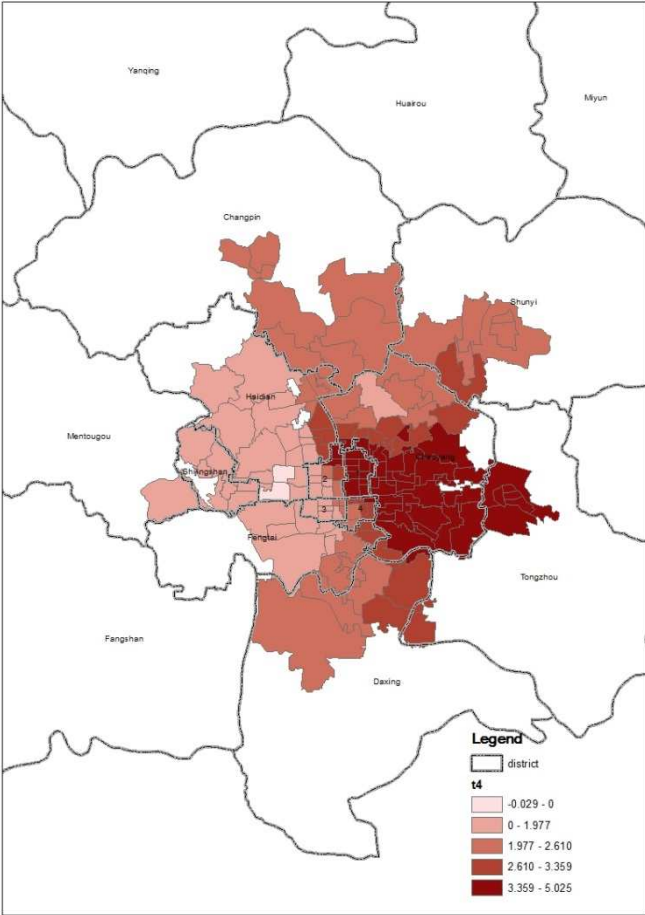
Appendix 7 Residual of Regression on Households in Crowded Living Situation



Appendix 8 t Value of Social Elite Factor



Appendix 9 The Distribution of t value of Urban Poor Factor



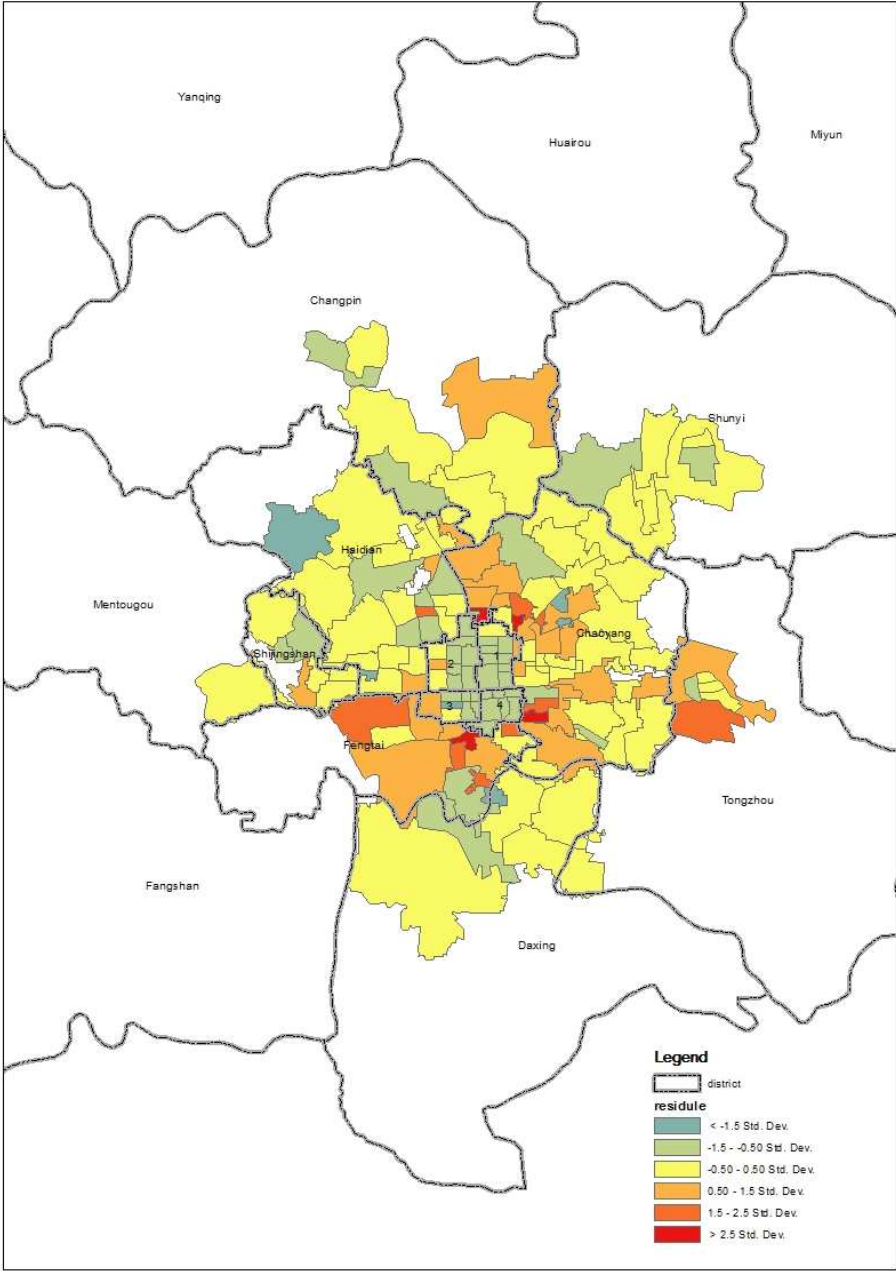
Appendix 10 Communalities of Principal Component Analysis on Spacious Housing

	Initial	Extraction
Percentage non-agriculture <i>hukou</i>	1.000	.744
Percent self-built	1.000	.832
Percent public purchase	1.000	.812
Percent private rental	1.000	.825
Percent gov officials	1.000	.574
Percent professionals	1.000	.940
Percent clerk	1.000	.605
Percent service workers	1.000	.900
Percent workers	1.000	.914
Percent young	1.000	.827
Percent middle age	1.000	.943
Percent elderly	1.000	.943
Percent low education	1.000	.942
Percent middle-high education	1.000	.947
Percent high education	1.000	.865

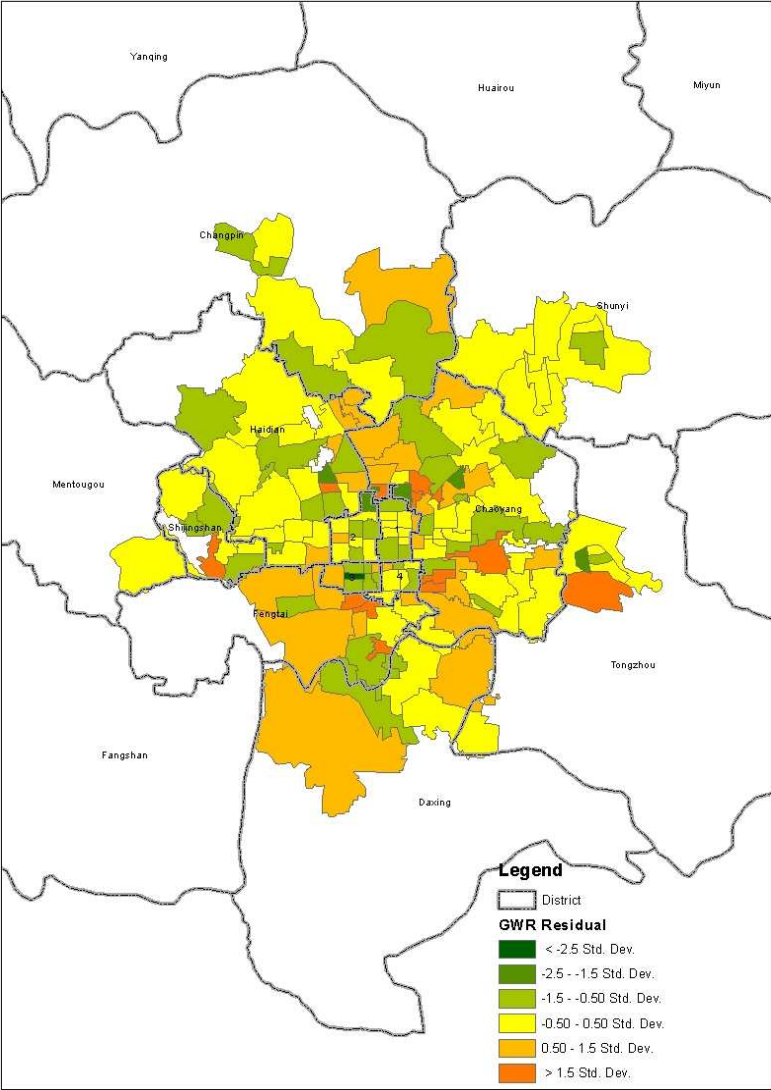
Appendix 11 Rotated Component Matrix of Principal Component Analysis on Spacious Housing

	Component		
	1	2	3
Percent middle-high education	0.96	0.10	-0.14
Percent high education	0.92	-0.14	-0.06
Percent low education	-0.91	-0.33	0.06
Percent professional	0.92	0.23	-0.19
Percent workers	-0.85	-0.36	-0.24
Percent self-built	-0.77	-0.47	0.12
Percent public purchase	0.75	0.23	-0.44
Percent gov officials	0.65	0.36	0.14
Percent young	-0.16	-0.90	0.00
Percent middle age	0.07	0.97	-0.01
Percent elderly	0.07	0.97	-0.01
Percent private rental	-0.38	-0.72	0.41
Percent non-agricultural <i>hukou</i>	0.53	0.67	-0.12
Percent clerk	0.45	0.63	-0.08
Percent service worker	-0.05	-0.06	0.95

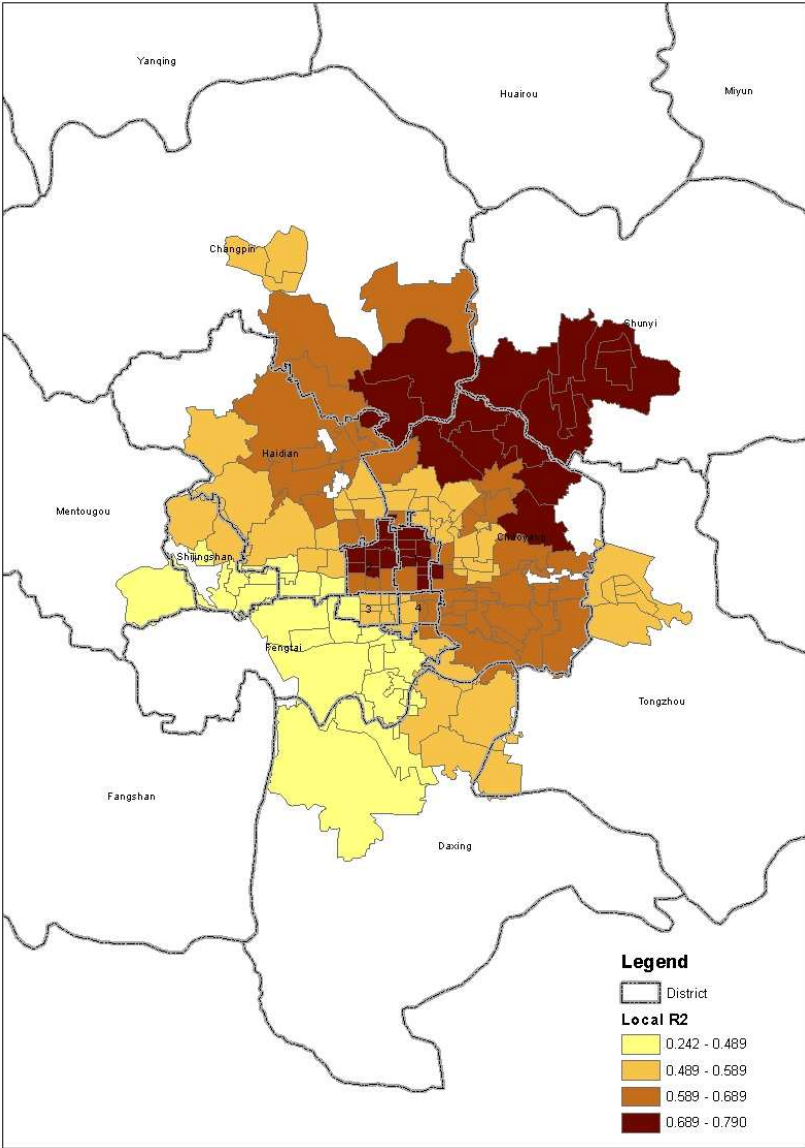
Appendix 12 Residual of Regression on Percentage of Households with Spacious Housing



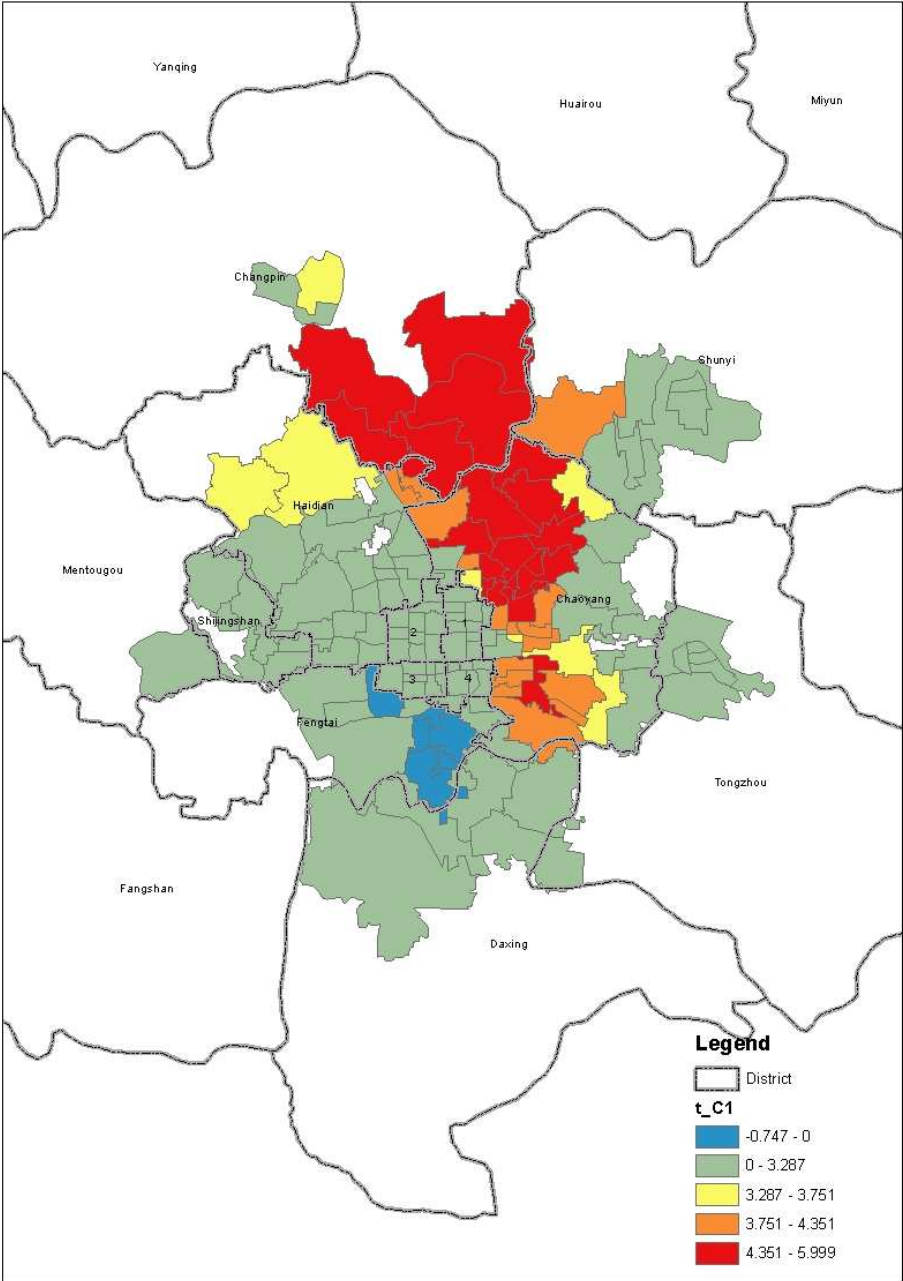
Appendix 13 The Residual of Geographically Weighted Regression on the Percentage of Population in Spacious Housing



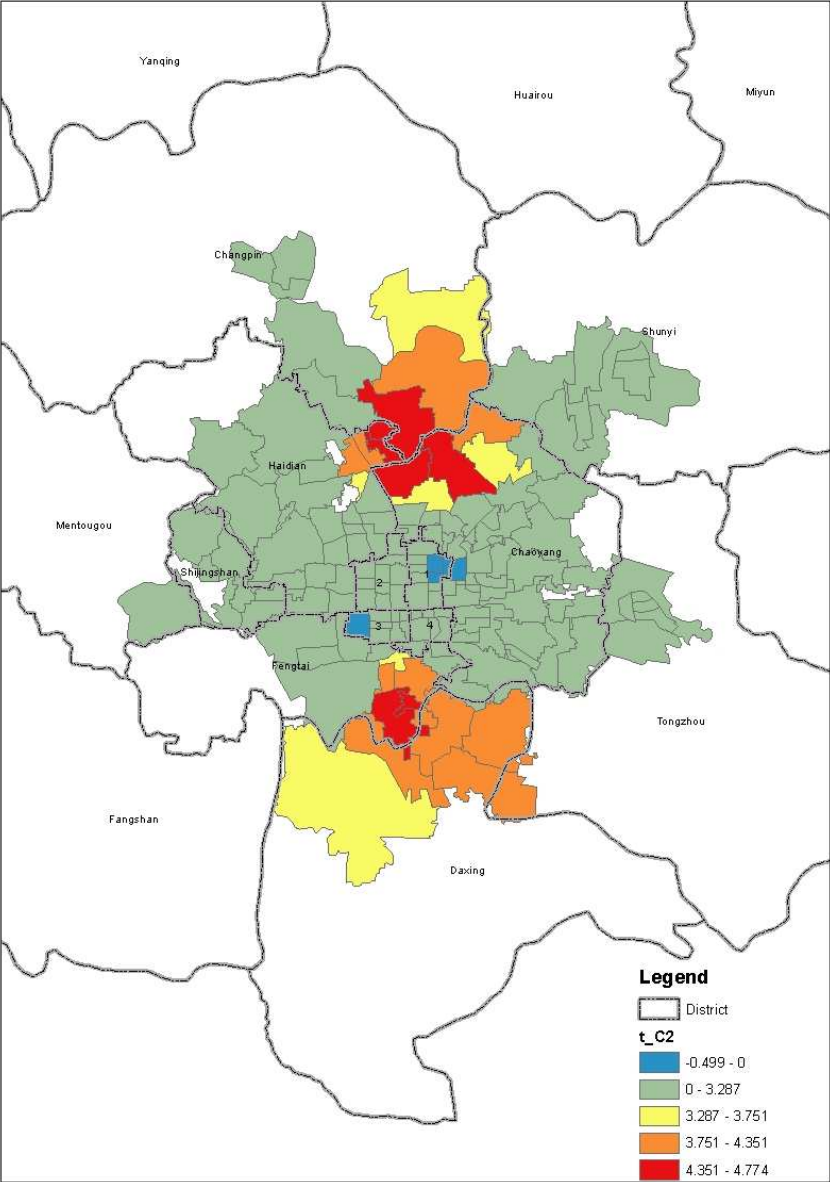
Appendix 14 The Distribution of Local R2



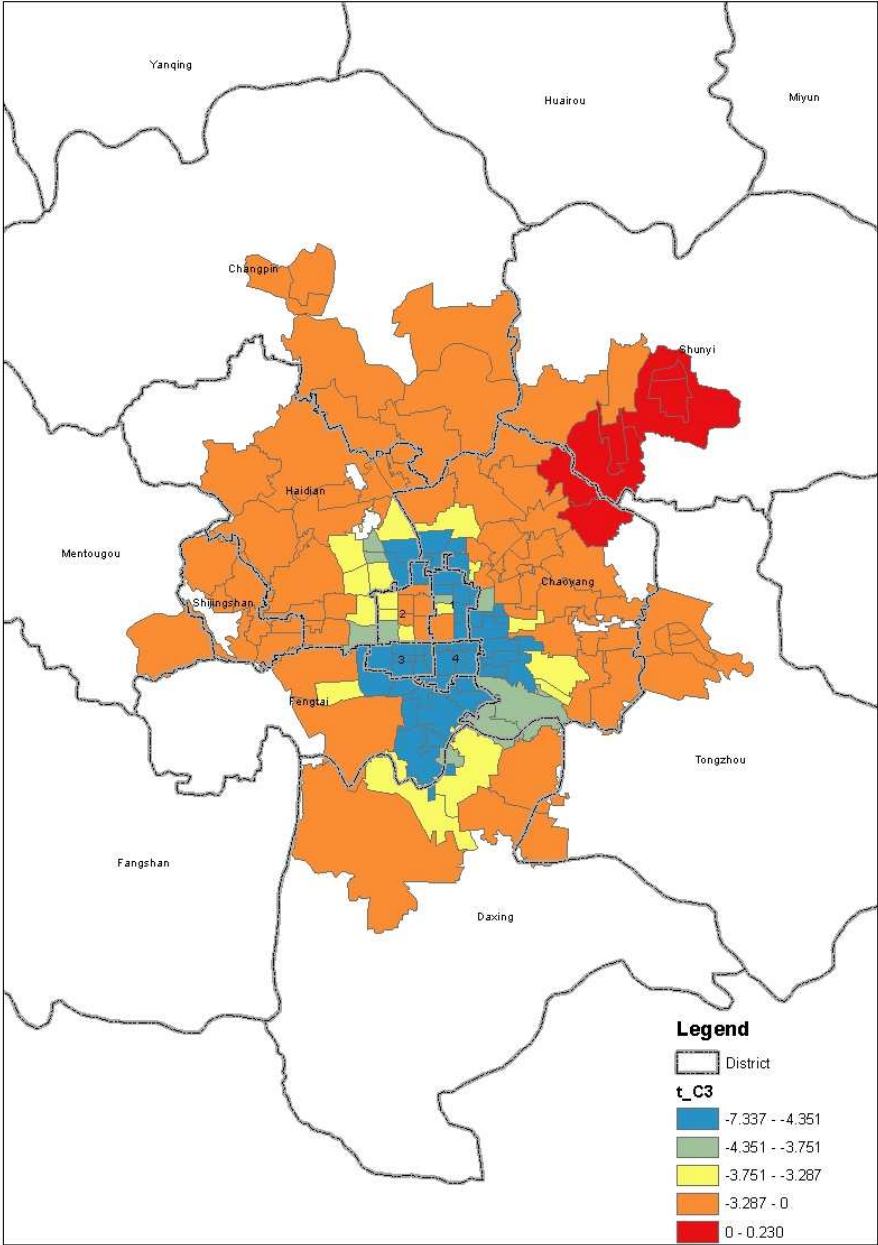
Appendix 15 The Distribution of t Value of Coefficient the Social Elites



Appendix 16 The Distribution of the t Value of Urban Senior in Public Sector



Appendix 17 The distribution of t Value of the Service Worker Factor



Curriculum Vitae

Guilan Weng

EDUCATION

Ph.D. Geography, University of Washington, 2014

Dissertation: *Moving towards neoliberal(izing) urban space? housing and residential segregation in Beijing*

M.S. Human Geography, Peking University, 2004

B.S. Geography, East China Normal University, 2001

ACDEMIC WORKING EXPERIENCE

- 2012 Research Assistant, University of Washington
- 2006-2011 Teaching Assistant, University of Washington
- 2008-2009 Research Assistant, PKU-Lincoln Land Institute Center for Urban development and Land Policy
- 2008 Research Assistant, University of Washington
- 2002-2005 Research Assistant, Peking University
- 2000- 2001 Research Assistant, East China Normal University

AWARDS AND GRANTS

- 2010 UGSG Travel Grant, Urban Geography Special Group, Association of American Geographers
- 2010 GPSS Travel Grant, Graduate and Professional Student Senate, University of Washington
- 2009 Dissertation Fellowship, PKU-Lincoln Land Institute Center for Urban development and Land Policy
- 2007 Fritz Grant, Jackson School of International study, University of Washington
- 2007 Howard Martin Travel Grant, Department of Geography, University of Washington
- 2006 Gerlach Fellowship, University of Washington
- 2006 Graduate Student Fund for Excellence and Innovation Fellowship, University of Washington
- 2003 Excellent Study Award, Peking University
- 2003 Guanghua Scholarship, Peking University
- 2003 Excellent Paper Award, Geography Society of China
- 2000 First Class Scholarship, East China Normal University
- 2000 Best Paper Award, East China Normal University
- 1999 SONY Scholarship, Education Committee of Shanghai
- 1999 Second Class Scholarship, East China Normal University

PUBLICATIONS

- Weng, Guilan, 2007. Book review on Restructuring Intra-urban Space during China's Transition and Urban Poverty, Housing and Social Changes in China, *Eurasian Geography and Economics*, 48 (3):380-382.
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CONFERENCE PRESENTATIONS

- Institutional Transition of China's Urban Housing System, paper presented in Graduate Seminar on Contemporary China, Hong Kong, January 7-10, 2009
- Property Rights in Transition: Implications for Urban Housing in China, paper presented at 2007 Annual Conference of Association of American Geographers, Boston, Massachusetts, April 15-20, 2008
- The Geography of Non-hukou Interprovincial Migration in the 1990s: Spatial Change and Dynamics, paper presented at 2007 Annual Conference of Association of American Geographers, April 17-21, 2007, San Francisco, California.